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2015•2016
FACULTY OF BUSINESS ECONOMICS
Master of Management

Master's thesis

How do companies choose their partners for cross-industry innovations (collaborations)?

Supervisor :
Prof. dr. Anna ROIJAKKERS

Co-supervisor :
Mevrouw Oana-Maria POP

Iliyana Gudzheva
Thesis presented in fulfillment of the requirements for the degree of Master of Management

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"VUCA (Volatility, Uncertainty, Complexity, Ambiguity) world is a bit like an amusement park: it's full of thrilling rides – just not all of them are fun. It's a world where stock prices swing wildly from one week to another and entire industries become features in larger ecosystems. A world where new competitors pop up out of nowhere and disruptive technologies wipe out entrenched business models overnight. A world where a political coup or a tsunami on the other side of the planet can disrupt markets in surprising ways." **– Paul Hobcraft**

Summary

Nowadays, there is a growing trend – companies using open practices to gain a competitive advantage over their rivals in the market. Open innovation is known to have diverse applications in many different areas. Of particular interest for this research is the search for foreign knowledge across industry borders. It is said that innovations resulting from such distant collaborations are rather novel (Enkel, Gassmann and Chesbrough, 200), which makes them extremely valuable for a company. Through this utilization of skills and capabilities firms are able to provide complete solutions more efficiently, thus reducing the risk associated with this activity. However, not all collaborations are successful, regardless of the industry in which the company operates. In order to sustain the competitive advantage, companies have to try to keep the partnership viable for as long as possible. Thus, it is extremely relevant to know which factors have an influence on the outcome. From the literature, it becomes apparent that the pre- and post-formation activities of the alliance have to be thoroughly investigated so that its success chance increases. Only the pre-formation phase and the factors that play a key role in it are of relevance for this paper. These are related to the selection and evaluation of potential alliance partners, and the relevant criteria used for this process. Despite the increasing attention on the topic of intra-industry alliance formation, there has been little research done on the alliance formation process when the partners are from distant industries (inter-industry alliances). Consequently, I try to provide answers to the topic *"How do companies choose their partners for cross-industry innovations (collaborations)?"*

This paper is based on seven different case studies developed from the insights of seven people that have some experience and knowledge regarding this subject. As there is an extensive research on the criteria used for the formation of same-industry collaborations, I used the already validated information to provide a base for this investigation. Therefore, I researched whether there is a significant difference between the intra- and inter-industry partner selection processes.

I was able to obtain information regarding the central research question of this study from seven people, which are quite diverse in terms of their occupation and knowledge background. The majority of them have already dealt with cross-industry collaborations in

one way or another and some, in their role as industry experts, have only consulted their customers on the same topic. In this sample of interviewees, there are people that operate in Germany, the Netherlands, the United Kingdom and France, which makes their insights that more interesting. I collected the data through semi-structured and in-depth interviews and created seven different case studies using the complete transcripts of the interviews. These are based on the methodology of theory-building described by Eisenhardt, 1989, and Yin, 2009. Each case was then individually analyzed and the findings were compared across cases, in order to establish possible patterns or contrasts. As a result, testable propositions were made.

The findings reveal that there is not a significant difference in the process of choosing a partner from the same industry as opposed to a partner from a foreign one. There are unique factors which need to be taken into consideration when dealing with a distant partner, but they are highly dependent on the industry in question. Thus, these factors cannot be generalized but they have to be considered when evaluating a potential partner. Furthermore, the criteria that are relevant for both intra- and inter-industry collaborations, as pointed out before, are not that different. However, the *degree* to which they influence the relationship is of importance. Since the alliance between distant industries is much more complex, companies are to conduct more extensive research (due diligence), in order to be sure that the potential partner is compatible with them on different levels. For example, organizational and operational fit has to be present. In addition to this, culture on both organizational and individual level has higher relevance for distant collaborations than for same-industry ones. Even though it is extremely important to have a strategic fit with a same-industry partner, this may not be the case in inter-industry alliances, since the strategic objectives might change over time. Trust plays a key role in both situations, but it has greater importance for the collaborations across industries. In addition to this, companies – regardless of their industry – have to prove whether the potential partner is open to the possibility of sharing its knowledge. Otherwise, the alliance would face many issues throughout the joint activities. Furthermore, same-industry collaborations are developed in order to achieve greater market coverage, whereas inter-industry partnerships are striving for market access. Size is not relevant when choosing a partner but companies have to make sure that the partner can deliver what was promised. Last but not least, the communication criterion has higher relevance for distant collaborations.

Preface

I would like to give special thanks and acknowledgements to my promotors Prof. Nadine Roijakkers and Ms. Oana Pop for their support and guidance they provided me throughout the process. They succeeded in inspiriting me not only personally but academically as well.

Furthermore, I would like to thank the people who took their time to talk to me and sharing their experiences on strategic alliances – Henk de Graauw, Brendan Dunphy, Mike Nevin, Jaco Fok, Paolo Bavaj, Florian Kellhuber and Michael Frank, without whom I would not have been able to write my thesis. The insights from them added substantial value to this study.

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Chapter 1 – Introduction

While many businesses are facing challenges such as budget constraints, globalization and increased competition in the market, some companies are trying to diversify their processes by investing in the search for new commercial growth opportunities. As a result, some of them have adopted some intriguing open approaches. In the market this is known as "Open Innovation" – businesses opening their processes to external parties in order to make use of different expertise, thus gaining a competitive advantage. As a result, the complexity of the knowledge in the market has increased, pushing companies to search for complementing capabilities outside of their industry boundaries (Hung and Chiang, 2010).

By collaborating with other companies, regardless of their industrial heritage, they are able not only to develop novel innovations, but also to reduce their expenditure and meet the market demands more quickly. It is furthermore argued that utilizing this foreign knowledge can greatly improve the innovation activities and expand the usage of the current ones (Yoon and Song, 2014). However, not every alliance is or has always been a successful collaboration (Das und Teng, 2003; Beamish, 1985; Bierly III and Gallagher, 2007). A study by Beamish, 1985, shows that more than 50% failed to achieve their objectives. Some authors argue that the reasons behind alliance fallouts – to name a few – are conflicting interests, lack of clearly defined objectives (Dodourova, 2009) and premature partner selection (Lambe and Spekman, 1997). Therefore, companies have to be able to recognize the capabilities which are best suited for a particular partnership and to know where to look for them (Shah and Swamimathan, 2008).

It is true that there has been some previous research done in this area, though mainly focused on different topics and issues concerning the overall partner selection process. For example, the literature has invested more time in researching specific traits such as trust and strategic fit, which are critical for collaborations. Furthermore, Dodourova, 2009, introduced a paper on motives and drivers behind partnering with another company, the decision-making process in question and even the success and failure factors of an alliance development. But she is not the only author to address these factors. Brouthers, Brouthers and Wilkinson, 1995, also described the process of choosing the right partners depending on different drivers. In addition to this, Kale and Singh, 2009, examined the partner selection process as a phase of the alliance evolution. In contrast to this, there is scarce literature focusing on the framework criteria when considering a partner from a distant industry. In support of this statement, Gulatti, 1995, shows that there is little investigation as to *who* firms ally with. Some researchers have shed light on how to identify potential partners that would bring the company the highest value due to their special skills and capabilities (Gomes-Casseres, 1993). Others have focused their interest in investigating the advantages and disadvantages of partnering (Porter, 2001). But all those authors have not yet considered these topics across industries. The research conducted is mainly based on companies within the same area of expertise. The most popular and widely utilized framework for evaluating and selecting partners is the typology proposed by Geringer in his article *"Strategic Determinants of Partner Selection Criteria in International Joint Ventures"* published in 1991. In it, he suggests that there are two categories of selection criteria – partner-related and task-related. Additionally, Dancin et al., 1997, proposed a set of fourteen criteria to evaluate an international partner. Holmberg and Cummings, 2009, are two of the very few authors who have scratched the surface of inter-industry partner selection and have included the consideration of industrial heritage as a step in their robust framework.

As shown above, the empirical evidence with regard to this subject is limited. Therefore, with this exploratory research my aim is to investigate if there are predefined rules of how companies choose their partners and if there is a significant difference between the processes of intra- and inter-industry partner selection. I try to provide enough insight into the selection criteria and distinguish them according to the two types of collaboration to see if such framework criteria actually exist. The goal is to build a theory based on qualitative information, gathered from semi-structured, in-depth interviews and present it as case studies. This method is described in detail by Eisenhardt, 1989, and Yin, 2009. The information I obtained for the seven cases is considered from the perspective of strategic alliance directors from Germany and the Netherlands, industry experts from the United Kingdom and France and an agency from Germany. Through this diversity, I was able to collect various insights into this topic. By comparing them, I was able to establish whether there is a significant difference in the process of choosing a same-industry collaborator as opposed to a foreign one. As a result, I am not going to test and generalize existing theory to a population but rather build it.

Therefore, using the data collected from the semi-structured, in-depth interviews, the aim of this paper is to address the following research question:

Is there a fundamental difference in the selection process of same-industry collaborators compared to different-industry collaborators?

The central issue of this research is the intra- and inter-industry collaboration, especially the process of partner selection. Thus, this paper contributes to the existing literature by generating insights on this topic and seeks to further stimulate a more professional research regarding the inter-industry collaborations. Moreover, it gives an overview of the current situation in terms of cross-industry partnerships and the associated issues.

This paper is structured as follows: The first chapter introduces the topic and the motivation behind writing this paper. The second chapter presents the research done on the existing literature relevant to this case. Chapter 3 describes and discusses the methodology that was followed to create the design of the qualitative investigation. After explaining this, Chapter 4 presents a detailed description of the case studies and a cross-case analysis of the data gathered. Last but not least, Chapter 5 is dedicated to the findings, managerial implications, limitations of the study and recommendations for future research.

Chapter 2 – Literature Background

1. Collaboration

Strategic innovations are the reason behind the paradigm shifts in customer value propositions, which has neutralized the current competitive advantages of the firms in the market (Holmberg and Cummings, 2009). Powerful examples being smartphones, like Apple's iPhone, or digital television in the field of digital communications and entertainment. These shifts were often a result of outside-the-box thinking, uninfluenced by traditional industry practices. To counteract this movement, firms' strategies were developed with the perspective of forming an alliance (Barker, 1992), in order to produce and maintain the sustainable competitive advantage with another firm. This is visible in the number of partnering activities, which has spiked over the last couple of years (Hagedoorn, 2002).

Collaboration is defined by Mattessich and Monsey in their book "Collaboration: what makes it work" (1992) as *mutually beneficial and well-developed relationship entered into by two or more organizations to achieve common goals.* Collaborations exist in many forms and variations, but their structure is just a tool for companies to gain acquire something from the partnership. Therefore, it is important to pinpoint the incentives that stimulate companies to search for partners. Depending on the strategic goal of the firm, there are many drivers that can influence its decision to collaborate. For example, according to Tidd et al., 2005, collaborations can be used to reduce the cost of technological development or easier market entry, to achieve the scale of economies in the production, to improve the time needed for development and commercialization of new products or to promote shared learning. This will be explained more elaborately later on.

Nowadays, firms are forced to try new creative ways to stay ahead of their competition. This is caused by a constantly evolving environment, blurred industry boundaries, the invention of novel technologies and constant pressure exerted from newcomers in the market. Firms today are not in a position to individually create or provide the best possible solution to their customers as often their views and capabilities are limited to their own perspectives (Antikainen, Mäkipää and Ahonen, 2010). Furthermore, some earlier studies reinforce this statement by suggesting that collective thinking is a key to maximize the efficiency in innovating (Hargadon and Becky, 2006). Moreover, Ahonen et al., 2007, propose that the main focus of companies should lie on group or community creativity). It is generally accepted that through collaboration, innovation increases since the firms have greater access to external resources and knowledge (Chesbrough, 2003).

An additional observation is that the innovation processes, as described by Thrift, 2006, are becoming more open. This phenomenon is called Open Innovation (OI). It is a concept by Chesbrough, 2003, the significance of which has risen many fold in the last couple of years, not only in theory but in practice as well. OI gives the company an opportunity to have more efficient internal processes by using an already existing input from outsiders (Yoon and Song, 2014). By implementing it, firms were able to shorten their innovation cycles, reduce the escalating costs of industrial research and development as well as the dearth of resources (Gassmann and Enkel, 2004).

Some researchers speculate that with the open approach to innovation most of the firms rely just on the knowledge provided by external specialists (Gassmann, Daiber and Enkel, 2011). Building on this statement Enkel, Gassmann and Chesbrough, 2009, suggested that companies from distant industries will be an essential source for innovating activities. This can be explained by the fact that most of the innovation is *based on a recombination of existing knowledge, concepts and technology*. They furthermore argue that already established solutions from one industry could be deployed in the process of product development of another, in order to reduce the related risks. Although many firms still perceive the distance between industries as a no-go (Enkel and Gassmann, 2010), this type of cooperation between distant industry partners is set to be an important driver of the firm's innovation performance (Belderbos et al., 2014).

There are some successful partnerships in the automotive industry resulting from technological spillovers from other distant industries such as the gaming or aeronautics. An example is the BMW's iDrive system, which was successfully transferred from a non-automotive supplier, recognized in creating technology used mainly for joysticks and medical equipment (Enkel and Heil, 2014; Gassmann et al., 2010). Von Hippel, 2005, gives another example of a cross-industry innovation, where car manufacturers were able to transfer successfully the aeronautical antilock braking system (ABS) to the automobile industry. In the year 2000, Nike presented a basketball shoe with small hollow columns in its mid-soles (Gassmann, Daiber and Enkel, 2011) and branded it “Nike Shox”. The design was developed with the sole purpose of the columns to absorb the shock *of a strike when the heel of a wearer stuck a surface* and give the player the opportunity to add more power by “springing back”. The material originally used for the mid-soles of the shoes was developed as an application in the automotive industry.

1.1. Motives for collaboration

In general, there is a broad range of drivers, which can motivate a company to collaborate with another firm. However, managers should always take into account that a motivation can change constantly, as it is derived from the surrounding environment in which the company operates. According to Child and Faulkner, 1998, the five main motivators for engaging in an alliance are classified under cost, resource-based, strategic-positioning, learning and other motivations (risk reduction/management, first mover advantage, increased flexibility, etc.).

Some large firms, for example, strive to explore new fields and expand their businesses through the formation of alliances, thus reducing risk levels and uncertainties (Dodourova, 2009; Vanhaverbeke, Gilsing and Dysters, 2012; Yoon and Song, 2014; Brouthers, Brouthers and Wilkinson, 1995). Partnering up with another company opens up many opportunities for the company such as access to additional or complementary knowledge as well as other additional resources (Dodourova, 2009; Yoon and Song, 2014; Brouthers, Brouthers and Wilkinson, 1995). A vivid example here is the forming of the partnership between Vodafone and Swisscom, in which the main objective was sharing of risks and combining their complementary capabilities (Gassmann, 2006). As a result, Vodafone will be able to provide roaming services in Switzerland and Swisscom will be able to access the leading and innovative products and services of Vodafone (Swisscom AG, 2000). On the other hand, some firms engage in an alliance solely based on the accumulated cost reductions or even to rapidly develop and diffuse new technologies (Walters, Peters and Dess, 1994). As pointed out in the beginning of the paragraph, these are all only hypothetical gains of the collaboration since there are many other factors that could influence the outcome of the alliance (Schilling, 2010).

In contrast to big, established companies the smaller firms face different challenges - lack of intangible but also of tangible resources such as financial support or infrastructure (Spithoven, Vanhaverbeke and Roijakkers, 2012). Therefore, their reasons for collaboration with other actors are not the same. Small firms are at a disadvantage when it comes to intangible assets as their knowledge base and capabilities are quite limited (Rogers, 2004; Nieto and Santamaría, 2010). As a result, external knowledge may be of great importance to them (Asheim and Isaksen, 2002; Bjerke and Johansson, 2015).

The literature shows that when collaborating in different types of knowledge networks, firms enhance their innovation capacities (Bjerke and Johannason, 2015; Freel, 2003). Furthermore, researchers have argued that integrating foreign knowledge has led firms to reduce the overall development time, costs and risk (Enkel and Heil, 2014; Kalogerakis, Lüthje and Herstatt, 2010; Gassmann and Zeschky, 2008) since the solutions or concepts transferred to the firm have already been prosperous in another industry (Enkel and Bader, 2016; Enkel and Mezger, 2013). Consequently, firms that are pursuing more radical innovations should consider expanding their network beyond industry boundaries.

The five most known collaboration agreements, which are rather distinct from one another, have been introduced by Schilling (2010). To be able to achieve one of the above-mentioned incentives, a company has to engage in a specific form of collaboration: a strategic alliance, a joint venture, licensing agreements, outsourcing or collective research organizations.

Strategic Alliance – form of collaboration between two or more companies to achieve common objectives. They share some capabilities and resources while remaining distinct so that they can either enhance or complement their core competencies. This can vary in terms of time commitment and chose whether or not there should be formal or informal agreements between the parties (Schilling, 2010).

Joint Ventures – a more formal form of collaboration. It is a partnership between firms, which often results in an entirely new entity, with shared risks and profits. (Schilling, 2010)

Licensing – lighter form of collaboration. In it, the one firm (the licensor) sells the legal rights for using and exploiting a technology created by itself to another firm (the licensee). This relationship is not only beneficial for the licensee, but also for the licensor. With the acquisition of this technology, it saves tremendous costs if the licensee had to develop it by its own R&D processes, whereas the licensor gets a steady income and reduces the risk in investing in other uncertain activities.

Outsourcing – typically used when the company cannot perform certain activities, either due to lack of knowledge, skill or the lack of facilities to develop it themselves. In practice, the outsourcing collaborative agreements can over a period of time evolve into a strategic alliance (Schilling, 2010).

Collective research organizations - are trade associations, private research corporation or university-based centers. These research organizations are known to be founded by governments or industry associations (Schilling, 2010). They conduct R&D activities, which are going to be beneficial for all of the partners, sharing the risk and the investment expenditure needed to perform these processes.

But the spectrum of the Business Relationships does not stop with just those. The literature suggests different types of partnerships depending on the continuum associated with different degrees of collaboration, and the exchange or merging of corporate resources between the companies (Porter Lynch, 2001). Some examples of other types of collaboration are Joint R&D, Co-makership, Customer-supplier relationships, etc.

The collaboration activities not only differ on the exchange of assets but can be also characterized by time, if they are long or short term agreements not involving full ownership forms (Forrest, 1990). For example, in the case of technological collaboration, we can find collaborative R&D or university and/or research agreements and technology licensing.

Today, due to the fast changing environment conditions, the rising technology trends and the globalization processes, firms have to act quickly in implementing their strategies, in order to achieve their objectives. Even though alliances can be quite beneficial, not every established partnership results in a sound success. Some of them are being dispersed throughout the years.

Therefore, it is interesting to explore which drivers are responsible for a long-lasting collaboration and which ones are to be avoided.

In this research paper, the collaboration management is considered from the perspective of people who have a key role in the process and are operating either with collaborators from the same or different industries; or with people who one way or another are familiar with establishing alliances. Since the process of forming a partnership is known to be time-consuming, complex and challenging, it is good to look closely at the structure for managing alliances. After the evaluation of the potential partners, against certain criteria, is complete and the alliance is formed, the firms also have to consider the post-formation activities – coordination activities, development of trust and relational capital, and conflict resolution and escalation (Kale and Singh, 2009). These practices are often of high significance since they prevent unforeseen contingencies arising during the life cycle of the alliance (Popo and Zenger, 2002; Khalid and Bhatti, 2015).

Kale and Singh 2009, identify two factors, which are extremely important for the alliance life cycle, namely managing coordination between partners and developing trust between them. Partners have to coordinate their actions, due to their interdependence, otherwise, they would undergo serious problems resulting from the lack of knowledge about each other's intentions of how to move forward (Gulati, Lawrence and Puranam, 2005; Gulati and Singh 1998; Kale and Singh, 2009). Even if their strategic view is aligned, firms may still be unable to assess the uncertainties or the potential value creation opportunities, resulting in higher performance risks (Khalid and Bhatti, 2015). Managers should be aware of these possibilities *ex-ante* and minimize these risks by creating a suitable governance structure (Gulati and Singh, 1998).

Many other studies also discuss the key role of trust to the critical success of an alliance (Bierly III and Gallagher, 2007; Douma et al., 2000; Das and Teng, 1998; Shah and Swaminathan, 2008). Bierly III and Gallagher did an extensive analysis on the antecedents to trust but in this research, it is not the main objective. Furthermore, trust not only facilitates alliance governance (Kale and Singh, 2009) but also provides a healthy working environment for partnering. In addition to this, trust is also the reason behind why partners are more open in sharing sensitive information (Dyer and Chu, 2003). It also lowers the risk of potential harm and promotes willingness to work with each other (Doz, 1996). Due to trust, de Man and Roijakkers, 2009, suggest that partners will put the success of the alliance always first if they are intrinsically enough motivated for it.

As a result, the firm has to be able to find the right balance between risk and openness. Hattori and Lapidus, 2004, argue that there are four different relationship types, depending on the state of trust and the motivating force behind it (Table 1). With low levels of trust, the potential outcomes could be unpredictable. In contrast to this, with high levels of trust between the partners, there is a high potential for breakthrough innovations.

Table 1: A matrix of dimensions of four types of relationships

Relationship type	State of trust	Motivating force	Outlook	Behavior	Potential outcomes
Collaborative	Highly invested	For the good of the whole	Synergy	Responsible	Breakthrough innovation
Cooperative	Transaction oriented	For successful project outcomes	Win-Win	Willing	Preconceived success
Competitive	Reluctant or cautious	To look good	Win within rules	Shrewd	Compromise
Adversarial	Distrust	Not to lose	Win at any cost	Cut-throat	Unpredictable

Source: Hattori and Lapidus, 2004

When considering inter-industry collaborations, managers should be able to deal with the cognitive distance between the firms. Cognitive distance is defined as the heterogeneity between the firms' resources, in term of people and their understanding of the environment (Nooteboom et al., 2007). The organizational focus of a firm is based on *different categories of perception, interpretation, and evaluation inculcated by organizational culture* (Schein, 1985). In a study by Nooteboom et al., 2007, the inverted-U shaped relationship between cognitive distance and innovation performance is proven to be correct. It explains that as cognitive distance increases, the positive effect on learning by interaction also goes up (Nooteboom et al., 2007). When people interact with each other, they are able to provide different insights, in order to connect the diverse knowledge. Consequently, firms have the opportunity to discover greater novel combinations. On the other hand, if the cognitive distance becomes too large, there is a risk of misunderstandings and losing the novelty opportunities. Firms need to be also aware of the consequence that when partnering with other companies there is the trade-off between *the opportunity of novelty value and the risk of misunderstanding* (Nooteboom et al., 2007). Employing strategies, which could bring novel value, could nevertheless result in decreased innovation performance due to the miscommunications. As a result, the firms might face a considerable level of uncertainty due to the apparent lack of fit between the collaborators (Gassmann et al., 2010).

