Examining Firms’ Strategies for Competitive Advantages through Resource-based View and Dynamic Capability View under Different Environments

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Abstract

The fundamental question in the field of strategic management is how firms achieve and sustain competitive advantage. Rooted on Ricardian perspective, resource-based view advocates firms to accumulate heterogeneous resources for competitive advantages. Rooted on Schumpeterian perspective, dynamic-capability view suggests firms to redeploy unique resources and competences to quickly respond to environmental change for competitive advantages. While the resource based view and the dynamic capability approach are often portrayed as sister theories, they sometimes cited as a competing theory or as complementary theory with respect to the others. For application of strategic management, the important issues are to clarify the applied environment and the interaction of each other. Therefore, this article divides environment into technological innovation (competence-enhanced vs. competence-destroyed) and market changes (static market vs. dynamic market). Through conducting multiple case-studies, this article analyzes firms’ strategic behavior to obtain competitive advantage in different environmental contexts. This research finds that when entering the context of competence-enhancing innovation and static market, firm prefers to resource-based view for developing competitive advantages; when entering the context of changed technology or market, firm prefers to dynamic-capability view for developing competitive advantages. This research further induces two different types of dynamic-capability strategy and concludes that two strategic views complement each other.

Keywords: Corporate Social Responsibility, Operating Performance, Stakeholders

1. Introduction

The core problem of strategic management is how firms achieve and maintain their competitive advantage. Porter’s five forces analysis (Teece, Pisano, and Shuen 1997) is the mainstream paradigm in the 1980’s and the source of this theory is derived from Mason (1949) and Bain’s (1959) paradigm of industry organization, which emphasizes that firms should analyze the opportunities and threats derived from the changing trends in the industry structure. Thereafter, they can develop their competitive advantage with the defensible position created from their specific strategic intent. This strategic intent and positioning are considerably critical (Porter 1990; 1996). The resource-based view is synonymous with the view of Ricardian Economics. He believes firms who have important and special resources can acquire economic rents (Makadok 2001; Parayitam and Guru 2010; Wilson 2012). That is, important and special resources can determine firms’ competitive advantage. This view advocates that firms not only exert and leverage the resources by making the best of the resources but also continuously deepen the resources to construct and prolong their competitive advantage (Arend and Levesque 2011; Bakar and Ahmad 2010; Barney 1991; 2001; Nelson 1991; Peteraf 1993; Ray; Barney, and Muhanna 2004; Teece et al. 1997; Teece 2007; Wernerfelt 1984). However, the resource-based view is constantly being challenged by the Schumpeterian view which dictates that, driven by the creative destruction and dynamic changes in the environment, firms have competitive advantage when they have the capabilities to construct and restructure the special resources. (Beinhocker 2007; Mahoney and Pandian 1992; Makadok 2001; Parayitam and Guru 2010; Teece and Pisano 1994; Teece et al. 1997;Wilson 2012). There are two different mechanisms to acquire economic rents (Makadok 2001; Parayitam and Guru 2010).

The resource-based view emphasizes the importance of valuable, rare, inimitable and non-substitutable (the “VRIN”) special resources that firms have (Arend and Levesque 2011; Barney 1991; 2001; Wilson 2012); and the competitive advantage
formed by the resource-based view taken by vendors is of path-dependence (Karim and Mitchell 2000). However, when firms are faced with rapid and unpredictable change in the environment, only having special resources, are unable to continuously provide firms with competitive advantage (Makadok 2001; Teece et al. 1997; Teece 2007; Wilson 2012). If firms are able to effectively integrate both the external and internal resources, they are able to create their dynamic capabilities (Eisenhardt and Martin 2000; Karim and Mitchell 2000). As such, the view advocates that “firms who possess dynamic capabilities are able to exhibit timely reflection, develop innovation quickly and flexibly. Additionally, they can connect the management capability to effectively integrate and rearrange external and internal capabilities and resources” to acquire competitive advantage (Teece and Pisano 1994; Teece et al. 1997; Teece 2007). This is known as a path-breaking change (Karim and Mitchell 2000).

