

ALLIANCES AS DYNAMIC CAPABILITY TO SUPPORT ORGANIZATIONAL TRANSFORMATION: EMPIRICAL FINDINGS FROM A STATE-OWNED ENTERPRISE

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Abstract: State-owned companies are typically trapped in a bureaucratic system that means they experience difficulties undertaking changes and adapting to environmental changes. Whenever these companies attempt a strategic maneuver, a series of complex bureaucratic procedures must be followed. As a result, the companies are late in responding to environmental changes. This study discusses how the state-owned companies transform their organization with the support of dynamic capabilities. XT Square, a company owned by the local government in Indonesia, is used as the subject of analysis. XT Square is engaged in property. During the course of its organizational transformation, the company found it difficult to fit with customers' needs because of the difficulties in understanding market conditions. The company then established alliances with other firms to overcome resource shortages. The results of the analysis demonstrate that the process of building these alliances was not linear; rather, it was iterative in nature. At a certain level, XT Square is required to undertake trial and error. At the end of the paper, a suggestion for further research is provided.

Keywords: alliance, dynamic capabilities, collaboration, organizational transformation, knowledge management

JEL: M10, M11, M19, D20, D73.

1 Introduction

The most appropriate strategic approach to analyze how firms adapt to environmental changes is dynamic capability, which is the ability to integrate, develop, and reconfigure internal and external competencies to adjust to environmental changes (Teece, et al., 1997). Dynamic capability is seen as important in the context of environmental changes because it helps managers to create value through innovation (Lieberherr and Truffer, 2015). A key feature of dynamic capability is that it allows companies to quickly modify their resources, and at the same time, revise their routine activities in response to challenges (Zahra, et al., 2006).

Analyzing organizations from the perspective of dynamic capability allows researchers to obtain a comprehensive view regarding the stages through which organizations adapt to environments and how they innovate (Lin and Wu, 2014). Research and development, new product development routines, organizational structures, strategic decision making, social capital, external alliances, are some of the

dynamic capabilities that can be adapted and offer opportunities to create innovation (Eisenhardt and Martin, 2000).

The concept of dynamic capabilities exists at several levels. The concept of dynamic capabilities proposed by Teece (2007), which states that the major elements of dynamic capability consist of sensing, seizing, and transforming, is well accepted amongst scholars. Each of the major elements requires different micro-foundations in its development (Gavetti, 2005). However, the presence of the micro-foundations does not necessarily mean that an organization will be successful in creating dynamic capabilities. This is due to the fact that the interplay between the dynamics and the resources within an organization sometimes hinders the emergence of dynamic capabilities. Reluctance to take risks is a good example of an obstacle to creating dynamic capabilities (Teece, et al., 2016).

One of the features that distinguishes dynamic capabilities from its underlying theory – that is, the resource-based view – is its emphasis on environ-

mental change. More specifically, Teece (2007) argues that organizational processes must be followed to obtain technical information, develop exogenous knowledge, monitor customer needs, and competitor activities, as well as to support new product formation and opportunity creation (Helfat, et al., 2007). Several previous studies have shown that alliances are linked to innovation and new product development (Rothaermel and Deeds, 2004) but there is no clarity regarding whether an alliance can be used for a company during a transformation process as a response to environmental changes. To address this gap, this study attempts to analyze the following research question: *how do state-owned companies use alliances as dynamic capability to be more adaptive to their environment?*

This paper is organized into five sections. The next section will review the literature related to dynamic capabilities, particularly in regard to how alliances can support organizations to be more flexible and adaptive to environmental changes. The third section will then discuss the research design adopted in this study, namely case studies, and the fourth section will present and discuss the findings. The last section, the conclusion, will present the main insights obtained from this study, as well as future research recommendations.

2 Literature review

2.1 Dynamic capabilities

Dynamic capability theory views companies as mini ecosystems that produce productive knowledge (Easterby-Smith and Prieto, 2008; Teece, Pisano and Shuen., 1997). From this perspective, dynamic capability is built based on the legacy of the theory derived from the resource-based view (Barney, 1991). According to the resource-based view, a company's competitive advantage depends on heterogeneous resources scattered throughout the organization. Compared to the resource-based view, which views resources as static, dynamic capability view emphasizes the role of resources in the context of change (Teece, et al., 1997) and the company's ability to reconfigure its resources whilst utilizing them (Helfat and Peteraf, 2003; Teece, et al., 1997).