In the case of Senseo coffeemaker, its inventors did not have the "obvious" fit between them since both partners were operating in different industries – Philips Domestic Appliances (DAP) and Douwe Egberts, a consumer-goods company (de Man and Roijakkers, 2009). They joined efforts, in order to revolutionize the process of making coffee – a new coffeemaker, combined with coffee "pods" containing the fixed quantity for the perfect cup of coffee. Even though the risk was extremely high due to the fact that the partners had no previous experience with collaboration and handling entirely different industrial backgrounds (de Man and Roijakkers, 2009), the alliance was a success due to a thorough contract, which specified the role of each partner. Managers addressed the behavioral differences between the employees of the two companies and conducted cultural seminars for increasing the understanding levels in the alliance. Thus, we can conclude that way of managing an alliance is of great importance for this process.

1.2. Reasons behind successful und unsuccessful collaboration

Previous research has identified specific partner traits, which have a positive influence on the partner selection during alliance formation and on the probability of success (Kale and Singh, 2009; Shah and Swaminathan, 2008). These are partner complementary, partner commitment and partner compatibility/fit. Partner complementary stands for firms who bring non-overlapping capabilities and assets to the relationship that other members do not possess and vice versa (Dyer and Singh, 1998; Kale and Singh, 2009). A firm does not only have to bring additional resources to the alliance but it must be compatible and committed to the success of the partnership. There has to be a fit between the working styles and especially cultures of the participating firms. Moreover, committing to the relationship has to include the willingness of the firms to share their knowledge and make adjustments in the short term, in order to achieve success in the long run (Gundlach, Achrol and Mentzer, 1995).

From (Table 2) – *Partnerships: success and failure factors* – Dodourova, 2009, we can stipulate that a successful relationship is furthermore based on good coordination and communication, honest commitment to the partnership and transparency between the partners' teams. She furthermore explains that the values and rules holding the alliance together are helped built by active teamwork.

Table 2: Partnerships: success and failure factors

Success factors	Failure factors
Specific goals, life span, tasks, responsibilities and achievement measurements Use of pilot deals Ongoing management, coordination, transparency and communication Commitment Value chain alignment Active teamwork and staff training	Conflicting interests Lack of clearly defined objectives and responsibilities Ill evaluation of the achievements Under-resourcing Cultural issues (Perceived) underperformance

Source: Dodourova, 2009

Having a successful collaboration, according to Walters, Peters and Dess, 1994, firms should follow three key principles – clearly defining a strategy, phasing in the relationship and blending the culture. The strategy being followed should be closely aligned with the corporate strategies of the partners and incorporate goals and milestones for achieving these goals. Phasing in the relationship means getting to know the partners better and thus establish trust amongst them. The bond should be developed through a time period. Starting with smaller projects is a more effective way to build trust and test the compatibility while minimizing the economic risk. The last principle is undoubtedly the most complex and yet the most important one. In order for a collaboration to be successful, developing a shared culture is a key move since it consists of values and beliefs of the different employees, which could have a major influence on the activities. When talking about collaboration across industry boundaries, culture could have a significant impact on the whole process (Senseo example).

After all the preparatory work when partnering with another firm, some researchers suggest that there should be a plan of governance for the collaboration (Schilling, 2010; Nooteboom, 2004a). Partners should be legally bound to a contractual agreement, confirming that they are aware of their rights and obligations and the consequences in case of agreement violations (Schilling, 2010) and thus minimizing the risk of opportunism (Das, 2005).

Lundvall, 1988 also argues that when opportunism and uncertainty are replaced by trust, informal obligations would provide a more stable framework for interaction. In addition to this, Nooteboom, 2004a, suggests that *interaction partners may get to understand each other better, which enables a better judgment of trustworthiness.* Even though some disagreements may appear, when the partners are willing to express and discuss them openly, *the conflict may deepen the relationship rather than breaking it* (Nooteboom, 2004a).

Last but not least, it is argued that in order for an alliance to be successful, neither of the partners should be dominant in their relationship (Hausler et al., 1994). The firms should be equal not only in their contributions to the partnership (Brouthers, Brouthers and Wilkinson, 1995; Johnson et al., 1996) but also in the risks they face (Medcof, 1997). METRO, the third largest supermarket chain in the world, wanted to differentiate itself from its competitors in terms of technology. Its strategy was to build a "store of the future" full of the latest technologies, automated processes and more personalized shopping experience (de Man and Roijakkers, 2009). As METRO lacked the knowledge and experience to realize this idea, it had to set up an alliance. It invited Intel, Cisco and SAP to take part of this project. According to de Man and Roijakkers, 2009, the alliance organization was *pivotal* to the success. There were no decisions enforced on the partners but everybody was equal. Firms realized that they are mutually dependent on each other and if the store was to be a huge flop, it would affect the reputations of them all. The project was quickly finished, as the firms had a clear objective and the *vision of creating "the store of the future" created enthusiasm among people,* which ensured coordination and success.

Despite the many advantages, it is generally known, that not all collaborations are successful. According to some researchers, about 60 percent of them are considered failures (Beamish, P. 1985; Das and Teng, 2003). Partnering with other firms could pose some unforeseen risks.

Strategic alliances are often endangered by opportunism, lack of trust between partners and even power games (Dodourova, 2009). There is a threat of potential deceitful behavior which can hinder the collaborative process, destroy the trust among partners causing high levels of uncertainties regarding the performance of the alliance and can eventually lead to alliance dissolution (Das, 2005).

To begin with, companies often fail to choose the right partners for co-operation and therefore are unable to meet their set of objectives. For example, firms that are new to the world of alliances, find the negotiation process as the most frustrating part of establishing a relationship with another firm, therefore they often rush into it without *appropriate safeguards or adequate resolution of critical issues* (Harbison and Pekar, 1997). They try to enter into an alliance based on the opportunity rather than taking the overall objectives into consideration (Walters, Peters and Dess, 1994).

In order for the collaboration to be successful, the partners should establish goals and specific measurement tools at the beginning of their relationship. Without clearly defined objectives and a plan for achieving them, the conflicting interests of the companies might be the main cause of failure (Dodourova, 2009). Consequently, such collaborations might have a negative impact on the strategic and growth processes of the firm. Another major issue in partnering activities of large firms is culture. It can have a major negative influence on the development of the cooperation (Table 2). Cultural conflicts may also lead to alliance termination (Luo et al., 2001). They may not only be on a managerial level but can also appear between different departments of the partnering companies (Dodourova, 2009). Lastly, in some situations, one of the partners tends to fall behind thus damaging the competitive advantage of the alliance. It is then perceived as underperforming (Dodourova, 2009).

While most of the alliances are formed, in order for both sides to mutually benefit from their activities, there is always the risk of some firms to engage in countervailing activities. As Doz and Hamel, 1998, discuss – there is always the danger of possessing predatory self-interest. From the literature, many authors talk about trust and suggest that distrust might even elicit opportunism (Nooteboom, 2004a), with the hidden agenda to steal technologies, clients or even knowledge (Taylor, 2005). In order to mitigate such risks, partners should develop detailed legal agreements and stringent control mechanism, to ensure that each partner meets its obligations (Das and Teng, 1998).

Another central issue of alliance failure lies in the potential conflict between cooperation and competition (Douma et al., 2000). Some partners may enter an alliance with their existing mindset, in which they are still competing against their partner. According to Hamel et al., 2002, firms are trying not to transfer a wide range of core skills to their partner but try to share those skills needed for creating a competitive advantage, in contrast to companies outside the alliance. Partners try to carefully select to what capabilities and technologies they give an access to and also develop mechanisms to prevent unintended ´transfer of information'. A great example here is the alliance between the German auto giant Volkswagen (VW) and the Japanese manufacturer Suzuki Motor Corporation (The New Economy, 2014), VW announced that it would acquire a substantial stake in Suzuki. Furthermore, the deal was to sign an agreement in which both partners would share technologies and their distribution networks. The idea was, in the end, both companies to have better access to the markets – VW was dominant in Europe, whereas Suzuki was a leading firm in Asia. VW promised Suzuki usage of its electric and hybrid vehicle technologies while being able to access the technologies of the Japanese manufacturer plus the Indian market. The partnership quickly dissolved since there were many disagreements and cultural differences. VW was accused of failing to hand over the promised hybrid technology, which led eventually to termination of the alliance and Suzuki suing VW.

According to Porter Lynch, 2001, poor adaptability could also be a reason behind collaboration failures. Having two firms, which appear to be similar on the surface but have completely different product lines will definitely lead to fallout. This is the case due to the fact that the techniques used, either strategic or operational, are virtually incompatible to pursue.

Although there are many interrelated reasons of why collaborations do not often succeed, the literature identifies two main issues – poor partner selection and poor alliance management (Holmberg and Cummings, 2009). Some researchers argue that if initially the partners were poorly screened and targeted, no matter how superior the alliance management skills might be, the situation cannot be saved. Therefore, the next section focuses on the partner selection process across both intra- and inter-industry alliances.

2. Partner selection process and criteria in the literature

The current alliance literature concentrates more on *why* firm forms intra-industry alliances and whether or not they are successful but little research has focused on *who* firms ally with (Gulatti, 1995). Any partnership begins with the need to *analyze potential partners, as realizing the potential benefits of an alliance will depend on the selection of appropriate partners* (Holmberg and Cummings, 2009, p.166). Furthermore, according to Dyer and Singh, 1998, partner selection process is extremely important since it could represent a source of competitive advantage for at least one of the firms. This statement is not only true for the outcomes of intra-sectoral collaborations but as well as for firms, who ally with companies across their industry boundaries. The literature acknowledges the fact that when it comes to innovation-related research domains, novel innovations are an outcome from the combination of distant pieces of knowledge (Gassmann and Zeschky, 2008; Amabile and Khaire, 2008).

The decision-making process for partner selection when engaging in a strategic alliance is known to be complex and challenging (Bierly III and Gallagher, 2007). Managers are then burdened with forming and managing such knowledge-intensive partnerships. This process goes beyond choosing the one partner, which has superior human capital, the best technology and/or sufficient resources. But it is argued that firms should look furthermore for characteristics relevant to the specific goals of the alliance (Shah and Swaminathan, 2008). Based on a research done by Douma et al., 2000, it is suggested that managers should try to obtain the best “fit” between the partners. The nature of setting up an alliance always consists of a repetitive sequence of stages of negotiation, commitment, and execution in which the strategic objectives, organizational structures, operational activities and cultures, as well as the individual interests of the partners, must be aligned (Ring and van de Ven, 1994). This fit will be challenged not only by external factors in the environment but also by the changes and differences within the organization of one of the partners. Therefore, the view of the fit between the partners should be seen more as a dynamic than a static one (Douma et al., 2000). Thus, managers should possess a thorough understanding of the dynamics of the fit and be able to manage it efficiently and effectively.

Gomes-Casseres 1993, argue that selecting allies is also important in terms of benefits maximization and risk minimization and that *the choice of partners determines the raw material, so to speak, for collaboration.* Studies have shown that those are not the only motives, which encourage firms to engage in collaborating with other firms and it is suggested that exactly these motives are the ones shaping the selection criteria for the partner evaluation stage (Solesvik and Westhead, 2010). Therefore, when seeking an alliance, due diligence needs to be conducted, giving light to the advantages and disadvantages associated with the potential partner (Porter Lynch, 2001; Solesvik and Westhead, 2010).

Holmberg and Cummings, 2009, propose a robust framework for the process of partner selection in the context of the travel-tourism industry. However, they further specify that their process can be also applied to other service and product industry alliances and of course different alliance types. First, it specifies the importance of aligning the corporate and strategic goals of the partners and afterwards continues with the development of evaluation criteria set for each potential partner; the mapping of potential partner industries and partners, and the last step consists of using a tool to evaluate and to select the appropriate partner.

2.1. Criteria used to evaluate and select a partner

The literature reports diverse selection criteria by firms regarding the evaluation and selection process in collaborations. The most widely used typology for partner selection is the one from Geringer, 1991, in which the distinction between partner-related and task-related criteria has been made. Partner-related criteria consider a good strategic fit between the alliance partners; established trust at the level of top management; good reputation and financial stability of the partner(s); the positions of the partners in the industry; and the enthusiasm of the partner for the collaboration. On the other hand, task-related criteria regard the partner's product-specific knowledge; knowledge about the local and international market; knowledge of the partner's culture and internal standards; competence in new product or service development; links with major buyers, suppliers and distribution channels; political influence; and other industry-related criteria.

According to Geringer, 1991, the weightage of the selection criteria has to consider the perceived importance the activities a firm contributes to the partnership, in order to enhance its competitive position. Partner selection criteria for international alliances have been introduced by the research of Dacin et al. 1997, in which they recognized a set of fourteen criteria. These include (1) financial assets, (2) complementarity of capabilities, (3) unique competencies, (4) industry attractiveness, (5) cost of alternatives, (6) market knowledge/access, (7) intangible assets, (8) managerial capabilities, (9) capabilities to provide quality product/service, (10) willingness to share expertise, (11) partner's ability to acquire your firm's special skills, (12) previous alliance experience, (13) special skills that you can learn from your partner and (14) technical capabilities. Furthermore, Dong and Glaister, 2006 and Hitt et al., 2000, specify the importance of context (industry and country) and the need for geographical fit (Evans, 2001).

Moreover, Gulati, 1995, establishes that prior alliances create ties which directly or indirectly have an effect on the partner process selection. In addition to this finding, Gulati and Gargiulo, 1999, propose that the probability of two independent firms allying increases with their interdependence, in terms of their prior ties, common third parties and even their alliance network. Saxton, 1997, proposed that partners with previous relationships before the strategic alliance was formed, may understand each other better. Thus, the probability of a conflict is much lower, which increases the chance of the partnership to be successful.

The requirements needed for setting up an alliance between partners from the same knowledge domain and partners operating in distant industries might be quite different. As we already discussed, for successful partnerships, in the long run, there should be at least an established "fit" between them on the strategic, organizational and operational levels (Douma et al., 2000; Gassmann et al., 2010). Taking the three levels under consideration, it is safe to suggest that the differences between the partners will be much stronger since both parties have distant knowledge and capabilities.

In the previous section, it was discussed that the choice for intra-industry partners is influenced by their direct and indirect ties to the firms (Gulati, 1995; Gulati and Gargiulo, 1999). However, inter-sectoral alliances may not have any ties, direct or indirect, due to their separate pasts. Thus, the absence of prior ties may lead to low levels of trust among the partners. As seen in the previous discussion, trust is an extremely important factor in a successful collaboration, especially in the case of uncertainty (Gassmann et al., 2010).

The literature has furthermore argued that there should be a strategic, organizational and operational fit and that they are vital prerequisites for partners entering a partnership (Douma et al., 2000). But authors such as Gassmann et al. 2010, with the example of iDrive, propose the notion that successful R&D alliances can be also developed even though the fit between them is poor, only if specific measures are taken. They furthermore argue that having a common objective for the creation of radical innovations is an important aspect which can outweigh the drawbacks in other areas.

While the literature has presented many studies on how to choose partners for intra-sectoral collaborations, it has offered little insight into the specific case of how firms choose their partners for cross-industry alliances. Despite the limited studies on this subject, in my opinion, the process of choosing a partner is a crucial element in determining the successful outcome of a strategic alliance. Consequently, I am interested in researching whether or not there is a significant difference in the process of partner selection from the same industry compared to the process when choosing a collaborator from a distant industry. Thus, my research question is:

Is there a fundamental difference in the selection process of same-industry collaborators compared to different-industry collaborators?

Chapter 3 – Methodology

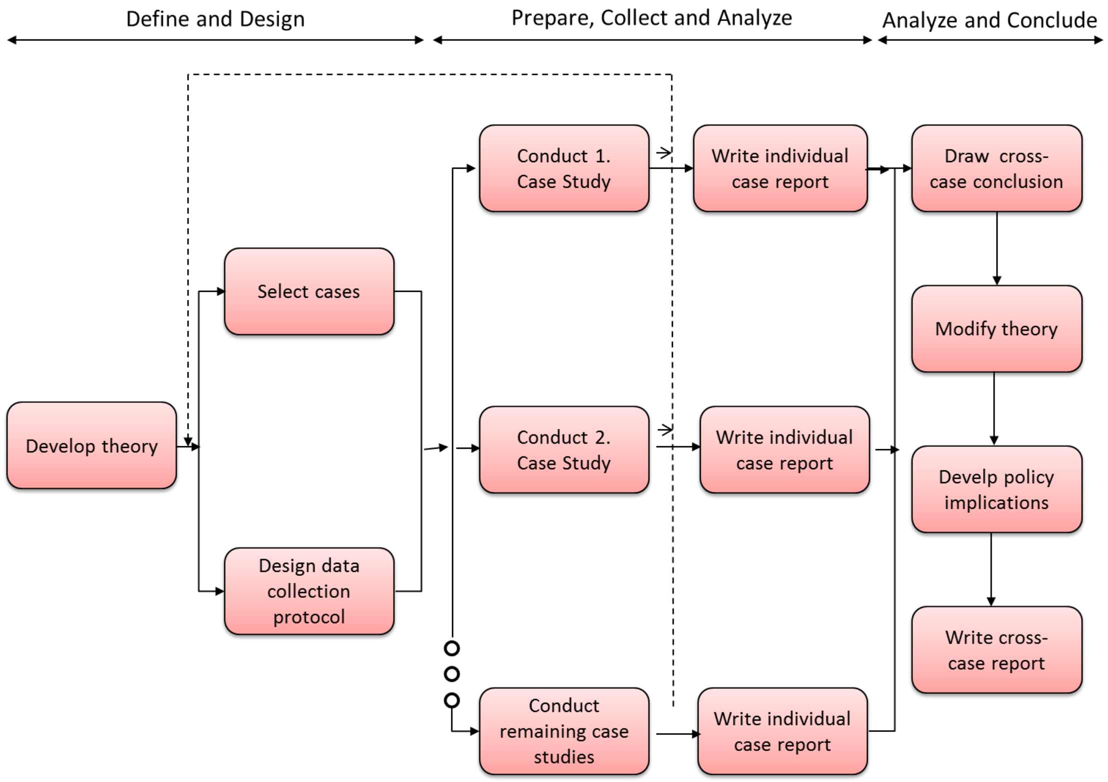
This chapter describes the research design that is used for writing this paper and the choices made for tackling the definition of the problem.

3.1. Research design

The research question would offer the literature a deeper insight into the process of partner selection, since the existing literature does not contain enough information on this topic. Consequently, my goal is to introduce enough empirical evidence to build a base for this issue. Thus, an exploratory study based on case studies will be conducted. The literature that I will use as a guide for this type of research is a paper on theory-building from cases by Eisenhardt and Graebner, 2007, and the book “Case Study Research” by Yin, 2009. According to Eisenhardt and Graebner, 2007, the central idea is to develop theory inductively using the cases as the basis for the research. This is an investigation strategy which includes one or more cases, whereby the author is trying to identify theoretical constructs through the replication logic (Eisenhardt, 1989). Yin, 2009, defines this method as an empirical inquiry that investigates a phenomenon in-depth and within its real-life context. He furthermore argues that a single case is seen as an independent distinct experiment, while multiple cases can be analyzed as discrete experiments that *serve as replications, contrasts, and extensions to the emerging theory.* As a result from these tests, a person can find some of the most important factors, which can then be analytically generalized. In the past, this method was not so popular among researchers (Yin, 2009), even though many influential studies were based on the method of building theories from case studies (Eisenhardt & Graebner, 2007). In order to ensure validity and reliability of the research (Yin, 2009), the cases should be done in a systematic manner. This way, the research is not going to be overly complex and misunderstood (Eisenhardt, 1989).

In general, there are two ways of conducting a case study research – either using the single-case or the multiple-case design. Yin, 2009, shows that a single case can be the unit of analysis by itself or there can be several units within one case. Furthermore, he states that a single-case is only chosen when it is considered to be unique. On the contrary, multiple-case designs are not chosen due to their uniqueness but because they contain similar and/or contrasting outcomes (Yin, 2009). In addition to this, multiple-case designs allow the researcher to demonstrate replications and/or contrasts across cases, thus resulting in more substantial and invulnerable analytical conditions (Yin, 2009). According to Eisenhardt, 1989, when the information obtained for a research analysis is based on multiple sources, the reliability of the data gathered increases and thus strengthens the theoretical foundation of the study. Consequently, a multiple-case study design was chosen as it is more suitable for the research of collaborations between intra- and/or inter-industries. The process of conducting multiple case studies is shown more closely in Figure 1, based on Yin, 2009. In order to reduce complexity and ensure the clarity of the research, sub-units were not used.

Figure 1: Case study research



Source: Yin (2009)

According to the figure above, each case study is reviewed as an independent study, from which convergent evidence and conclusions are being derived (Yin, 2009). Subsequently, the outcomes are being replicated in case studies. To ensure enough validity of this research, the correct application of the replication technique is extremely important (Table 3).

Table 3: Case Study Tactics for Three Design Tests

Tests	Case Study Tactic	How	Phase of research in which tactic occurs
Construct validity	• Used multiple sources of evidence • Used multiple investigators • Had a second key informant to review the draft case study report	• In-depth interviews and data from secondary sources	• Data collection • Composition
External Validity	• Used replication logic in multiple-case studies	• Application of replication logic method	• Research design
Reliability	• Apply case study protocol • Develop case study database	• Developed a case study protocol and transcriptions of the interviews	• Data collection

Source: Adapted from "Case Study Research Design and Methods", Yin, 2009, p.41

3.2. Data Collecting

According to the literature, there is no ideal number of cases. In his article, Eisenhardt, 1989, suggests that the optimal number of cases provided should be between four and ten. He points out that with less than four cases it would be quite difficult to generate theories and see the connections among them, whereas with more than ten the amount of data gathered would not be easy to handle. Due to time constraints, seven cases were chosen for this paper. The interviewees can be divided into three categories – people, responsible for the partner selection process, industry experts and agencies.

