

## Impact of Founding Network Resources on Firm Performance and Strategy: Evidences from Game Development Industry\*

CHUL WOO MOON  
Sungkyunkwan University  
College of Business  
([cwmoon@skku.edu](mailto:cwmoon@skku.edu))

.....

Founding contexts matter in determining eventual organizational evolutions (Hannan & Freeman, 1997; Lawrence, 1984; Zald, 1987; Boeker, 1989). Among different facets of founding contexts, we focus on the founding network resources in this study. We define founding network resources as the cooperative relationships a firm creates with external organizations and individuals at the time of its founding. While the idiosyncratic organizational routines (Nelson & Winter, 1982) may emerge independently from the organization itself, it may as well be that those routines are an outcome of transferred practices and imitated processes from external sources, or their mutations with internally developed routines over random-based historical events and continuous interfaces with external environments. Inputs from a network of allies at founding stage, along with other founding contexts, create a genetic imprinting (Boeker, 1989) that lasts over the life of the organization. No organizations at their births can be free from the routines or genetic structures created by their predecessors. To varying degrees, start-ups inherit the routines of their family members, that is, the network of founding alliances. Like inheriting superior genes, as a start-up receives more of the positive influences from the founding alliances, the chances of its survival or performance would increase. Exposures to such positive influences from the founding alliances at the inception would also lead the start-up to become increasingly network-dependent in its behavioral patterns.

We argue in this paper that an important portion of variations in firm performance and strategic behaviors one observes now can be traced back to firm's founding network resources in the past. Assuming the evolutionary context of the two different time stages i.e. firm's founding stage and post-founding stage, this research proposes and tests the following three theses relating to firm's founding network resources: (1) firm's initial endowment of network resources at the founding stage enhances the firm's eventual performance at post-founding stage, (2) the amount of founding network resources a firm starts with also influences how extensively the firm will rely on external networks for building its own competitive advantage and growth potentials at post-founding stages, (3) an important variations in the strengths of the above relationships can be accounted for by the differences in top manager's leadership. For the empirical investigations of our research questions presented in this paper, we found the game development industry of Korea fairly relevant as research sample. The game development industry of Korea suits our research purpose well in that bulk of the industry participants we observe today were newly created start-ups founded during a relatively identical time period i.e. mostly during the few years after 1997.

---

논문접수일: 2007. 4                      게재확정일: 2007. 7

\* This research was partially supported by generous grant from the Korean Game Development Institute, Seoul, Korea. Capable research assistances by Jeongsik Kim and Nari Lee are gratefully acknowledged.

This study empirically tested the thesis that firm's founding network resources matter i.e. they not only enhance eventual financial performances, but also affect firm behaviors in strategic decision making. As evidenced by statistically significant effects of the two variables i.e. founding alliance partners' reputation and their operational contributions on performance increases in sales and profitability at post-founding stages, an overall support for this study's main thesis was found in the research sample. An additional analysis of our study related to the roles of CEO leadership in strengthening the linkages between founding network resources and performance and strategic behaviors. Despite our prediction that stronger leadership would be more (as opposed to less) instrumental in converting founding network resources into post-founding performance and network-based behavioral pattern, only a limited support for this hypothesis was found in our data.

Key words: Founding effects, network strategy, entrepreneurship

.....

Founding contexts matter in determining eventual organizational evolutions (Hannan & Freeman, 1997; Lawrence, 1984; Zald, 1987; Boeker, 1989). Among different facets of founding contexts, we focus on the founding network resources in this study. We define founding network resources as the cooperative relationships a firm creates with external organizations and individuals at the time of its founding. While the idiosyncratic organizational routines (Nelson & Winter, 1982) may emerge independently from the organization itself, it may as well be that those routines are an outcome of transferred practices and imitated processes from external sources, or their mutations with internally developed routines over random-based historical events and continuous interfaces with external environments. Inputs from a network of allies at founding stage, along with other founding contexts, create a genetic imprinting

(Boeker, 1989) that lasts over the life of the organization. No organizations at their births can be free from the routines or genetic structures created by their predecessors. To varying degrees, start-ups inherit the routines of their family members, that is, the network of founding alliances. Like inheriting superior genes, as a start-up receives more of the positive influences from the founding alliances, the chances of its survival or performance would increase. Exposures to such positive influences from the founding alliances at the inception would also lead the start-up to become increasingly network-dependent in its behavioral patterns.

Assuming the evolutionary context of the two different time stages i.e. firm's founding stage and post-founding stage, this research proposes and tests the following three theses relating to firm's founding network resources: (1) firm's initial endowment of network

resources at the founding stage enhances the firm's eventual performance at post-founding stage, (2) the amount of founding network resources a firm starts with also influences how extensively the firm will rely on external networks for building its own competitive advantage and growth potentials at post-founding stages, (3) an important variations in the strengths of the above relationships can be accounted for by the differences in top manager's leadership.

## 1. Theoretical Backgrounds

Social network approach (Granovetter, 1985; Powell and Smith-Doerr, 1994; Gulati, 1995; Gulati, Nohria & Zaheer, 2000; Stuart, 1998; Stuart, Hoang & Hybels, 1999; Hite and Hesterly, 2001; Baum, Calabrese & Silverman 2000; Inkpen & Tsang, 2005) and evolutionary perspectives on organizational studies (Hannan & Freeman, 1997; Lawrence, 1984; Zald, 1987; Boeker, 1989) provide the theoretical basis for this study. In his seminal work on the 'liability of network', Stinchcombe (1965) viewed that a start-up firm's subsequent performance is significantly affected by founding conditions. In particular, he viewed two conditions are important at founding stage; (1) 'organizational conditions' i.e. key members of the start-up given are

not familiar with their roles and work relationships newly created, (2) 'environmental conditions' i.e. start-ups lack the base of influence, endorsement, external relationships with important stakeholders and legitimacy. In a similar vein, Singh, House and Tucker (1986) found some empirical evidences for the liability of newness thesis. Eisenhardt and Schoonhoven (1990) found that the liability of newness decreases as the top managers at start-ups have greater joint work experiences. Stuart(1998) and Stuart, Hoang, and Hybels (1999) also reported that the start-ups with prestigious alliance partners tend to perform better than the start-ups without such endorsement effects. Baum, Calabrese, and Silverman (2000) studied Canadian biotech start-ups' performance and found that variations in alliance networks startups create subsequently influenced their performance. In sum, the above literature collectively suggests that external ties at the time of organizational founding is an important means to overcome the liability of newness, thus potentially a necessary condition for eventual organizational success.

Another important theoretical basis for the current study relates to the strategic alliance literature where the notion of alliance capability is considered as source of sustainable firm growth. Aldrich, Rosen and Woodward (1987), Anand and Khanna (2000), Dyer and Noboeka (2000) emphasize that the existence

of organizational routines for creating and managing alliances opens up more opportunities for organizational growth through alliances and the value of such routines increases as the environmental uncertainties increase.