The resource-based view and the dynamic capability view are usually described as “sisters”. In strategic theory, they are at times in mutual competition and at times, complementing each other (Wilson 2012). In the application of strategic theory, clarification with regards to the environmental application conditions of both views and understanding the relationship between them are important issues. These issues include “How do they complement each other?” and “How do they replace each other?” (Makadok 2001) Looking back at traditional research, most of the research between resource-based view and dynamic capability view are empirically tested separately (Parayitam and Guru 2010). Take for example, exploring the relevance between different types of resource-base and financial performance when they are experiencing uncertain environment (Miller and Shamsie 1996) or the relationship between the dynamic capability and organization performance (Wilden et al. 2013) are done separately. At the same time, exploration into the research of these two views is limited (Makadok 2001; Parayitam and Guru 2010; Wilson 2012). For example, it is found in Wu’s (2010) research, the explanatory power of dynamic capability view in a dynamic environment is beyond that of resource-based view; but the exploration in relation to the applicability of resource-based view and dynamic capability view in a dynamic environment is still unclear. This is also in reference to Makadok’s (2001) adaptation of the math model to conduct derivation. Thus, when firms are in an applicable circumstance, the resource-base and dynamic capabilities at that time are mutually exclusive; on the other hand, when firms are in other applicable circumstances, the resource-base and dynamic capabilities at that time are complementary. Having said this, the issues in relation to the changes in the environment and industry field are not addressed. On the conceptual el, Parayitam and Guru (2010) try to integrate the resource-based view of Ricardian economic rents and the dynamic capability view of Schumpeterian economic rents so that they can propose a situational application framework, but, unfortunately, they did not go ahead with its verification. As a result, this research segment’s the environmental characteristics into technical innovativeness (competence-enhanced vs competence-destroyed) and market variability (static market vs. dynamic market) dimensions so that analysis can be done on the applicability of resource-based view and dynamic capability view under the uncertainty of different environmental dimensions.

2. Theory Background

2.1. Resource-based View and Dynamic Capability View

The resource-based view emphasizes the importance of VRIN’s important and special resources. The important and special resources are the fundamentals that shape the continuous competitive advantage (Arend and Levesque 2011; Bakar and Ahmad 2010; Barney 1991; 2001; Conner and Prahalad 1996; Pertusa-Ortega, Molina-Azorí, and Claver-Cortés’s 2010; Peteraf, Ray, Barney, and Muhanna 2004; Wernerfelt 1984; 1995). This perspective is adopted from Ricardo’s (1817) view (Barney 1986; 1997; Makadok 2001; Peteraf 1993; Ray, Barney, and Muhanna 2004; Wernerfelt 1984; Wilson 2012). According to the logics of Ricardo, firms acquire heterogeneous performances (Makadok 2001) only when they have resources that produce differentiation productivity. In response to this issue, Barney (1986) advocates the strategic factor market. He believes the incompleteness of factor market enables firms to possess required resources for strategy implementation in advance. This ability to possess resources in advance is the source of firms’ competitive advantage. In response to Barney’s views, Makadok (2001) believes firms need to have the skill to select important and special resources in order to produce excellent performance. Consequently, plentiful, heterogeneous and dedicated resources that firms have are important source to create competitive advantage (Arend and Levesque 2011; Bakar and Ahmad 2010; Michalisin and Stinchfield 2010; Pertusa-Ortega, Molina-Azorí, and Claver-Cortés’s 2010).

Scholars (Priem and Butler 2001; Teece 2007) point out, the fundamentals of resource-based view is to take environment factors such as products, clients and so forth as constant premise; and as such, changes in resource values arising from the environment changes in product markets are not handled from the resource-based view. As a result, Mahoney and Pandian (1992) first point out that Ricardian views are often challenged by Schumpeterian views which believes creative destruction is borne when vendors are faced with globalization, rapid technology changes and market upheavals; whereas, resource-based views, working on the accumulation and enhancement of existing resources cannot fully explain why vendors can retain continuous competi-