Considering the objective of this study – to see if there is a significant difference in the process of choosing distant partners compared to same-industry ones, I chose cases from different industries and different countries. Although it is advisable, it is not mandatory that the examples are based on innovation-related topics, but it is rather important to show clearly the factors and drivers the companies have to take in mind when selecting an alliance partner. In addition to that, I considered the knowledge insights of industry experts based on the projects they have worked on or even their own research findings. To ensure the diversity of the data gathered, I included the information from an intermediary firm, specialized on finding the right partners for cross-industry innovations. In doing so, I was able to provide versatility and generate more valuable insight for this research (Table 4). The literature suggests that the choice of cases should not be random but rely on the information one can draw from them, in order to contribute to the theory development (Eisenhardt and Graebner, 2007).

Therefore, each of the seven interviewees is in a way relevant to the research topic and their responses will contribute to answering the central research question. I included a company that has not much experience with innovation collaboration but has developed a lot of strategic alliances. In the case portfolio, there are the opinions of two industry experts on the partner selection process and the process seen from the perspective of an intermediary firm. In addition to this data, there are the insights of managers who were actually responsible for selecting the alliance partners.

The data gathered for the research was mainly collected from in-depth, semi-structured interviews via Skype with the people responsible for evaluating and then selecting a potential partner. Skype interviews were the most appropriate tool in gathering information, since all of the representatives that I interviewed were situated in a different country than mine. As this is an exploratory research, internal validity has no importance, as it is a further test used in empirical research (Yin, 2009). Furthermore, it is advisable to refer to multiple sources of evidence as this increases the construct validity through the process of data triangulation (Yin, 2009). Therefore, I gathered additional information regarding these cases from various sources – company websites and articles from previous research conducted on this topic that used the same companies as a basis.

Table 4: Research Setting

Criteria Firm/Expert	KLM Case 1	Dunphy Associates Case 2	Alliance Best Practice Case 3	HYVE Case 4	Henkel AT Case 5	Shell Case 6	Henkel AT Case 7
Country	NL	UK+FR	UK	Germany	Germany	Netherlands	Germany
Industry	Airline	Advisory services	Advisory services for different types of alliances	Cross-innovation agency	Adhesive, sealing materials and functional coatings	Oil and gas	Adhesive, sealing materials and functional coatings
Employees	32 685 (2014)	1-10 (2016)	1-10 (2016)	51-200 (2016)	Na	94,000 (2015)	Na
Profit	€9643 (2014)	Na	Na	Na	Na	$ 1,939 bn (2015)	Na
Type of commerce transaction	B2C and B2B	B2B	B2B	B2B	B2C and B2B	B2C and B2B	B2C and B2B
Innovation activities	No	Yes	No	No	Yes	Yes	Yes
Interviewee	**Henk de Graauw** Strategic alliance director	**Brendan Dunphy** Expert on OI	**Mike Nevin** Managing Director, Strategic Alliance expert	**Florian Kellhuber** Senior Project Manager Ideation	**Paolo Bavaj** Corporate Director, NBD, Adhesive Techn.	**Jaco Fok** Manager Technology and Innovation Excellence	**Michael Frank** AR Supplier Innovation
Subject	Partner selection process for strategic alliances	Partner selection in different projects, information mainly from the mobile industry	Advisory services for different types of alliances	Intermediary company for finding the right partner for Cross-Industry Collaborations	Collaborations based on innovation	(Cross-industry) collaborations in the oil and gas industry	Partner Selection Process for Supplier Innovation

The transcripts of the interviews can be found in Appendix A and the interview questions in Appendix B. The reader should be aware of the fact that during the interviews, the form and sequence of the questions were adapted to the interviewee's responses. The questions used for the industry experts/agencies were slightly changed, as these only provide consulting services to firms engaging in collaborations and have no experience in partnering with other companies.

Chapter 4 – Results

In the following chapter, the findings of the research are discussed. The information is presented in the form of individual case studies. Consequently, the data from the cases is considered in view of either intra- or inter-industry collaborations.

4.1.Within-case analysis

Case 1: KLM, Henk de Graauw, previous Strategic Alliance Director, KLM

Henk de Graauw says that innovation has an extreme importance for some companies, but for the aviation industry the priority is achieving enough market coverage through increasing the partner network. In his opinion, it is better when larger firms acquire specific knowledge through startups or new companies, which specialize in delivering innovative solutions.

"Therefore, instead of trying to run an innovation project within the airline, we invested in smaller startups to run the innovations for us."

He mentions some alliances with companies from distant industries, like their Joint Venture with General Electric, specialized in engine maintenance, and American Express to develop and promote the Frequent Flyer Program of KLM. Both of those alliances were successful as they were able to use the expertise and capabilities of the firms to achieve their objectives. Nevertheless, the main focus of KLM, as discussed before, lies on expanding their airline alliance network, as those partnerships bring the most value to the company. They make KLM stronger and able to compete against larger competitor airlines such as Lufthansa. Furthermore, he shares his perspective that the factors that influence these partnerships do not stay the same over time. For example, relationships nowadays are becoming more sophisticated and professional, whereas in the past they were mostly based on the political relations of the country.

In his eyes, searching for a partner can be a two-way street. It may be the case that KLM needs external knowledge and specific capabilities, but it may also be that some other company wants their expertise. When searching for a potential partner, Henk de Graauw does not have a special method of selecting the most appropriate one. At times, KLM has evaluated their potential partners strategically against some specific criteria established from the management. In contrast to these cases, some collaborators have been considered due to a previous connection – either a personal contact within the company or previous engagements with it. After the search phase of the process is completed, the people responsible for establishing the partnership consider certain specific requirements, defined by the collaboration agreement. A key condition that could have an influence on the selection criteria is the compatibility with a partner. Operating in the same industry is much easier to achieve than teaming up with a distant company, since same-industry firms are already familiar with how the industry works.

"When partnering with another airline, it is basically the same people."

Through the collaboration agreement included in the contract, the company initiating the cooperation ensures that all of the criteria are met. By entering the contract, the two parties are protecting themselves in the case of the collaboration's fall-out and even against hazardous behavior. Without an agreement an alliance cannot be established. From the perspective of inter-industry partnerships, the contracts have to be more demanding since there usually has been no previous relationship with the company. In addition to that, the outcomes of the alliance may be more innovative, making the presence of a written contract even more imperative.

"In general, a good match between the partners is important, but do not forget the contract."

With regard to intra-industry relationships, trust and good understanding could be also quite important for the success of the collaboration. However, according to our industry expert, on some occasions, only trust is not enough to proceed with the activities. Consequently, if trust is pivotal for the development of an intra-industry alliance, its importance doubles when partnering with a distant company. It is more complex to rely on somebody with whom you have nothing in common with. In general, the lifecycle of some alliances is not very long due to the fact that there has been no trust established beforehand. Companies cannot be as transparent as they need to be if their alliance partner is not 100% trustworthy. Trust can be built through extensive communication and exchange of information. If the companies are unable to express their concerns or their expectations of the collaboration, it is more likely that the partnership will sooner or later dissolve. Another important factor that needs to be considered is the organizational structure and culture within the company.

Along with trust, Henk de Graauw puts an emphasis on the size of the collaborating companies. He does not reject the possibility of one partner being more dominant in the relationship due to its size. It is a lot more difficult for smaller companies to dictate the rules of the situation. Therefore, in order to establish a balance between the partners, it is easier to create a medium-sized company (Joint Venture), thus enabling a smoother process. In the case of inter-industry alliances, it is much more difficult to achieve that, since both sides consider their input to be of importance.

Henk de Graauw's view on innovation and large multinationals is that the two do not go well together. Due to the already complex processes and routines in big companies, there is not enough entrepreneurial spirit in them as opposed to innovative startups. As a result, great ideas may not be developed due to an unexpected change in the organization.

"They have to "break through" many glass ceilings before they can convince the top layer to go along with the concept. In a big company, before you know it, the idea is killed because budget has changed by 3%."

Case 2: Brendan Dunphy, Industry Expert on Open Innovation (OI)

Brendan Dunphy has extensive knowledge in the field of Emerging Technologies, IT services and Mobile Market Development. He shared some of his years-long experience as a Director at Accenture Centre for Strategic Technology in France.

Brendan Dunphy starts by talking about collaboration being fundamental for value creation. He refers to it as a type of open innovation or some other form of an ecosystem. When talking about the companies operating in the mobile industry, he makes an important remark. He states that the partners in one firm's value chain have different infrastructure but are still operating in the same industry. Thus, they are not considered distant partners in the process of creating an innovation. In his opinion, companies that provide different services (accounting, marketing, technology or software) are to be defined as a type of distant collaborators.

Later on during the conversation, he mentions that the Internet of Things (IoT) is now the biggest trend in the mobile industry. Since most of the mobile companies are unable to support this kind of innovation (IoT), they are often forced to search for a distant partner. In this way, he argues that market conditions can serve as a motivation driver for collaborating.

"…so in other words, the mobile device is starting to connect with devices or things from other industries' devices."

The decision to collaborate can be made in two ways – either outside-in or inside-out. The process, according to Brendan Dunphy, starts basically with a problem that the company faces but cannot solve. As a result, the firm partners with another firm which has the knowledge and resources for solving this particular issue. Nowadays, the already established large firms in the market are unable to generate innovative ideas, which are necessary to keep them ahead of the competition. In order to manage and overcome these routine processes, it has to be recognized that a strategic alliance with an innovative startup is the right path to take, instead of trying to develop the innovations themselves. He supports this statement with the example of Nokia. Nokia was unable to solve a problem as it was reluctant to collaborate with other firms and thereby lost a significant amount of resources.

"…it is a key problem in the sense of "Not-invented-here syndrome". For them, it would have been economically more sensible and quicker to adopt an external technology."

Brendan Dunphy emphasizes the fact that companies should be aware of the changing conditions in the market in order to react properly to them. Therefore, the keyword here is "transparency". With the help of intermediaries, networks or even platforms, firms are able to obtain a better view of the situation and select the most relevant partners. He then adds that from a confidential point of view, firms prefer collaborating with a third party in the partner selection process, so that they do not accidentally disclose their strategy.

When choosing an intra-industry partner, the criteria that one has to consider can be quite diverse. It mainly depends on the official structure of the company. Taking the whole size spectrum into consideration, Brendan Dunphy concludes that this process can be executed either formally or informally. Sometimes the duration of the process could be quite long but the decision could also be taken within days. If a company is developing alliances more informally, throughout time it gets more familiar with the process and knows which foreign capabilities are of importance for it. Furthermore, some of the criteria relevant for incumbent firms are not coming into question when partnering with a newcomer.

"If you are dealing with IBM, Accenture or any other big firm, it is quite easy to tick those boxes. On the other hand, if you are dealing with a startup (3-9 months old), financial stability means nothing."

On the other hand, when talking about inter-industry collaborations, the issue is not which capabilities there are, but rather if they actually bring value to the company and how one can utilize them in the most efficient way. Brendan Dunphy gives here the patent practice as an example.

Furthermore, a company has to be clear about its goal when engaging in an alliance. It has to take the duration of such collaboration into account – whether it is going to be a one-time partnership (project-oriented) or over a longer period of time (strategic). Consequently, managers have to consider a broad range of factors which can affect the partnership. For example, if a large firm is cooperating with a small firm, it has to pay attention to the organizational culture of its partner. Their processes will most likely be unable to coincide, thus making the whole situation harder to deal with. In terms of inter-industry alliances, the factors that have an influence on the outcome are more or less project-dependent. When cooperating with a startup, control and efficiency are harder to achieve, as when cooperating with an already established firm. The more distant a company is, the harder the process will be.

"See, when the companies are operating in the same industries, they have some sort of commonalities among them which makes the process easier."

Another challenge could be the culture on an individual level and even the informality of doing business that comes with it. Cultural aspects are in many cases responsible for misunderstandings/miscommunications and thus inefficient processes throughout the company. Furthermore, firms that do business on the basis of goodwill and trust will later be exposed to risks and liabilities if the partner is not entirely honest.

Trust in each other could actually be the “glue” that holds an alliance together. In the case of inter-industry partnerships, trust has to be developed, since there are not many commonalities. Starting with a small project, companies get acquainted with one another and test whether continuing the relationship makes sense. After cooperating for some years, partners can secure that there will be no opportunistic behavior.

Brendan Dunphy explains that when a challenge arises, managers should recognize first that there is a problem and then be proactive in trying to solve it, rather than forcing the situation. In his opinion, there should be a person responsible for the process, making sure that everything is going according to plan. In addition to this, managers have to have proper expectations and consider the possibility of achieving results later than planned. Not everything can be predicted.

Case 3: Mike Nevin, Strategic Alliance Expert and Founder of Alliance Best Practice

Mike Nevin is mainly focusing on providing consulting services to companies involved in strategic alliances, not only domestically but also internationally. An alliance can happen either with partners from the same industry or from a different one.

Mike Nevin considers innovation, even though it is not a part of his research, as one of the main drivers behind partnering. In his opinion, there are multiple factors which influence the decision of the companies to engage in an alliance. He thinks that size plays an important role. A new firm will have different problems to solve compared to an already established firm. As a result, the motivation behind the decision will vary.

“Sometimes it is a small expanding company, which has a good product or a service but lacks a distribution network. As a result, they would search for a company that will have a distribution network in order to be able to get their product in the market faster, quicker, better. In other cases, the main driver behind collaborating is the desire to enter a new market.”

Comparing the situation in same-industry alliances with cross-sectoral ones, he suggests that these factors depend on the industry in question. When looking at a partnership in the high-tech industry, decisions have to be made extremely quickly due to the fast-changing environment conditions. On the other hand, when a company from the pharmaceutical industry allies with a distant partner, the time to make the decision vastly exceeds the time needed in the high-tech industry. Therefore, Mike Nevin introduces the process of due diligence.

"Let us categorize the process of choosing the right partner as due diligence, meaning all the activities a company takes to make sure they are choosing the right partner."

Furthermore, he explains that the goals of the alliances can change over time. Throughout the process of choosing a partner, companies are not extremely familiar with the capabilities of their potential partners. As a result, during the negotiation phase or even during the due diligence, they could recognize a better opportunity than the original idea and the nature of the alliance could change.

According to Mike Nevin, there are three stages of partnering maturity – Opportunistic, Systematic and Endemic. Taking this into consideration, there are different people who participate in the process of choosing a partner. The first one, Opportunistic, is very ad hoc. In this phase, companies can spot opportunities in the market but do not have much experience in collaborating. Here the motivation is based more on enhancing the product line and therefore just people associated with the specific product line or service are considered. If the company is in the second stage, then it is known that it has established many alliances and afterwards it forms a separate unit to coordinate the activities there. At the last stage, the company has enough experience with developing alliances that this is integrated into its corporate skills.

I am then interested in the way companies search for the right partners. Mike Nevin suggests that there is a connection between the abovementioned stages and the criteria that need to be taken into account. Starting opportunistically, most of the times companies do not regard certain criteria, but with time they advance into the other stages and make the process of choosing a partner more structured and clearly defined.

He describes five dimensions which are significant for the success of the intra-industry alliances (Table 5) – Commercial, Technical, Strategic, Cultural/Behavioral and Operational. The first one estimates the value that the partner would bring to the relationship. The criteria in the technical and strategic dimensions examine respectively the fit between the product or service of the two companies and the strategy behind the partnership. The cultural dimension considers the cultural fit and the last dimension evaluates the operational compatibility of the partners. In Mike Nevin's opinion, companies are not aware of these dimensions, which is the reason why so many alliances did not succeed in the past. Companies are usually evaluating their potential partners based just on the criteria from the first two categories, neglecting the strong influence of the other three. For example, the alliance between IBM and Salesforce was dissolved, since the two business models were too different to be implemented together (operational reason). Some alliances did not make it due to a change in strategy, moving from offering complementary services to being in direct competition, e.g. IBM and Cisco. Another risky situation that he mentions is when competitors collaborate with each other ("coopetition") and are not aware of the "hidden agenda" of the other side. Therefore, companies have to be extremely careful not to fall into this trap as in the case of Rover and Honda.

When considering an inter-industry relationship, Mike Nevin argues that the situation is much more difficult.

"It is even worse!"

He emphasizes that in these partnerships the last three dimensions have an immense impact on the outcome – whether it is going to be a success or a failure. This results from the great distance between them.

"…Western-European company partnering with a Japanese company, one has to consider the immense distance not only geographically, but also the distance in their culture and even in their operational processes…"

Afterwards, he gives two examples of cross-sector alliances which were successful – Senseo coffee machines and Wella hairdryers. In his opinion, the partnership between Philips and Douwe Egberts was only successful because of their cultural similarity, and the alliance between Hitachi and Wella – because of its simplicity. He once more points out the importance of due diligence being done in the beginning. Spending a little extra time to review all of the dimensions could save both partners the costs and problems afterwards. Mike Nevin then talks about the "vicious circle". With time passing, companies are getting better at choosing their partners considering a wider range of factors. But some firms do not recognize this and continue evaluating their potential allies only based on the two categories – commercial and technical. As a result, the alliance fails. This means:

"…that they do not do a lot of partnering, which means that they keep on making the same mistakes."

When collaborating with distant industries, companies should be able to trust each other. This is very difficult due to the fact that firms have to first work together in order to develop trust. It takes a long time until partners really trust each other and the problem here is that there is no tool that managers could use to measure the level of trust. Mike Nevin proposes a simple way to do that just by asking directly. Depending on the response, companies could weigh the threats and opportunities. The process could be furthermore managed through a good governance model – both sides should be aware what responsibilities they have with regard to their partners. In this way, the parties can exclude opportunistic or dominant behavior from the relationship.

Table 5: The 52 Common Success Factors in Strategic Alliances

Commercial	Technical	Strategic	Cultural	Operational
Business Value Proposition (BVP)	Valuation of assets	Shared objectives	B2B trust	Alliance process
Due Diligence	Partner company market position	Relationship Scope	Collaborative corporate mindset	Speed of progress
Optimum Legal / Business Structure	Host company market position	Tactical and strategic risk	Collaboration skills	Revenue flow
Alliance Audit	Market fit of proposed solution	Risk sharing	Dedicated alliance manager	Business plan
Key metrics	Product fit with partners offerings	Exit strategies	Alliance center of excellence	Communication
Alliance reward system	Identified mutual needs in the relationship	Senior executive support	Decision-making process	Health check
Commercial cost	Process for team problem-solving	B2B Strategic alignment	Other cultural issues	Alliance charter
Commercial benefit	Shared Control	Fit with strategic business path	B2B Cultural Alignment	Change mgt.
Process for negotiation	Partner accountability	Other relationships with same partner		Operational metrics
Expected Cost value ratio		Common strategic ground rules		Operational alignment
		Common vision		Exponential breakthroughs
				Internal alignment
				Project plan
				Issue escalation

Source: Alliance Best Practice Ltd

Case 4: Florian Kellhuber, Senior Project Manager Ideation, HYVE

HYVE operates more in the area of innovation. Therefore, they have projects which consider the activities in the front-end of the process. As an intermediary agency, they help companies choose a collaboration partner. Mr. Kellhuber explains that collaborations have different character – two companies can come together to create a radical innovation, to find a new customer that helps them further expand their supplier network, or to test the possibilities in the area of open innovation. According to him, depending on the project, there are different objectives behind each partnership. Companies can search for a partner when they face an innovation challenge or if they want to expand to a new market. There are multiple examples of alliances which happen when one partner supplies the innovation and the other one provides the access to the foreign market.

Furthermore, some companies want to find new ways of implementing their technology in other areas, known as "technology searches for application". It is mostly the case that the new applications of the old technology are found in distant industries. Another reason behind allying with another company could be searching for technology which is already developed and can help improve the operational efficiency of the company.

Due to the different motives for partnering, the criteria for choosing a partner from the same industry would be quite different than the criteria considered for inter-industry collaborations. Depending on the strategic objectives, a company can choose a partner either from a distant industry or from the same one. From Mr. Kellhuber's point of view, the goals of the partnership do not change over time if they were clearly defined in the beginning of the relationship. A same-industry partnership will be successful if the partner is a company within the supply chain (vertically) and the goal is obtaining bigger market coverage or getting closer to the customer. However, he suggests that if for some reason the strategic objective of one partner changes, thus putting both of the companies in direct competition, the inter-industry alliance may not be viable for much longer.

In contrast to this, when considering an inter-industry partnership, secrecy should not be a factor. Mr. Kellhuber gives the following example to support his statement. An automobile producer has a problem in its manufacturing plant and engages into a partnership with a bottling company. This alliance results in a good and innovative solution to the problem of the automobile producer. But in this case, there is no fear of competition between the partners since each of them will have access to the solution.

All in all, a partnership starts with the readiness of the company to disclose its processes to other companies in the market. If this readiness is not there, the company will continue to keep its processes and ideas secret from the other players. Furthermore, according to Mr. Kellhuber, the duration of an alliance depends on the size of the companies involved. If they are relatively small, then it could take about a week to make the deal, whereas if they are larger, then it could take more than a year to set the framework conditions.

Not all past HYVE's collaborations were successful. There were some cases in which the partners did not get along. Florian Kellhuber gives an example of a project he worked on with the Deutsche Telekom (DT). DT wanted a partner for "machine communication". HYVE was able to find a company, which was supposed to bring the physical product to the market, and a technology partner, who was going to develop the concept. But in the end, there were some issues and as a result, HYVE had to decide whether to search for new partners or to figure out a solution for the misunderstandings that had occurred.

Furthermore, Florian Kellhuber puts an emphasis on the fact that in a partnership every company has to be equally positioned. But in reality, depending on the size or the character of the company, in terms of who initiates the search, there could be some asymmetry in the relationship. In the end, according to him, it depends on the moderator of the relationship to create the balance in it.

Case 5: Paolo Bavaj, Corporate Director „New Business Development, Adhesive Technologies", Henkel

Paolo Bavaj starts the conversation by pointing out that innovations today are not being created the same way as they were in the past. Nowadays, companies have to think more creatively and even build innovation ecosystems with other firms. Through these ecosystems, companies have access to missing knowledge, experience and resources, making it easier to for them to develop the idea behind the collaboration. The great challenge here is to find the right partners for such an alliance and then be able to sustain it throughout time.