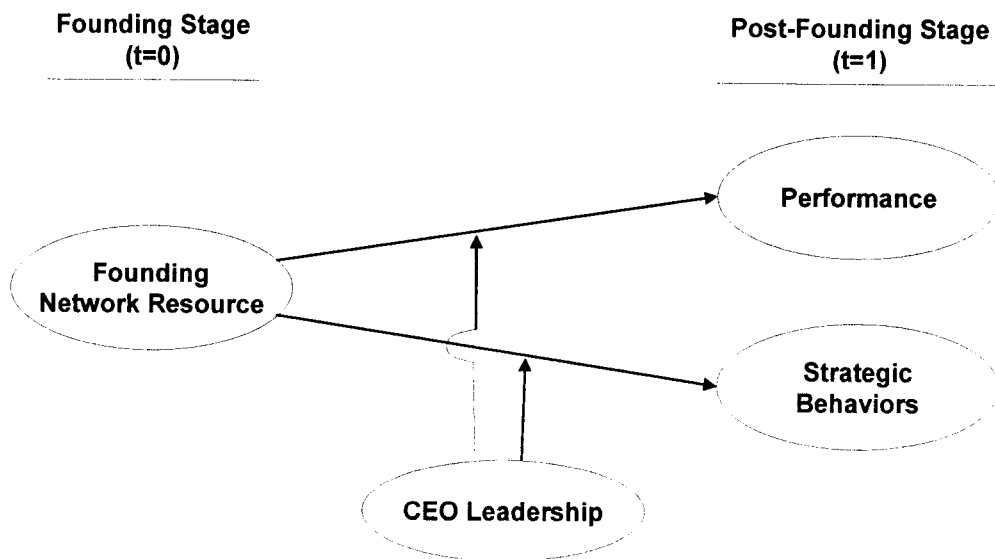
## II. Model & Hypotheses

In order to test the theoretical arguments developed as above, we advance here a model in which a firms' strategy and performance at the post-founding stage are hypothesized to be affected by the firm's initial network resources at the founding stage, along with the moderation effects by CEO's leadership

(Figure 1).

### 2.1 Effects of Founding Network Resources on Performance

In this study, we define the theoretical construct of 'founding network resources' as a set of productive services in the forms of assistances, contracts, transactions, advices, arrangements, endorsements, and favors that are available for a start-up firm because of the cooperative relationships the start-up firm has with its network participants. Social network research (Aldrich, 1999; Walker, Kogut & Shan, 1997; Burt, 1992; Woolcock, 1998) identified that there are broadly two types of networks: identify-based and



〈Figure 1〉 Effects of Founding Network Resources on Firm Performance & Strategic Behaviors at Post-founding Stage: A Conceptual Model

calculative. The concept of identity-based network is defined as those relationships where some type of personal or social identification with the other actors motivates or influences economic actions (Granovetter, 1992; Uzzi, 1996). Identity-based networks are highly personal and cohesive by nature. On the other hand, calculative networks refer to relationships where the potential purposes and functions of the network ties are a predominant theme (Hite & Hesterly, 2001).

Following the above tradition in the literature, we conceptualize founding network resource construct as having two orthogonal dimensions i.e. 'reputation' and 'operational contributions'. In response to the *identity-based* networks above, we define the variable 'reputation' as intangible effects accruing to a start-up due to its social association, or identity-ties, with its network partners who are well-known or prestigious. For start-ups, allying with prestigious firms is a merit because it establishes legitimacy as well as attracts attention (Stuart, 1998; Stuart et al., 1999). Such identity-ties are known to motivate the formation of alliances with particular partners and promote the involvement in networks in general, and also they were reported to enhance organizational performance in prior research (e.g. Stuart et al., 1999).

On the other hand, in line with the concept of *calculative* networks in the literature, the

variable 'operational contributions' is defined as the degree of functional contributions made by network partners to a start-up in specific tasks such as production, component sourcing, recruitment etc. at the time of founding. To summarize, we conceptualize that, vis-à-vis its founding network partners, a start-up firm can receive productive benefits in two distinct forms: (1) direct and practical contributions i.e. 'operational contributions', (2) indirect and symbolic contributions from the partners i.e. 'reputation'. Assuming the founding network resources' positive effect on eventual performance at the post-founding stage as argued earlier, we generate the following hypotheses:

*Hypothesis 1a. Ceteris paribus, the stronger 'reputation' a start-up's founding network partners have, the higher the start-up's performance at the post-founding stage will be.*

*Hypothesis 1b. Ceteris paribus, the greater 'operational contributions' founding network partners make to a start-up, the higher the start-up's performance at the post-founding stage will be.*

## 2.2 Effects of Founding Network Resources on Strategic Behaviors

Exposures to allies at founding stage are

viewed here to be instrumental in building *network capabilities* internal to start-ups over time. Externally, the founding allies may represent a window to a wider array of potential network relationships with other embedded firms (Stuart, 1998; Stuart, Hoang & Hybels, 1999). Such friend-of-friend relationships would generate a greater set of opportunities for the start-up to be exposed to further network relationships. Internally, a firm that is founded within a strong embedded network would be likely to make investments for organizational systems and processes to satisfy the demands from the network relationships. It is noteworthy here that the literature on strategic alliances (e.g. Aldrich, Rosen & Woodward, 1987; Anand & Khanna, 2000; Dyer & Nobeoka, 2000) collectively suggests the importance of alliance capability i.e. firm's unique capabilities to organize and manage the alliance relationships with other external constituencies. We argue that such alliance capabilities are a rent-generating mechanism by their positive sustainable performance implications over long-run (Anand & Khanna, 2000; Dyer & Nobeoka, 2000). Our logic follows that, assuming managerial rationality, such network-embedded firms would show a post-founding tendency to behave in a way of exploiting its network capabilities fully because such capabilities, once built, would show the property of public goods i.e. additional

services from the capabilities do not incur marginal costs, as has been argued in the resource-based view of the firm (Barney, 1991; Peteraf, 1993). Through the above external and internal processes, we conceptualize, stronger inertial pressures are built over time to orient start-ups to be increasingly more network-based in their strategic behaviors i.e. by exploiting the network capabilities, when the allies' influences over the start-ups were stronger at the time of founding. To borrow Boeker's (1989) terminology, we predict that the stronger the imprinting is, the stronger the inertial pressures on firm behaviors will be.