To enable innovation, according to the dynamic capability view, the basics of organizational knowledge need to be integrated with organizational capabilities. The capability concept includes the organizational structure, processes, and knowledge needed to operate more efficiently (Amit and Schoemaker, 1993). Organizational capability consists of various elements that are structured and can be repeated when the organization performs various activities (Helfat and Peteraf, 2003).

In order for an activity to be viewed as a capability, it must have been implemented within the organization and become a routine that is embedded in daily activities. For this reason, not all activities can be viewed as capabilities. A capability is something that is reliable, structured, patterned, and can be repeated regularly (Helfat and Peteraf, 2003).

Each capability, both individually (Helfat and Peteraf, 2003) and in groups that form a portfolio (Laamanen and Wallin, 2009), can change over time. Accordingly, dynamic capabilities can undergo evolutions from time to time. The evolution of dynamic capability is path-dependent (Dierickx and Cool, 1989), and consequently, many researchers claim that dynamic capabilities are unique and firm-specific (Barreto, 2010). Furthermore, Eisenhardt and Martin (2000) view dynamic capability as "best practice", implying that there will be certain managerial practices that can be applied across different companies producing the most optimum results. However, researchers currently do not yet have an adequate understanding of the heterogeneity of dynamic capabilities. In fact, Wang and Ahmed (2007) have suggested conducting an in-depth analysis of whether there is homogeneity in dynamic capabilities. In terms of the specific topic of this paper, the homogeneity of capabilities in the context of dynamic changes due to internal pressure has never been observed.

The development of dynamic capabilities depends on organizational knowledge. Organizational knowledge is embedded in individuals within organizations; it is accumulated over the long term. The level of organizational learning, to some extent, depends on how much knowledge has been accumulated (Cohen and Levinthal, 1990). Experimental, learning-by-doing, learning-by-using, and other forms of experi-

mental-based learning by trial-and-error tend to be local. The knowledge of the local learning process only exists in the company concerned (Levinthal, et al. 2008). Consequently, because learning is unique in an organizational context, the capability development process is also unique.

If the knowledge accumulation process is associated with certain characteristics, such as time-compression diseconomies, an ambiguity of causal relationships, or asset interconnectedness, it is likely that the outcome will also be idiosyncratic. Because dynamic capabilities are embedded in the organizational context, capability development paths may depend on the availability of interconnected resources and capabilities in the organizational system (Pan, et al., 2007).

2.2 Alliance as a dynamic capability

To overcome the problem of how companies with limited resources can attempt to transform, developing alliances with partners is one possible solution. Dynamic capability can be seen as an antecedent of strategic routines and non-routine organizations, where managers can make changes to the existing resources that are then used to create value (Eisenhardt and Martin, 2000; Helfat and Peteraf, 2009). From this perspective, the company's ability to create and manage alliances to respond to external changes can be seen as a dynamic capability. Furthermore, the literature states that dynamic capability is related to the ability of organizations to respond to market changes, so that environmental suitability can be maintained (Helfat and Peteraf, 2009).

Previous research has demonstrated that companies adopt different path to acquire new capabilities when there is a dramatic environmental change or competitor undertake strategic maneuver (Teece, et al., 2007). The company can enter a new business if it has sufficient capabilities, which, broadly speaking, consist of core and complementary capabilities; possessing complementary capabilities without core capabilities is not sufficient to enable the company to compete in the industry. Establishing an alliance with other companies can be in the form of joint ventures, direct investment, non-equity association, and joint R&D. Alliances to promote knowledge development can include technology licensing, tech-

nology exchange, testing agreements, and research contracts. The degree of success in acquiring the capabilities from the company's partners through alliances is determined by the company's internal conditions and the type of relationship between the involved parties (Pisano, 1990).

Companies that have established capabilities tend to use internal resources, and hesitate to build alliances with other parties, particularly for capabilities related to technology. One potential reason for this could be that building an alliance involves the risk of exposing technology to the partners. Highly innovative firms may be concerned that there will be unexpected information flows resulting in knowledge leakage (Ritala, et al., 2015).