Dynamic means “to be consistent with the changing environment”, which is also to pay attention to the importance of strategic responses to environmental upheavals (Ambrosini and Bowman 2009; Teece and Pisano 1994; Teece 2007; Wang and Ahmed 2007). As for capability, it means ‘firms’ have the abilities to use organizational process to arrange resource combination. The aim is to strengthen resource productivity’ so that it is able to protect the final products or services and also retain strategic flexibility’. (Amit and Schoemaker 1993; Teece and Pisano 1994; Teece et al. 1997) The dynamic capability view advocates that the core capability is a temporary and non-sustainable competitive advantage. According to this definition, there are two characteristics that can differentiate resources from capabilities (Makadok 2001): (1) Capabilities are firm-specific because they are embedded in organizations and processes while resources are not. (2) The main objective of capabilities is to strengthen firm’s productivity of resources (Amit and Schoemaker 1993). Teece et al. (1997) emphasize that capabilities cannot be purchased and need to be constructed. Amit and Schoemaker (1993) also emphasize that capabilities cannot be acquired in the market. The ability to differentiate resources from capabilities is one of the key points of applicable situation that also analyzes the resource-based and dynamic capability views (Makadok 2001; Wilson 2012).

The dynamic capability is based on the commercial environment of Schumpeterian (1950) views in which firms are embedded in the competitive world of Schumpeter. In this environment, firms need to continuously produce new products, develop new and technologically advanced manufacturing processes, enter new markets, search for new supply sources and organize new innovations(Teece and Pisano 1994). The key point of Schumpeterian competitive relationship is firms compete with each other to develop new abilities or improve existing abilities; while dynamic capability plays a critical role in strategic management, which enables the organization to flexibly adjust, integrate, reallocate internal and external organizational skills, resources and capabilities to meet the need for the changing environment (Teece and Pisano 1994; Teece et al. 1997; Teece 2007; Wilson 2012). Dynamic capability selects the areas of abilities to invest in and this action is influenced by past selection and asset stock. But, the key point of capability renewal is innovation and learning (Ethiraj et al. 2005; Teece et al.1997). The orientation of dynamic capability according to Teece and Pisano (1994) emphasize the continuum of Schumpeterian views, which means to view vendors’ internal procedures so as to assist in the explanation and acquisition of market opportunities.

By summarizing these two views, dynamic capability is obviously much more relevant with environment factors than the resource-based is. On the strategic level, managing the uncertainty of the environment focuses on product markets, technologies, supply of raw material or changes in competitors’ movement (Porter 1985; Miller 1992). Moreover many scholars (Schoenmakers and Duysters 2010; Teece et al. 1997; Teece 2007; Wang and Ahmed 2007) indicate that technology breakthrough is the main source of causation to environmental changes and is the core of dynamic capability consideration.

2.2. Empirical Research into Resource-base and Dynamic Capability

More and more scholars use the resource-based view to confirm the role resources play when firms are developing (Brush, Green, and Hart 2001; Chandler and Hanks 1998; Lichtenstein and Brush 2001). There are many management implications in relation to resource-based research such as gradual change to an enterprise’s resource combination (Lichtenstein and Brush 2001). Additionally, better financial performance can be garnered with knowledge-based re-source during uncertain environment (Miller and Shamsie 1996). The resource combination is related to enterprises’ survival and can create better performances (Brush and Changanti 1999; Pertusa-Ortega, Molina-Aznor, and Claver-Corte’s 2010). Plentiful resource base can help in the innovation of products (Bakar and Ahmad 2010), even when there are big changes in the environment. Firms can adopt resource base strategy to garner competitive advantage so as to acquire better performance. (Michalisin and Stinchfield 2010).

In addition, finding from related empirical re-search in dynamic capability indicates: Most of the values created by technology-based enterprises are from internal capability (Lee, Lee, and Pennings 2001). The resources and capabilities of firms in the pharmaceutical industry make a big contribution to continuous competitive advantage (Yeoh and Roth 1999). In productivity research into the measurement of how firms’ capability affects the development of new medicine, the organization capabilities are divided into element capability and framework capability. The result confirms that there is a continuously significant difference between the firms’ productivity of new medicine development (Henderson and Cockburn 1994). Additionally, it is found that the source of competitive advantage is mainly from the firms’ ability to identify and actively respond to environmental information (Cockburn, Henderson, and Stern 2000); Enterprises' internal capabilities are main factors that determine firms’ performances (Song, Di Benedetto, and Nason 2007). Alternatively, capability combination processes can also allow firms
to produce significant competitive advantage (Ray, Barney, and Muhanna 2004). In the dynamic environment, the explanatory power of dynamic capability view is beyond that of the resource-based view (Wu 2010). Dynamic capability and organizational performance are positively related (Wilden et al. 2013); if software firms are able to develop capabilities such as swift response to customers’ needs, they can drastically increase their performances in project developments and thus significantly increase its performance. (Ethiraj et al. 2005).

