

THE INFLUENCE OF ENTREPRENEURS' STRATEGIC AGILITY AND DYNAMIC CAPABILITY ON THE OPPORTUNITY PURSUIT PROCESS OF NEW VENTURES: EVIDENCE FROM SOUTH KOREA

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ABSTRACT

This study proposes a process for successful opportunity pursuit based on entrepreneurs' strategic agility and firms' dynamic capabilities. An in-depth case study is conducted with five Korean ventures to expand our understanding of how venture firms identify, develop and realize new business opportunities. The process undertaken by venture firms to develop opportunities is a critical engine for attaining competitive advantage. Through longitudinal and in-depth case studies on the five new venture firms, the opportunity pursuit process and the key factors affecting its success are analyzed qualitatively based on CEO or founder interview data. The three major study findings are as follows. First, the strategic agility and alertness of the founder are associated with successful opportunity recognition and pursuit. Second, a dynamic convergence of the core firm competences-resource, network and knowledge-is critical for successful opportunity development. Third, rapid changes in firms' external and internal environments are related to successful opportunity pursuit.

Keywords: Opportunity Identification, Strategic Agility, Entrepreneurial Alertness, Dynamic Capability.

INTRODUCTION

The increasing popularity of the creating new ventures in the Korean market did not last long into the new millennium. Ventures once highly regarded in the market have disappeared because of lack of core technology and insufficient entrepreneurial competency. In contrast, ventures in the United States and Taiwan have contributed to the dynamism of their national economies. Ventures in Korea are currently facing limits to growth due to the lack of entrepreneurial opportunity recognition and the dearth of knowledge management capability. Ventures with fewer resources than large firms should continue to search for and capture core opportunities. In the past, successful companies acknowledged and moved quickly to solve any problems recognized by consumers (Stalk, Pecaut & Burnett, 1996), whereas unsuccessful companies failed repeatedly in the market as they did not recognize the transformations occurring in the external environment. Therefore, corporations need to understand how they can identify and develop new business opportunities (Baron, 2006). With insufficient resources and capabilities, ventures should be more sensitive to changes in the market and need to develop the dynamic capability to deal with them (Ardichvili, Cardozo & Ray, 2003). Entrepreneurship, which is a topic of widespread interest today, is the ability to identify and realize new

entrepreneurial opportunities. Entrepreneurs must seize opportunities compatible with their organizational capabilities and devise specific methods to utilize them.

In Korea, however, strict government regulations and intense global competition have increasingly reduced the potential for new ventures. As a result, studies on Korean ventures' opportunity identification and capacity building have decreased. Nevertheless, Korean ventures have enhanced their capabilities and demonstrated remarkable performance. While the potential for ventures is shrinking as large corporations come to dominate even niche markets, some entrepreneurs retain outstanding entrepreneurship and strategic objectives. Strategic agility with which entrepreneurs continuously quickly identify, develop and capture new business opportunities is emerging as a critical element of firm success.

Particularly, the proactive strategy and dedication of Korean entrepreneurs have generated the most dynamic IT growth in Asia (Park, Kwon, Kim, Ohm & Chang, 2014), driven by the excellent venture performance and entrepreneurial capability to recognize business opportunities. Moreover, Korean ventures have exemplified important academic lessons about the growth of ventures in developing countries and have attracted keen attention to their practical implications for the global growth strategy of ventures. In other words, the capability to discover new business opportunities and utilize them is essential for the growth of Korean ventures and entrepreneurship. However, insufficient research has been conducted to investigate the identification and development of business opportunities by ventures in the Korean market (Han, Chung, Son & Kwon, 2017).

Hence, this study conducts a case study on major ventures that achieved growth by identifying opportunities continuously. The goal of this study is to provide practical suggestions to local entrepreneurs. Of late, business opportunity identification and capacity building are of great interest to ventures that are facing limits to growth. Accordingly, this study focuses on performance enhancement through opportunity identification by Korean ventures, based on the capability of entrepreneurs and on enhancing academic understanding and offering implications about ventures' opportunity identification and capacity building.

The rest of this study is organized as follows. Section 2 outlines the theoretical literature background. Section 3 introduces the research method and the reasons for our focus on the process of opportunity identification and development. Section 4 presents the case study results and the research proposition. Finally, section 5 offers the concluding assessment.