In order to achieve the radicalism in their innovations, Henkel Adhesive Technologies operates as an independent entity, away from the operational day-to-day processes. They have a different way of working, different methods and philosophy, which enables them to think more creatively and outside-the-box. One the one hand, they search for potential companies through evaluating patents and intellectual properties (IPs) in the database to see which one will be a good match. On the other hand, they conduct extensive interviews with companies in the market. Paolo Bavaj argues that during these interviews the person in charge could very easily notice if the cooperation will be successful or not. If they find a suitable collaboration partner, the relationship is being formalized and a contract is signed. In this way, every party knows their responsibilities and there is no room for opportunistic behavior.

When choosing a partner for a potential strategic alliance, Mr. Bavaj considers just two things. First, he looks at the technical capabilities of the other firm. What he searches for afterwards is the chemistry in the relationship. He places extreme importance on it. Therefore, even if the technical fit is there, he would not collaborate with the company if the chemistry between them is not good. Furthermore, he points out that there is no specific checklist that companies use when choosing a partner.

"Es ist nicht so systematisch, wie man sich das vorstellt. Es gibt kein Excell-spreadsheet mit den verschiedenen Kriterien. Es ist vielmehr ein Gefühl." – "It is not as systematic as one would imagine. There is no Excell spreadsheet with all the relevant criteria. It is more of a feeling."

In the case of inter-industry alliances, the situation stays the same. In terms of trust, he says that it is important for partners to be able to rely on each other. If the cooperation is not successful, it does not necessarily mean that the partner was not suitable for the purpose of the relationship but that there may have been other negative factors. In an ecosystem all of the companies have to be equal, otherwise it will not exist for long.

Case 6: Jaco Fok, Manager Technology and Innovation Excellence, Shell

Jaco Fok is fascinated by the new trends in the market. He talks about innovation being popular again even though most of the companies already knew about it in 2003. In his opinion, there is an accelerating trend in the market – incumbent companies utilizing the capabilities of startups. The interesting thing here is that most of the small companies are not operating in the same industry but in a distant one. Thus, large firms do not have to develop the skill or the technology themselves but acquire it externally, saving money and time. He also explains the importance of developing a network system, since nowadays the value that a partner brings from its network is higher than the value derived from a good supply chain.

"Therefore, my advice will be not to look at just one startup. Look at them all and only then you can see some patterns."

Recognizing patterns is the capability that a company has to possess in order to provide a complete and innovative solution. Re-combining the already existing foreign knowledge with the knowledge of the company leads to a novel innovation.

In terms of types of collaboration, Shell has mostly done everything. Since it operates in the oil and gas industry, it has to constantly acquire new land, thereby making Joint Ventures its second nature. In general, this industry is associated with high capital investments and high risk. Therefore, in order to mitigate the risk, Shell is in a way "forced" to collaborate with other companies. It is also a part of diverse technology partnerships since it does not own the equipment itself.

"In my opinion, the oil and gas industry is quite the "closely-knit family"."

Mr. Fok explains that for them it is better to first search for the missing knowledge or capability from one of their "family" members, instead of directly looking for it in another industry. In order to choose the perfect partner, the criteria used mainly depends on the type of cooperation that the company wants to achieve – peer collaboration, front-end activities based on innovative ideas (radical inventions), university collaborations, venturing or cross-industry collaboration. Each field has developed its own framework and structure for engaging in the partner selection process.

The easiest decision is the one made when considering a partner from the "family". Since there is an already established framework agreement, the decision is taken rather quickly. The process gets more complicated when the company is trying to bring a radical innovation to the market. Jaco Fok explains that such novelty cannot be predicted and most of the times the department which is responsible for these innovations, Game Changer, deals with incremental ones. The submitted idea has to have at least some connection to the oil and gas industry. They furthermore evaluate how novel the idea is and what value it will bring them.

"This is difficult to steer and we do not want to steer it that much because it is a radical innovation, so it is not going to feel comfortable anyway."

When choosing a university for collaborations, the criteria used for the radical innovations do not apply anymore. According to Mr. Fok, they consider just two parameters – rankings and proximity. When scouting for startups, the only criterion that comes into question is whether the domain the startup operates in coincides with the domain in which Shell needs additional knowledge. If there is a business fit, Shell invests in it.

Shell TechWorks is the team in Boston which deals with cross-industry collaborations. They search for the partners separately, having different criteria in mind as these highly depend on the problem they have to find a solution to. It could be that they completely borrow the knowledge from another industry, hire the best company to fix the problem or even engineer it together.

"There are 60 people and just two of them who know something about the oil and gas industry. The rest have a different background."

Mr. Fok explains that there are not many companies in the market that are able to perform the activity or provide the needed knowledge so the selection process is as extensive as someone would think. In the case of radical innovations, since the level of novelty is extremely high, there could be just one company able to provide the solution. So there may be no actual choice. In his opinion entering an alliance with a distant partner is much more difficult than with an intra-industry one. Some factors that play an important role for the alliance's success such as communication, organizational culture and language are quite different, which causes myriad challenges. For example, companies often overestimate their capabilities and underestimate the scale of the activities in the oil and gas industry.

An important observation that he makes is that a company should be extremely careful when entering a partnership with another firm. It has to ensure that the screening process is thorough and all objectives are clear to both collaborating partners. In the case of cross-industry alliances companies need to have employees that are familiar with the incoming foreign knowledge.

"…these are professionals who know the other industries; one mitigates the risks of not understanding the non-industry partners."

Case 7: Michael Frank, AR Supplier Innovation, Adhesive Technologies, Henkel

Michael Frank works for the business unit “Adhesive Technologies” at Henkel and his main responsibility there is finding the right partners for their activities. This consists of searching for possible allies in the early stages of the process. He proposes the idea of connecting with potential partners in the front-end of the project, so that companies can develop and deliver the best possible solution for the customer’s demands.

In his opinion, an innovation is not something new but something that brings value to the company. He suggests that an innovation can be extensively developed, thus “over engineered”, making the creation useless to most people since they are not ready to or do not know how to utilize it appropriately. This innovation is new on the market, but when there is no demand for the invention, then it is a wrong estimation of the market and a waste of money.

“…dann haben wir den Markt falsch geschätzt und nur Geld verbrannt.“ – “…then we wronly estimated the market and wasted money.”

In terms of cooperation, Michael Frank talks about knowing what your partners are planning and what their intentions are. He gives an example concerning the production of BMW electro automobiles – BMW i3 and BMW i8. For him the important aspect here is the material from which the car is constructed and not that much by what it is powered. The material in question – Fiber-reinforced composites, has not been used before in the production process. As a result, in order to be able to deliver the needed material, AT had to know that BMW actually needed it or BMW had to communicate its needs to them beforehand. He states that companies have to abstain from the idea of self-optimization, in terms of making it on their own, and rather focus on how they can make it happen with a collaborator.

“Ich glaube heutzutage ist weniger die Frage OB man das machen soll, sondern man sollte sich eher mit der Frage beschäftigen, wie man das machen will.” – “I think nowadays the question is not IF we have to do it but rather how we can do it.”

Consequently, companies have to be clear from the beginning with whom they can ally and what they need to do. He makes a valid point that a company cannot achieve all with just one partner. It has to have multiple ones which are then assigned to different projects. Another thing to be taken in mind is the post-formation phase, meaning they have to determine the individual rights on the outcome after completing the project. He points out that an important factor for searching and securing a partner is their attitude towards IP, costs and exclusivity. There could be misunderstandings which can lead to dissatisfaction and the collaboration may not happen at all. The next example illustrates the partnership between Mercedes and Bosch. Bosch was able to provide a solution to a pressing problem of Mercedes, but only under the condition that Bosch is allowed to sell the technology to other automobile producers in the market (no exclusivity). The decision-making factor in such situations is whether the company wants to find a solution by itself or seek partners.

The process of finding a suitable partner at Adhesive Technologies is based on two main things. Firstly, there has to be a good and clear understanding about the function of the partner. After that the team has to hear the opinion of the procurement team and decide together which partners come in question. Another important factor to be considered is the global presence of a possible ally. Since AT operates in an industry where it can supply different markets with the same product, this is an important criterion that needs to be evaluated beforehand. Furthermore, they have to evaluate the potential companies based on a checklist with requirements from Henkel.

"Eine Checkliste ist dafür zu gebrauchen, um zu prüfen, ob der Lieferant alle Kriterien von Henkel erfüllt." – "A checklist is needed in order to see whether all of Henkel's criteria are met by the supplier."

Michael Frank also argues that on an emotional level a partner has to be dedicated to the cause and the idea of the alliance. Otherwise, it will not be possible to influence them with any contracts.

Due to the size of AT, in terms of profit, there is always the tendency to search for long-term relationships with partners, since it is inconvenient to change them every year.

According to the segmentation criteria of Mr. Frank, the business unit AT does not have inter-industry partnerships in its portfolio. Even though Henkel is a chemical company that operates with many automobile manufacturers, he sees both as one industry.

"Henkel ist in der Grauzone der chemischen Industrie. Früher waren wir sicher ausgeprägter ein Chemieunternehmen, mittlerweile zählen manche auch zum Konsumgütersegment…" – "Henkel is in the grey zone of the chemical industry. In the past, we were more of a chemical company but nowadays some consider us a part of the consumer goods segment…"

Fortunately, he provided his professional opinion (as an industry expert) of the situation. In his view, there is not a big difference in the criteria when choosing same-industry and different-industry collaborators. It is true that the list of the possible partners from the same industry is always going to be easier to make than when trying to figure out with whom one should cooperate when considering a distant-industry partner. Partners from the same industry are more familiar with the processes and the products, therefore making the collaboration much easier. According to the interviewee, the searching process is much more complex when choosing a "foreign" partner. But other than that all other processes are the same.

In terms of challenges that one can face in cross-industry collaborations, he is of the opinion that it is not the industry that matters, but rather the size of the company. Big companies are not used to cooperating with smaller firms, so there might be issues in the communication and contract negotiations that do not occur when cooperating with a firm their size.

In terms of trust he differentiates between two situations – before-contract and after-contract. In the first situation there is basically no trust. Once the contract is finalized and the companies have worked together for some time, then trust becomes important. Mr. Frank says that many of the collaborations dissolve due to the short time invested in finding the optimal partner for the project in the beginning.

4.2. Cross-case analysis

After conducting the analysis of the interviews and developing the cases, some of the outcomes showed certain similarities in the data, allowing the central research question to be answered. According to the seven case studies, there are some differences in the partner selection process depending on the industry. Although the case studies are analyzed individually, the findings are structured by theme. Therefore, in order to present them appropriately, I compared the findings based on the industry character and the importance each criterion has on the relationship. The two types of collaboration are explained in detail in the section below and Table 6 gives a detailed overview of the resulting four dimensions – Inter-industry criteria with high or low importance and Intra-industry criteria with high or low importance.

Table 6: Cross-Case Analysis

Cases	Partner selection			
	Intra-industry criteria		Inter-industry criteria	
	High importance	Low importance	High importance	Low importance
Case 1 **KLM**	Market coverage Strategic goals Trust Safety Network Internal alignment	Organizational culture Operational compatibility	Trust Operational compatibility Organizational culture Size Unique skills	Market coverage Safety Network
Case 2 **Dunphy Associates**	Strategic goals Trust Organizational culture	Cultural alignment Communication	Strategic goals Trust Cultural alignment Organizational culture Patents Communication	Size
Case 3 **ABP**	Market coverage Strategic interest Trust Business Model	Market access Technical capabilities Operational compatibility Cultural alignment Size	Market access Strategic interest Trust Commercial compatibility Technical capabilities Cultural alignment Operational compatibility	Market coverage Size
Case 4 **HYVE**	Market coverage Strategic goals Trust	Market access Culture Size	Market access Trust Openness	Market coverage Strategic goals Size
Case 5 **Henkel**	Trust Chemistry IP/Patents	Na	Being innovative IP /Patents Trust Chemistry Technical capabilities	Na
Case 6 **Shell**	Financial stability Trust	Communication Size Value of the innovation Organizational culture Language Rankings Proximity	Communication Size Value of the innovation Trust Organizational culture Language Rankings Proximity	Na
Case 7 **Henkel**	Openness Strategic goals Technical capabilities Global presence	Exclusivity Expenditure IP Trust	Organizational culture Communication	Trust

Source: Cross-case analysis based on the interviews made

From the case study analysis I observed that even though there are more than a few similarities in the selection criteria, there are also some extra requirements of high importance when considering a partner from a distant industry. Some of the criteria such as culture, language, operational compatibility and openness are highly relevant for both types of collaborations, but the difference is the degree to which they affect the alliance. All of these factors were mentioned during the interviews with the remark that when choosing a partner for inter-industry relationships, they have a much greater importance. In addition to this, all of the respondents said that regardless of the industry, the potential partner has to be completely trustworthy and there has to be a good fit between them. Without chemistry the alliance would not happen. Another criterion is the compatibility of the organizational culture. If it does not coincide with the one of the potential partner, it can cause significant problems for the success of the alliance. Therefore, it has to be considered during the evaluation phase.

In terms of intra-industry partnerships, companies search for others who can provide them with the technologies and resources needed to expand their market coverage in the industry. In contrast to this, inter-industry alliances are developed not so much out of the idea of achieving greater market share, but in order to access new and foreign markets.

The majority of the interviewees had a uniform opinion in terms of strategic goals. When searching for a partner that operates in the same industry, it is important to see if there is a strategic fit and whether both have the same objectives in mind. It is much harder for intra-industry companies to collaborate with each other because there is always uncertainty about the intentions of the other partner. With regard to cross-industry partnerships this concern is not that relevant. Due to the fact that the processes and activities on both sides address different market needs, there is a minimal risk of these partners ever becoming direct competitors. However, with the distance between the industries comes a higher probability of miscommunications – either due to misunderstandings caused by language differences, or by knowledge gaps. As a result, successful communication should be a top priority when selecting a foreign partner.

Another important factor is size. Interestingly enough, there are manifold opinions when it comes to it. Some of the interviewees pointed out that size plays a role when evaluating the potential collaboration partners, but it is not as vital as the other factors. Others suggested that the size of the company should not be taken so lightly, especially in the case of cross-industry partnerships with large-scale industries (e.g. aviation or oil and gas industries). When discussing inter-industry alliances, we have to bear in mind that the researched industries in this paper are quite distinct. Therefore, factors such as safety, network, rankings and proximity are not relevant for this analysis since they are extremely industry-dependent, thus cannot be generalized.

Furthermore, many of the experts named technical capabilities as the next criterion, meaning whether the product or service offered by one partner will fit in the business model of the other one. When collaborating with a company from the same industry, this factor is not as essential as it is when evaluating a distant-industry firm, since the market offerings are quite similar to each other. However, operating in the same industry does not necessarily mean that the business models of both collaborating companies fit together. If they do not coincide, this can be a deal-breaker. Another important factor that almost all companies consider when selecting a partner, especially for inter-industry relationships, is the monetary value that a potential partner can bring in. Since some of the distant partnerships are based on the idea of creating radical innovations, the commercial compatibility is not the only relevant one. It is also pivotal to determine the degree of novelty resulting from the alliance. In contrast to this, in same-industry partnerships this criterion is not of particular relevance, since the resulting innovations are mostly incremental.

Last but not least, only one of the interviewees said that patents are a part of the selection process and the industry does not matter, as long as the alliance brings value to the company. As opposed to this statement, another industry expert was of the opinion that patents are mostly considered when selecting a distant-industry player.

All in all, choosing a collaboration partner is seen as crucial to the success of the relationship. Industry does play a role in the selection criteria, but it rather concerns the degree to which the partnership is influenced. Since every industry is unique, there are factors that cannot be generalized when evaluating a potential company.

Chapter 5 – Discussion and Conclusion

This research is designed to shed a light on the partner selection process and the relevant criteria when choosing a distant partner for collaboration. This is done through a comparison to the already established requirements for intra-industry alliances and I was able to establish if there is a significant difference in the process. The study represents a first attempt to empirically investigate the inter-industry collaborations.

In this section, I discuss the insights from the interviews with the experts with the purpose of highlighting and proposing theoretical contributions to the existing literature. Through including the literature and the theories from related fields, a stronger justification of the findings is provided. Furthermore, there is a special section outlined on the implications and recommendations for managers. In conclusion of this paper, I describe the limitations and recommendations for future research.

5.1. Theoretical contribution

Linking the findings to the literature

From the results of the conducted research one can conclude that there is some kind of a process which companies follow when choosing an alliance partner. Only one of the respondents was of the opinion that there are no framework criteria used when selecting potential partners. Instead, the partners are being chosen only if the feeling is right. As already discussed, the process highly depends on the industry the company operates in, the type of alliance in mind and the experience in developing partnerships. Due to the fact that I considered different industries for this research, there are some factors from which I cannot draw any conclusions, since they are not generalizable – network, safety, rankings and proximity.

1. Market Flexibility

The cross-case analysis confirms the results from previously developed research that companies consider collaborating with other players in the market in order achieve greater market flexibility or to position themselves differently (Child and Faulkner, 1998). The majority of the interviewees are of the opinion that when it comes to market flexibility, the goals depend on the industry of the partner. In terms of market exploration, the only advantage that a company from the same industry can offer is increased market share. Contrary to this, allying with a foreign industry partner could be used as a stepping stone for entering a new market and exploring new fields (Mike Nevin: *"In other cases, the main driver behind collaborating is the desire to enter a new market.")* It could also offer some intangible benefits such as access to foreign knowledge and resources. Thus, it is much more relevant to have market flexibility as a criterion in the inter-industry partner selection process than market coverage. It can be concluded that this factor would have different importance depending on the industry context and the following can be proposed:

Proposition 1: In the case of intra-industry collaborations, market coverage has a higher importance when choosing a partner, whereas in terms of inter-industry collaborations, market access is more relevant.

2. *Openness and Trust*

Moreover, the results of this study demonstrate that partners have to be chosen based on their attitude towards open practices. When establishing an alliance, the company has to understand that the success of the alliance lies in the willingness to share its knowledge and sensitive information (Gundlach, Achrol and Mentzer, 1995) which under other circumstances would not be requested. It is argued that a company with which there already is an established connection or which employs somebody who can contribute to the development of the partnership, could have a priority over the other candidates. This is the case since there is already some certainty of the partner's reliability. If this is not an option, the company has to do its due diligence to be sure that the potential partner has no hidden agenda (Porter Lynch, 2001; Solesvik and Westhead, 2010).

In addition to being transparent, the results of the case study analysis show that the interviewees all share the opinion that being able to trust the alliance partner is extremely important when establishing a relationship. Since one cannot measure trust, it cannot be a direct factor in the process of partner selection, but it can serve as an indication of whether the potential ally is willing to share its expertise and to what extent. It certainly does not depend on the industry in which the company operates but it has to be there. However, the previous strategic alliance director of KLM, Henk de Graauw, states that it is going to be much more difficult to trust a company when there is no previously established relationship/bond. It is true that the uncertainty of not knowing what to expect from a partner can put additional pressure on the alliance. All experts agree that low levels of trust will weaken the partnership and the outcome will be unpredictable. On the other hand, when there is a higher degree of trust, the results from the collaboration can be novel (Lapidus, 2004).

Proposition 2: Regardless of the industry in which the partners operate, one should search for openness when choosing an alliance partner.

3. Strategic Fit

The cross-case analysis shows that next to market flexibility and being open-minded, the strategic goals among partners have to coincide. It is central to the collaboration that both sides have the same objectives in mind and that they work together to achieve them. Even though the majority of the interviewees were of the opinion that strategic fit is important when considering both same- and distant-industry partners, one of them, Florian Kellhuber from HYVE, expressed a contrasting view. He believes that when collaborating with intra-industry companies, there is a higher risk of becoming direct competitors since the strategic goals are more or less the same, whereas when partnering with a foreign company, this risk is minimal or non-existent due to the different industries in which they operate (*Florian Kellhuber: "Das heißt jeder Partner muss sein eigenes nicht-konkurrierendes strategisches Interesse an dem Bereich haben"- "That means that every partner has to have a non-competitive strategic interest in the area"*). As already pointed out, this factor depends highly on the duration of the collaboration – if it is going to be a short-term initiative or a long-term one. According to Douma et al., 2000 and Gassmann et al., 2010, in order for an alliance to be successful, there has to be an established fit at a strategic, organizational and operational level. Brendan Dunphy supports this statement by saying*: "[...] the other one is strategic partnering, so that means companies are not doing that just for one time but think more in terms of a longer term."* Some of the people interviewed also reckon that the strategic objectives do not stay the same over a period of time but they might change due to unforeseen circumstances. As a result, the fit between partners should be considered more as a dynamic one (Douma et al., 2000).

Proposition 3: It is not necessary to have a strategic fit between partners in inter-industry collaborations, as opposed to intra-industry partnerships.

Thus, it can be inferred that even though strategic alliances with cross-industry partners might be more complex and harder to develop, it is also true that such partnerships could last longer and be more profitable than same-industry alliances.

4. Operational Alignment

While it is assumed that operational alignment must always be there when companies choose a partner from the same industry, this research reveals that is not always the case. From the example of IBM and Salesforce, given by Mike Nevin, it can be inferred that internal alignment has to be considered when evaluating the compatibility of a potential partner. Without a good operational fit between the business models, the alliance will most likely dissolve. This confirms the statement of Porter Lynch, 2001, that many companies are similar on the surface but have a totally different structure. If in same-industry collaborations there is a risk of failure due to operational incompatibility, then it is imperative to test this factor before partnering with a distant company.

Proposition 4: Operational compatibility is considered to be relevant for both types of collaboration. However, it has a bigger impact on the outcome of cross-industry alliances.

5. Communication

According to the industry expert Mike Nevin, being technically compatible – that means having a good fit between the product/service portfolio of the partners – is one of the criteria mostly considered when choosing a partner. A further requirement that can be derived from the case study analysis is communication. Surprisingly, only two of the people interviewed mentioned this and suggested that communication among partners have to be possible in order for the alliance to succeed (e.g. Jaco Fok: *"Indeed there are some communication problems. They cannot understand our language and we do not understand them."*). This finding can be linked to the research paper of Dodorouva, 2009, with respect to the success and failure factors for partnerships. She states that being able to communicate freely with the other company is an important prerequisite for a positive outcome. It is known that many partnerships happen internationally and the geographical distance is not the only issue. There are language barriers and cultural differences to be taken in mind.