In order to test the emergence of network-based behavioral patterns by highly embedded start-ups, we identify the following areas of decision making because they are highly visible and of strategic importance in general: related diversification, unrelated diversification, international market entry, and formation of strategic alliance with foreign partners. In sum, we generate the following hypotheses relating to the effects of founding network resources on firm strategic behaviors:

*Hypothesis 2a. Ceteris paribus, the greater founding network resources (in terms of partner's reputation and operational contributions) a start-up acquires at the founding stage, the more likely the start-up's related diversification*

*moves at the post-founding stage will be network-based.*

*Hypothesis 2b. Ceteris paribus, the greater founding network resources (in terms of partner's reputation and operational contributions) a start-up acquires at the founding stage, the more likely the start-up's unrelated diversification moves at the post-founding stage will be network-based.*

*Hypothesis 2c. Ceteris paribus, the greater founding network resources (in terms of partner's reputation and operational contributions) a start-up acquires at the founding stage, the more likely the start-up's international expansion moves at the post-founding stage will be network-based.*

*Hypothesis 2d. Ceteris paribus, the greater founding network resources (in terms of partner's reputation and operational contributions) a start-up acquires at the founding stage, the more likely the start-up's searches for foreign alliance partners at the post-founding stage will be network-based.*

### 2.3 Moderation Effects by CEO Leadership

CEO's personal factors matter in social networks (Hite & Hesterly, 2001; Aldrich, 1999; Walker, Kogut & Shan, 1997). Especially, organizations at their early

stages are composed heavily of embedded ties within a network high in closure and cohesion (Aldrich, 1999; Walker, Kogut & Shan, 1997). And in such high closure settings, top managers' personal characteristics were found to play important roles in network arrangements as evidenced in Young, Charles and Shortell (2001)'s study on a public hospital system.

As the extant literature indicates, to a large extent, the act of building and maintaining social relationships between organizations happens at individual level involving the exposition of CEO's personal traits, skills, and capabilities. Extending the personal dimension of inter-organizational ties, we argue here that CEO's capability or leadership is instrumental in extracting real opportunities and complementary resources from the social relationships. In essence, knowing somebody is one thing, and getting benefits from that relationship is another. Recognizing such instrumentality of top managers in converting social relationships into valuable resources, we further hypothesize a moderation effect by CEO leadership in strengthening the relationships between founding network resources and firm performance and behaviors as proposed in Hypotheses 1 and 2.

More specifically, we identify transactional and charismatic leadership styles are instrumental as moderators. A transactional

leader is one who operates within an existing system or culture (as opposed to trying to change them) by: (1) attempting to satisfy the current needs of followers by focusing on exchanges and contingent reward behavior and (2) paying close attention to deviations, mistakes, or irregularities and taking action to make corrections (Bass, 1985; Burns, 1978). On the other hand, Waldman, Ramirez, House, and Puranam (2001) defined charisma as a relationship between an individual and one or more followers based on leader behaviors combined with favorable attributions on the part of followers. Key behaviors on the part of the leader include articulating a vision and sense of mission, showing determination, and communicating high performance expectations. Favorable attributional effects on followers include the generation of confidence in the leader, making followers feel good in his/her presence, and the generation of strong admiration or respect. We expect that both transactional and charismatic leadership styles have positive effects of strengthening the linkages between founding network resources and performance and strategic behaviors. For instance, in *calculative* networks, we posit that the presence of transactional leadership may become functional in utilizing the social relationships. In contrast, in *identity-based* networks, charismatic leadership style that emphasizes the personally-embedded influence

may prove to be effective. Combining both contexts i.e. identity-based and calculative networks together, we predict that a higher degree of leadership in both styles will exert a stronger moderation effect.

*Hypothesis 3a. Ceteris paribus, the relationships posited in Hypotheses 1 and 2 will be stronger when the CEO's charismatic leadership is higher.*

*Hypothesis 3b. Ceteris paribus, the relationships posited in Hypotheses 1 and 2 will be stronger when the CEO's transactional leadership is higher.*

### III. Methods

#### 3.1 Research Setting and Sample

For the empirical investigations of our research questions presented in this paper, we found the game development industry of Korea fairly relevant as research sample. The game development industry of Korea suits our research purpose well in that bulk of the industry participants we observe today were newly created start-ups founded during a relatively identical time period i.e. mostly during the few years after 1997. The surge of game developers' founding activities in the

post-1997 period was possible largely because it was the time when much of the technological infrastructures for the internet and mobile communications were being established in Korea, thus allowing the potential and actual demands for both internet-based 'on-line games' and cellular phone-based 'mobile games' to grow rapidly (Korean Ministry of Cultures and Tourism, 2004). Such concentrated founding activities within a short common time period can provide a sample where firms are exposed to a relatively homogenous set of environmental opportunities and historical events as they evolve synchronically. Hence, a natural controlling for the environmental variations due to different founding time periods.

For the actual construction of the database for this study, we initially contacted Korea Game Development Institute (KGDI), a government-sponsored research agency specializing in the game development industry. KGDI estimated that although there were approximately 2,000 game-related firms by registration counts, only about 200 firms were considered active ones in terms of revenues and the number of employees. Out of those active game developers, KGDI maintained its own database consisting of 158 firms. We used the KGDI's 158 firms as the starting point of our sampling.

To enhance both the response rate and the quality of responses, instead of conducting a

mailing-based survey for this study, we adopted a unique survey approach where our research staffs are present on spot while respondents are filling out the surveys. Research staffs were given specific instructions about the survey questions so that they could clarify any ambiguities respondents may feel on the questions on site. Additionally they made sure that survey questions were answered by the designated respondents i.e. CEOs in our case. While this approach has its own merits of high response rates and quality of responses, it generally tends to take longer time and be more labor-intensive than the traditional mailing-based survey approach. However this approach was practically feasible in our case, because most of the firms covered were located in the metropolitan area of Seoul, within a 20-30 km radius, and the population size was not too large to handle logistically.

For the survey implementation, a group of senior college students majoring in business were selected and 82 firms that initially agreed to participate in the survey were contacted. After the survey, excluding non-responses and a few cases with data problems, we came up with a usable database consisting of 48 responses (a response rate of 58.5%). It is noteworthy that 48 firms obtained for our sample represent 24% of the population, as industry experts including KGDI researchers estimated that there were

only about 200 active game developers in Korea. Thus, based on the high proportion of firms represented in our sample relative to the population size, we view that the population's statistical properties must be adequately reflected in our sample. We also checked for the non-response biases, and found no substantial differences in profiles between the firms in our sample and the non-responding firms.

## 3.2 Measures

### 3.2.1 Independent Variables

We conceptualized a start-up's initial network resources into two dimensions i.e. reputation of the network partners and operational contributions from them at the time of the start-up's founding. Building on the prior measures developed in Stuart (1998) and Stuart et al. (1999), we operationalized the reputation of initial network partner by the following three items: (1) how well-known the partner is to the game development industry, (2) how much of technological prestige the partner firm has in the industry, and (3) how successful the partner's products are in the market places. With respect to the three items, we asked the participating CEOs to rate their most influential initial alliance partner using a 7-point Likert scale. Finally, we created the composite measure 'reputation'

by averaging the scores of the three items (mean=4.69, std.dev.=1.34).