THEORETICAL BACKGROUND

Entrepreneurial Alertness and Opportunity Realization

In the study of entrepreneurship, the process of recognizing and commercializing new business opportunity has become one of the most popular domains (Baron, 2006; Shane & Venkataraman, 2000; Short, Ketchen, Shock & Ireland, 2010). Particularly, entrepreneurial alertness to recognize opportunity is the ability to identify market changes and their effect in the industry (Kirzner, 1985). Therefore, entrepreneurial alertness represents the capability of entrepreneurs to create previously unrealized potential value in the process of recognizing and developing new ideas (Jintong, Michele & Lowell, 2012). To grow, firms need to continuously discover and develop business opportunities using entrepreneurial alertness in the market. In recent times, entrepreneurial alertness has emerged as the most essential factor in ensuring corporate sustainability, irrespective of organization type and size.

Among the numerous definitions for the concept of opportunity, Von Hippel (1994) explains opportunity as the “value that customers will pursue in the future in the market.” Additionally, Schroeder, Buckman & Cardozo (1996) argue that opportunities can be generated through the technology and knowledge held by firms and by utilizing the capability to exploit resources. That is, the previous literature stresses that the capability to create value provides new opportunities (Han, 2017; Kwon, Park, Ohm & Yoo, 2015). A review of relevant previous theories and studies leads us to conclude that entrepreneurial alertness is defined as the ability to promptly respond to information generated in a certain environment and to cultivate sensitivity to market and opportunities. Hence, the combination of firms’ external environment and internal capabilities can raise entrepreneurial alertness and, in turn, facilitate the identification of new opportunities (Gaglio & Taub, 1992; Hisrich, 1990; Kwon, 2015).

Opportunity Identification

One of the most important elements for entrepreneurs is alertness with which they can identify new ideas in a timely manner and convert them into innovative business opportunities (Ko & Butler, 2003; Stevenson, Roberts & Grousbeck, 1985). The importance of recognizing new business opportunities has been frequently mentioned in many studies. For example, Venkataraman (1997) stresses the importance of research in methods to create new values and facilitate judicious utilization of business opportunities by ventures (Park, Kim, Kwon, Ohm, Del Pobil & Yoo, 2016).

Previous studies, however, are limited as they considered only a single aspect of opportunity identification and development process. For example, Sigrist (1999) focuses on the cognitive process for opportunity recognition, while Hills & Sharder (1998) focus more on the social network. On the other hand, Shane (2000) considers prior experiences and background knowledge to be effective factors in opportunity identification. Hence, the literature on factors of opportunity identification and development appears to lack consistency (Park et al., 2016).

Strategic Agility and Dynamic Capability

Changes in business and environment are a fact of life for firms. In order to deal with change, entrepreneurs need to have strategic agility (Doz & Kosonen, 2010). As an indispensable capability for firms to survive in a rapidly changing environment, strategic agility is categorized into three enabling capabilities: strategic sensitivity, leadership unity and resource fluidity. These three elements are necessary for firms to grow and innovate.

Strategic sensitivity signifies the sharpness of perception and intensity of awareness and attention in communication with the outside world through an open strategic process (Park, Kwon & Kim, 2016). Leadership unity connotes the capability of the management to make and implement decisions promptly and boldly. Resource fluidity denotes the internal capability to identify opportunity and redeploy resources rapidly (Doz & Kosonen, 2010). In addition, in order to boost the collective commitment of members of an organization, leaders should display adaptive leadership (Heifetz & Laurie, 2001). Fair implementation of the process may encourage members to demonstrate collective commitment in a dynamically changing environment (Van der Heyden & Limberg, 2007).

The capability of a firm to establish a dynamic learning process and understand advanced technology and market changes has been perceived as essential, rather than optional (Cooper, 1991). Therefore, businesses should continue to acquire capabilities through learning in order not

to fall behind in tandem with changes in the business environment (Kim, 1999; Park, Yoo, Kwon, Ohm & Chang, 2016). Additionally, the starting point is to encourage members of a corporation to learn effectively. Other core competencies needed for a firm include redeploying internal resources flexibly according to the changes in the environment (Thompson, 2003).

In this rapidly changing environment, instead of entirely relying on core competency, firms need adaptation and adjustment to manage products and their business according to changes in business models or the environment. In particular, entrepreneurs should continuously strive to respond flexibly to each of the changes in the market such as the integration of hardware and software (Galunic & Eisenhardt, 1996). Therefore, businesses and entrepreneurs need to examine their own resources and adjust their business models. Firms should encourage all members of the organization to recognize the environment dynamically and respond to changes flexibly. Moreover, by redeploying resources in response to environmental changes, firms should cultivate the capability to adapt flexibly in the market (Doz & Kosonen, 2010; Kwon, Park & Kim, 2014).