2.3. Classification and Measurement of Environment Changes

Scholars (Schoenmakers and Duysters 2010; Teece et al. 1997; Teece 2007; Wang and Ahmed 2007) believe technology breakthrough is the main source or contributor to the change in environment. This change will have a big impact on industries and firms and is one of the core issue dynamic capability must consider, especially when firms enter into disruptive technology of new application market where they are able to provide exceptional values that are above existing products and services. This type of innovation not only involves technology activity; it very much involves complicated new market development activity un-familiar to the public. (Christensen and Rayor 2003). Firms cannot predict the scale and strategies in the new application market and have to carry out market exploration under the uncertainty of possibly incorrect prediction (Christensen 1997; Christensen, Anthony, and Roth 2004; Veryzer 2005; Danneels 2004).

Afafu (1998; 2000) points out that the technological innovation has two effects on firms. Firstly, organization capability view and secondly, product market view. This research adopts the organization capability view to explore the effect of technological breakthrough on firms’ competitive environment. When capability destruction technologies change, firms need new capability to meet the needs for environment upheavals. When capability reinforcement technologies change, firms need to improve the capability (Tushman and Anderson 1986). This logic conforms to that of the dynamic capability view. Consequently, this research measures the changes in technological environment by adopting the organization capability view of technological innovation. This research adopts the technological innovation of the capability reinforcement and capability destruction from the organization capability view (Afuah 1998; 2000; Tushman and Anderson 1986). It also adopts Gatignon et al. (2002) technology innovation as the measurement variables in this research.

This research adopts the critical characteristics of the market dynamic concept from Eisenhardt and Martin (2000) which includes “stability of industry structure, changes in business boundary, appearance of new competitors in the industry, appearance of new customers in the industry, appearance of new product application in the industry, appearance of new suppliers in the industry, changes in business models in the industry, prediction of industry change” and so forth as the measurement basis of this research that is in the variability of these empirical markets. Strategically, in company with the content of technological innovation measurement, this research has conformed to the key points of environmental uncertainty such as the management of product market, technology, raw material supply or the changes in competitors’ movement (Porter 1985; Miller 1992).

3. Research Design and Measurement

In the industry field, exploration of related strategic theories of these two views is still at the exploration stage and related empirical research is very few (Makadok 2001; Wilson 2012). As for the field of Taiwanese industry, exploration of related theories is even lesser. When exploring theories into new areas, currently, there are little related empirical results or there is no firm conclusion to theoretical perspective. Thus, the exploratory case research method is an appropriate research method (Eisenhardt 1989; Yin 1994; 2003). According to the recommendations from Yin(1994; 2003) as the starting point of exploration, this research references literatures of previous related theory to form an initial research’s theoretical frame-work such as that in Figure 1.
4. Cross Case Comparison and Analysis

According to the initial research framework in Figure 1, comparison and analysis between Excelsior Group, Excelsior and Advantech are conducted when they are at areas of different technology innovation and market dynamic. The comparison between their strategic actions and types of creating competitive advantage is in Table 1.

5. Research Findings and Theory Exposition

According to the comparison of cross-case analysis in Table 1, the research findings are as follows: (1) the replication logic of Case 1 and Case 3 substantiates that when firms are at the technological innovation area of capability reinforcement and static market, its source of competitive advantage tend towards the resource-based view. (2) The replication logic of three cases such as Case 2, 3 and 5 verifies: no matter how great the changes are in relation to the market or technology, firms tend to develop their competitive advantage through the strategy of dynamic capability view. The research findings respond to the questions in this research; that is, they clarify the application situation of resource-based view and dynamic capability view in the application of strategic theories.