Secondly, to operationalize the 'operational contributions' from the initial network partners, we asked the CEOs to rate the most influential partner's contributions at the founding stage in the following 9 operational areas using a 7-point Likert scale: (1) technology, (2) sales, (3) promotion and advertising, (4) introductions to potential customers, (5) logistics and infrastructures, (6) administrative, legal, tax services, (7) investors and financing (bank loans, private equity, etc.), (8) direct equity participation, and (9) introductions to potential alliance partners. Because no specific measurements that directly address the areas of potential contributions for start-ups have been conducted in the prior research, we chose to pursue an expert panel's validation of the measure. A group of start-up incubation specialists recommended by KGDI reviewed the above 9 items and confirmed that they are valid and distinct areas in providing incubating services for start-ups in the game development industry. A composite variable adding the scores of the 9 items was used to calculate the 'operational contributions' (mean=24.33, std.dev.=9.87).

### 3.2.2 Dependent Variables

To capture the eventual performance of

start-ups after founding, we used two variables, 'sales' and 'profitability'. 'Sales' was measured by the CEOs' self-report of firm revenues in the previous year. Self-report values were used because none of the start-ups in our sample were listed in the stock markets, thus the sales data were not publicly available<sup>1)</sup> (mean= 10.94, std.dev.= 1.12). Similarly, for the 'profitability' variable, lacking public data, we asked the CEOs to self-report the percentage of pre-tax income to sales for his or her company<sup>2)</sup> (mean= 30.91, std.dev.=12.97).

Our second category of dependent variables related to start-up's strategic behaviors, and we conceptualized the following four distinct types of strategic decisions at the post-founding stage being influenced by start-up's founding network resources: related diversification, unrelated diversification, entry into international markets, and search for overseas alliance partners. For the two variables, 'network-based related diversification' and 'network-based unrelated diversification', using a 7-point Likert scale, we asked the CEOs to rate how extensively they relied on networks of partners and existing alliance relationships in their previous and current attempts to formulate and execute diversification moves into product fields that have

strategic and operational relatedness (and unrelatedness, respectively) with the focal firm's major lines of product within the game development business (mean= 2.89, std.dev.= 1.90 for related diversification; mean= 2.22, std.dev.= 1.77 for unrelated diversification). For the 'entry into international markets' variable, we asked the CEOs to rate the degree of their reliance on the existing networks and alliance relationships when they devised and executed international market entry strategies during the post-founding period (mean= 1.88, std.dev.= 1.59). Similarly, the variable 'overseas alliance partner' was operationalized by asking the CEOs to indicate the degree to which they have relied on the existing 'domestic' networks for finding 'foreign' partners to collaborate with (mean= 1.78, std.dev.= 1.49).

### 3.2.3 Moderating Variables

In our model, we conceptualized two leadership style variables, 'charismatic leadership' and 'transactional leadership', as having moderating effects between initial network resources and performance/strategy of start-ups. For the variable "charismatic leadership", we adopted the seven-item measure from

1) For a sub-sample of the firms studied, however, we asked KGDI to cross-check the sales figures reported by the CEOs with the agency's own internal data for confirmation purposes, and no significant deviations were found.

2) Again, a separate check by KGDI confirmed the reliability of the measure used.

Waldman, Ramirez, Homoe, and Puranam (2001). Cronbach's alpha of .82 was found, indicating a high level of cross-item reliability (mean=5.36, std.dev =0.66). Similarly, for the 'transactional leadership', we replicated the measure in Waldman et al. (2001). Support for the measure's reliability was also found with Cronbach's alpha of .67 (mean=5.55, std.dev=0.71).

### 3.2.4 Control variables

For the control variables in our model, we included 'years-in-operations', 'initial capital', and a series of 'platforms' variables. 'Years-in-operations' is added to the model to reflect that performances and strategic behaviors of start-up firms can be a function of organizational development stages. For instance, firm age was found to exert a systematic effect on the rate at which firms patent (Sørensen & Stuart, 2000). Assuming in general that the longer an organization has existed, the more progressed the organization is in the developmental path, we viewed 'years-in-operations' as measured by the number of years a focal firm has existed after its founding a valid way of operationalizing the construct (mean= 3.5, std.dev.= 2.38) .

Additionally, because financial resources a start-up is born with can influence eventual strategic behaviors and performances, we took the 'initial capital' as a control variable

to capture the amount of financial resources at the time of founding. We operationalized 'initial capital' by asking the CEOs to self-report the total amount of equity investment made at the time of founding into game development industry (mean=14380.21, std.dev. =17572.90).

Finally, it seemed plausible to reflect in our model that there exist differences in demand scales, competitive structures, participants, regulations, technological infrastructures, and game-user behaviors and preferences across different platforms games are played on. Typical game platforms include internet, mobile phones, consoles, PCs, and arcades (Ministry of Culture & Tourism, 2005). Thus, in order to control for the potential platform-by-platform differences in the effects founding network resources may have on eventual performance and strategy of game development companies, we created dummy variables indicating the particular platform types being used by focal firm's game products (mean=.42, std.dev.= .50 for on-line; mean= .46, std. dev.= .50 for mobile; mean=.02, std.dev.=.14 for consoles; mean=.10, std.dev.=.31 for PCs; mean=.10, std.dev.= .20 for arcades).

### 3.3 Analysis

Table 1 reports descriptive statistics and correlations, and Table 2 reports the results

<Table 1> Descriptive Statistics and Correlations

Variables	Mean	S.D.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Years-in-operations	3.5	2.37675	1																
Initial Capital	14380.21	17572.90	.230	1															
Platform-on-line	.42	.498	.153	.164	1														
Platform-mobile	.46	.504	-.249	-.081	-.777(**)	1													
Platform-console	.02	.144	-.093	-.037	-.123	.159	1												
Platform-PC	.10	.309	-.159	.033	.265	-.314(*)	-.050	1											
Platform-arcade	.10	.309	-.145	-.181	.127	-.177	.428(**)	.330(*)	1										
Reputation	4.6889	1.33767	.049	-.201	-.079	-.122	.109	.081	.342(*)	1									
Operational Contribution	24.3340	9.88672	.132	-.002	-.081	-.019	.086	-.090	-.118	.133	1								
Sales	10.9394	1.12459	.191	-.083	-.200	.111	.075	-.129	-.046	.194	.062	1							
Profitability	30.9113	12.96612	.024	.007	.167	-.180	-.266	.181	-.179	.142	-.294	.100	1						
Network-based Related Diversification	2.89	1.897	-.048	-.143	.053	-.034	-.168	.023	-.104	.342(*)	.401(*)	.229	.225	1					
Network-based Unrelated Diversification	2.22	1.773	-.150	-.151	-.213	.261	-.125	.083	-.047	.385(*)	.379(*)	.137	.149	.623(**)	1				
Network-based International Expansion	1.88	1.588	-.131	-.084	-.142	.016	.523(**)	-.098	.319(*)	.189	.323(*)	.098	-.188	.027	.152	1			
Overseas Alliance Partner	1.78	1.492	-.121	-.084	-.162	.013	.560(**)	-.085	.308(*)	.211	.309	.097	-.190	.040	.121	.987(**)	1		
Charismatic Leadership	5.3618	.66132	-.122	-.006	-.089	.035	.015	.117	.154	.083	.018	-.126	-.031	.146	.274	.241	.254	1	
Transactional Leadership	5.5510	.70639	.074	-.031	-.044	.049	-.115	-.001	-.074	.032	.035	-.111	.086	.256	.244	.011	.016	.680(**)	1