RESEARCH DESIGN

This research investigated how Korean ventures identify and develop entrepreneurial opportunity and acquires capabilities to address changes in the external environment. In order to implement new projects and convert them into a business model, entrepreneurs need to acquire strategic agility. Few studies have examined the dynamic changes in the process undertaken by Korean ventures to identify opportunities. In order to examine the acquisition of dynamic capabilities (in terms of organization, resources and strategy) in an environment facing a firm, a case study is much more meaningful in this research.

A case study is generally conducted when a research hypothesis cannot be statistically tested. According to the theory of Eisenhardt (1989), when existing factors cannot explain changes or phenomenon of research objects or when a new theory needs to be established, a case study can be more effective (Covin & Slevin, 1989; Edmondson, Bohmer & Pisano, 2001; Park & Kwon, 2016; Sirkin, 1995). The Academy of Management Journal, the flagship empirical journal on management, also emphasizes the necessity of case studies using qualitative methods (Dutton & Dukerich, 1991; Gephart, 2004; Weick, 2007). As the business environment evolves with increasing speed and case studies become effective in explaining phenomena more convincingly, the need for a case study is increasingly being recognized in academic journals (Eisenhardt & Graebner, 2007; Galunic & Eisenhardt, 2001; Sudday, 2006).

Accordingly, this study adopted the case study method of Eisenhardt (1989), which is the most widely applied among case study methodologies. Five firms with a record of dynamically identifying new business opportunities were selected, comfortably within the appropriate range of 3 to 10 (Eisenhardt, 1989; Siggelkow, 2007). Through comparative analysis of the five firms in this study, the strategic agility of entrepreneurs and capabilities of ventures could be identified with more precision. The present case study is detailed in Table 1.

In order to select the five firms, the type of ventures and industrial sectors in which they operate were considered. By exploring diverse industrial sectors and observing firms in the growth phase, the risk of generalization based on the case study was mitigated (Eisenhardt, 1989; Sudday, 2006; Yin, 1994). Firms were selected as follows: 1) ventures that have emerged as successful companies through strategic intent of entrepreneurs or aggressive pursuit of businesses, 2) ventures that have grown through dynamic response to changes with steady

revenue and profit growth during recent years. Industrial sectors are divided into software, hardware and agriculture industries.

Table 1 CASE STUDY PROCESS	
Research Process	Descriptions
Getting started	Acquisition of strategic agility of entrepreneurs of ventures to identify opportunity and dynamic capacity of ventures.
Selecting cases	Selection of five venture firms that have steadily grown in Korean software, hardware and agriculture sectors.
Crafting instruments and protocols	Access to and application of various data such as interviews with entrepreneurs.
Entering the field	Visits to workplace of ventures and detailed interviews.
Analyzing data	Precise analysis through interviews and existing data and additional interviews, if necessary.
Shaping propositions	Ventures' identification of opportunities and establishment of specific objectives for further growth.
Enfolding literature	The significance of this research vs. previous literature.
Research ending	Theoretical contributions and practical implications.

CASE STUDY

The entrepreneurial experience of the ventures selected for case study is as follows: the entrepreneurs of Companies A, J and S were also the CEOs. The entrepreneur of Company D, the CTO at the time of study, had focused more on technology development. However, the entrepreneur of Company B had hired a professional business executive and the entrepreneur himself was responsible for an American subsidiary of the company to explore overseas markets. Four entrepreneurs, except for Company S, had accumulated experience in other companies before establishing their ventures. The entrepreneur of Company S had previously operated his own businesses by creating ventures twice. Table 2 shows the careers of the five entrepreneurs.

Table 2 CAREER OF ENTREPRENEURS OF CASE FIRMS	
Company	Descriptions
Company S	Previously created two ventures along with friends while attending university
Company A	Acquired related knowledge and technology at the Agency for Defense Development
Company D	Operated a company created by the spin-off of a large corporation
Company B	Acquired background knowledge by working for an industrial association
Company J	Previously ran a floral business and created a business based on that experience

Opportunity Identification

By studying each of the cases, we analyzed when and how the firms sensed change in their businesses and identified opportunities. These ventures conduct business in areas in which large corporations cannot easily penetrate and are well aware that because of their own insufficient capabilities, opportunity identification is an essential element in their growth. The

interviews with entrepreneurs and the management confirmed that sensing changes and identifying opportunities largely rely on the opinions of customers observed in the market. Generally, opportunities are found in the market. A closer look at changes in the market reveals that as the demand and inconvenience of the customer increase, relevant markets also expand. This is consistently valid in all industries.