During the interviewing process of this research, it is found that: Firms’ strategic intent play a critical role when they are faced with changing trends in the environment of the industry. This strategic intend directs firms deepening of resource-base and integration of dynamic capability. In addition, Helfat and Peteraf (2003) also indicate that firms need to have a selection event to drive the dynamic capability transformation. As for the selection events, they can be internal selection effect of management decision and external selection effect of changes in environment factors such as the external markets, technologies and supply chains. This internal selection effect is similar to the concept of strategic intent; as such, this research adds both the environmental impact and strategic intent to the analysis. In totality, related information from previous interviews can be acquired from Table 2.

This research also summarizes the previously related main views and analysis information and transforms the range of capability renewal and restructuring into the schematic diagram. The gray part represents resource deepening and the white part represents capability renewal, which explains that as firms develop and grow under different environment and different stages, the strategy to acquire competitive advantage is as indicate Table 3 below.

When the Excel Group is in the technological innovation area of capability reinforcement and static market, its competitive advantage is strategically directed towards resource-based view. As for Excelsior, when it is in the destructive technological innovation area and static market, its competitive advantage tends toward the dynamic capability view. This is the need for dynamic capability transformation caused by the management decision according to firms’ active strategic intent. This is internal selection effect of dynamic capability view.

Under the technology platform of HP’s testing instrument, the positioning of Advantech in its first stage of establishment is to provide integration services and low-level instrument to firms. This is also where Advantech enters into the technological innovation area of capability reinforcement; and also into the static market where few people know about the needs of customers. This stage tends towards the strategy of resource-based view. At the second stage, Advantech enters into the technological innovation area of breakthrough capability destruction. At this stage, Advantech must respond to the technology and market uncertainty brought by the destructive technological innovation and dynamic markets. This situation means that, to survive and develop, firms cannot help, but need to transform the dynamic capability to respond to these changes. This is the external selection effect of dynamic capability view. At the third stage, Advantech becomes the multi-industry application and eservice firms. In this stage, Advantech enters into the technological innovation area of capability reinforcement. It also enters into different areas of industry application. As such, Advantech’s customer specifications vary. This variation drives Advantech to rapidly develop products and shorten manufacturing cycle. Additionally, the industry structure serviced by Advantech becomes vague and new application customers continue to grow. At this stage, Advantech enters into the dynamic market and its strategy of competitive advantage is the dynamic capability view. In this situation, firms have active selection option, which means when making management decision, it’s proactive strategic intent brings about the transformation need of dynamic capability. This is known as external selection effect of dynamic capability view.

By integrating the above analysis, the four propositions proposed by this research are as follows.

Proposition 1:
Firms prefer the strategic actions of resource-based view to develop their competitive advantage when the enterprises enter into the technological innovation area of capability reinforcement and the area of static markets.

Proposition 2:
Due to the internal selection effect, firms prefer the strategic actions of dynamic capability view to deve-
**Table 1: Excelsior Pharmatech Lab. and Advantech Case Type Comparison**