\*  $p < .05$ , \*\*  $p < .01$

<Table 2> Results of Hierarchical Regression Analysis: Effects of Initial Network Resources on Performance & Strategy

Variables	Sales			Profitability			Network-based Related Diversification			Network-based Unrelated Diversification			Network-based International Expansion			Overseas Alliance Partner		
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10	Model 11	Model 12						
Constant	10.499**	10.401**	27.667*	29.807**	-1.688	-1.778	-2.499†	-3.523*	1.498	1.579	1.665†	1.687†						
<i>Control</i>																		
Years-in-operations	0.015	.025	-.312	-.340	-.208	-.238	-.200	-.105	-.128	-.103	-.105	-.074						
Initial Capital	9.302E-06	9.046E-06	7.043E-05	.000	3.099E-06	1.409E-05	8.856E-07	-1.9E-06	3.605E-06	2.968E-06	3.686E-06	2.438E-06						
Platform-online	-.386	-.306	3.493	1.030	1.736†	1.854†	1.613	2.530†	-.832	-.789	-.895†	-.821						
Platform-mobile	-.108	.004	-2.549	-3.810	1.290	1.356	2.427†	3.060*	-.816	-.825	-.952†	-.916†						
Platform-console	.563	.796	-6.347	-4.043	-2.299	-2.215	-2.637	-2.021	3.728*	3.727*	4.307*	4.318*						
Platform-PC	-.427	-.323	6.447	9.700†	-.063	.041	1.000	1.466	-1.276	-1.293	-1.032	-1.031						
Platform-arcade	-.353	-.595	-16.138*	-11.170*	-.976	-.184	-.314	-.442	1.173	1.214	.780	.752						
<i>Independent</i>																		
Reputation	.155†	-.161	3.254*	16.597**	.596*	1.764†	.539*	-1.316	.054	.058	.057	.012						
Operational Contribution	-.003	.070	-0.438*	-3.704**	.056*	-.304	.045†	.112	.044*	-.049	.035*	-.052						
<i>Moderating</i>																		
Reputation * Charisma	.185†		.292		-.177		.211		-.050		-.015							
Reputation * Transactional	-.119		-2.610†		-.034		.146		.042		.017							
Operational Contribution * Charisma	-.037†		-.254		.022		-.011		.027		.024							
Operational Contribution * Transactional	.022		.802**		.041		-.004		-.009		-.007							
Total R <sup>2</sup>	.223	.337	.365	.541	.366	.445	.430	.541	.446	.497	.465	.525						

\* p < .10, \*\* p < .05, \*\*\* p < .01

of our analysis of the survey data using hierarchical regressions with ordinary least square (OLS) estimators. Our findings were also robust to the use of maximum-likelihood estimators (MLE) instead of OLS estimators. Variance inflation factors (VIF) for the models ranged between 1.046 and 1.123, values that are considerably lower than the critical value, thus ruling out potential multicollinearity problems. List-wise deletion method was used for missing values, thus the variations in model sample sizes.

## IV. Results

### 4.1 Main Effects

Hypothesis 1 predicted that the variables indicating founding network resources i.e. 'reputation' of founding alliance partners (H1a) and 'operational contributions' made by them (H1b) at the time of founding would have positive effects on start-up's 'performance' at the post-founding stage. Two dependent variables for measuring performance were used: 'sales' and 'profitability' and the results of hierarchical regressions are reported in Models 1 and 3 in Table 2. For the independent variable 'reputation', the coefficients were both positive and significant at  $p < .10$  and  $p < .05$  for explaining the variations in

'sales' and 'profitability', respectively. Thus H1a was supported by the data. Another variable indicating founding network resources was the 'operational contributions', and it showed negative signs, an opposite direction to our expectation, while significant at  $p < .05$  level only in Model 3 where 'profitability' was the dependent variable ( $t$ -value =  $-.2369$  with standard error of  $.185$ ). Hence, this finding did not support our prediction, H1b. All the control variables except 'platform-arcade' were found to be not significant at  $p < .10$  level in Models 1 and 3.

Hypothesis 2 predicted that start-ups founded with positive network resources are likely to evolve towards those firms whose strategic behaviors are also dependent on alliances and networks i.e. firms that follow a network-based strategy. In Model 5, both variables of the founding network resources, 'reputation' and 'operational contributions', showed positive coefficients with significances at  $p < .05$  in explaining 'network-based related diversification'. Firms started with alliances with high reputation or by receiving high degree of operational contributions from alliance partners at the time of founding showed later a behavior pattern of utilizing alliance firms and networks when they had to make diversification moves into related product fields. Thus H2a was supported. In Model 7, we tested the founding network resources variables against 'network-based

unrelated diversification'. The results also support H2b, with both 'reputation' and 'operational contributions' showing positive signs with significance levels of  $p < .05$  and  $p < .10$ , respectively.

Another dependent variable was 'network-based international market entry' and the results are reported in Model 9. While 'operational contributions' showed a positive sign with  $p < .05$  level of significance, the effect of 'reputation' was not significant at  $p < .10$  level, hence only partial support was found for H2c. Firms started with high endowment of operational contributions from alliance partners at the time of founding showed later a strategic behavior pattern of pursuing international market entries by exploiting their network relationships. To the contrary, firms started with alliance partners with high reputation only i.e., without operational contributions from them, did not.

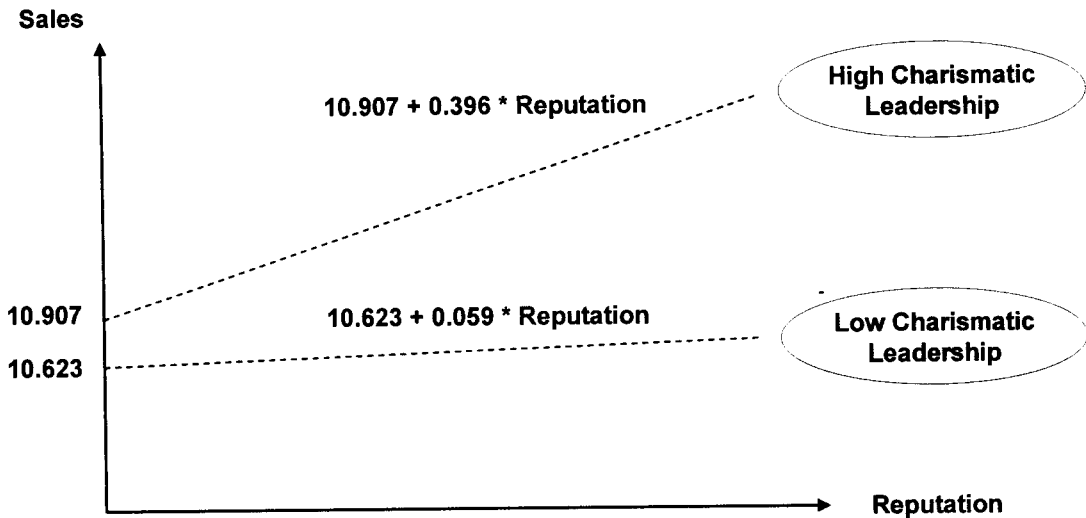
For the dependent variable 'overseas alliance partner', 'operational contributions' was found to have a significant positive effect ( $p < .10$ ), thus supporting H2d. However, the independent variable 'reputation' did not show a significant effect. Overall, we conclude that a partial support for H2d was found by the data.