Company J started a vegetable business. The entrepreneur of Company J visited markets and analyzed the distribution process of vegetables over a year and found that consumers become more interested in health when they hear that a lot of pesticides were discovered in some vegetables. Hence, he immediately commenced an organic vegetable business. The entrepreneur of Company S began with an SNS service and developed a free educational application that enables college students to lead their college lives more conveniently by recollecting the inconveniences he had faced at college and offering solutions to them. Identifying the opportunity by focusing on the inconveniences of consumers and resolving them proved to be the source of success (Stalk, Pecaut & Burnett, 1996). Companies A, B and D also identified opportunities by preemptively sensing changes in customers and the market trend, rather than changes in technology.

That is, all firms focused on the increase of customer requests, expansion of consumers' intention to purchase products and new market trends in order to select a new business. As Hills (1995) observes, entrepreneurs agree that market demand for a new business is very important. Subsequently, to understand how effectively ventures identify opportunities, their efforts to discover opportunities were further investigated. The five venture firms invested more efforts than their competitors to obtain diverse information. All of them strengthened staff education and encouraged members to further study at graduate schools or to participate in conferences. Companies A and D, based on software and hardware technology, respectively, were continuously recruiting quality R&D manpower. Company J, an agricultural business, sent employees to international conferences and invested as much as large corporations in employee training and education. These efforts significantly contributed to obtaining dynamic capabilities and realigning resources. Meanwhile, some firms were discovering opportunities by hiring specialists. Company S started the SNS business after recruiting several marketing, investment and technology professionals in order to enter new businesses and overseas market. That is, Company S commenced business after recognizing market prospects and acquiring technological expertise.

Nevertheless, all five venture firms continued to be attentive to grievances or requests of consumers on a regular basis in their efforts to identify opportunities. Moreover, regardless of their industry, all entrepreneurs thought that opportunities are generated in the markets, not from technology. As a critical success factor, all interviewees emphasized the ability to identify the inconveniences of customers in the market ahead of others and convert such findings into an entrepreneurial opportunity. With regard to opportunity identification, the following facts were observed (Observation 1).

Observation 1

Changes in market and customers have a positive impact on entrepreneurial opportunity identification.

1. As customers' demands or grievances about products increase, successful venture entrepreneurs tend to regard them as business opportunities.

2. Irrespective of industry, an opportunity is more easily discovered in changes in the market rather than from technological changes.
3. Employees having more external education and knowledge tend to identify opportunities more easily.
4. Building a group of professionals within a company and identifying opportunities through networking tend to increase the chances of opportunity identification.

Generally, ventures are known to engage in creative destruction through technological innovation and large corporations grow by deploying resources in established markets. However, this case study found that ventures succeeded in recognizing opportunities in an existing market with proven technology and customers. Instead of exploring new markets, most successful ventures closely examined the inconveniences of customers and observed the practice of other firms and converted the resulting observations into entrepreneurial opportunity. This suggests that in order to grow sustainably, ventures need to adopt an entrepreneurial opportunity in a more stable way while minimizing risks, instead of directly entering into a new business carrying high risks. The efforts of the five firms to identify opportunity are listed in Table 3.

Table 3 OPPORTUNITY RECOGNITION AND SEARCH PROCESS		
Company	Opportunity recognition	Opportunity search process
Company S	The entrepreneur found that all college students share the same inconveniences he had felt during his college years. Based on this finding, he developed an application by informatizing these inconveniences.	Currently, all employees are fluent in at least one foreign language. IR and technological specialists were hired.
Company A	Since 2000, Company A preemptively prepared for the emergence of virtual reality and augmented reality in sports games.	Employees are encouraged to further study in the graduate school of management and graduate school of engineering, apart from attending external educational sessions.
Company D	Company D owns capability in aircraft and robot technology and continued to hire R&D specialists related to the supply of products to the military amid the trend of localization of military equipment in 2008.	Staffs are encouraged to participate in external educational programs and seminars.
Company B	Company B identified the growth potential in renewable energy industry by learning that people are concerned about water treatment.	The company continues to hire R&D and marketing specialists and deposes staff to external educational programs.
Company J	Company J focused on the possible emergence of food safety issues through field inspections of agricultural and fishery markets over a year.	The entrepreneur of Company J reads 20 books a month and encourages employees to read books and attend external seminars and training sessions.

Opportunity Realization through Strategic Agility

Successful ventures are characterized by 1) a symbiotic relationship with large corporations, 2) fast launching, 3) import substitution and 4) core product and technology. These factors are also extremely critical in the ventures; identification of opportunities and capacity building. Hence, we analyzed the strategic aspect of ventures with a focus on these factors and how the organization, resources and capabilities are acquired in response to changes (Kwon, 2015; Han, 2017).