On the other hand, alliances can support companies to undertake innovation (Rosenkopf and Almeida, 2003) and allow companies to obtain resources instantly, which may take a long time if they intend to accumulate the resource internally. The alliances can also act as a way to enter a market or industry. Knowledge acquisition from alliance partners allows companies to upgrade their capabilities so they can enter new markets more quickly. In addition, the alliances can be used as a tool to acquire capabilities that the company does not already have (Grant and Baden-Fuller, 1995), or to access and combine various types of capabilities to create new capabilities (Prahalad and Hamel, 1994). Alliances can also play a role in strengthening the company's basic capabilities (Hamel, 1991), and function as a way to share the risk of entering a new market by reducing uncertainty and taking advantage of reversibility (Anand, et al., 2010).

Building alliances to obtain complementary capabilities is evident in technology-based industries, especially where companies have successfully exploited commercial innovations in technology (Gans and Stern, 2003). These technology-based companies are capable of developing new products and generating new product ideas, which in turn generate high profits, and provide access to new markets or rare resources that are difficult to obtain (Pisano, 1991). Their success could attract new companies to build alliances with them, where new players are eager to develop alliances with them with the purpose of acquiring complementary capabilities. Another

motive for the new players to build alliances is to build a reputation and gain legitimacy (Stuart, et al., 1999).

On the other hand, well-established companies prefer to build alliances with new companies. They expect that the new companies will integrate their capabilities with their own capabilities to result in synergies and higher returns (Vassolo, et al., 2004). More established companies also prefer to use systemic integration rather than bolt-on integration, as they have better control with their new alliances (Fourné, et al., 2014).

3 Research method: case study

This study uses a case study method, following the design suggested by Yin (2009). Case studies are considered appropriate for research investigating *how* and *why* type questions, where the investigated phenomenon cannot be clearly separated from its context. Due to the characteristics of *how* and *why* type questions, this type of research tends to be inductive and exploratory. For similar reasons, case studies are well suited for theory development (Meredith, 1998). In addition, this method has been viewed as suitable for undertaking in-depth analysis of the causal relationship between two phenomena, which cannot be achieved through other, quantitative methods such as surveys (Eisenhardt, 1989).

3.1 Case study design

There are no definite rules determining the number of cases that should be studied. In the case study method, the composition of cases, to some extent, is more important than the number. A case is included as a subject of investigation because of its potential contribution to the research (Eisenhardt, 1989). This study uses a multiple case study design with a holistic unit of analysis. According to Eisenhardt (1989), between 4–10 cases is optimum, but others claim that just one case can be used as the subject of analysis (Siggelkow, 2007). On the other hand, Yin (2009) argues that up to 30 cases is considered sufficient for various research designs, so this number is considered the most acceptable. Nevertheless, a larger number of cases does not ensure increased reliability of data analysis. Indeed, a larger number

of cases often leads to redundancy, as one case might overlap with another, so that the inclusion of a case does not contribute further insight to the researcher (Eisenhardt, 1989). Provided the number of cases is more than one, the researcher can undertake direct and indirect replication logic and generate logical generalizations (Yin, 2009).

3.2 Data collection techniques

Data was collected using a number of techniques, including observation, interview, focus group discussion, and document analysis. The interviews were mostly open in nature, using ‘how’ and ‘why’ type questions. Both types of questions can explain the causal relationship between two phenomena, so the reasons behind the relationship can be revealed (Meredith, 1998). Interviews were conducted with front-line employees, government policymakers, supervisors, and managers. The use of a variety data sources enabled the researchers to undertake triangulation (Jick, 1979). Triangulation ensured that the collected data met reliability criteria (Eisenhardt, 1989; Yin, 2009) and avoided bias (Jick, 1979).

4 Analysis and Results

4.1 The case company: XT Square

XT Square is a state-owned company situated in Yogyakarta, Indonesia. The company manages a tourist area offering various forms of entertainment, meeting the various needs of customers. The company attempts to fulfil the needs of customers under the slogan, “*You can find what to see, what to eat, and what to buy*”. As an integrated area offering various entertainment sources, there are a lot of options for food, shows, music, and retail. The spaces in the area are leased to vendors who are interested in running a business in the area. Most of the vendors are small and medium enterprises (SMEs), with low rental rates. This strategy is part of the government’s strategy to promote the growth of SMEs.

Since it was established in 2010, XT Square suffered consistent losses before it built alliances with other companies. The alliances were initiated in 2015, when the company realized that it had to undertake strategic action to overcome the poor performance since its establishment. In addition to building alli-

ances, the firm attempted to implement internal changes, particularly in the way it organized its resources. It took roughly two years for the results of the alliances to become apparent and reflected in improved financial performance. The following sections will describe the iterative process of alliance development carried out by XT Square.