#### 4.2 Moderating Effects

We predicted that the positive relationships

between founding network resources and firm performance and strategy will be stronger when CEO leadership is stronger. In our tested models, in addition to the main effects with independent variables, we added the interactive terms that consist of both founding network resource variables, 'reputation' and 'operational contributions' along with the two leadership variables 'charismatic leadership' and 'transactional leadership'. With respect to H3a where the moderating effects by charismatic leadership was hypothesized, the interactive terms with 'charismatic leadership' in Models 2 and 4 (for performance dependent variables), only the 'reputation'\*'charismatic leadership' was found to have a positive effect on 'sales', with significance level  $p < .10$ . As illustrated in Figure 2, the data confirms that the positive effect of having prestigious alliance partners at founding stage on eventual firm sales increases at post-founding stage is greater when the CEO is a charismatic leader than when he or she is not. Overall, we conclude that only a weak support was found for H3a.

Similarly, H3b posited that the positive association between founding network resources and the likelihood of firm behaving in network-based ways at post-founding stages will be more stronger in those firms where CEO has strong leadership (both in terms of charismatic and transactional leadership), than in those firms where CEO



〈Figure 2〉 Moderation Effects by Charismatic Leadership on the Relationship between Reputation and Sales

leadership is weak. Contrary to our predictions, such moderating effects were not confirmed by our data as reported in Models 6, 8, 10, and 12, thus rejecting H3b. We address this issue in the discussion section.

## V. Discussion

This study proposed and empirically tested the thesis that firm's founding network resources matter i.e. they not only enhance eventual financial performances, but also affect firm behaviors in strategic decision making. As evidenced by statistically significant effects of the two variables i.e. founding

alliance partners' reputation and their operational contributions on performance increases in sales and profitability at post-founding stages, an overall support for this study's main thesis was found in the research sample of Korean game development firms. An additional analysis of our study related to the roles of CEO leadership in strengthening the linkages between founding network resources and performance and strategic behaviors. Despite our prediction that stronger leadership would be more (as opposed to less) instrumental in converting founding network resources into post-founding performance and network-based behavioral pattern, only a limited support for this hypothesis was found in our data.

## 5.1 Further Analyses

For the construct 'performance' at post-founding stage, we adopted two conventional variables of firm performance, 'sales' and 'profitability'. However, as Baum, Calabrese, and Silverman (2000) pointed out, using non-financial performance measures may be relevant especially for analyzing start-up firm's performance because such operational achievements as human capital recruitment and new product development through R&D are often critical at early stages, because they provide a platform from which future sales and profits can be generated. In response to such observations present in the literature on start-up firms, we conducted a further analysis using two additional dependent variables that focus on operational aspects of start-up performance, 'number of employees' and 'number of new products'. Following the prior start-up studies (e.g. Baum, Calabrese & Silverman, 2000), we viewed the 'number of employees' hired by start-up as an important indicator of organizational performance at early stage. For operationalization, self-report of number of employees by respondent was used as data source (mean=19.47, std.dev.=20.39). Similarly, 'number of new products'

was measured by the self-reported number of new products launched in the market, divided by years-in-operations, thus a yearly average data was used (mean=1.13, std.dev.=1.23).

Table 3 reports the results of hierarchical regression analysis using 'number of employees' and 'number of new products' as dependent variables. In the main-effects-only models (Models 13 and 15), the coefficients of 'reputation' and 'operational contribution' did not show the predicted signs with significance. This is a contrasting result to the supportive evidences found in our earlier models (Models 1 and 3 in Table 2) that were tested against 'sales' and 'profitability' as dependent variables. On the statistical front, it follows that our model fits the data better with financial performance measures as opposed to operational ones.<sup>3)</sup> Still, the substantial reasons why the results are more confirmative to our model when financial performance measures were used as opposed operational ones are unclear, given the overall lack of prior theories and findings on this particular issue. Future research efforts seem necessary to clarify the underlying reasons for the differences in findings, especially in view of the earlier works' emphasis on the relevance

3) Additional analyses checking potential flaws such as multicollinearity were conducted especially because the variable 'initial capital' in Model 13 showed a very strong sign ( $p < .001$ ), indicating a key difference from the earlier models with financial performance measures. However, no substantial violations of statistical assumptions were found (results not reported here).

〈Table 3〉 Further Analysis: Effects of Founding Network Resources on Number of Employees and Number of New Products

Variables	Number of Employees		Number of New Products	
	Model 13	Model 14	Model 15	Model 16
Constant	7.173	4.776	1.442*	1.421*
<b>Control</b>				
Years-in-operations	.833	.927	-.103†	-.108†
Initial Capital	.000**	.000**	1.271E-06	1.096E-06
Platform-on-line	-.158	1.109	-.443	-.490
Platform-mobile	-.648	.681	.148	.101
Platform-console	-2.257	-2.434	.832	.605
Platform-PC	1.558	.767	-.248	-.285†
Platform-arcade	4.255	.890	.098	.234
<b>Independent</b>				
Reputation	-.059†	-7.262	-.012	.317
Operational Contribution	.193	1.989*	.008	-.013
<b>Moderating</b>				
Reputation * Charisma		1.989		-.115
Reputation * Transactional		.660		.053†
Operational Contribution * Charisma		-.044		.019
Operational Contribution * Transactional		-.271		-.014
Total R <sup>2</sup>	.756	.779	.236	.267

†  $p < .10$ , \*  $p < .05$ , \*\*  $p < .01$

of operational performance in start-up studies (e.g. Baum et al., 2000).

Moderating effects by CEO leadership was also tested against the operational measures of performance and the results are reported in Models 14 and 16 of Table 3. For 'number

of employees' (Model 14), none of the interactive terms showed significances, thus rejecting the hypothesis on moderation effects by CEO leadership. Also, in Model 16 where the dependent variable 'number of new products' was used, only the interactive term

'reputation'\*'transactional leadership' showed the predicted sign with weak significance ( $p < .10$ ). In sum, no systematic moderating effects by CEO leadership were evident even when 'number of employees' and 'number of new products' were used as dependent variables.