First, with regard to the symbiotic relationship with large corporations, we considered whether customers of new businesses or products continue transactions with large corporations. While Companies S and J were engaged in business with consumers, Company A's augmented reality business, Company D's aircraft/marine simulator and intelligent unmanned robotics and Company B's water treatment establishments were in contact with enterprises and the government directly rather than consumers because of the unique characteristics of their businesses. These companies continue to do business with large corporations, the Ministry of Defense and the government and to expand their respective capabilities. They hired employees with experience in related areas and considered the management of relationship with their business partners as fundamental to growth. On the other hand, Company S, an SNS company that was directly dealing with consumers and Company J, in the agricultural industry, did not consider this symbiotic relationship with large corporations to be an important factor (Kwon, 2014).

Second, with regard to swift product launch, we considered whether it is important to launch products in the market ahead of rivals. For software businesses, first entry into a new product market provided firms with a competitive advantage. Companies S and A, engaged in SNS and augmented reality, respectively, considered the speed with which they carry out businesses to be the most critical element. In particular, since SNS has emerged as trend keywords worldwide, Company S established a subsidiary in China ahead of its competitors in order to win the market proactively, possibly due to the fear that slow speed will inevitably lead to a defeat in the race. Further, given the unique characteristics of its SNS business, Company S hired an external strategy specialist to complement its strategic capability whenever such needs arose. However, Company A holds weekly seminars to meet the increasing demand of augmented reality and 3D simulation to expand its organizational learning capability. One of the most important constituents of the absorptive capacity is the current level of knowledge and the extent of efforts by members (Cohen & Levinthal, 1990). Therefore, research staff and the management of Company A are constantly trying to establish a new direction of technology and identify changes in the market. Consequently, Company A has modified its direction of business from augmented reality to technological works commissioned by the government as part of its efforts to diversify businesses, which resulted in improved strategic capability. In the meantime, Companies B and D, both hardware specialists and Company J, engaged in agriculture, placed higher priority on the stable function of products and post-sale management than on swift launching. They considered that a focus on product perfection, despite belated market launch, would ultimately be advantageous in future market entry.

Third, import substitution was considered by ascertaining whether the substitutes to imports that already exist in the market are essential in achieving market success. While Companies S, A and J do not operate in this area, Company D, which is engaged in government-commissioned projects and Company B, which fiercely competes with foreign imports in water treatment products, highlighted import substitution as one of the most important elements of their success. For example, Company D achieved rapid growth primarily because of the Ministry of Defense's project to localize major equipment in 2008. Company D gained growth momentum and achieved innovation as the military decided to replace the imported high-tech aircraft simulators with ones based on local defense technology. In addition, company B has won 54.8 percent share in the local market of livestock excretions disposal facilities by using a 100 percent pure local technology, driving out products of prominent multinational companies. Hence, import substitution was considered to be one of the most important elements driving the growth

of hardware manufacturers, whereas it was not treated as a significant performance factor by the software companies and the agricultural business, as mentioned earlier.

Lastly, with regard to the core product and technology, we investigated whether companies enjoy a definite competitive advantage compared with competitors. Besides interviews with entrepreneurs and the management, an additional financial data search was conducted to enhance objectivity. Among the five firms, Companies B and J clearly dominate their respective markets, with 15% and 20% market share, respectively. Having already received an eco-friendly agricultural produce certification, Company J became the first vegetable parcel deliverer in Korea and retains a solid market domination based on its core technological strength. In addition, Company B exports a sewage disposal system developed solely with its own technology as the first in Korea and thus shifted its strategic focus from the diversification of business sectors to diversification of markets. In other words, the company appears to aim at overseas markets to leverage its definite technological advantage, rather than focus only on the domestic market. Currently, Company B owns 78 domestic and international patents and 7 new environmental technologies and is recognized as an industry leader with the highest number of locally certified new technologies in water treatment. Based on this strength, the entrepreneur of Company B focuses on the operation of its American subsidiary while delegating responsibility for local operation to professional managers. The results of analysis of these companies are summarized in Observation 2 and Table 4, showing which sectors they value most in terms of business strategy.

Observation 2

Different methods of identifying opportunity according to strategic capability affect performance.

1. For companies in the software industry, swift market launch has a positive impact on performance.
2. For companies in the hardware industry, import substitution in terms of product and market has a positive impact on performance.
3. Regardless of industry, the accumulated capability of core products and technology has a positive impact on performance.