XT Square has attempted to build alliances with different partners. Companies can reap many benefits from such alliances, and in the case of XT Square, the alliances have successfully improved the company's performance. However, the process of building an alliance is similar to a journey, and may not necessarily be successful. XT Square required a process of trial and error to find the right alliance partners, and to design appropriate forms of alliance. The firm approached a number of companies, including the Indonesian Hotel and Restaurant Association (IHRA), De Mata Maris, and Wahana De Arca.

XT Square has two areas that offer visitors different experiences: De Mata Maris, and Wahana De Arca. These areas are successfully managed by XT Square through collaboration with its allies; the company could not have managed the facilities by itself if it had not established alliances with partners. Even making alliances with these partners cannot be done in a linear fashion; rather, these were developed iteratively.

4.2 Alliance with the Indonesian Hotel and Restaurant Association (IHRA), Yogyakarta

- **Sensing stage**

Top management realized that the performance of XT Square was not satisfactory following its establishment. If this trend continued, the sustainability of the business would be in danger. The management believed that the key success factor for improving the performance of the firm would be to increase the number of customers; this would increase the sales of the tenants, which in turn would streamline the payment of the rental fee. In addition, a larger number of customers would create additional income through non-core business activities, such as parking and advertising. However, the company did not have sufficient resources to undertake wide-scale promotion to attract more customers to visit. One of

the solutions offered by the tenants was to build alliance with other parties.

- **Seizing stage**

XT Square attempts to seize opportunities to work with IHRA. The majority of guests staying at the hotel are tourists, because Yogyakarta is the second most popular tourist destination in Indonesia, after Bali. Under the alliance, the IHRA notifies all hotel guests that there is a free shuttle service to visit XT Square. IHRA was eager to build an alliance with XT Square because it benefits hotel guests; a visit to XT Square can be seen as an additional service provided for hotel guests. With this alliance, many IHRA members have attempted to integrate the visits into their daily activities. It therefore appears that XT Square has attempted to integrate its alliance with IHRA into daily routines.

- **Transforming stage**

The alliance with IHRA creates co-specializations. In its co-specialization, IHRA focuses on promoting XT Square to its customers, while XT Square focuses on managing the venue for their visits. After this alliance had been in place for approximately three months, the results were not satisfactory, both from the perspective of customers and the company. Not many hotel guests were spending time or shopping at XT Square. There were a few occasions when customers visited the area but they were not satisfied as many of the kiosks were closed. On the other hand, the kiosk operators said they were not open due to a lack of customers visiting their stores.

4.3 Alliance to develop De Mata Maris (3D Museum)

- **Sensing stage**

Having realized that the first strategy to attract more customers had not been successful, XT Square management redirected their improvement orientation from an external to an internal focus. From the first strategy, there were some lessons learned: the kiosk management were not yet ready to welcome customers. In addition, the area lacked the uniqueness capable of attracting customers. XT Square thus decided to undertake a more strategic change in order to distinguish the firm from other competitors offering similar products and services.

To identify new opportunities, XT Square analyzed technological developments, especially those related to social media. Indonesia is a country with one of the largest numbers of social media users in the world, with as many as 102.76 million across Facebook, Twitter, and Instagram. Many of them use more than one social media platform. This is the customers' need that XT Square attempted to address.

XT Square needed facilities for entertainment that could not be found elsewhere in the city. XT Square developed a team to undertake research with the aim of identifying customer needs that could then be fulfilled by the firm. According to the analysis and a team of experts from various disciplines, it was concluded that developing a 3D museum in XT Square could be one way to address the existing customers' needs. The management expected that the development of the 3D museum would attract more visitors that would consequently improve the performance of the firm.

- **Seizing stage**

XT Square decided to build an alliance with De Mata Maris, a 3D Museum operator. The De Mata Museum is a 3D optical illusion museum located in the XT Square area. The museum displays approximately 120 three-dimensional (3D) paintings, which are located on the wall or in installations containing an augmented reality effect, also known as 3D illusion. A number of themes are represented in the paintings, including nature, world leaders, superheroes, and sports, amongst others. There are some locations where visitors can take pictures as if they are upside down, and the museum is also equipped with green screen technology for creating visual effects, particularly for manipulating the background of pictures. The museum, which was launched in early 2014, has had much attention from customers and received an award from the Indonesian Record Museum (MURI) in January 2014 for the biggest 3D museum.