Proposition 5: Communication has higher relevance for the inter-industry partner selection process in comparison to the framework criteria for a same-industry alliance.

6. Organizational Culture and Cultural Alignment

As already discussed, some alliances happen on a larger scale and across countries, thus there are different issues that need to be taken into consideration. From the case studies it can be deduced that organizational culture is also an important trait when selecting a collaboration partner. Some of the interviewees have considered it or at least think it has relevance for the partner selection process (Brendan Dunphy: *"Organizational culture plays indeed a huge role in this alliance, since there are the established firms and the newcomer."*) for both types of collaboration. This confirms the previous theory about organizational culture in terms of different-industry partnerships and adds further evidence for same-industry ones.

Proposition 6a: Organizational culture has a significant influence on the outcome of both types of alliances.

From the literature review it can be derived that culture has to be included in the selection criteria together with the working style of the partner, in order to secure compatibility among them (Dyer and Singh, 1998; Kale and Singh, 2009). According to Dodourova, 2009, culture is one of the most complex and important factors. In order to make inter-industry collaborations work, the workforce has to share the same values and norms as the one of the chosen collaborator. In support of this statement, Florian Kellhuber states: *"Im Endeffekt, es handelt sich um Menschen, die miteinander arbeiten würden" – „In the end, it is about the people that work together".* Same-industry alliances could be also across geographical borders. Consequently, the weight of the cultural alignment should be considered as an argument in the decision-making process. However, in most of the examples that were gathered in this research the companies in the intra-industry partnerships were described as having the same culture (e.g. Mike Nevin, Senseo example). As a result, this factor was not as relevant as the rest of the criteria.

Proposition 6b: Cultural alignment is important for the success of both types of collaborations. Nevertheless, its role in inter-industry alliances is greater.

7. Size

Last but not least, the cross-case analysis illustrates the relevance of the size of the partner when choosing one. The opinions expressed are quite different. Some of the interviewees argued that size does not play an important role in the process, whereas others had the exact opposite opinion. One thing that can be said with certainty is that if the company has a unique capability or an advantage over the other one, size would not matter when picking a partner. Another important point here is that this actually depends on the industry in question. If the industry is heavily capital-dependent, the alliance initiator has to ensure that the potential collaborator is able to deliver what was agreed on. Jaco Fok comments: "*They think that they can supply us but after a short amount of time they realize that they do not have the capacity for that order."* In other cases, there is no other choice but to collaborate with a distant company with a different size due to the fact that it is the only provider in the market.

Proposition 7: Size has little importance when choosing a collaboration partner.

In conclusion, the research reveals that the criteria for choosing a collaborator from the same industry are not significantly different from the criteria used for selecting an inter-industry partner. Nevertheless, the criteria for cross-industry alliances have more influence on the outcome of the process. Market flexibility has to be considered in both cases, but depending on the industry, the motives for collaboration are different. In order to develop a partnership, both parties have to be open to the idea of working together and trusting each other. However, there is more uncertainty about the intentions of the other company when it is from the same industry. Strategic fit has to be a criterion of the intra-partner selection process, but it is not a mandatory factor in terms of an inter-industry collaborator. When searching for the missing capabilities and resources in distant industries, it is pivotal to know not only the partner's organizational culture but also the culture on individual level and the internal standards. Communication is also present in both cases but it weighs more in different-industry partnerships. Last but not least, size is considered to be irrelevant in both types of alliances.

5.2. Implications for managers

The investigation findings present several issues that managers need to take into account when engaging in an intra- or inter-industry alliance. Some of the factors that need to be considered are openness and trust, culture, organizational culture, size, business model, operational capability, strategic goals and communication.

First, they have to be sure if they are actually comfortable revealing their processes to an external party and most importantly if they want to do so. If there is no genuine motivation to be a part of this alliance, the company is better off on its own.

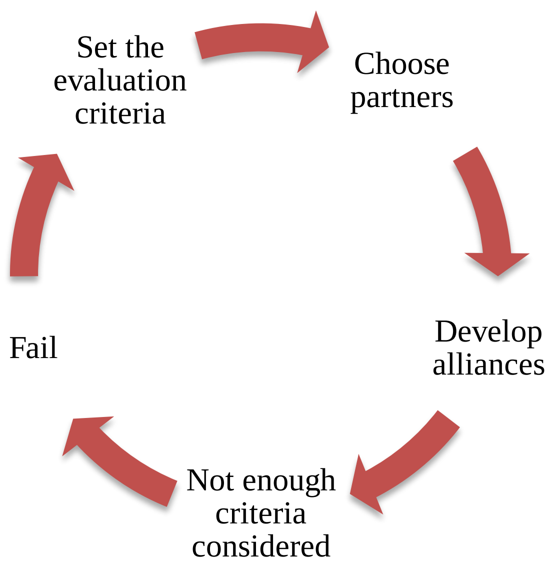
In addition to this, managers have to be really careful when initiating a partnership. As discussed before, there is no scientific method for measuring trust. Therefore, partners have to be certain that the other side is being as transparent as needed and has the same strategic interest in view. They also have to be aware that when choosing a partner from the same industry, it might be easier to develop an alliance, but not necessarily "safer" due to the very similar corporate strategies of the partners. Establishing trust among the collaborators might be the most difficult task of the manager. Trust is not built in a day, but rather throughout time. Cross-industry alliances have the disadvantage of not having the needed know-how beforehand. Therefore, it can be challenging to introduce them to the industry processes and expect an immediate result.

Another issue could be the cultural aspect of the alliance. Many previous collaborations have been dispersed due to the fact that the partners were not culturally compatible. Managers should try to search for companies that are culturally similar to their own. Zooming out from the culture on an individual level, the organizational culture also plays an important role in the process. As a result, managers should pay attention to it when making the selection. They should make sure that there is enough communication between the parties so that there is no room for misunderstandings or irregularities.

Operational capability should be not underestimated. In the case of inter-industry relationships, managers have to be careful not to be misled by the results they are trying to achieve through the partnership. Even in same-industry alliances managers should take their time to examine if there is an internal alignment between their firm and the potential partner and not rush into quick conclusions. Working in the same industry does not always mean that the business models are compatible.

In terms of size, company managers should consider every possibility and be thorough in their evaluation of the capabilities of a company. It does not matter if it is an incumbent firm providing the missing knowledge or a small company, which owns the patent, not even if it is in the same industry or not. The only thing that matters is whether a partner is able to deliver its end of the agreement.

Figure 2: Vicious Circle of the Partner Selection Process

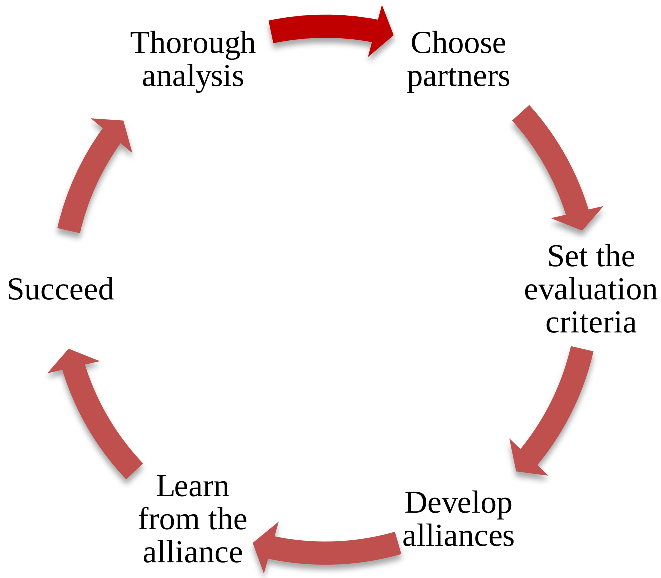


As previously mentioned, some of the companies do not have the needed experience to evaluate their potential partners against the relevant criteria. As a result, they fall into, as Mike Nevin calls it, a "vicious circle" (Figure 2). Even though companies are able to establish alliances, they do not learn from them, since they dissolve prematurely due to the poor criteria framework chosen at the beginning of the process.

Source: Own illustration based on the information from the interviews

Figure 3: Turning the Vicious Circle into a Virtuous Circle

Therefore, managers should consider every possible aspect before choosing to engage in a relationship with the wrong partner. They should invest more time in this process in order to ensure that they are making the right decision. In this way, they will be able to maintain the relationship for a longer period of time and reach a higher level of maturity, hence learning from each collaboration they develop. The idea is to turn this "vicious circle" in a "virtuous" one.



Source: Own illustration based on the information gathered from the interviews

5.3. Limitations and recommendations for future research:

This study focuses on the relevant criteria for partner selection process in both intra- and inter-industry alliances, through which companies are able to develop more creative and new innovations. The way I searched and provided information concerning this topic is surely not the only one. There are other variables and relationships which could be examined to reach the goal of this paper. As already established, there are different factors considered when selecting a distant partner. This has implications on the criteria framework used when collaborating. As a result, the factors considered can affect the partnership in many different ways. For example, they can make the selection process either more complex, or make it more detailed, thus increasing the rate of successful partnerships in the market. Consequently, another research area could be the advantages and disadvantages of selecting distant partners.

Additionally, this research was limited to the investigation of the relevant criteria on the management level. However, it could have included information from a project point of view which could be the base for future investigations.

A further limitation of this research paper is the number of interviewees considered. It is based on small amount of cases that are rather different from each other – industries, speakers, firm sizes and countries. Thus, the consistency of the replication could be questioned. Furthermore, the insights gathered were not as specific as intended, since the information requested from the speakers was more or less sensitive, making it hard to be freely disclosed. It would be advisable to investigate similar companies in order to establish to what extent the findings could be replicated.

Moreover, some of the companies chosen were not active per se in developing collaborations but are just advising companies on how to make the process better. As a result, the advice given on the criteria used for choosing a relevant partner may be limited to their knowledge. It would be better if for future research the sample consists of companies that are actively engaged in developing inter-industry alliances.

This investigation is also limited due to the subjective analysis of the qualitative data, gathered only through Skype and telephone interviews and enriched through some secondary sources of information. Despite efforts to find additional sources of evidence, hardly any documentation of the topics discussed in the interviews was available online. Therefore, the outcome of a further research would be of interest – one that is based on a larger sample and includes quantitative results to help verify the data.

As this research is a first attempt to address the problem, it mostly serves to generate ideas and stimulate further investigation in this area. I encourage researchers to test the derived propositions and study the unanswered questions in the relevant fields. It could be extremely interesting to test the criteria used for successful cross-industry collaborations compared to the criteria for partner selection in failed alliances and describe the challenges that managers had to face, how they dealt with them and what they could have done better.

References

Ahonen, M., Antikainen, M. and Mäkipää, M. (2007) „Supporting collective creativity", European Academy of Management (EURAM) Conference Proceedings, IDEAD, Paris

Amabile, T.M. and Khaire, M. (2008) "Creativity and the role of the leader – Your organization can use a bigger dose of creativity – Here's what to do about it." Harvard Business Review, https://hbr.org/2008/10/creativity-and-the-role-of-the-leader , retrieved 01.05.2016

Antikainen, M., Mäkipää, M. and Ahonen,M. (2010) „Motivating and supporting collaboration in open innovation" Journal of innovation Management, Vol.13, No.1, pp.100-119

Barker, J.A. (1992) "Paradigms: The Business of Discovering the Future" HarperCollins Publishers, Inc., New York

Beamish, P. W. (1985) "The characteristics of joint ventures in developed and developing countries." Columbia Journal of World Business, Vol. 20, No.3, pp.13-19

Belderbos, R., Carree, M., Lokshin, B. and Sastre, J.F. (2014) "Inter-temporal patterns of R&D Collaboration and Innovative Performance", The Journal of Technology Transfer, Vol. 40, No.1, pp. 123-137

Bierly III, P.E. and Gallagher, S. (2007) "Explaining Alliance Partner Selection: Fit, Trust and Strategic Expediency." Long Range Planning, Vol. 40, pp. 134-153

Bjerke, L. and Johannson, S. (2015) "Patterns of innovation and collaboration in small and large firms." The Annals of Regional Science, Vol. 55, No.1, pp. 221-247

Brouthers, K.D., Brouthers, L.E., and Wilkinson, T.J. (1995), "Strategic alliances: choose your partners", Long Range Planning, Vol. 28, No.3, pp.18-25

Chesbrough, H.W. (2003), "Open Innovation: The New Imperative for Creating and Profiting from Technology", Harvard Business School Press, Boston, MA.

Child, J. and Faulkner, D. (1998), "Strategies of Cooperation: Managing Alliances, Networks and Joint Ventures." Oxford, London: Oxfrod University Press.

Dacin, M. T., Hitt, M.A., Levitas, E. (1997) "Selecting partners for successful international alliances: examination of U.S. and Korean firms." Journal of World Business, Vol. 32. No.1, pp. 3-16

Das, T.K. and Teng, B.S. (1998) “Resource and risk management in strategic alliance making process”, Journal of Management, Vol. 24, No.1, pp. 21-42

Das, T.K. and Teng, B.-S. (2003) “Partner analysis and alliance performance” Scandinavian Journal of Management, Vol. 19, No.3, pp. 279-308

Das, T.K. (2005) “Deceitful behaviors of alliance partners: potential and prevention.” Management Decision, Vol.43, No.05/06, pp. 706-719

De Man, A.P. and Roijakkers, N. (2009). “Alliance Governance: Balancing Control and Trust in Dealing with Risk”, Long Range Planning, Vol.42, pp.75-95

Dodourova, M. (2009). “Alliances as strategic tools. A cross-industry study of partnership planning, formation and success.” Management Decision, Vol. 47, No.5, pp. 831-844

Dong, L. and Glaister, K. W. (2006), “Motives and partner selection criteria in international strategic alliances: perspectives of Chinese firms”, International Business Review, Vol. 15, pp. 577-600.

Douma, M.U., Bilderbeek, J., Idenburg P.J. and Looise, J.K. (2000). “Strategic Alliances: Managing the Dynamics of Fit.” Long Range Planning, Vol. 33, pp. 579-598

Doz, Y. (1996). “The evolution of cooperation in strategic alliances: Initial conditions or learning processes?” Strategic Management Journal, Vol. 17, No.7, pp.55–83

Doz, Y.L. and Hamel, G. (1998). “Alliance Advantage: The Art of Creating Value through Partnering”, Harvard Business School Press, Boston, MA

Dyer, J., and Chu, W. (2003). “The role of trustworthiness in reducing transaction costs and improving performance.” Organization Science, Vol. 14, pp. 57–68.

Dyer, J. and Singh, H. (1998) “The relational view: Cooperative strategy and sources of inter-organizational competitive advantage”, Academy of management review, Vol. 23, No.4, pp.660-679

Enkel, E. and Bader, K. (2016) „Why do experts contribute in cross-industry innovation?” A structural model of motivational factors, intention and behavior.” R&D Management, Vol. 46, No.1, pp. 207-226

Eisenhardt, K.M. (1989) “Building theories from case study research.” Academy of Management Review, Vol. 14, No. 4, pp. 532-550

Eisenhardt, K.M. and Graebner, M.E. (2007) „Theory building from cases: Opportunities and challenges”, Academy of management journal, Vol. 50, No.1, pp. 25-32

Enkel, E. and Gassmann, O. (2010). „Creative Innovation: Exploring the Case of Cross-Industry Innovation”, R&D Management, Vol.40, No.3, pp. 256-270

Enkel, E., Gassmann, O. and Chesbrough, H. (2009) “Open R&D and open innovation: exploring the phenomenon” R&D Management, Vol. 39, No.4, pp. 311-316

Enkel, E. and Heil, S. (2014) „Preparing for distant collaboration: Antecedents to potential absorptive capacity in cross-industry innovation.” Technovation, Vol. 34, pp.242-260

Enkel, E. and Mezger, F., (2013) „Imitation processes and their application for business model innovation: An explorative study.” International Journal of Innovation Management, Vol. 17, No.1

Evans, N. (2001) “Collaborative strategy: an analysis of the challenging world of international airline alliances”, Tourism Management, Vol. 22, pp. 229-243

Freel, M.S. (2003) “Sectoral patterns of small firm innovation, networking and proximity.” Research policy, Vol.32, pp. 751-770

Forrest, J.E. (1990). “Strategic Alliances and the Small-Technology-Based Firm”, Journal of Small Business Management. Vol. 28, pp.37-45

Gassmann, O. (2006) “Editorial – Opening up the innovation process: towards an agenda”, R&D Management, Vol. 36, No.3, pp. 223-228

Gassmann, O. and Enkel E. (2004) „Towards a Theory of Open Innovation: Three Core Process Archetypes“, R&D Management Conference, Lisbon Portugal, July 6-9

Gassmann, O., Daiber, M., Enkel, E. (2011) „The role of intermediaries in cross-industry innovation processes”, R&D Management, Vol. 21, No.5, pp. 457-46

Gassmann, O. and Zeschky, M. (2008) „Opening up the Solution Space: The Role of Analogical Thinking for Breakthrough Product Innovation”, Creativity Innovation Management, Vol. 17, No.2, pp. 97-106

Gassmann, O., Zeschky, M., Wolff, T., Stahl, M. (2010) „Crossing the industry-line: Breakthrough innovation through cross-industry alliances with “non-suppliers”.” Lon. Range Planning, Vol. 43, pp. 639-654

Geringer, J.M. (1991),“Strategic Determinants of Partner Selection Criteria in International Joint Ventures.” Journal of International Business Studies, Vol. 22, No.1, pp. 41-62.

Gomes-Casseres, B. (1993) “Managing International Alliances: Conceptual Framework” Case 9-793-133, Harvard Business School

Gulati, R. (1995) “Social Structure and Alliance Formation Patterns: A Longitudinal Analysis.” Administrative Science Quarterly, Vol.40, pp. 619-652

Gulati, R. and Gargiulo, M. (1999). “Where do Interorganizational Networks Come From?” American Journal of Sociology, Vol. 104, No.5, pp. 1439-1493

Gulati, R., Lawrence, P. and Puranam, P. (2005). “Adaptation in vertical relationships: Beyond incentive conflict.” Strategic Management Journal, 26(5), pp. 415–440.

Gulati, R. and Singh, H. (1998). “The architecture of cooperation: Managing coordination costs and appropriation concerns in strategic alliances.” Administrative Science Quarterly, Vol. 43, No.4, pp. 781–814.

Gundlach, G., Achrol, R., & Mentzer, J. (1995). “The structure of commitment in exchange.” Journal of Marketing, Vol. 59, No.1, pp.78–92.

Hagedoorn, J. (2002). “Inter-firm R&D partnerships: an overview of major trends and patterns since 1960.” Research Policy, Vol.31, No.4, pp. 477-492

Hamel, G, Doz, Y. and Prahalad, C.K. (2002). “Collaborate with your competitors – and win.” Harvard Business Review on Strategic Alliances. Boston: Harvard Business School Press, Chap.1, pp. 1-21

Harbison, J.R. and Pekar, P. Jr. (1997) “Cross-border alliances in the age of collaboration” New York: Booz Allen & Hamilton

Hargadon, A. and Becky, B. (2006) “When collections of creatives become creative collective – a field study of problem solving at work”, Organization Science, Vol.17, No.4, pp.484-500

Hattori, R. A. and Lapidus, T., (2004), “Collaboration, trust and innovative change.” Journal of Change Management, Vol.4, No.2, pp. 97-104.

Hausler, J., Hohn, H. and Lutz, S. (1994), “Contigencies of innovative networks: a case study of successful R&D collaboration”, Research Policy, Vol. 23, No.1, pp.47-66

Hitt, M. A., Dacin, M. T., Levitas, E., Arrregle, J.-L. and Borza, A. (2000), “Partner selection in emerging and developed market contexts: resource-based and organizational learning perspectives”, Academy of Management Journal, Vol. 43, No. 3, pp. 449-467

Hobcraft, P. (2015) “The sharks that prey are arriving a lot earlier now”, https://paul4innovating.com/2015/09/02/the-sharks-that-prey-are-arriving-a-lot-earlier-now/ , retrieved 10.08.2016

Holmberg, S.R. and Cummings, J.L. (2009) "Building Successful Strategic Alliances: Strategic Process and Analytical Tool for Selecting Partner Industries and Firms." Long Range Planning, Vol.42, No.2, pp. 164-193

Hung, K.P. and Chiang, Y.H. (2010) "Open innovation proclivity, entrepreneurial orientation, and perceived firm performance", International Journal of Technology Management, Vol. 52, No.3/4, pp. 252-274

Johnson, J.L., Cullen, J.B., Sakano, T. and Takenouchi, H. (1996), "Setting the stage for trust and strategic integration in Japanese-US cooperative alliances", Journal of International Business Studies, Vol. 27, No.5, pp.981-1004

Kale, P. and Singh, H. (2009), "Managing Strategic Alliances: What do We Know Now, and Where Do We Go From Here?" Academy of Management Perspectives, Vol. 23, No.3, p.45-62

Kalogerakis, K., Lüthje, C., Herstatt, C. (2010) „Developing innovations based on analogies: experience from design and engineering consultants." Journal of Product Innovation Management, Vol. 27, Issue 3, pp. 418-436

Khalid, B. and Bhatti, K. (2015) "Entrepreneurial competence in managing partnerships and partnership knowledge exchange: Impact on performance differences in export expansion stages." Journal of World Business, Vol. 50, No.3, pp. 598-608

Lambe, C.J. and Spekman, R.E. (1997) "The bases of alliance-derived sustainable advantage: relationship and resources." American Marketing Association Winter Conference Proceedings, Vol.8, pp. 119-125

Luo, Y., Shenkar, O. and Nyaw, M.-K. (2001) "A Dual Parent Perspective on Control and Performance in International Joint Ventures: lessons for a developing economy." Journal of International Business Studies, Vol. 32, No.1, pp. 41-58

Lundvall, B.A. (1988) "Innovation as an interactive process: from user-producer interaction to the national system of innovation", In Technical Change and Economic Theory, eds G. Dosi, C. Freeman, R. Nelson, G- Silverberg and L. L. Soete, pp. 349-367. London: Printer

Mattessich, P. W. and Monsey, B. R., (1992) "Collaboration: What Makes It Work. A Review of Research on Factors Influencing Successful Collaboration." St. Paul, Minnesota: Wilder Research Center, in association with Wilder's Community Collaboration Venture.