Table 4 KEY FACTORS FOR PERFORMANCE SUCCESS					
Business Area	Company	Partnership with large corporations	Fast launching	Import substitution	Core product and technology
SW	Company S	X	O	X	O
	Company A	O	O	X	X
HW	Company D	O	X	O	X
	Company B	O	X	O	O
Agriculture	Company J	X	X	X	O

Opportunity Identification through Organizational and Resource Capability

Through interviews and studies, it was discovered that all five entrepreneurs use strategic agility to control resources and their organizations. Regardless of whether in software, hardware or agriculture industries, they all cultivate a culture of autonomous business decision and voluntary learning. Although Company S has only 30 employees, all of them possess a superior

command of foreign languages and computers. Moreover, by eliminating vertical hierarchy, they address each other by first names, amid a flexible organization structure. Top-notch professionals in the industry are hired to buttress weak areas and to share related knowledge and technology with staff members.

Other companies promote the culture of learning so that all employees can acquire knowledge effectively. Company J sends staff members to universities for in-house education and offers overseas training opportunities to employees with a meritorious service of five years in order to nurture an atmosphere of learning. The entrepreneur and CEO of Company J reads an average of 20 books a month, establishing reading as its corporate culture. He stresses the importance of learning by saying that people engaged in agricultural industry can fall behind unless they constantly study. In addition, companies A and D place considerable weights on learning. They do not spare any investment in staff education by assigning their employees to master's programs of local universities and by awarding higher score in individual capacity assessment to employees who participate in seminars. Company B deposes its employees to its American subsidiary to be aligned with its strategic shift from diversification of business sectors to diversification of markets.

In terms of utilization of resources, it is unusual that none of the five firms is actively collaborating or cooperating in terms of technological development and R&D. To justify this position, Company S mentioned the low barrier of its technology, Companies A, B and D said they were concerned about industrial espionage and Company J replied that technological collaboration is not easy as its organizational knowledge is mostly tacit knowledge (Nonaka, 1994). However, they were active in alliance, collaboration or partnership in terms of branding or corporate promotion activities that are necessary for entering new markets. None of them, regardless of industry, is collaborating with other technological companies because of concern over technology leakage, but actively pursue collaboration and partnership in marketing or company promotions. Therefore, it can be inferred that strategic partnership in marketing can be an effective way to address weak brand power during the initial stages of ventures.

With regard to organizational structure, all the ventures were operating under a horizontal organizational structure. The five firms were all medium-sized businesses with 30 to 250 employees. Therefore, efficient communication and prompt dissemination of organizational vision is extremely critical. In particular, they emphasized autonomy and smooth communication among staff members by strengthening communications between employees and management. In summary, with regard to utilization of resources, all five firms are currently in the growth phase and acquire and develop technology on their own, whereas they are actively cooperating with other corporations for the purpose of marketing and market penetration. Thus, with regard to organization and resource capabilities, Observations 3 and 4 are summarized as follows.

Observation 3

The accumulated organizational capabilities based on autonomy have a positive impact on firm performance.

1. Encouraging members of an organization to acquire related knowledge and technology are positively associated with firm performance.
2. Building capabilities by realizing an organizational culture based on autonomy is positively associated with firm performance.

Observation 4

A flexible utilization of resource capability is positively related to firm performance.

1. In case of technological development, identification of opportunity by accumulating relevant resources and developing products independently is positively related to firm performance.
2. When new markets or marketing methods are to be explored, an active collaboration or partnership with the outside world has a positive impact on firm performance.

Research Proposition

In this paper, through interviews with entrepreneurs or CEOs of five venture firms, we derived a total of 11 observations to analyze how they identify opportunities and build capabilities of strategy, organization and resources deployment. In addition, through a combination of previous studies and newly observed outcomes, a research proposition was established. In the opportunity development process outlined by Ardichvili, Cardozo & Ray (2003), personal traits of CEOs and firms' internal capabilities significantly affect the process of identifying opportunities and achieving performance. Moreover, this case study identified that a voluntary desire to identify changes in the external and internal environments increases activities to search for opportunity. Finally, the following propositions are made after examining companies that maintain steady growth in diverse industries. With regard to opportunity identification and based on these results, proposition 1 is as follows.

Proposition 1

The more intense the stimuli from the internal and external environments, the more actively ventures explore opportunities.

1. The greater the changes in market or technology, the more actively ventures explore opportunities.
2. The more intense the competition and the desires of a firm to change, the more actively ventures explore opportunities.