<table>
<thead>
<tr>
<th>Construct</th>
<th>Case 1</th>
<th>Case 2</th>
<th>Case 3</th>
<th>Case 4</th>
<th>Case 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technological Innovativeness</td>
<td>Measurement</td>
<td>1.92</td>
<td>3.62</td>
<td>2.42</td>
<td>3.86</td>
</tr>
<tr>
<td>Description</td>
<td>Become pharmaceutical agent. This is innovation in reinforced capability</td>
<td>Enter into the area of new medicine development. This is innovation in destructive capability</td>
<td>Continue knowledge of HP technology platform. This is innovation in reinforced capability</td>
<td>Enter into the whole new PC technology platform. This is innovation in reinforced capability</td>
<td>Continue the PC technology platform. This is innovation in reinforced capability</td>
</tr>
<tr>
<td>Market Variability</td>
<td>Measurement</td>
<td>2.38</td>
<td>2.44</td>
<td>2.46</td>
<td>3.97</td>
</tr>
<tr>
<td>Description</td>
<td>Predictable demand, clear industry boundary and stable industry structures in the static market</td>
<td>Stable demand in related markets, clear industry boundary and stable industry structures in the static market</td>
<td>Understand need of few customers in a stable market, clear industry boundary and stable industry structures in the static market</td>
<td>Non-linear changes in the market demand, vague industry boundary and unstable industry structures in a dynamic market</td>
<td>Continuously emergence of new industry application, non-linear changes in the market, vague industry boundary and continuous change in the industry structures in the dynamic market</td>
</tr>
<tr>
<td>Ratio of Resource to Capability</td>
<td>Measurement</td>
<td>1.63</td>
<td>0.74</td>
<td>1.67</td>
<td>0.39</td>
</tr>
<tr>
<td>Description</td>
<td>Continue 13 knowledge resources of entrepreneurs, 1 item updated, 7 items newly created, ratio of resource to capability is 13:8</td>
<td>Continue 14 knowledge resources of Excelsior Group, 4 items updated, 12 items newly created, ratio of resource to capability is 14:9</td>
<td>Continue 10 knowledge resources of entrepreneurs, 4 items updated, 2 items newly created, ratio of resource to capability is 10:6</td>
<td>Continue 7 knowledge resources at the first stage, 8 items updated, 10 items newly created, ratio of resource to capability is 7:18</td>
<td>Continue 13 knowledge resources at the second stage, 12 items updated, 10 items newly created, ratio of resource to capability is 13:22</td>
</tr>
<tr>
<td>Strategic View</td>
<td>Resource Base</td>
<td>Continue 13 VRIN resources such as import and export, marketing, sales and management which entrepreneurs have learned from foreign enterprises</td>
<td>Continue 14 knowledge resources created by Excelsior Group, which are not enough to form the resource bases necessary for the competitive advantage in the new environment. Need to update and construct new resources</td>
<td>Entrepreneurs have unique and rare HP Basic interface integration technology and 10 preemptive resource advantage of VRIN such as customer network</td>
<td>Continue 7 knowledge resources developed at the first stage, which are not enough to form the resource bases necessary for the competitive advantage in the new environment. Need to update and construct new resources</td>
</tr>
<tr>
<td>Dynamic Capability</td>
<td>Update and develop 8 new knowledge to meet the need for complete business venture</td>
<td>Update original resources and develop 19 new resources and capabilities to meet new capabilities necessary for new businesses</td>
<td>Develop 6 new capabilities to meet the need for complete business venture</td>
<td>Enter into totally different technology platform; thus, need to update organization, processes and systems continuously; Introduce and construct 18 new knowledge to respond to the environment needs</td>
<td>Enter into the area of new application; need for new processes, establish e-system; update and construct 22 new knowledge to respond to the market demand</td>
</tr>
<tr>
<td>Competitive Advantage</td>
<td>Prefer resource based</td>
<td>Prefer dynamic capability</td>
<td>Prefer resource based</td>
<td>Prefer dynamic capability</td>
<td>Prefer dynamic capability</td>
</tr>
</tbody>
</table>
Due to the internal selection effect, firms prefer the strategic actions of dynamic capability view to develop their competitive advantage when enterprises are at the technological innovation area of capability destruction and the area of static market.

**Proposition 4:**
Due to the external selection effect, firms prefer the strategic actions of dynamic capability view to develop their competitive advantage when enterprises are at the technological innovation area of capability destruction and the area of dynamic market.