In the alliance, a number of agreements were made. XT Square provides space, facilities and other equipment to De Mata Maris to enable it to run its business. In return, XT Square receives 30% of the income from its partner under a profit-sharing scheme. The 3D Museum offers visitors unique ex-

periences and the opportunity to take pictures with optical illusions. The museum is the first such museum in Yogyakarta, and hence, it is the first choice for those looking for such opportunities and experiences. The pictures that are taken at the museum are typically posted by the visitors on social media, which triggers the viewers of the photos to also visit the museum. Thus, the advance of technology and widespread use of social media have had a positive impact on the number of visitors.

- **Transforming stage**

Once XT Square and De Mata Maris reached an agreement, XT Square began to undertake coordination efforts and adapt its internal resources to the needs of De Mata Maris, as its alliance partner. This internal resource adjustment was required to ensure the company had resources that were in line with the needs of its alliance partners. Some actions carried out by the company include: (1) conducting an environmental analysis to identify the most appropriate location for the character of the De Mata Maris business; (2) conducting training for its employees who would be involved in the business operations of De Mata Maris.

- **Alliance results**

When it first began operating, De Mata Maris did not generate a profit. As a new entertainment facility, it was not well recognized by society; thus, De Mata Maris was required to spend a certain amount of funds to support promotion. Nevertheless, situation did not last for a long time; in the second year of its operations, the firm had successfully earned a profit.

After De Mata Maris began operating, there was a significant increase in the number of visitors to XT Square. The increase has had a positive impact on other business entities in XT Square. It could be said with certainty that the 3D Museum is the main attraction for visitors to XT Square, which has stimulated the growth of other business players in the venue. The number of visitors has been consistently increasing year on year since the first year that De Mata Maris opened. Due to the increase of visitors to the venue, XT Square decided to increase the lease rates for kiosks in the venue, which resulted in higher potential income for the company.

4.4 Alliance with Wahana De Arca

- **Sensing stage**

XT Square management realized that relying on just one entertainment facility represented a risk in terms of business sustainability; visitors could easily become bored. The management was concerned about achieving long-term successful performance, and, due to the success of the alliance built with De Mata Maris, the top management of XT Square began to consider adding another entertainment facility to the venue. XT Square thus extended its alliance with De Mata Maris to offer a new entertainment area. As a partner, PT. De Mata Maris offered Wahana De Arca, the first wax attraction in Indonesia featuring imitation figures of both national and international celebrities. Political icons of Indonesia, such as General Soedirman, Soekarno, the first president, and Mohammad Hatta, the first vice president, are featured in the museum. Other famous world leaders are also represented in the museum, including Queen Elizabeth, Barack Obama and Adolf Hitler. Popular celebrities are also amongst the wax figures, such as David Beckham, Michael Jackson, and Rowan Atkinson.

- **Seizing stage**

After conducting an in-depth analysis, XT Square decided to establish an alliance with Wahana De Arca. XT Square reached an agreement to manage Wahana De Arca under a profit-sharing scheme whereby the two parties agreed to share the profits obtained from the firm's operations. XT Square provides all the equipment, facilities, and infrastructure needed, while Wahana De Arca is responsible for the operations of the business. XT Square decided that the location for Wahana De Arca would be nearby De Mata Maris so that visitors did not need to walk far if they wanted to go from one to the other.

- **Transforming stage**

At this stage, the top management of XT Square reorganized its internal resources to meet the needs of the new entertainment facility operations, such as logistics, equipment and infrastructure. One of the decisions that needed to be agreed was the ticket price for entering the venue; this decision affects the profits of the two parties involved in the alliance. Meanwhile, the need for human resources for Wa-

hana De Arca was met by De Mata Maris, the existing alliance partner of XT Square – Wahana De Arca was assigned to undertake this role as it had achieved success in its alliance with XT Square. Under these conditions, Wahana De Arca did not depend on XT Square for sourcing human resources for its operations. With the addition of the new entertainment facility, the number of visitors to XT Square increased significantly. To ensure the comfort of visitors, XT Square made changes to the layout of the existing kiosks and added extra facilities so that visitors had more space.