Investigation of the five firms shows that firms with a strong desire to change can actively identify entrepreneurial opportunities, regardless of the type of firm. The identification of entrepreneurial opportunity was particularly evident at firms where the vision of the entrepreneurs of the firms and the objectives of the firms are clear and imposing. Moreover, when customers remain discontented or unsatisfied, firms try to identify opportunities more intensely. In particular, the research proposition that activities to identify opportunities increase when desire to change arises from within presents an important implication that has not been reported in previous literature on opportunities. In addition, our finding that the activities of opportunity identification are proportional to the extent of changes in the external environment corresponds to the research outcome of Ardichvili, Cardozo & Ray (2003). Based on these results, proposition 2 between strategic agility of an entrepreneur and opportunity exploration activities is as follows.

Proposition 2

The activity level of opportunity identification exhibited by a venture is positively correlated with the strategic agility of the entrepreneur.

1. An entrepreneur with stronger strategic agility pursues diversification of business locations rather than diversification of business itself.
2. An entrepreneur with stronger strategic agility tends to concentrate more on the market where profits arise.

When an entrepreneur or CEO of a firm has stronger strategic agility, it allows him to perceive changes sharply and capture opportunity, which intensifies the processes of opportunity identification, development and realization. As confirmed in the research on entrepreneurship in Silicon Valley by Lee (2000), an entrepreneur who accommodates changes has the capability to set the direction of the firm and restructure it. Moreover, according to Ray & Cardozo (1996), only a high level of alertness in response to specific information leads to opportunity identification. That is, performance can be created only through entrepreneurial sensitivity to behavioral patterns, events or the number of possibilities transpiring from a specific environment, the cultivation of a sense of opportunity identification and the proactive pursuit of those opportunities.

Entrepreneurs of all five firms displayed leadership in perceiving, identifying and developing business opportunity. Moreover, all companies focused on diversification of business locations rather than diversification of business and made efforts to expand their operations overseas. Further, their efforts to identify opportunities are unique in that they intend to enter profitable markets ahead of competitors to create firm performance. Finally, proposition 3 between dynamic capability of a firm and opportunity activities are as follows.

Proposition 3

A firm's high level of dynamic capability is associated with its high level of activities of opportunity identification.

1. A venture firm with high level of dynamic capability identifies opportunities through independent learning and development of R&D capability.
2. A venture with a high level of dynamic capability identifies opportunities by employing marketing and corporate promotions.

The dynamic capability of a firm is closely related to the process undertaken by the venture to identify opportunities. Firms that possess strong capabilities in related areas can identify and capture opportunities more easily. In addition to existing capabilities, firms actively employ marketing and promotional capabilities offered by external firms in order to enter new markets. Except for Company S, the other 4 firms emphasize their employees' education. Company S, which is engaged in the rapidly changing SNS business, steadily hired external specialists in order to acquire the necessary capability to expand technology and gain product and market knowledge.

The results of the case analysis show that in the very initial stage of searching for a business opportunity, the accumulated internal capabilities of firms play a crucial role. However, over time, in order to fully realize an identified opportunity, the utilization of external corporate resources through networking and recruitment of new workforces were found to be critical. Moreover, five firms were steadily knowledge learning and expanding their own technological capabilities without any external linkage. As for marketing and company promotions relating to products and branding necessary for short-term performance, they were actively seeking, implementing and preparing for collaborations with external partners. As the business environment is being rapidly transformed across industries, the entrepreneurs of all the five firm

value dynamic capability with which they can continue to further develop and accumulate existing sensing opportunity realization capabilities. All opportunity pursuit mechanisms and detailed summarizing research descriptions are shown Table 5.

Table 5 THE EXPLANATION FOR OPPORTUNITY PURSUIT MECHANISM	
Opportunity pursuit process (Timing)	Great changes in market, technology and competition strength in industry
Strategic agility (Entrepreneur)	Diversification of business locations Concentration on profit maximization market
Dynamic Capability (Organization)	Building learning and R&D capability Sensing opportunities by corporate marketing

CONCLUSION

Theoretical Contribution and Practical Implications

This research analyzed how ventures can identify entrepreneurial opportunities effectively and how the strategic agility of entrepreneurs and firms' dynamic capability affects the opportunity identification process. The study results reveal that the most important element facilitating ventures; opportunity identification is the ability to promptly recognize changes in the market and customers' opinions. As the number of suggestions, requests or grievances about products continues to rise, CEOs of ventures recognize them as opportunities and actually translate them into tangible performance.

All five firms seek opportunities in the market, especially based on customers' opinions, instead of technology. Even when a good business opportunity arises in a sector where they do not possess relevant capabilities, they do not start a business. Moreover, the entrepreneurs' clear vision and solid strategic agility are prerequisites for effective opportunity realization. Furthermore, firms can actively implement business opportunities on the basis of the dynamic capability that enables them to efficiently utilize new capabilities.