## 5.2 Potential Contributions

Within the overall literature of strategy, we consider this study as having a position in a rather underdeveloped research area relating to the origins of resource heterogeneity. To the extent heterogeneous resources held by different firms are a necessary condition for performance differentials among those firms (Barney, 1991; Peteraf, 1993), the inquiry on where such heterogeneity comes from remains as a pivotal question in strategy research. Along this line, the findings of our study can make a case for the implication that social relationships and symbolic ties do play an important role in imprinting firm's internal resources to develop in heterogeneous ways at its inception, which in turn construct the basis for longer-term competitive advantages. This is so because, otherwise, the power of social ties at founding would not have prolonged effects over time on economic performances as observed in our study; rather the effects created by social ties would have been limited to short-term performances only. Hence, by implication of the findings

here, we suggest that development of firm resource heterogeneity may in part be caused by the heterogeneity in social relationships and network resources available at the time of organizational founding. Different social relationships could bring in to organizations at early stage a different set of lens to interpret the environment, a different market opportunity set to cultivate (Penrose, 1959), as well as different ways of dealing with day-to-day operations. However, the qualitative research question of how such social ties specifically help firms develop rent-generating economic resources at the early stage was not addressed by this study, and we feel that the question remains as a fertile area for future studies.

To the research streams of networks and alliances, this study's findings that firm strategic decisions are crafted and carried out in a network-based way in part due to the initial network experiences the firms had at founding stage provide an interesting perspective on the motivations for networking and alliances. Our findings suggest the notion that the propensity of firm's joining networks and forming alliances is, to some extent, predetermined by a series of networking events and experiences at the time of organizational beginning. While, from a strategic choice perspective, networks and alliances may represent an optimal solution a firm accepts through deliberate analyses

against various contingencies, they may also reflect a practice of routines in that firms may have been conditioned over time with varying degrees to rely on networks and alliances by their early exposures to and experiences of networking.

Further in relation to the evolutionary perspectives on organizational studies where the notions of imprinting (Boeker, 1989), organizational history (Hannan & Freeman, 1977; Lawrence, 1984; Zald, 1987; Boeker, 1989), early political and social processes (Selznick, 1957), and events surrounding the creation of a new organization (e.g. Stinchcombe, 1965) have already been viewed as important determinants of subsequent organizational performances, the findings of this study generally confirm the prolonged effects of founding contexts on eventual organizational performance and behaviors. Unlike the other studies so far, however, we highlight the effect of external network relationships as another significant facet of founding contexts.

### 5.3 Limitations and Future Research Directions

An important weakness of this study relates to the limited support found for the moderation effects posited in our model -- CEO leadership did not exert significant

influences in strengthening the relationships between founding network resources and firm performance in our data. While the theoretical basis for our predictions was rooted in the prior research on top management leadership, as a conjecture, we speculate that we might have over-specified the scope of CEO leadership's influence to reach beyond organizational boundary. In reality, there might not have been too much room for CEO leadership to have control over the transformational process that converts the network resources and social ties into financial performances and specific patterns of firm behaviors. An alternative conceptualization is that CEO's leadership styles, or personal characteristics in a broader sense may matter in the process of *securing* the social relationships, not in the later process of *transforming* those social resources into performance and behaviors. Previous literature on CEO leadership also emphasized the positive roles played by CEOs in building the needed networks at the time of firm's founding (Gupta, 1984; Hambrick & Mason, 1984; Ireland, Hitt & Sirmon, 2003; Reuber & Fischer, 1997).<sup>4)</sup> A future study addressing this possibility may open up a productive research stream in that the fits between different styles of entrepreneurial leadership vis-à-vis different phases of idio-

---

4) For this point, I am thankful to one of the reviewers who suggested the CEO's roles may be more effective in securing the networks at early stage of founding than applying the network resources to strategic actions and performance outcomes later.

syncratic resource developments can provide much more detailed theoretical and practical insights into an issue which is quite underdeveloped yet.

At a more micro-level analysis, it is interesting to observe however that the only significant coefficients found with predicted signs were the two cases of 'reputation'\* 'charismatic leadership' and 'operational contribution'\* 'transactional leadership' (with the dependent variables 'sales' and 'profitability' respectively) as reported in Model 2 and Model 4 in Table 2. When the two results are combined together, it seems to suggest that a higher level of fit exists for enhancing performance when *identity ties* (as represented by 'reputation' of founding network partners) are created by those CEOs with high *charismatic* leadership, and also when *operational ties* (as represented by 'operational contributions' from founding network partners) are created by those CEOs with high *transactional* leadership, than any other combinations. While the particular matching makes an intuitive sense, it seems that a more systematic research agenda in the future should follow to investigate the implied notion that the effectiveness of specific entrepreneurial leadership styles may vary depending on the particular nature of social relationships the leaderships are exposed to.

By taking the research sample from a newly

emerging industry, we intended to assure data relevance in fitting to our research questions and research design parameters. While such data effectiveness might have been achieved in our study, the drawbacks of such sampling also exist. As a single industry study, the generalizability of the findings should await future research's verification. As a newly emerged industry, the sample size was limited for obvious reasons. While we tried a unique survey method to improve the sample's representativeness of the population, there might still be statistical irregularities due to the sample size, and to that extent, this study's findings should be interpreted with caution.

## References

- Aldrich, H. E., Rosen B, & Woodward W. 1987. The impact of social networks on business foundings and profit: A longitudinal study. In *Frontiers of Entrepreneurship Research*, Churchill N. et al. (eds). Babson College: Babson, MA: 154-168.
- Anand B. N. & Khanna, T. 2000. Do firms learn to create value? The case of alliances. *Strategic Management Journal*, Special Issue 21: 295-316.
- Barney, J. 1991. Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99 - 120.
- Bass, B. M. 1985. *Leadership and performance*

- beyond expectations. New work: Free press.
- Baum, J. C., Calabrese, T., & Silverman, B. S. 2000. Don't go it alone: Alliance network composition and startups' performance in Canadian biotechnology. *Strategic Management Journal*, 21: 267-294.
- Boeker, W. 1989. Strategic change: The effects of founding and history. *Academy of Management Journal*, 32: 489-515.
- Burns, J. M. 1978. *Leadership*. New York: Harper & Row.
- Burt, R. S. 1992. *Structural Holes: The social structure of competition*. Harvard University Press: Cambridge, MA.
- Dyer, J. H., & Nobeoka, K. 2000. Creating and managing a high performance knowledge sharing network: The case of Toyota. *Strategic Management Journal*, Special Issue 21: 345-368.
- Dyer, J. H., & Singh, H. 1998. The relational view: Cooperative strategy and sources of interorganizational competitive advantage. *Academy of Management Review*, 23: 660-679.
- Eisenhardt, K. M. & Schoonhoven, C. B. 1990. Organizational growth: Linking founding team strategy, environment, and growth among U.S. semiconductor ventures, 1978-1988. *Administrative Science Quarterly* 35: 504-530.
- Freeman, J., Carroll, G. R. & Hannan, M. T. 1983. The liability of newness: Age dependence in organizational death rates. *American Sociological Review*, 48: 692-710.
- Ghorpade, J., Hatstrup, K., & Lackritz, Z. R. 1999. The use of personality measures in cross-cultural research: A test of three personality scales across two countries. *Journal of Applied Psychology*, 84: 670-679.
- Granovetter, M. 1985. Economic action and social structure: The problem of embeddedness. *American Journal of Sociology*, 91: 481-510.
- Granovetter, M. 1994. Business groups. In N. Smelser and R. Swedberg (eds.), *Handbook of Economic Sociology*. Princeton University Press, Princeton, NJ, 453-475.
- Gulati, R. 1995. Social structure and alliance formation patterns: A longitudinal analysis. *Administrative Science Quarterly*, 40: 619-652.
- Gulati, R. 1998. Alliances and networks. *Strategic Management Journal*, 19: 293-317.
- Gulati, R. 1999. Network location and learning: The influence of network resources and firm capabilities on alliance formation. *Strategic Management Journal*, 20: 397-420.
- Gulati, R., Nohria, N., & Zaheer, A. 2000. Strategic network. *Strategic Management Journal*, 21: 203-215.
- Gupta, A. K. 1984. Contingency linkages between strategy and general manager characteristics: A conceptual examination. *Academy of Management Review*, 9 (3): 399-412.
- Hambrick D. C., & Mason P. A. 1984. Upper echelons: The organization as a reflection of its top managers. *Academy of Management Review*, 9: 193-206.
- Hannan, M. T. & Freeman, J. 1984. Structural inertia and organizational change. *American Sociological Review*, 49: 149-164.