- **Alliance results**

The success of the alliance with Wahana De Arca helped the company to become more financially sound. In accordance with the expectations of XT Square and Wahana De Arca, the establishment of the new entertainment facility increased the number of visitors to the site. These visitors were not only locals, but also foreigners. Groups of foreigners now visit the entertainment facility every day. Most of profit increase has come from the sale of entrance tickets, however, there are also additional income sources, such as parking fees, promotion fees from other companies, and the increased lease fee for kiosks. From 2015 to 2017, XT Square revenues continued to increase, and the company was able to share a certain portion of its profits with government, and the owner of the company.

5 Discussion

5.1 The iterative process of dynamic capability development

The data analysis in the previous section demonstrated that the process of building an alliance carried out by XT Square in the context of strategic changes was an iterative process. In this process, the company attempted to cooperate with partners; when the alliance did not achieve the expected results, the company sought other partners with whom to build a new alliance. In finding appropriate alliance partners, XT Square followed a series of steps, where each step was flexible in nature. This flexibility in finding partners was a key success factor in developing the alliance.

In general, alliances based on dynamic capabilities are initiated with sensing, followed by seizing, and transforming. However, the process is not necessarily undertaken sequentially; it can also be undertaken randomly. For example, XT Square decided to build alliance with bus operators to provide a public service. At the venue, XT Square provides a parking area for bus operators, with the purpose of attracting bus passengers to visit the shopping center managed by the company. Once the parking area was being used by bus operators, XT Square began to identify opportunities from the abundant numbers of bus passengers who were visiting the venue. In other words, XT Square carried out sensing after it was been decided to build an alliance with bus operators. After undertaking evaluation, XT Square came to the conclusion that the alliance did not offer much benefit to the firm and, consequently, it retracted the decision. In this case, the decision to withdraw was undertaken after sensing, which precedes seizing.

5.2 Alliance as a strategy to build dynamic capability

The dynamic capability implemented by XT Square has been successful in making the company more adaptable to environmental changes. Dynamic capability has also made the firm more sensitive towards market changes and competitors' strategic maneuvers. In addition, the capability can help the case company avoid saturation in certain market segments, and prepare it to enter new markets that offer high potential profit.

In order to perform above the industry average, companies must have sufficient resources to support activities; to do so, these resources must be: rare, valuable, difficult to imitate, and difficult to substitute. The ability to use changing resources to organize strategic activities is known as dynamic capability.

The results of data analysis have demonstrated that strategic alliances enable companies to become more flexible. Through strategic alliances, companies can acquire resources from external parties faster, more easily – in this case, De Mata Maris, and Wahana De Arca. The acquisition of resources from allied partners also makes the company more flexible; when the company acquires unsuitable resources from its

partners, it can release them more easily. Evidence for this was found when XT Square built an alliance with IHRA. The two companies reached an agreement to establish alliances, and are not necessarily able to produce the expected performance. One of the necessary conditions for the alliance to be successful is the ability of managers to orchestrate resources, both those that are internally owned and those that are acquired from external parties.

One of the critical success factors in a strategic alliance is the way in which benefits are shared between the two parties. For example, in the alliance between XT Square and De Mata Maris, each party had different motivations; XT Square had the infrastructure facilities, while De Mata Maris had extensive knowledge of business operations, but lacked infrastructure. Both parties were willing to establish an alliance because both agreed with the proposed profit-sharing scheme. However, reaching such an agreement requires an iterative process.

In short, an alliance is a shortcut to obtaining unique resources, specific knowledge, and complementary resources, and thus, can produce new dynamic abilities. Firms seeking to build alliances should look for appropriate partners that are eager to share their resources and capabilities. The concept of an alliance strategy relies on the trust between two firms in an effort to achieve a common goal. When both parties trust one another, it is far easier for them to achieve mutual symbiosis that benefits each party.

6 Conclusion and future research suggestions

This study has analyzed the way in which strategic alliances support dynamic capabilities, in particular, for firms faced with environmental changes. The analysis showed that the strategic alliance carried out by XT Square was not a singular process that achieved immediate success. Rather, it was undertaken through a series of iterative processes, and continual analysis of alliance partners is undertaken, in particular, to determine the most appropriate forms of alliance for both parties. Although alliances have helped the firm to increase profits, its relationships with its partners are continuously evaluated with the purpose of improving the competitiveness

of the company in a situation of rapid external environmental change.