Medcof, J.W. (1997), "Why too many alliances end in divorce", Long Range Planning, Vol. 30, No.5, pp.718-732

Nieto, M.J. and Santamaría, L. (2010) "Technological Collaboration: Bridging the Innovation Gap between Small and Large Firms", Journal of Small Business Management, Vol. 48, No.1, pp. 44-69

Nooteboom, B. (2004a) "Inter-firm Collaboration, Networks and Strategy: An Integrated Approach." London: Routledge.

Nooteboom, B., Van Haverbeke, W., Duysters, G., Gilsing, V., Van den Oord, A. (2007) „Optimal cognitive distance and absorptive capacity", Research Policy, Vol. 36, pp. 1016-1034

Popo, L. and Zenger, T. (2002) „Do formal contracts and relational governance function as substitute or complements?" Strategic Management Journal, Vol.23, No.8, pp. 707-725

Ring, P.S. and van de Ven, A.H. (1994) "Development processes of cooperative interorganizational relationships", Academy of management review, Vol. 19, No.1, pp.90-118

Rogers, M. (2004) "Networks, Firm Size and Innovation." Small Business Economics, Vol. 22, No.2, pp. 141-153

Saxton, T. (1997) "The effects of partner and relationship characteristics on alliance outcomes", Academy of Management Journal, Vol. 40, No.2, pp.443-461.

Schein, E.H., (1985) "Organizational Culture and Leadership" Jossey-Bass, San Francisco

Schilling, M. A., (2010) "Strategic Management of Technological Innovation" SOURCE

Shah, R., & Swaminathan, V. (2008) "Factors influencing partner selection in strategic alliances: The moderating role of alliance context." Strategic Management Journal,29(5), 471–494.

Spithoven, A., Vanhaverbeke, W. and Roijakkers, N. (2012) "Open innovation practices in SMEs and large enterprises" Small Business Economics, An Entrepreneurship Journal, Springer Science+Business Media New York

Solesvik, M.Z. and Westhead, P. (2010) "Partner selection for strategic alliances: case study insights from the maritmime industry" Industrial Management and Data Systems, Vol. 110 No.6, pp. 841-860

Swisscom AG (2000) "Partnership with Vodafone: Swisscom gears itself up for growth in UMTS",https://www.swisscom.ch/en/about/medien/press-releases/2000/11/Partnerschaft_mit_Vodafone_Swisscom.html , retrieved on 10.06.2016

Taylor, A. (2005) “An operations perspective on strategic alliance success factors. An exploratory study in alliance managers in the software industry.” International Journal of Operations and Production Management, Vol.25, No.5/6, pp. 469-490

The New Economy, (2014) “In bed with Big Brother: Apple and IBM form an alliance”, http://www.theneweconomy.com/home/strategic-alliance-ibm-apple, retrieved on 10.08.2016

Thrift, N. (2006), “Re-inventing invention: new tendencies in capitalist commodification”, Economy and Society, Vol. 35 No. 2, pp. 279-306.

Tidd, J., Bessant, J., & Pavitt, K. (2005). “Managing innovation: Integrating technological, market and organizational change.” Chichester: John Wiley & Sons.

Vanhaverbeke, W., Gilsing, V., and Duysters, G. (2012). “Competence and Governance in Strategic Collaboration: The Differential Effect of Network Structure on the Creation of Core and Noncore Technology.” Journal of Product Innovation Management, Vol. 29, No. 5, pp.784-802

Von Hippel, E. (2005) “Democratizing Innovation” MIT Press, Cambridge, MA

Walters, B.A., Peters, S. and Dess, G.G. (1994) “Strategic alliances and joint ventures: making them work”, Business Horizons, Vol. 37, No. 4, pp. 5-10

Yin, R.K. (2009). “Case study research design and methods”, Applied Social research Method Series, Vol. 5, No.4, Sage Publications Inc.

Yoon, B. and Song, B. (2014). “A systematic approach of partner selection for open innovation”, Industrial Management and Data Systems, Vol. 114, No.7, pp. 1068-1093

Appendix

A. Full Transcripts of the Interviews

Project: Master thesis: Cross-Industry Innovations, Hasselt University

Date and location: 7th July 2016, 12.00 am – 12.40 am, Interview on Skype

Interviewer: Iliyana Gudzheva

Interviewee: Henk de Graauw, Strategic Alliance Director, KLM (Royal Dutch Airlines)

Topic: Partner selection process for strategic alliances

Transcript 1

I: I am going to start with some general questions and if there is something that is not completely clear, you can just stop me and ask. Could you please introduce yourself and describe your position and responsibilities within your company?

Henk: My name is Henk de Graauw. I am a retired Director of Alliances of KLM Royal Dutch Airlines and I was active in alliances for over 15 years in the KLM office in Amsterdam.

I: Okay, thank you. As you already know, my name is Iliyana Gudzheva. Can you please tell me what your thoughts on innovation are? Was it important for the company that you worked for?

Henk: In our case, the most alliances were based on network and market issues in order to increase our network by making partners with other airlines. But in my opinion, there were definitely partnerships that we also had with other companies because of their special skills. For instance, our Frequent Flyer Program. Do you know what that is?

I: The program which allows you to collect miles?

Henk: Yes, exactly. We worked together with the credit card company, American Express, which then made all the distributions through their credit cards. It helped us a lot to have their database and their knowledge so that we can promote the Frequent Flyer Program better.

Therefore, these types of cooperation we did have, but the main bulk of alliances was with other airlines in order to extend our network.

I: You said innovation is important in some cases, but there are occasions when it does not play such a big role. Was there a team, a department or a separate entity that dealt with innovations?

Henk: Yes, we had an Innovation Department, but it only lasted for 6-7 years, even though it was successful. We realized that a big company like ours is not so good in running innovations and it is much better to do that outside the company, for example with smaller startup companies. Therefore, instead of trying to run an innovation project within the airline, we invested in smaller startups to run the innovations for us. One of those companies, in fact, I worked for the last few years. It is called Sky Energy and is active in sustainable biofuels for aviation and that is really an innovative project. Therefore, as I said before, it is much better to invest in a small company and let it run the project by itself.

I: Okay, so that means you are very keen on the idea of cooperating. Did I understand this correctly?

Henk: Yes, we have a Joint Venture with General Electric (GE) for engine maintenance. It is a quite successful maintenance center, since they have the expertise in this area.

I: KLM was cooperating with many companies. Can you give a more specific example of such a partnership?

Henk: We do not have many alliances that are based only on innovation or product development ideas, like for example Philips or Siemens. As an airline, the examples that I gave you are the only ones I know of with which we had such type of a relationship. In general, when we have alliances with other airlines, we do analyze their skills and their unique skills if they have any, and then they are added to the value of the airline, but the main driver for us is the *network*. As a single airline you cannot fly all over the world by yourself, you must search for local partners.

I: So the main goal of KLM is to build up a network within your own industry. In this case it is aviation.

Henk: Yes, network, as well as to build up longer positions. We have a Joint Venture with Delta and Air France across the North Atlantic, so you can understand that we, therefore, have a much bigger market position than if KLM was operating on its own. In this way, we can compete with Lufthansa (LH) and their alliance with United and British Airways is doing the same thing with American Airlines. Those market-based alliances are possible but there a lot of competition-based complexities, as you can imagine.

I: Yes, that is true. You said that the two main drivers for developing collaborations are network and establishing longer relationships. Have those changed over time, or do important partners change over time?

Henk: Yes, I think so. It all became sophisticated, a little bit more professional. But in the earlier days of the Airline industry, a lot of those collaborations were made because of political reasons. Maybe we are going a little bit deep, but if for example LH flies to Japan, it is not because LH can make it possible but because the German government has the right to fly to Japan and vice versa. And it is not easy to get those rights because you are also competing with national carriers on the other side. BUT if you work together with them and form some type of an alliance, you can manage slowly to increase your number of flights. In the beginning of the 60s, 70s or the early 80s that was not an important driver, but in the early 80s KLM started more professional alliances in order to extend its network due to the fact that KLM was at that time a small airline.

I: As you said, political factors play a big role when choosing a partner from within the industry, then you mentioned the network and even the duration of the relationships. In your opinion, are those drivers also important when collaborating with companies from outside the industry?

Henk: For example, we have partners from the IT industry. I do not know all the details but I do remember working with Fujitsu and even one small startup, which was developing iPads that the cabin crew could use on board. Through this iPad they were able to see who is sitting where and which customers, for example, spilled coffee on their seats during the last flight and little tricks like that.

I: Let me go back to the iPads. How was the idea for them created? I mean how did the company decide to collaborate with this startup?

Henk: It was a very small startup and I also knew them well. After my retirement, I stayed in contact with them. They developed basically the software – how to run it and have the iPad as a communication tool for the cabin crew. It was really important for the pilots, since it replaced those huge piles of paper in the cockpit, which were of course inefficient. Through the iPad, they had the ability to much faster access the files than by accessing them manually. But for the cabin crew it became a communication tool, enabling the airline to communicate with the cabin crew – to give them information about the flights and the people on board. It was mostly used to recognize the frequent flyers and customers.

I: How did you choose the startup?

Henk: It was a very frustrating process for the startup, because they came with the idea to KLM's IT Department, which in my opinion was not the right entry. They should have gone to the Commercial and Cabin Crew Management Departments. When the IT department saw this, they were sure that they can do it themselves, so that is why the whole process got delayed by a number of years. This is an example of an innovative product that cannot be developed in big companies like KLM, Philips, Shell, Unilever or even Siemens. In my opinion, a company is much better off making an alliance with another company and then buying the technology from it. As I said, big multinationals and innovations do not go well together, they just do not have the entrepreneurship within the company in terms of people who come up with those radical ideas. They have to "break through" many glass ceilings before they can convince the top layer to go along with the concept. *In a big company, before you know it, the idea is killed because budget has changed by 3%.*

I: Would you say that the partnerships of KLM were based more on the industry focus of the company (KLM) or were they a result of an already existing relationship?

Henk: The fun thing about working in alliances was that it was not predictable how one got the relationships. Obviously, there is a strategy, there is a budget, there are marketing and network plans, and of course from all of that you can come to select the possible partners. On the other hand, it has also happened that I have met someone, just by chance, at the airport or that our CEO was approached by a Chinese CEO during a meeting with the idea of doing business together. It is not always a perfect plan. Sometimes it just happened and quite often we traveled all over the world to talk to airlines in order to see what was happening and whether we were interested in forming some sort of an alliance with them.

I: Let us imagine you are searching for potential partners now in the same industry as KLM. What capabilities/skillset are/is there? Are there some specific criteria that you use?

Henk: Yes, that is very much so. The number one, two and three issue is safety. As you can understand, as an airline you want to make sure that whomever you are partnering with is certified, has good pilots and that everything is fine. There is a whole process internally which is responsible for doing an audit of the airline that we want to partner with and see if they are doing a good job as it is supposed to become a part of our network. After that, obviously, your main driver is again the network. Then we have some product requirements. If we give our passengers a free drink, a meal and a movie, and it is not the same in the other airline, we have an issue. There is also a requirement concerning the handling capabilities of the airline – for example, how does the checking process work. An example that I can give you is our alliance with Copa, a really good airline in Panama City, which flies all over Central America. They were so organized, it was just fantastic. We were able to link our IT systems without many problems. As a result, a passenger checking-in in Costa Rica could get a boarding pass to Panama with KLM and on to Denmark, and all that could be arranged in Costa Rica, where we had no office, but Copa did. So, those types of audits are being done as well. In the old days it was more of a feeling but over the years we have learned a lot, and now there is a whole checklist that we are using. The checklist consists basically of the chapters of the alliance agreement. If you look at the alliance agreement we sign with partners, it goes through all these issues – safety, IT, handling, brand and marketing.

I: Does that mean that for every alliance you had an established contract and in that way you controlled the alliance?

Henk: Yes indeed. You have to have a contract because of liabilities. Obviously, there is a big legal part in which if a passenger books a Copa flight and that flight has a KLM flight number (this is called “code-sharing”), we will then have a certain amount of responsibility for the passengers. Therefore, we have to know how big the insurance amount is that our potential partner covers. If it is not high enough, then we cannot do business with them, because then we will be liable. I think an aircraft is insured at 100 million dollars in liabilities because of the passengers who could have claims. Sometimes passengers even die… In the end, this is a huge amount of money. But some smaller airlines only have an insurance of hundred thousand and then you have to see what the risk is if something happens, because if the people are not able to get the money out of the smaller airline, they will most likely come to KLM. So this gives you an idea that there is a checklist and an alliance agreement that you sign beforehand. There are a lot of legal things that you have to arrange.

I: Can you now think of criteria like that but for a company that operates in a distant industry?

Henk: When I think of the examples I gave you, about GE, American Express and the company producing the iPads, called MI airlines, it is not much of an alliance, but more like a supplier-customer relationship. But because if a supplier delivers a product to you that is essential for the running of the business, it is not just A supplier. Therefore, you need longer contract agreements so that they cannot say after a year “We cannot supply you, we are now going to go to your competitor”. You can always arrange some exclusivity.

I: Could you please tell me what your view on trust is in intra-industry partnerships?

Henk: I think trust and good understanding are really important. In general, a good match between the partners is important, but do not forget the contract. That is what I always say. You basically sign an agreement in which it already says what happens when you “break up”. That is really important, since a lot of issues can arise during the process. For example, how long is the contractual relationship going to last, what does the exclusivity give us, what are the penalties if you break it up. Sometimes there are penalties if someone suddenly leaves and as a consequence of their leaving your business suffers. Yes, there is trust but there is also the reality that you have to write down the things properly.

I: Do you think trust also plays a role when the company is from a completely different industry?

Henk: Well, it is important to have it, but it is far more complex establishing trust with a company we have nothing in common with. When partnering with another airline, it is basically the same people. They all have the safety in their minds as we do. It is much easier to build up a trustworthy relationship because we are using the same words or abbreviations and with another industry it is far more difficult.

I: So does that mean that communication is also a really important factor?

Henk: Yes.

I: What is the role of culture when it comes to cooperating with a distant industry? What challenges have you experienced, if any?

Henk: We have worked with one airline and their way of executing day-to-day tasks was far different than ours. Do not try to think that everything works like in Amsterdam. For us the corporate culture was far more essential. How do companies make decisions? Is there a strong hierarchy like in the Asian companies, where the boss decides if the deal is going to be closed or not. It is key that one understands that because otherwise you lose time.

I: Some of the collaborations were successful. Were there some that did not work out?

Henk: Yes, no one has a 100% record. Let me give you a German example. The company that is now Germanwings used to be called Eurowings. We were trying to make things work, but in the end it was just too difficult for them to be profitable. It was too costly not only for them but for us as well. As this partnership did not succeed, they turned to LH and eventually LH bought them and the company is now called Germanwings. You try to do something in another country and it turns out that it is more difficult than expected.

I: Do you mean that there was no strategic fit between you, or what do you mean by it being "too costly"?

Henk: No, there was a very good strategic fit for us and through this company we were going to be able to easily develop our market coverage in Germany. The main issue was the operational fit. It was just too costly for them and for us as well to compensate them completely.

I: If you had the chance, what would you have done better to sustain this alliance?

Henk: Probably, I would have just considered not only the opinion of the director but also the one of the people working in the network in different departments such as Marketing and Sales. When you have such a small airline to deal with, the managers tend to dictate the terms. We, in Alliances, believe that whether the partnership is going to be formed with a bigger airline or a smaller one, you should be open to their ideas and should be able to listen to them. So that is something that we have learned over time.

I: Were there cases where one of the partners dominated the relationship?

Henk: Yes, size is important. In those relationships, size is a very difficult issue, because if one is a lot bigger than the other, it is not an easy job to create a partnership that will last for a longer time. The best way to do that is to create a smaller size company. Therefore, we are introducing these Joint Ventures – our employees work together with the people from the other airline, have a specific number of flights, making it more of a 50/50 balanced situation, than a bigger airline working with a smaller one.

I: Would this be also the case in terms of innovation?

Henk: Well, you can make it like this. You can look at it as not so much as an alliance, but more like a supplier-customer relationship: we want you to fly 3 times a day, between Düsseldorf and Amsterdam, this is the economic picture. Then we want to you to make a profit and we are going to make a contract with you. OR you can say that you would meet up every two months and discuss the situation. But in the case of working with bigger companies and not just the small companies (example GE), we treated each other more like equal partners and had a different approach.

I: So you were using the contract by both as a controlling mechanism?

Henk: Iliyana, everything in life is in a contract.

I: Yes, that is true, but I still had to ask. Thank you very much for your time!

Project: Master thesis: Cross-Industry Innovations, Hasselt University

Date and location: 7th July 2016, 17.00 pm – 18.00 pm, Interview on Skype

Interviewer: Iliyana Gudzheva

Interviewee: Brendan Dunphy, Industrial Expert on Open Innovation (OI)

Topic: Partner selection in different projects, information mainly from the mobile industry

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Transcript 2

I: Could you please introduce yourself shortly and describe your position and responsibilities within your company?

Brendan: My name is Brendan Dunphy. Most of my career I spent working in Digital ICT, programming and technical areas, before moving into commercial business development sales, marketing, etc. After that I continued my career in ICT-consulting, before changing again into Research. I ran a lab for Accenture in the South of France. I have experience with a lot of emerging technologies, mobile, and the internet. My current clients are in these sectors so I am still doing business in them. Nowadays, mobile is a huge sector for me, especially in the developing markets (Africa and the Middle East). I am also responsible for business planning workshops, market research and support.

I: Have you ever worked with partners to create something new?

Brendan: Yes. For example, in the Mobile industry there are a lot of already developed ecosystems. Underneath them there is a huge amount of technology device players such as Apple or Motorola. There is obviously a huge stack of companies, developing the software for this industry. Furthermore, a lot of functions are outsourced, IT in particular, where you have long-term engagements and partners. Partnering is a part of the DNA of the Mobile industry. Not just the Mobile industry, of course, but let me use it as an example. This type of collaboration is often referred to as a type of open innovation to some degree or some other form of ecosystem innovation. But yes, as I said before, partnering is fundamental for value creation.

I: Taking the Mobile industry as an example, would you say that the firms operating there are looking for companies only within the industry, or are they also searching for distant collaborators?

Brendan: Well, looking at all OEMs of the companies, we cannot say that they come from a distant industry. They have a different infrastructure but they are still a part of the value chain and as a result, they operate within their industry. But then if you take devices, for example, they are very much connected, but not uniquely. Therefore, we cannot say that WIFI is being delivered from just a mobile operator, but maybe there is another firm that provides it. In addition to this, there are all sorts of applications on those devices which have nothing to do with the Mobile industry on itself. This is more of a software development, which in my opinion belongs to a different industry. Mobile is essentially hardware that evolved into software. The network is becoming more software-controlled but that is another case. It is in some way transforming, it does not stay the same over time. You see, in the early 20s and 30s the mobile industry was more hardware-focused, whereas today it is just 50% hardware-focused. Nowadays, the software part is increasing in potential and becoming more of a separate industry. And that is very interesting because it is a huge struggle for mobile operators to deal with this trend. It is a huge cultural change, a shift of how we do things, the ways you manage the processes, KPIs and so on. And many mobile companies and many hardware companies in other industries struggle to make this transition to the software part. So, to get back to your question, if we are working with professional service firms – accountants, well that is not the same industry as the Mobile industry. If we are working with marketing, we are working with advertisement and sales people as well that are also not a part of our industry. Therefore, many firms partner with companies from distant industries, whether it is professional services, finance, accounting, marketing, technology or software.

I: Let us think outside the value chain. Can you give an example of companies from distant industries working together in order to introduce an innovation?

Brendan: Well, one of the biggest things in Mobile these days is the Internet of things (IoT). All mobile players are very keen on finding a distant partner since their networks are not designed for this type of innovation. But yes, the 5^{th} generation mobile networks are supporting the IoT, so it is a major step forward if an automobile is connected to a mobile phone. Another example could be mobile money which is better established in Kenya than in Europe, simply because we have existing banking systems. Some banks actually generate 20-30% of their revenues from financial transactions.

I: Could you please elaborate more on the topic of mobile payments?

Brendan: Yes, of course. Almost all operators have some form of a mobile payment system and the market here is quite competitive. Mobile devices are becoming more essential. Despite its original purpose as a verbal communication tool, the mobile phone nowadays is mostly used for accessing data networks and is as powerful as a small computer back in the days. This is a phenomenal amount of capacity which can be used for all sorts of additional features such as games, remote controls, scanners, health and well-being related apps, etc. Therefore, this device has such a computing power that it can be used in many areas. In other words, the mobile device is starting to connect with devices or things from other industries. Nowadays, everything that can be digital is digital.

I: Let us now take a certain project that you have worked on and start building questions related to it. How does a company decide enter a collaboration?

Brendan: Well, there are two ways: either outside-in, or inside-out. The classic way is that a company has a problem which it cannot solve on its own, or the company sees some kind of an opportunity but it cannot address it alone. In the past, the "mentality" of a company was to invent and re-invent itself. Therefore, companies were more reluctant to cooperate with other partners. I have worked with Nokia for many years and from a device point of view, it is a key problem in the sense of the "Not-invented-here syndrome". For them, it would have been economically more sensible and quicker to adopt an external technology. Open Innovation is pretty established nowadays and there is a huge amount of startups in the market, most of them digitally based. This is currently a huge trend in Europe. Strategically, large companies which have the IT infrastructure but lack some of the resources needed for making innovations work, go beyond their borders and partner with small startups. They are in a way forced to do so because they are not able to do it by themselves at the pace of other companies. Therefore, partnering is a strategic imperative for them. Outsourcing vs.

Partnering. Partnering is such an abused term. There is no consistent definition that I have found. What happens is that companies are effectively outsourcing and they call it partnering because it sounds better.

There are two forms of partnering. One is a company having a particular project/reason for the collaboration. The other one is strategic partnering which means companies are not doing that just once, but are thinking more along the lines of a long-term relationship. This shift is caused by the fact that the market is changing every day. There are many new products and ideas cropping up and changing the conditions in general. Obviously, if we go back to the Mobile industry, there are literally hundreds and thousands of apps. Now, some of those apps are really good and some of them do not succeed. If one wants to partner with a startup in developing some sort of a clever app, organizational culture plays indeed a huge role in the alliance since there are the established firms and the newcomer. The procurement processes and the contracts of the larger firm do not coincide with the ones in the smaller firm. The failure rates are therefore quite high in this sector, since these two companies are a different kind of beasts struggling to try and find a way to interact. Therefore, these collaborations would need different strategies, different types of people, processes, knowledge and even different ecosystems.