- Hite, J. M., & Hesterly, W. S. 2001. The evolution of firm networks: From emergence to early growth of the firm. *Strategic Management Journal*, 22: 275-286.
- House, R. J. 1977. A 1976 theory of charismatic leadership. In J. G. Hunt & L. Larson (Eds.), *Leadership: The cutting edge*: 189-207. Carbondale: Southern Illinois University Press.
- Inkpen A. C. & Tsang E. W. K. 2005. Social capital, networks, and knowledge transfer. *Academy of Management Review*, 30:146-165.
- Ireland, R. D., M. A. Hitt, & D. G. Sirmon. 2003. A model of strategic entrepreneurship: The construct and its dimensions. *Journal of Management*, 29 (6): 963-989.
- James, W. H. 1957. *Internal vs. external control of reinforcement as a basic variable of learning*. Unpublished doctoral dissertation, Ohio State University.
- Lawrence, B. 1984. Historical perspective: Using the past to study the present. *Academy of Management Review*, 9: 307-312.
- Ministry of Culture & Tourism, 2005. *2004 White Book on Korean Cultural Industries. (in Korean)* Seoul, Korea.
- Nelson, R. R., & Winter, S. G. 1982. *An Evolutionary Theory of Economic Change*. Harvard University Press, Cambridge, MA.
- Nohria, N. 1992. Is a network perspective a useful way of studying organizations? In N. Nohria & R. Eccles(Eds.), *Networks and organizations: Structure, form and action*: 1-22. Boston: Harvard Business School Press.
- Penrose, 1959. *The theory of the growth of the firm*. New York: John Wiley.
- Peteraf, 1993. The cornerstones of competitive advantage: A resource-based view. *Strategic Management Journal*, 14, 170-181.
- Powell, W. W., Kogut, K. W., & Smith-Doerr, L. 1996. Interorganizational collaboration and the locus of innovation: Networks of learning in biotechnology. *Administrative Science Quarterly*, 41: 116-145.
- Reuber, R. & Fischer, E. 1997. The role of management's international experience in the internationalization of smaller firms. *Journal of International Business Studies*: 807-825
- Selznick, P. 1957. *Leadership in administration*. New York: Harper & Row.
- Sørensen, J. B., & Stuart, T.E. 2000. Aging, obsolescence, and organizational innovation. *Administrative Science Quarterly*, 45: 81-112.
- Stinchcombe, A. L. 1965. Social structure and organizations. In handbook of *Organizations*, March JG(ed). Rand McNally: Chicago, IL; 142-193.
- Stuart, T. E., Hoang, H., & Hybels R. C. 1999. Interorganizational endorsements and the performance of entrepreneurial ventures. *Administrative Science Quarterly*, 44: 315- 349.
- Stuart, T. E. 1998. Network positions and propensities to collaborate: an investigation of strategic alliance formation in a high-technology industry. *Administrative Science Quarterly*, 43: 668-698.
- Uzzi, B. 1997. Social structure and competition in interfirm networks: The paradox of embeddedness. *Administrative Science Quarterly*,

- 42: 35-67.
- Waldman, D. 1994. The contributions of total quality management to a theory of work performance. *Academy of Management Review*, 19: 510-536.
- Waldman, D. A., Ramirez, G. G., & House, R. J. 2001. Does leadership matter? CEO leadership attributes and profitability conditions of perceived environmental uncertainty. *Academy of Management Journal*, 44: 134-143.
- Walker, G., Kogut, B. & Shan, W. 1997. Social capital, structural holes, and the formation of an industry network. *Organization Science*, 8: 109-125.
- Woolcock, M. 1998. Social capital and economic development: Toward a theoretical synthesis and policy framework. *Theory and Society*, 27: 151-208.
- Young, G. J., Charles, M. P. & Shortell, S. M. 2001. Top management and network effects on the adoption of innovative management practices: A study of TQM in a public hospital system. *Strategic Management Journal*, 22: 935-951.
- Zald, M. 1987. *History, sociology, and theories of organization*. Working paper, University of Michigan, Ann Arbor.

## 창업시 네트워크자원의 창업후 기업성과 및 전략에 대한 영향: 게임개발산업을 통한 실증적 연구

문철우\*

### 요 약

본 논문은 현재 보이는 기업 성과와 전략적 행위의 변량 중 상당한 부분은 기업창업 초기의 네트워크자원에 의해 설명이 가능하다고 주장한다. 본 논문은 '창업초기네트워크'를 개념화하며, 이를 창업 당시 기업이 소유하고 있는 외부 기업 및 개인과의 긍정적 또는 협력적인 사회적 관계로 정의한다. 본 논문은 그동안 문헌에서 간과되었던 초기 사회적 자산의 사후적 성과 및 전략 패턴에 대한 지속적 효과 (prolonged effects)의 존재를 보고함으로써 기업조직의 진화적 본질에 대한 학문적 공헌을 하고자 한다. 한국 게임개발산업을 연구대상으로 분석한 결과, 창업자가 갖고 있던 창업당시의 초기네트워크의 우월성은 창업 후 상당기간이 지난 후에도 기업성과에 정(正)의 영향을 갖는 것으로 입증되었다. 또한 우월한 초기 네트워크를 갖고 창업되는 기업일수록, 창업 이후에도 네트워크에 기반한 전략적 의사결정을 하는 행동적 패턴을 보이는 것으로 나타났다. 반면에 최고경영자의 리더십 수준은 위 관계들을 강화시키는 조절효과를 갖으리라 가설화 되었으나, 데이터 분석의 결과, 이 가설은 기각되었다.

주제어: 창업컨텍스트, 네트워크전략, 벤처경영

\* 성균관대학교 경영학과