This study has demonstrated that companies with limited resources can use alliances to respond to changes in the external environment. Such alliance is increasingly important when partners have capabilities that the company does not itself possess. In other words, the capabilities obtained from these partners can complement existing resources. The capability to build alliances can only be effective as dynamic capabilities that support transformation when the company has certain core capabilities, and the capabilities of the allied partner are complementary.

The results of this study are expected to provide practical insights for managers regarding the fact that companies can use alliance partners to drive innovation. Indeed, companies can innovate more intensively with the support of alliance partners because the partner's resources can help to overcome the resource limitations of the company. The innovations that result from alliances are better because companies are not only seeking knowledge to invest but also alliance partners from whom they can absorb knowledge to further support innovation.

This study used a single case study design with a state-owned company as the subject. This condition suggests a number of opportunities for further research. Future studies could include SMEs as objects, because these types of companies faced different challenges to the state-owned enterprises. In addition, further research could compare the process of acquiring dynamic capability between private and state-owned companies.

7 References

- [1] Amit, R., Schoemaker, P.J., 1993. Strategic Assets and Organisational Rent. *Strategic Management Journal*, 14(June 1990), pp.33-46.
- [2] Anand, J., Oriani, R. Vassolo, R.S., 2010. Alliance Activity as a Dynamic Capability in the Face of a Discontinuous Technological Change. *Organization Science*, 21(6), pp.1213-1232.
- [3] Barney, J., 1991. Firm Resources and Sustained Competitive Advantage. *Journal of Management*, 17(1), pp.99-120.
- [4] Barreto, I., 2010. Dynamic Capabilities: A Review of Past Research and an Agenda for the Future. *Journal of Management*, 36(1), pp.256-280.
- [5] Cohen, W.M., Levinthal, D.A., 1990. Absorptive Capacity: A New Perspective on Learning and Innovation. *Administrative Science Quarterly*, 35(1), pp.128-152.
- [6] Dierickx, I., Cool, K., 1989. Asset Stock Accumulation and Sustainability of Competitive Advantage. *Management Science*, 35(12), pp.1504-1511.
- [7] Easterby-Smith, M., Prieto, I.M., 2008. Dynamic Capabilities and Knowledge Management: An Integrative Role for Learning? *British Journal of Management*, 19(3), pp.235-249.
- [8] Eisenhardt, K.M., 1989. Building Theories from Case Study Research. *The Academy of Management Review*, 14(4), pp.532-550.
- [9] Eisenhardt, K.M., Martin, J.A., 2000. Dynamic Capabilities: What Are They? *Strategic Management Journal*, pp.1105-1121.
- [10] Fourné, S.P.L., Jansen, J.J.P., Mom, T.J.M., 2014. Strategic Agility in MNEs: Managing Tensions to Capture Opportunities across Emerging and Established Markets. *California Management Review*, 56(3), pp.13-38. Available at: <http://journals.sagepub.com/doi/10.1525/cmr.2014.56.3.13>.
- [11] Gans, J., Stern, S., 2003. When does Funding Research by Smaller Firms Bear Fruit?: Evidence from the SBIR Program. *Economics of Innovation and New Technology*, 12(4), pp.361-384.
- [12] Gavetti, G., 2005. Cognition and Hierarchy: Rethinking the Microfoundations of Capabilities' Development. *Organization Science*, 16(6), pp.599-617.
- [13] Grant, R.M., Baden-Fuller, C., 1995. A Knowledge-Based Theory of inter-Firm Collaboration. In *Academy of Management*. Briarcliff Manor, NY 10510, pp. 17-21.
- [14] Hamel, G., 1991. Competition for Competence and Interpartner Learning within International Strategic Alliances. *Strategic Management Journal*, 12(S1), pp.83-103.
- [15] Helfat, C.E., et al., 2007. *Dynamic Capabilities: Understanding Strategic Change in Organizations.*, John Wiley & Sons.