### Table 2: Comparison and analysis of strategic action types

<table>
<thead>
<tr>
<th>Competitive advantage</th>
<th>Tend Towards Resource-based View</th>
<th>Tend Towards Dynamic Capability View</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case</td>
<td>Excelsior Group, Advantech (I)</td>
<td>Excelsior Pharmatech Labs. Advantech (II) Advantech (III)</td>
</tr>
<tr>
<td>Environmental Change</td>
<td>Static Market</td>
<td>Reinforced Innovation</td>
</tr>
<tr>
<td>Environmental Effect</td>
<td>Pharmaceutical is listed as one of the top 10 industry by the government. Development of external industry is stable.</td>
<td>The government actively promotes the biotech industry through “The Enhancement of Biotech Industry Promotion Program”</td>
</tr>
<tr>
<td></td>
<td>Taiwanese industries are booming. Stable increase in the demand for industrial computers</td>
<td>Encourage vendors to invest in supply, manufacturing and R&amp;D through “Rare Diseases Prevention and Pharmaceuticals Act”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Stable development in the external industry environment</td>
</tr>
<tr>
<td>Strategic Intent</td>
<td>Because the founder of the Excelsior Group owns the VRIN resources, he identifies that there are business opportunities in relation to the knowledge for business operation. Because the partners of Advantech own related knowledge in relation to the HP Industrial Computer Platform, they identified that there are business opportunities in providing integrated services such as automatic testing to customers</td>
<td>Proactively enter into the high-tech area of new pharmaceutical development, vendors restructure related resources that are needed in R&amp;D value activities. Need to construct new and related knowledge. Vendors have the options to choose - either maintain original positioning or actively carry out repositioning.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Active selection effect</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Range of Capability Update</td>
<td>0.38/0.38</td>
<td>0.58 (19/ (14+19) )</td>
</tr>
</tbody>
</table>
Table 3: Different Strategic Stage in Relation to Firms’s Competitive Advantage

<table>
<thead>
<tr>
<th>Strategic Views</th>
<th>Market Variability</th>
<th>Dynamic Market</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Static Market</td>
<td>Dynamic capability strategy of internal selection</td>
</tr>
<tr>
<td></td>
<td>(Advantech at the third stage)</td>
<td>Dynamic capability strategy of external selection</td>
</tr>
<tr>
<td>Technology Innovativeness</td>
<td>Passive strategic intent/</td>
<td>Dynamic capability strategy of internal selection</td>
</tr>
<tr>
<td>Capability Reinforcement</td>
<td>Internal selection effect</td>
<td>Dynamic capability strategy of external selection</td>
</tr>
<tr>
<td>Capability Destruction</td>
<td>Active strategic intent/</td>
<td>Dynamic capability strategy of external selection</td>
</tr>
<tr>
<td></td>
<td>Internal selection effect</td>
<td></td>
</tr>
</tbody>
</table>

**Proposition 3:**
Due to the internal selection effect, firms prefer the strategic actions of dynamic capability view to develop their competitive advantage when enterprises are at the technological innovation area of capability destruction and the area of static market.

**Proposition 4:**
Due to the external selection effect, firms prefer the strategic actions of dynamic capability view to develop their competitive advantage when enterprises are at the technological innovation area of capability destruction and the area of dynamic market.

6. Conclusions and Recommendations

There are three points related to the contributing theories of this research. Firstly, this research responds to scholars’ appeal by way of adopting the empirical way of multi-case replication logic: In the strategic theories application, it is an important issue to clarify the application conditions of both (Makadok 2001; Wilson 2012); that is, the source of firms’ competitive advantage is towards the strategy of resource-based view when entering into the technological innovation area of capability reinforcement and static markets; firms have a tendency to develop their competitive advantage with the strategy of dynamic capability view no matter how big the change is in the market or with what technology.

Secondly, the research result further expounds on the inter-relationship between the dynamic capability and environment changes. At the same time, the research also derives different types of strategies of dynamic capability. This research further analyzes and derives the internal selection effect by citing the view of strategic intent which Porter (1990; 1996) has emphasized as well as the view of Helfat and Peteraf (2003) which select events to drive the transformation of dynamic capability. At this point, based on the decision management, vendors can actively opt whether to enter into the environment that needs to transform the dynamic capability. If firms actively select to enter, it is known as the dynamic capability strategy of active options. The view of strategic intent also has external selection effect. At this point, firms that do not have the options are required to have decision management in respond to the environment changes. This is known as dynamic capability strategy of passive options. With it, firms are then not eliminated by the environment changes.

Finally, this research responds to another important issue of scholars: How do resource-based view and dynamic capability view complement each other? How do they replace each other? (Makadok 2001; Wilson 2012) According to the empirical analysis of this research, no matter how large or small the range of capability renewal is, the strategic action of partial resource deepening is still necessary. Consequently, the resource-based view and dynamic capability view are complementary, not mutually exclusive.
REFERENCE


--- (1997), Gaining and Sustaining Competitive Advantage. Addison-Wesley: Reading, MA.


Mahoney, Joseph T. and J. Rajendran Pandian (1992), “The resource-based view of the firm within the