I: In terms of partnering with either small or large entities, is there a specific type of criteria that the other company has to bring with and if they do not have it, the cooperation will not happen?

Brendan: Yes, but the issue here is actually how formalized are they. If you take for example the small end of the cooperation, for some small firms the partnering could happen within a day and in a more informal way. It could be actually the product manager that decides whether the app, or the whole startup is of value for the company. So it could be just one person that makes the decision and this selection process would significantly vary from the selection process for example of Deutsche Telekom (DT). In DT, there are many factors such as culture, hierarchy and processes that have to be taken into consideration.

Small companies can get more familiarized with these processes over time and establish a more formal selection process. If you are a small company that wants to partner with DT, for example, you are not going to go to the office in Germany but to the office in the Silicon Valley. There, DT has around six people. DT like many other telecom organizations recognized that it had to put some people in the Silicon Valley because of the technology wave. Again, the important thing is that DT recognized that the teams sitting in Germany would not be able to cope with this type of innovation and technology wave due to the fact that such deals have to be done within days, otherwise the startup could decide to go with their competitors.

I: Would you say that trust, financial stability or even brand reputation play some role when talking about choosing a partner?

Brendan: They do, but it highly depends again on the firm. If you are dealing with IBM, Accenture or any other big firm it is quite easy to tick those boxes. On the other hand, if you are dealing with a startup (3-9 months old), financial stability means nothing.

I: That is true. But when we think about partnering with distant companies, do these factors play a significant role in the selection process?

Brendan: Absolutely. The issue here is not how do you establish them but how do you value them. There are some core things on larger deals, which can be applied across industries – for example – patents. In a mobile phone there are at least 6000 patents. Therefore, a company has to decide if it would like to develop the technology by itself or search for it in another company.

I: Do these collaborations happen based on a strategy plan or can they also happen because of a previous connection to the company?

Brendan: Yes. A lot of them are becoming more informal. Many corporations need to be much better aware of what is going on outside of their industry and particularly – in startups. What we see is basically the formalization through the intermediaries, networks and even the platforms which allow the corporations to get visibility on what is happening. This brings great importance due to the fact that it does not limit the process to just one person but allows other people to take part as well. This is simply because the needs vary not just by region but also by function or even by country and they will change over time. Beyond the strategic needs of a corporation (what do they have to do to achieve their objective), every company has its specific list of criteria that they would use for finding a partner. They will most probably rely on intermediaries, consultants, research companies in order to scout organizations. Through them they would be able to identify partners in relevant areas. This is also useful from a confidentiality point of view. If a firm announces its plan in public then it might reveal some of its problems or markets of interest.

I: Going back to the cultural aspect of the whole process. What kind of challenges have you experienced in term of distant collaborators? (if any)

Brendan: If you look at all the inter-industry M&As, for example, most of them fail quite quickly and very few achieve their goals. The ability of one company to absorb another company is difficult and the more different the company is, in terms of size, culture, industry, the harder it is. The individuals in the organization are not trained or motivated to do this. Corporations are quite often based on control and efficiency and if the company is partnering with a very small company, this simply would not work.

I: So what can a company do to overcome these challenges?

Brendan: Well, A – it has to recognize that is has a problem because often the big corporations do not see that. B – Probably the management should think of some sort of an intermediate way of doing that. The first thing is that someone has to be placed in charge and manage that relationship which is not always the case. Most of the times either the person does not have the time to do it, or it does not want to do the job. Without someone there, looking it from the 2 sides of the spectrum, the chances are the things will go wrong. In order to succeed furthermore there should be proactive management with a certain skill set that makes sure all the processes are going according to plan. The company has to also have realistic expectations of how long would it take for it to achieve its goals because sometimes it is longer than one anticipates.

I: Are these challenges the same, in terms of a company from the same industry and with a company from a distant one?

Brendan: In general they are the same, but when we talk about companies from distant industries, this becomes much harder. See, when the companies are operating in the same industries, they have some sorts of commonalities among them which makes the process easier.

I: Can you give me an example of such partnership that clashed due to their culture (either organizational or national)?

Brendan: Well, national culture in our case is not relevant. I am talking more about the organizational culture.

I: Going internationally, when we think of partnering with another national culture, would not that make it harder for the company to collaborate?

Brendan: There are cultures that are known for being really bureaucratically and low risk-taking. Some of them even avoid saying "no" and try to be as friendly and hospitable as possible. So yes, some companies have these issues on the individual levels and most of the bigger companies are trying to deal with them through cultural trainings. For example, India is THE most competitive mobile market in the world, since the costs there are the lowest ones. I know some operators that were interested in entering this market and buying (could also partner, in terms of Joint Ventures, but they were mostly interesting in acquiring) Indian companies. But it was almost impossible to get the level of detail that they wanted and expected, because many of the companies there were family based ones. As a result, the process was quite informal. The last thing a company wants to do is make the deal and afterwards realize that there are all sorts of discrepancies in the balance sheet going on which will expose it to risks and liabilities that it was not aware of. This was the situation in our case. Therefore, that particular deal did not go ahead due to the fact that the company lost faith in its partner.

I: Is there some way to establish trust between two distant potential collaborators?

Brendan: Think like that: You start small with every relationship. You first find a small project to collaborate on with the company and over time you learn from it. After some time, the companies are more willing to share information and work together. Then the relationship moves to another level. That is actually how in praxis suppliers and customers work together. They probably start small and build on that. As a result, the company trusts the other one to a certain extent and some negotiations take place for another contract. But of course, this takes time.

DT ,for example, has diverse partnerships with already established corporations so as a result, they are sticking with them over time. In contrast to this, startups have difficulties working with large corporations. So if a startup wants to cooperate with DT it has to offer a significantly better product in order to shift their existing relationship with another supplier. Many large corporations fail to innovate because of these deep relationships which do not allow them to shift their focus to something more innovative. As the big companies are more interested in their own survival, they would try to keep the customer on a path that is more suitable for them as for the customer itself.

I: We already saw that the path dependency of a company is one reason why a partnership did not succeed. Can you name another one?

Brendan: There are different expectations, as I mentioned before, and companies have to take into account that the market scene around them changes. There is some research that I read yesterday on startups that thy need around 6-9months to set up but last only 18months. The point here is that the set-up time is quite significant when comparing it to the time that the startup actually lasted. So the different expectations, the changing conditions, in terms of digitalization or any innovative area could be an issue. Corporations in my opinion change, but they change mostly internally. For example, Heineken recently changed its R&D processes, which were more product related. They were known for producing alcoholic drinks but now they moved more into marketing. They believe that they cannot innovate internally as much as they would like to and therefore so they would try to cooperate with other startups that produce beverages. It is much more easily to buy the license of them and then try to build their image in the market through their global presence and already established distribution channels. As a result, Heineken, will now focus more on what it can do better – marketing, packing, smart bottles, etc. Partnerships are changing much more quickly as they did in the past.

I: I do not want to take more of your time so I am going to ask one last question. You mentioned something about Heineken having smart bottles. What is the function of a smart bottle?

Brendan: Smart bottle is an idea that concerns more or less the packaging aspect of a product. For example, the pharmaceutical company, Novartis, recognized that in order for patients to heal properly and stay healthy after being sick, they are supposed to take their antibiotics as prescribed and not stopping the medication after they start to feel better. The problem with that is that sometimes it is okay to not take the medication, but in most of the cases, patients get worse and have start another treatment. So in the end, there is more cost for the hospital and obviously more work. The problem in the aspect of the pharmaceutical company is that the efficacy of the treatment is then called in question. Health providers are therefore interested in understanding whether their patients are actually taking the drugs or not. As a result, they have to find ways to stimulate them and educate them to take their last pills as prescribed. For certain age groups, they could gamify the taking pills but for other age groups, this method is obviously not going to be effective. Involving social media, alerts or even friends and families could be the solution for older people. But the firm can also decide to improve the package itself. There could be an alert at a specific time of the day and the package can actually start flashing in different color-coding, depending on the importance of the pills. It is the same for bottles. They have specific types of sensors. For example, after a specific amount of time beer goes flat and it does not taste good. As a result, this affects your product. Therefore, temperature is obviously one thing considered. In the end, it is more of embedding a certain type of technology in your product, in order to improve consumption and quality.

I: Thank you very much! I think I got all of the information I needed.

Project: Master thesis: Cross-Industry Innovations, Hasselt University

Date and location: 20th July 2016, 9.00 am – 9.45 am, Skype interview

Interviewer: Iliyana Gudzheva

Interviewee: Mike Nevin, Strategic Alliance Expert and Founder of Alliance Best Practice

Topic: Advisory services for different types of alliances

Transcript 3

I: Good morning! I am going to start with some general questions and if there is something that is not completely clear, you can just stop me and ask. Could you please introduce yourself and describe your position and responsibilities within your company?

Mike: My name is Mike Nevin and I am the Managing Director and owner of the company called "Alliance Best Practice" Ltd. Alliance Best Practice Limited, we can from now on call it just ABP, is a Research and Benchmarking Consultancy. Our main domain is alliances, more specifically strategic alliances. These include not only international and cross-sectoral, but also same-sectoral alliances.

I: Can you please elaborate more on the term cross-sectoral alliances. How do you define it?

Mike: For ABP, cross-sectoral means different business industries. It could be a pharmaceutical company partnering with a manufacturing company or even a financial service firm collaborating with a high-tech firm.

I: Okay, good. I just wanted to be on the same page with you. Moving on. What are your thoughts on innovation and does your company deal with such projects?

Mike: ABP is just alliance-based and that means that innovation is not a focus of our research. Nevertheless, there is no doubt that in some of the alliances that we have been asked to research, innovation has been the prime driver for what both companies were trying to achieve. We consult the companies that want to partner with another firm and make those alliances as efficient as possible. We try to evaluate and understand the success factors behind these co-operations.

I: Understood. Let us assume two companies from the same industry want to collaborate. How do they actually take this decision? Do you have such knowledge?

Mike: There are multiple drivers. Sometimes it is a small expanding company, which has a good product or a service but lacks a distribution network. As a result, they would search for a company that will have a distribution network in order to be able to get their product in the market faster, quicker, better. In other cases, the main driver behind collaborating is the desire to enter a new market. Consequently, companies try to find a partner that is operating in the desired market. It could be China, India and/or Brazil. Furthermore, alliances could be developed due to some geographical drivers, new business offerings or even a new business problem that there is no solution for. For example, we are very often called in when there is an already existing alliance-relationship but neither side is happy with its operation.

I: Would you say that these drivers are the same for an inter-industry collaboration?

Mike: It depends on which industry you are talking about. Let us categorize the process of choosing the right partner as ***due diligence*,** meaning all the activities a company takes to make sure they are choosing the right partner. For example, if a firm operating in the high-tech space is choosing a partner in the same sector, then the period (the amount) of due diligence would be relatively superficial (around 2-3 months of work). The reason for that is that this market is very fast-moving. Large part of it is based on innovation, on creativity, and therefore the amount of time for due diligence is very small.

If you then compare this to a pharmaceutical company, you will have a different scenario. Here, a large pharmaceutical firm such as Astrozenica/Fizer/Merck/GSK might have a gap in their product/service portfolio and they know they need to plug that gap. Therefore, they search for promising products. As a result, they are not looking at the nature of the organization but are more concerned with the product that organization has. And as you can imagine, the amount of due diligence is vastly more, plus it has more complex nature, taking up to 18 months.

I: So, when partnering with another firm, there is a specific aim that the one company has. Does this aim change over time?

Mike: Well, it can do. It can start like one thing and then turn into another. I cannot think of an example right away but a company might start off thinking that they will partner because of product A or product B. But in the beginning the company does not know with whom they are teaming up. They do not know a lot about the organization and what they are capable of. So as a result, when the negotiations take place, they discover that product C or product D is a much better/attractive opportunity for them. Therefore, the nature of the alliance structure changes. Does that make sense?

I: Yes, it most certainly does. Can you please tell me more about the people involved in the process of establishing an alliance?

Mike: It very much depends on the alliance-maturity of the organization. Most of the companies have discovered that there are 3 main stages of partnering maturity. The first stage is what you might call "Opportunistic" – organizations spot opportunities in the market place (e.g. to develop new product/service). That is very ad-hoc. It is very product-line driven. Therefore, it is often the people in that individual line/service or even a business unit that get involved in the process. Secondly, there is the "Systematic" stage – organizations have multiple opportunistic alliances. At some point they decide that they want to set up a central unit that coordinates all these alliance activities. The third stage of maturity is reached due to the already gathered collaborating experience of the company. As a result, a collaboration/partnering has become more like a corporate skill. It might be even seen as a competitive advantage. I would call this *"endemic"*, meaning "built in" the organization. The answer to your question is based on the maturity of the alliance experience of the company.

I: How do companies search for partners? You just now explained the three stages of maturity. Is it the same? I mean is it different depending on the stages?

Mike: This is linked to the three stages. In the first stage, Opportunistic, it is usually driven by a specific business opportunity in a sector, so there the amount of the due diligence conducted is relatively short. It is very much based on which of the companies in this area has the necessary skills or resources to help one secure that business. Once the company moves pass that stage, however, organizations start to think more clearly about the factors that lead to an alliance success. What they conclude is that it is more than just money and technical expertise.

There are five dimensions that one has to consider when looking into an alliance relationship. For a successful alliance, each area should be in existence.

1. Commercial – A company would not get into a relationship with another company if the alliance does not promise good value to both sides.
2. Technical – Technical means the specifics of a product or a service that either side has to offer. If it is not a good fit, then the alliance will fail.
3. Strategic – If a company is going to develop an alliance, there should be a good strategic reason. It should not be taken as just one-time opportunity.
4. Cultural/Behavioral – How do the two companies behave culturally towards each other? Do they fit or even complement each other?
5. Operational – How are the companies going to manage the alliance relationship operationally? What are the procedures or protocols that the two companies agree to in order to drive progress?

So, there are five different categories. And the problem for most of the organizations is that they only consider the first two, which is commercial and technical. Essentially, when they are searching for a partner, they just ask "Can we make money with this partner?" and "Is there a good technical fit with their products and services?" That is how they do due diligence. And the problem there, what we have learned from ABP research, is that the reason why the vast majority of alliances fail is not because of commercial or technical reasons but because of the other three factors.

I: So would you say that the companies are familiar with those five dimensions?

Mike: No, many of them are not. This is based on our own research that we have conducted for the last 14 years. Unfortunately, there is not a common standard in the market. People still do not have any knowledge of what I call *Best practices.*

I: Does this mean that companies do not have a checklist when they try to search and evaluate a potential partner?

Mike: Correct.

I: What is then your opinion of cross-sectoral collaborations? What is the situation there?

Mike: It is even worse! It is because of the distance between them. This makes it that much more difficult to understand and collaborate. For example, when a Western-European company is partnering with a Japanese company, one has to consider the immense distance not only geographically, but also the distance in their culture and even in their operational processes. Therefore, the odds of a successful partnership go down. Typically, cross-sectoral alliances for me only really succeed when there is an overwhelming business value proposition. For example, Philips in the Netherlands. Philips noticed a gap in the market which was the absence of single-serving coffee machines. But they did not have any knowledge of coffee-making. They had good knowledge of making machines. As a result, they approached Douwe Egberts – a coffee importer and manufacturer. Consequently, after their joint efforts they came up with the product, which we know as Senseo. Senseo is now a market-leading single-shot coffee machine. At one time there were more Senseo machines than there were households in the Netherlands. That is an example of cross-sector. Philips is not in the retail space, Douwe Egberts is in the retail space but it is not in the manufacturing and high-tech space as Philips. The reason behind their success was, in my opinion, the cultural similarity. Both organizations are headquartered in the Netherlands. All the employees were speaking the language, so the chances of success were bigger. Although it was cross-sector, it was still a domestic alliance. Now, let us observe another example – Hitachi and Wella. Hitachi had made a hairdryer which was a fantastic one. It was more efficient than the other hairdryers in the market. It heated up more quickly, had more settings, was easier to handle, was more robust and it lasted longer. At any feature that you wish to choose, this hairdryer was better. But it did not sell. The company concluded that the reason behind this was the name – Hitachi. People did not think of Hitachi as a hairdryer-manufacturer. Therefore, Hitachi teamed up with Wella, the hair-specialists. The alliance relationship was supposed to be really easy – Hitachi would produce the hairdryer and Wella would put its name on it. They were extremely successful, selling the product not only to professional salons, but also to regular customers. The reason it worked was not – as in the case of Philips – that they were in the same country, but the fact that the criteria for the partnership was very simple.

I: Can you give me an example where such an alliance did not work out?

Mike: IBM and Salesforce. IBM is an established IT company, whereas Salesforce is a small and fast-growing software company. They tried to develop an alliance between them, but failed. The reason behind this was the business model of Salesforce – Software as a Service (SAAS). This means that they sell you as much as you need. Therefore, a customer will pay each time maybe 60-70 cents on the dollar when it uses a particular Salesforce product. In contrast to this, IBM is built around large-bulk buying – 500-600 thousand dollars at a time. Two organizations that could not make their very different business models work.

Another example will be Apple. Many organizations have tried to partner with it. But during the era of Steve Jobs, his view on the collaboration process was very different. He believed that Apple products and services should be owned only by Apple and they should not be available to use by anybody else. Thus, the culture in Apple was known as a "not sharing" one. That is now beginning to change. You can see that Apple is now serious into getting the high-tech space and they are trying to do this through alliances and partnerships with small companies.

These examples were mainly from initial alliance failures but there are also some relationships which failed due to the fact that one side changed strategy. So, as I said – there is also a scenario of alliances failing, even if they have already been set up. A bright example here is the relationship between Cisco and IBM. When Cisco made routers, they were not considered to be a competitor of IBM because routers were not important to the business model of IBM. Therefore, the degree of overlap of what was produced was very small, very complementary. But everything changed around 3-4 years ago when Cisco announced that they are going to get involved in the server market. Immediately, that brought them in a conflict with IBM because its biggest product line is IT servers. Consequently, this relationship dissolved overnight. The turn-around of this story is that in the last six months, IBM and Cisco have started communicating again. The reason why they re-launched their previous relationship is because there is a "desire" called the Internet of things (IoT). IoT is dependent on communication between consumer products and services. Examples here are energy boxes, the lighting in the house, it can pretty much be any consumer durable. As a result, in this area IBM can offer software plus market reach, and Cisco can offer something in terms of networking. So as a result, they will try to partner again but only in that specific area. Concluding from this example is that one of the key success factors for an alliance relationship is scope. Both parties have to be very clear on their objectives and also about their motivation of why they are entering an alliance. Companies have to be very, very careful about same-sector alliances. I am conscious that your research is not based on same-sector alliances. Do you want to hear about them?

I: Yes, sure. I am comparing same-sector with cross-sector alliances. It will be interesting to hear the examples.

Mike: Okay. Some years ago, there was a British car manufacturer called Rover. Their main competitor was Honda, produced in Japan. Honda proposed to join forces with Rover and make a strategic alliance. Their objective was to sell automobiles in Europe through the distribution network of Rover or at least they communicated it in that way. In return, Honda was going to provide them with their V-tech engine, which is a very technologically advanced engine. As a result, the range of automobiles of Rover grew and they offered some new models on the market. In the end, Rover achieved a significant profit out of this alliance. After the 3-year contract expired and Rover wanted to re-negotiate and extend the contract, Honda refused. The reason was that they had a different objective than the one they communicated to them. They wanted to understand how a company sells cars in Europe. Now they know it and they will sell them themselves. So, there is a thing called “coopetition”. That is basically a partnership where competitors partner with each other. In my opinion, this could be very dangerous because collaborators do not know what the “hidden agenda” on the other side is.

I: Everything sounds really interesting and I did not want to interrupt you. I have some questions on the previous topics. Let me go back to the example of IBM and Salesforce. What was the goal of the alliance?

Mike: Salesforce wanted to grow. It was a small company and it wanted to market its software. IBM, on the other hand, did not understand the SAAS marketplace and therefore, it wanted to understand how this business model works. Therefore, both companies had a good reason to participate in this alliance. But due to the commercial dimensions of both business models, neither could understand the other.

I: Okay. Speaking about unsuccessful partnerships, what could they have done differently? How could have they overcome the challenges?

Mike: Well, this goes back to the heart of your research question. They could have picked their partners better. They could have done more and better due diligence. If you imagine that you have two companies and they do due diligence just in the two dimensions – commercial and technical, then the amount and the sophistication of the due diligence is very small. Whereas if they do due diligence on much wider range of factors, like the other three dimensions, they will be more successful.

Take for example two companies working in different industries and looking at an alliance relationship that conclude that there is a fantastic commercial opportunity and the technical alignment of the two organizations is very good. Most of the companies will stop at this point and will happily engage in an alliance. But if they spend a little bit of extra time researching the other areas, they might discover that strategically the product or a service is not fitting the business model of the other partner. Therefore, there will be no genuinely higher interest in the organization. Or it could be that the two companies are so culturally diverse that actually working together will be extremely difficult. Another reason could be their operational system. Some could be organized based on product lines globally, the other ones could be geographically organized. That can make working together very difficult, as you can imagine. If they have done a little bit of extra thinking and research, they could have avoided these challenges.

I: Where do these factors come from?

Mike: Typically, it is from their experience. Here in England, we call the problem a "vicious circle". We know from research that the more alliances you do, the better you get at it. A lot of organizations can become really good if they have a lot of experience with it. Take Philips for example. It is an organization that has an active R&D unit, which is focused on generating innovative relationships. The same is with Cisco. It has an alliance division called

"Adjacencies". This means that they look for partners not in their business sector but they are adjacent to them, they are close to them. So companies get good at choosing factors for picking potential partners. The vicious circle here is that many organizations do not look at the broader range of factors but focus only on the two dimensions, which means that they will eventually fail, which means that they do not do a lot of partnering, which means that they keep on making the same mistakes.

I: Can you give me some examples of distant companies that have collaborated but the alliance was unsuccessful?

Mike: Now, to be honest, I cannot think of any right now. There should be some, but I can look at my notes and come back to you.

I: Okay, that will be good. Thank you. Going back to the hidden agenda. You scratched the surface there on the meaning of trust in alliances. We know that there are some commonalities when the partners are from the same industry but how is trust established across industries?