To date, few analytical studies have encompassed all elements: opportunity identification and realization of ventures, strategic agility of entrepreneurs and dynamic capability of firms (Han, 2017; Phan, 2004). For example, while the previous literature analyzes opportunities with a focus on entrepreneurial activities, this paper has analyzed the opportunity identification process from a more integrative perspective, thereby contributing to further expanding research on ventures' opportunity identification (Phan, 2004; Shepherd & Kruguer, 2002). Moreover, previous studies empirically analyzed the sensitivity of entrepreneurs and the opportunity identification process and were consequently limited in their presentation of practical implications (Kaish & Gilad, 1991; McMullen & Shepherd, 2006; Wasdani & Mathew, 2014). However, the present study has described specific cases of individual ventures in detail and analyzed firms' opportunity identification process more specifically and realistically. The study has therefore generated a practical understanding of ventures. In particular, by analyzing companies across three industries, namely software, hardware and agriculture, this paper has tried to derive a more effective opportunity identification process.

The following study implications are presented. Entrepreneurs of ventures need to acquire the complete range of professionalism from understanding the characteristics of the

industry to identifying and seizing opportunities (Djankov, Rafel, Florencio & Andrei, 2012; Guard & Giuliani, 2013). Furthermore, this research presented an insight into firm growth by suggesting an effective way in which ventures grow and develop capabilities in various industries so that they do not experience difficulties in the process of opportunity identification and realization (Lundstrom & Stevenson, 2005). This implies that the government should support ventures with differentiated supports for different industries. Furthermore, the government needs to realign its policies with a more custom-tailored approach to grow ventures more effectively.

In other words, venture firms that seek sustainable advantage through educational background and long knowledge acquaintance from the entrepreneurs, technological advancements and adaptation shift of organizational capability and legislative protection and government support for the internationalization (Han, 2017; Park & Kwon, 2018).

First and foremost, a competitive advantage performance should link entrepreneurs' activities with the organizational capability and government support. Entrepreneurs' strategic agility is critical for ventures to execute their opportunity pursuit strategy, that is, to identify business paradigm and adaptability timing, link organizations to appropriate technological development and dynamic shift from local market to international marketplace and support sustainable growth with patent protection and other government incentives (Bae, Qian, Miao & Flet, 2014). Based on previous studies, entrepreneurial experience, organizational dynamic capability and systematic government supporting program are associated with founders' agility which may enhance creative opportunity generation (Becker, 1975; Charney & Libecap, 2000; Chen, Greene & Crick, 1998; Douglas, 2013; Fitzsimmons & Douglas, 2011; Gorman, Hanlon & King, 1997; Lee, Wong, Foo & Leung, 2011; Unger, Rauch, Frese & Rosenbusch, 2011).

Limitations and Future Directions

The opportunity identification of ventures involves a myriad of factors, including changes in the industrial environment, the dynamic flows of corporate capabilities and the intent of entrepreneurs. Ventures can be value creators in the market and establish a growth path by identifying and developing new opportunities (Zhou & Wu, 2010). Hence, an empirical analysis with various variables would be beneficial in providing the solution for the growth of firms. However this study was limited by the absence of such analysis owing to the characteristics of the five-firm case study.

First, the propositions and observations presented in this paper were not empirically tested and thus cannot be generalized. In particular, the rationales that underlie the derived propositions were presented, but the specific methodologies that could support these propositions were not presented. To overcome these limitations, future studies can establish hypotheses and statistically test them with a larger sample size. Nevertheless, the dynamic process of opportunity identification will incur limitations on any statistical approach. Therefore, a combination of case study with statistical analysis may produce clearer and more meaningful research findings.

Second, a more precise research framework incorporating more specific factors needs to be established. For ventures, in addition to quantitative variables such as profit, R&D investment and job creation, various entrepreneurial traits can be added, using both case study and statistical testing. Such an approach would produce a more precise representation of the process undertaken by Korean ventures to identify opportunities.

Third, in the process of identifying and selecting opportunities, the five firms were in the development or growth phase. A more comprehensive study of the process of opportunity identification and development would be derived by the inclusion of firms in the stagnation

phase. That is, future research including firms in all phases of corporate growth will facilitate the examination of more factors such as the strengths and weaknesses of each firm. Also, future studies should investigate the relationship between a firm's dynamic capabilities and its ability to identify and realize opportunities. Accordingly, future studies need to increase the sample size and analyze implications for firms in each growth phase.

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