- [16] Helfat, C.E., Peteraf, M.A., 2003. The Dynamic Resource-Based View: Capability Lifecycles. *Strategic Management Journal*, 24, pp.997-1010.
- [17] Helfat, C.E., Peteraf, M.A., 2009. Understanding Dynamic Capabilities: Progress along a Developmental Path. *Strategic Organization*, 7(1), pp. 91-102. Available at: <http://journals.sagepub.com/doi/10.1177/1476127008100133>.
- [18] Jick, T., 1979. Mixing Qualitative and Quantitative Methods: Triangulation in Action. *Administrative Science Quarterly*, 24, pp.602-611.
- [19] Laamanen, T., Wallin, J., 2009. Cognitive Dynamics of Capability Development Paths. *Journal of Management Studies*, 46(6), pp.950-981.
- [20] Levinthal, D.A., March, J.G., Levinthal, D.A., 2008. The Myopia of Learning. , 14, pp.95-112.
- [21] Lieberherr, E., Truffer, B., 2015. The Impact of Privatization on Sustainability Transitions: A Comparative Analysis of Dynamic Capabilities in Three Water Utilities. *Environmental Innovation and Societal Transitions*, 15, pp.101-122.
- [22] Lin, Y., Wu, L.Y., 2014. Exploring the Role of Dynamic Capabilities in Firm Performance under the Resource-Based View Framework. *Journal of Business Research*, 67(3), pp.407-413.
- [23] Meredith, J., 1998. Building Operations Management Theory through Case and Field Research. *Journal of Operations Management*, 16, pp.441-454.
- [24] Pan, S.L., et al., 2007. The Development Paths of Non-Strategic Capabilities. *European Management Journal*, 25(5), pp.344-358.
- [25] Pisano, G.P., 1991. The Governance of Innovation: Vertical Integration and Collaborative Arrangements in the Biotechnology Industry. *Research Policy*, 20(3), pp.237-249.
- [26] Pisano, G.P., 1990. The R&D Boundaries of the Firm: An Empirical Analysis. *Administrative Science Quarterly*, p.153-176.
- [27] Prahalad, C.K., Hamel, G., 1994. Strategy as a Field of Study: Why Search for a New Paradigm? *Strategic Management Journal*, 15(S2), p.5-16.
- [28] Ritala, P., et al., 2015. Knowledge Sharing, Knowledge Leaking and Relative Innovation Performance: An Empirical Study. *Technovation*, 35, pp.22-31. Available at: <http://dx.doi.org/10.1016/j.technovation.2014.07.011>.
- [29] Rosenkopf, L., Almeida, P., 2003. Overcoming Local Search Through Alliances and Mobility. *Management Science*, 49(6), pp.751-766.
- [30] Rothaermel, F.T., Deeds, D.L., 2004. Exploration and Exploitation Alliances in Biotechnology: A System of New Product Development. *Strategic Management Journal*, 25(3), pp.201-221.
- [31] Siggelkow, N., 2007. Persuasion with Case Studies. *Academy of Management Journal*, 50(1), pp.20-24.
- [32] Stuart, T.E., Hoang, H., Hybels, R.C., 1999. Interorganizational Endorsements and the Performance of Entrepreneurial Ventures. *Administrative Science Quarterly*, 44(2), pp.315-349.
- [33] Teece, D., 2007. Explicating Dynamic Capabilities: The Nature and Microfoundations of (sustainable) Enterprise Performance. *Strategic Management Journal*, 28, pp.1319-1350.
- [34] Teece, D., Peteraf, M., Leih, S., 2016. Dynamic Capabilities and Organizational Agility: Risk, Uncertainty and Strategy in the Innovation Economy. *California Management Review*, 58(4), pp.13-36.
- [35] Teece, D.J., Pisano, G., Shuen, A., 1997. Dynamic Capabilities and Strategic Management. *Strategic Management Journal*, 18(7), pp.509-533. Available at: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-0342775775&partnerID=40&md5=2a3a2ae196e4ce83bf474d2212a71c3e>.
- [36] Vassolo, R.S., Anand, J., Folta, T.B., 2004. Non-additivity in Portfolios of Exploration Activities: A Real Options-Based Analysis of Equity Alliances in Biotechnology. *Strategic Management Journal*, 25(11), pp.1045-1061.
- [37] Wang, C.L., Ahmed, P.K., 2007. Dynamic Capabilities: A Review and Research Agenda. *International Journal of Management Reviews*, 9(1), pp.31-51.
- [38] Yin, R.K., 2009. *Case study research: Design and methods* 4th ed., London, United Kingdom.: Sage Publications, Inc.
- [39] Zahra, S.A., Sapienza, H.J., Davidsson, P., 2006. Entrepreneurship and Dynamic Capabilities: A Review, Model and Research Agenda. *Journal of Management Studies*, 43(4), p.917-955.