Mike: That is very difficult. Trust is one of those things where the companies should be actively working together in order to develop it. Trust is not something that you can flip a switch and immediately you have it. Trust is dependent on individuals in organizations which do exactly what they say that they will do. Typically, in my observations trust is in the cultural dimensions. Many organizations fail to recognize that. They may be the perfect fit in all of the other dimensions but culturally they are so different so they have to give up. Trust is one of those things that take a long time to be built up. The problem here is that there is no tool with which one can measure the degree of trust in the alliance relationship.

I: How can one measure trust?

Mike: One thing that you can do is simply ask the participants. That is actually what we are doing. We ask a simple question: What would you say is the current level of trust in the alliance? If the one firm says 25% out of 100% and the other one 20% out of 100%, then there is a relatively good alignment. Both sides are at the same level and think of the situation in the same way. On the other hand, if one company says 25% and the other one says 75%, then you have a big gap called “misalignment”. That means that one side thinks that there is a high level of trust and the other side thinks there is a low level of trust. That is a very dangerous situation because one side is making decisions thinking that there is trust when in fact there is none.

I: When we have different partnerships is it the case that one partner will be more dominant than the other?

Mike: Yes, there is always going to be some level of difference – either in physical size or brand value. There is always going to be some imbalance in such relationships. If you look at the pharmaceutical sector and the company Astrozenica, which has maybe 200 thousand employees worldwide, and they are partnering with a small research laboratory that is in the UK, which has most probably 15 people in the entire company, then there will be a massive mismatch. It is very important in these situations that the small company has something valuable to offer to the established corporation. The reason why the alliance of the pharmaceutical industry works is because the small company has the rights of a compound that is valuable for Astrozenica. The thing which makes the alliance efficient is the governance model. That means that both sides should sit down and agree on some rules that will govern how the alliance will operate. These rules will be for each side. Despite there being such a misalignment in this alliance, the governance model allows it to be successful.

I: Would you say it is the same when talking about cross-sectoral partnerships?

Mike: Yes, I think so.

I: Thank you very much for you time!

Project: Master thesis: Cross-Industry Innovations, Hasselt University

Date and location: 26th July 2016, 15.00 pm – 15.30 pm, Telephone interview

Interviewer: Iliyana Gudzheva

Interviewee: Florian Kellhuber, Senior Project Manager Ideation, HYVE

Topic: Cross-Industry Collaborations

Transcript 4

I: Können Sie sich kurz vorstellen und Ihre Position beschreiben? Was ist Ihre Tätigkeit bei dem Unternehmen?

Florian: Mein Name ist Florian Kellhuber und ich arbeite als Senior Project Manager Ideation. Ich bin für den Leistungsbereich Ideation verantwortlich, d. h. Ideengenerierung, Konzept- und Geschäftsmodellentwicklung.

I: Was ist Innovation für Sie?

Florian: Innovation ist für mich eine Unternehmung, die ein Unternehmen oder eine Privatperson lostritt, um was Neues in die Welt zu bringen. Es gibt auch eine alte Definition – Innovation besteht aus Erfindung und Markterfolg. Heutzutage können wir mit Hilfe von Innovationen die Probleme der Unternehmen lösen.

I: Welche Kooperationsarten hat HYVE bis jetzt getätigt?

Florian: Wir sind im Innovationsbereich tätig, d. h. wir haben nicht so viel mit Joint Ventures zu tun. Joint Ventures ist eine Art von Kooperation, bei der beide Unternehmen ein gemeinsames Geschäftsmodell haben. Da es im Innovationsbereich eher in Richtung Lean Innovation geht, ist unsere Tätigkeit oftmals das „Front-end" vom Prozess. Prinzipiell ist es bei uns so – das Unternehmen sucht eine Möglichkeit für seine Technologien und wir helfen, diese zu realisieren. Unsere Aufgabe dabei ist die richtigen Leute für die Kollaboration zu finden und die richtigen Fragen zu stellen. Diese Partnerschaften können ganz unterschiedlicher Natur sein: ein Kunde, der seine Lieferantenbeziehung ausbaut; ein Endkonsument, der eine Partnerschaft mit dem Anbieter sucht. Das können aber auch zwei Cross-Industry-Partner (zwei unterschiedlich gelagerte Unternehmen, die in anderen

Branchen agieren) sein, die zusammen innovieren. Es kann auch in Form eines Symposiums ablaufen, wenn Wettbewerber in dem extrem frühen Stadium schnuppern wollen (Open Innovation).

I: Welche sind die Ziele hinter einer Partnerschaft?

Florian: Innovationsherausforderungen, bei denen Cross-Industry-Ansätze zum Tragen kommen, z. B. wenn ein Unternehmen in einen neuen Markt eintreten will und ein anderes Unternehmen braucht, welches sich damit auskennt, oder im Fall „Technologie sucht Anwendung“, d. h. welche Anwendung gibt es für die jeweilige Technologie. Dabei sucht das Unternehmen verschiedene Branchen, mit denen man zusammenarbeiten möchte. Bei den Prozessthemen, z. B. bei dem Herstellungsprozess, scheitern Unternehmen an dem Thema Automation und suchen dann ein Unternehmen aus einer anderen Industrie, welches bereits die Technologie entwickelt hat und sie dabei unterstützen kann.

Ein anderes Thema kann Produktdifferenzierung sein: Was kann man anders machen, damit das Produkt von den Konsumenten wahrgenommen wird? Man beginnt bei anderen Industrien, denn dort besteht ein offener Austausch über mögliche Betätigungsfelder im Rahmen einer offenen Aufgabe. Das heißt, wenn die Entwicklung noch nicht weit vorzuschützen ist, gibt es am Anfang dann teilweise einen strategischen Informationsaustausch – einer liefert die Technologie und der andere dann den Marktzugang.

I: Haben Sie auch Kollaborationen mit Unternehmen aus der gleichen Industrie getätigt?

Florian: Ja, sowohl mit welchen aus der gleichen Industrie, als auch mit welchen aus verschiedenen Industrien. Wenn ich zum Beispiel an ein Unternehmen aus der chemischen Industrie denke, ist dieses auch mit Partnern aus der gleichen Industrie vernetzt. Da sind die Interessen natürlich anders, als wenn dieses Unternehmen mit einem Automobilhersteller oder einer Fluggesellschaft zusammenarbeitet. Im Endeffekt hängen die Zielsetzungen davon ab, ob es um eine Cross- oder In-Industry-Innovation handelt.

I: Gibt es dann in dieser Situation Unterschiede in den Kriterien für die Partnerauswahl?

Florian: Als Kriterien für eine Partnerschaft kommen als erstes die fachlichen Voraussetzungen – wer hat dieses Problem bereits gelöst? Ein anderes großes Thema für die Zusammenarbeit ist die Geheimhaltung. Das ist eigentlich die größte Herausforderung – wie bereit ist das Unternehmen, die Geheimnisse mit seinem Partner zu teilen und wer hat danach Anspruch auf die entstandene Innovation? Auf diese Weise kann man unterscheiden, ob die Unternehmen miteinander arbeiten können oder das nur ein Cross-Industry-Learning ist. Marktzugang ist natürlich auch ein großes Kriterium – was weiß ein Unternehmen über die Bedürfnisse oder wie ist seine Infrastruktur aufgestellt? Die Infrastruktur kann auch als alleinstehendes Kriterium gesehen werden. Wenn das Unternehmen eine coole neue Übertragungstechnologie hat, aber keine Infrastruktur, dann wird das Unternehmen nach einem Partner suchen, der eine hat.

Strategisches Interesse können wir mit dazu nehmen. Wenn das Unternehmen mit einem Partner kooperiert, dann darf dieser Partner nicht in direktem Wettbewerb stehen, d. h. jeder Partner muss ein eigenes, nicht konkurrierendes strategisches Interesse an dem Bereich haben. Und das ist natürlich etwas, was man nicht im Vorfeld sehen kann, aber das entscheidet natürlich, ob die Unternehmen für eine Partnerschaft geeignet sind.

I: Ändern sich die Ziele für eine Zusammenarbeit?

Florian: Meiner Meinung nach hängt es davon ab, ob die Partnerschaft sauber aufgezogen ist. Wenn wirklich klargestellt wird, welche die Erwartungen von dieser Zusammenarbeit sind, dann ändern sich die Ziele nur, wenn sich das Verhältnis zwischen den Unternehmen ändert. Je näher sie miteinander arbeiten, desto besser kann man über neue Ansätze sprechen. Dann sind natürlich auch andere wichtige Bewertungskriterien zu berücksichtigen. Ein Beispiel hierfür: Ein Bereitsteller für einen Funkhotspot arbeitet mit einem Lampenhersteller zusammen. Die Partnerschaft startet so, dass der Lampenhersteller Infrastruktur benötigt, um sein Produkt zu platzieren. Im Laufe der Zeit kommt man auf neue Anknüpfungspunkte und dann kommt der Lichthersteller auf die Idee, neben der Funkübertragung auch Steckdosen anzubieten. Aber das Problem ist, dass der Netzwerkbereitsteller das gleiche Ziel hat. Ab diesem Zeitpunkt wäre eine Kollaboration dann nicht mehr möglich, da beide Partner direkt im Wettbewerb stehen würden.

Eine Kooperation ist nur dann erfolgreich, wenn die Partner keine Wettbewerber sind. Ein Fall von Partnerschaften innerhalb der gleichen Industrie ist, wenn sie vertikal über die Wertschöpfungskette gehen, d. h. dass das Interesse eher bei der Beschaffung von Märkten liegt oder mit der Technologie näher am Kunden zu sein. Bei einem Cross-Industry-Partner ist es was anderes, wenn man von dieser Geheimhaltung redet. Zum Beispiel: Ein Automobilhersteller hat in seiner Fertigungsanlage ein Problem und arbeitet daran zusammen mit einem Unternehmen aus der Getränkeindustrie. Wenn bei dieser Partnerschaft eine coole neue Lösung gefunden wird, dann braucht der Automobilhersteller keine Angst zu haben, dass der Getränkehersteller ihm Konkurrenz macht, denn jeder hat Zugang zu dieser Lösung.

I: Wie lange dauert der Prozess?

Florian: Es kommt auf die Tiefe und die Art der Partnerschaft an. Wenn die Partnerschaft relativ klein ist, könnte es sein, dass das Problem innerhalb einer Woche gelöst werden kann. Aber wenn die Partnerschaft größer ist und erstmal die Rahmenbedingungen geklärt werden müssen, könnte es länger als 1 Jahr dauern.

I: Gehen Unternehmen bei dem Auswahlverfahren eher strategisch vor (Industrie-Screening) oder wird eine Kooperation überwiegend aufgrund vorheriger Erfahrungen mit einer Firma gegründet?

Florian: Die persönliche Verbindung zu einem potentiellen Partner spielt natürlich eine große Rolle. Im Endeffekt handelt es sich um Menschen, die miteinander arbeiten würden. Wenn ein Know-how-Träger das Unternehmen verlässt und zu einem anderen geht, dann ist es selbstverständlich, dass diese persönliche Konstellation Anknüpfungspunkt für eine Partnerschaft sein könnte.

I: Wie startet dieser Prozess?

Florian: Dieser Prozess startet natürlich mit einem Problem. Dann entscheidet sich das Unternehmen, ob es sich nach außen öffnen oder seine Prozesse lieber geheim halten möchte. Wenn da grundsätzlich eine Bereitschaft ist, sich nach außen zu öffnen, dann geht das Unternehmen auf die Suche nach möglichen Partnern und Partnermodellen.

I: Haben Sie bei einer Kollaboration Schwierigkeiten mit den Partnern gehabt?

Florian: Es kommt darauf an, wie lange wir in diesen Prozess involviert sind. Wir haben ein Projekt mit der Deutschen Telekom gehabt, im Rahmen dessen Bedürfnisse zum Thema Maschinenkommunikation ermittelt wurden und dann eben Ideen und Konzepte entwickelt wurden, um in diesem Bereich nutzerbasierte Lösungen anzubieten. Für dieses Projekt haben wir einen Absender gefunden, jemanden, der das physische Produkt auf den Markt bringt, und auch einen Technologiepartner, der das Ganze entwickelt. Es war schon der Fall, dass wir den Partnerauswahlprozess gesteuert hatten, aber danach gab es Probleme. Dann haben wir uns zusammen hingesetzt und überlegt, ob es da nicht einen besseren Partner gibt oder ob wir das Ganze noch „ausbügeln“ können.

I: Wer nimmt an dem Prozess teil?

Florian: Ein Teil ist von dem einen Partner und der andere Teil ist vom anderen Partner, je nachdem wer Anspruchsinhaber ist und was die Absicht ist. Es könnte sein, dass die Leute gemischt sind – Fach- und Führungskräfte, oder nur Führungskräfte, die sich untereinander austauschen. Es kann sein, dass wir Lösungsworkshops zu einem bestimmten Thema veranstalten oder mehrere Partner zusammen am Tisch sitzen und Lösungen entwickeln.

I: Sind beide Partner gleich dominant oder gibt es verschiedene Rollen?

Florian: Wenn man von einer Partnerschaft spricht, sollte man schon auf einer Augenhöhe sein. Klar ist das eine Unternehmen größer als das andere und die Größe und der Charakter des Unternehmens spielen schon eine wichtige Rolle. Es ist meistens so, dass das eine Unternehmen aktiv auf der Suche ist und das andere dann von diesem angesprochen wird. Es gibt schon eine Asymmetrie vom Auftreten her, aber wenn beide Unternehmen Interesse an dieser Partnerschaft haben und motiviert sind, dann müssen sie auch einen Weg finden, auf einer Augenhöhe zu sein. Ansonsten wäre das eine Kunden-Lieferanten-Beziehung.

I: Wie kontrollieren Sie die Situation?

Florian: Ich glaube, es ist wichtig, dass man diesen Prozess moderiert, in der Regel einen neutralen Ton angibt, auf Meetings entsprechend gut vorbereitet ist, klare Ziele, Verantwortlichkeiten und Inputs definiert und mit offenen Karten spielt.

Project: Master thesis: Cross-Industry Innovations, Hasselt University

Date and location: 18th July 2016, 14.00 pm – 14.30 pm, Telephone interview

Interviewer: Iliyana Gudzheva

Interviewee: Paolo Bavaj, Corporate Director "New Business Development, Adhesive Technologies", Henkel

Topic: Cross-Industry Alliances based on Innovation

Transcript 5

I: Können Sie sich kurz vorstellen und Ihre Position beschreiben? Was ist Ihre Tätigkeit bei dem Unternehmen?

Paolo: Mein Name ist Paolo Bavaj und ich arbeite bei Henkel als Corporate Director New Business Development, Adhesive Technologies. In diesem Bereich geht es im Prinzip darum, wo man Innovationswachstumsplattformen finden kann, die eben mittelfristiges Potential von 1 bis 200 Mrd. EUR pro Stück haben. Natürlich funktioniert das nicht mehr so wie vor 20 Jahren – im Labor. Heutzutage ist es bei solchen großen Innovationen unbedingt erforderlich, dass sich sogenannte Innovation Ecosystems bilden und sich die richtigen Partner zusammentun, um dann solche Innovationen auf die Beine zu stellen. Das ist zum einen wichtig, weil solche Innovationen überteuert werden, zum anderen weil solche Innovationen anspruchsvoller werden. Wir wollen eine komplette Lösung anbieten, also nicht nur ein Produkt oder einen kleinen Ausschnitt, sondern eine komplette Innovation. Deswegen müssen wir uns in einem Ecosystem mit verschiedenen Firmen zusammentun, die sinnvoll das ergänzen, was wir tun, und notwendigerweise aus einer anderen Industrie stammen. Es ist eine Herausforderung an sich, erst dieses Ecosystem zu bilden und es dann auch am Laufen zu halten.

I: Ist Innovation wichtig für Henkel? Gibt es ein Innovationsteam oder eine Abteilung oder ist das komplett getrennt von dem Kernbusiness?

Paolo: Business Development ist eigentlich eine Statusfunktion. Es gehört zu Henkel Adhesive Technologies und nicht zu den einzelnen operativen Geschäften von Henkel. Das ist wichtig, weil die normalen Geschäfte, aus denen die Innovationen stammen, inkrementeller als die Innovationen bei uns sind. Wir haben einfach eine eigene Herangehensweise, andere Methodik und Philosophie, und ein anderes Unsicherheitsprofil. Solche Innovationen kann man nicht mit den Leuten, die an einer kurzfristigen Produktentwicklung arbeiten, schaffen. Das funktioniert leider nicht.

I: Welche Kooperationsarten hat Henkel bis jetzt gehabt?

Paolo: Joint Ventures eher weniger. Es gab welche, aber – wie gesagt – so eine Kooperation ist eher weniger bei Henkel verbreitet. Es waren in der Regel nur strategische Partnerschaften.

I: Wie treffen Sie die Entscheidung zur Kooperation?

Paolo: Meiner Meinung nach gibt es zwei Ebenen. Auf der einen Seite muss natürlich die andere Firma fachlich den Beitrag leisten können, der uns fehlt und den wir uns erhoffen, aber das ist natürlich nicht alles. Genauso wichtig ist es auch, dass man mit der anderen Firma zusammenarbeiten kann, also dass die Chemie zwischen den beiden Firmen stimmt, d. h. dass beide Lust auf die Zusammenarbeit haben. Das ist für mich sogar wichtiger. Ich würde lieber mit der Nr. 2 oder Nr. 3 auf einem Gebiet zusammen arbeiten, dafür aber sicherstellen, dass die Chemie zwischen den Mitarbeitern existiert, als mit der Nr. 1 riskieren, dass diese tägliche Zusammenarbeit nicht klappt.

I: Sie haben jetzt ein paar Gründe genannt, wieso Sie an einer Kooperation teilnehmen. Haben sich diese Ziele im Laufe der Zeit geändert?

Paolo: Nein, nach dem, was ich bis jetzt erlebt habe, bleiben diese Ziele konstant. Sie werden in einem Projektcharter für die Partner schriftlich fixiert, damit jeder weiß, wohin die Reise geht und was die Erwartungen von dieser Kooperation sind. Das ist für mich auch wichtig, weil dann keiner enttäuscht wird.

I: Wie suchen Sie nach den richtigen Partnern?

Paolo: Es gibt verschiede Arten. Zum einen kann man versuchen, nach den IPs zu gucken, also wer für uns relevante IPs oder Patente angemeldet hat. Aber was wir in Business Development richtig speziell machen, ist, dass wir Interviews in der gesamten Wertschöpfungskette durchführen. Wir wollen einfach ein Bild bekommen, wie die Märkte aussehen und wie die Dynamiken sind, usw. Bei diesen Interviews kann man direkt sehen, mit welchem Partner man zurechtkommt und mit welchem nicht. Diese Beziehung muss danach formalisiert werden, so dass man sieht, dass diese Kooperation ernst gemeint ist.

I: Wer nimmt an diesem Prozess teil und wie lange dauert er?

Paolo: Es ist unterschiedlich. Es kommt darauf an, wie spezialisiert das Know-how, das wir brauchen, ist. In der Regel, würde ich sagen, zwischen 3 Monate und 1 Jahr.

I: Wie bewertet man bei Henkel die Fähigkeiten der potentiellen Partner? Haben Sie bestimmte Voraussetzungen, die erfüllt sein müssen? Können Sie diese nach Wichtigkeit ordnen?

Paolo: Es ist nicht so systematisch, wie man sich das vorstellt. Es gibt kein Excel-Spreadsheet mit den verschiedenen Kriterien. Es ist vielmehr ein Gefühl. Wie gesagt, wir gucken uns erst die Patente an, was deren Marktposition ist und was unser Eindruck ist, im Sinne von wie innovativ, wie aufgeschlossen so eine Firma ist. Das vierte und letzte Kriterium, meiner Meinung nach, ist eben die Chemie zwischen den Mitarbeitern.

I: Und wie sieht das mit einem Unternehmen aus einer anderen Industrie aus?

Paolo: Es ist immer das Gleiche.

I: Hatten Sie Schwierigkeiten mit Partnern aus der gleichen Industrie und mit Partnern aus einer anderen?

Paolo: Nein. Einige sagen, dass wenn man mit Partnern aus der gleichen Industrie arbeitet, man mit den IPs schon etwas vorsichtig sein muss. Das sehe ich nicht ein. Meiner Meinung nach ist es viel wichtiger einfach schnell zu sein.

I: Denken Sie, dass Vertrauen für eine normale Kooperation wichtig ist? Und für die anderen Kooperationen? Wie erreichen Sie ausreichend Vertrauen zwischen den Partnern?

Paolo: Vertrauen ist natürlich wichtig, aber man kann es nicht in irgendwelchen Verträgen festhalten. Insofern kann man nicht einfach sagen „Hey, lass mal Partner werden“. Man führt erst ein paar Gespräche mit der anderen Firma und dabei kann man dann sehen, ob die Firma gut ist oder nicht.

I: Und waren alle Kooperationen erfolgreich?

Paolo: Nein, aber das liegt nicht an der Partnerauswahl. Bezüglich der Partner waren alle Kooperationen erfolgreich, aber oft ist es eben so, dass man vielleicht auch gemeinsam bestimmte Herausforderungen nicht gemeistert kriegt und es eher technisch scheitert.

I: Haben Sie Schwierigkeiten bei der Kooperation mit einem Partner aus der gleichen Industrie gehabt? Und als der Partner aus einer anderen Industrie kam? Können Sie hierfür ein paar Beispiele nennen?

Paolo: Nein, kann ich nicht. Sie können sich das aber vorstellen. Zum Beispiel, obwohl beide Partner gut zusammen arbeiten, sich einbringen und Vertrauen ineinander haben, kann es trotzdem sein, dass die Hürde, die man nehmen muss, zu hoch ist, so dass man das einfach technisch nicht hinkriegt.

I: Waren diese Kollaborationen erfolgreich? Wenn nein, was ist schief gelaufen? Was könnte man besser machen?

Paolo: Nein, sie waren immer gleich, denn anders funktioniert das nicht. In unserem Ecosystem ist es so, dass wir sowohl mit großen Unternehmen, als auch mit Startups arbeiten. Das ist manchmal eine Herausforderung für das Managen von Mikrosystemen.

Project: Master thesis: Cross-Industry Innovations, Hasselt University

Date and location: 26th July 2016, 10.00 am – 11.00 am, Skype interview

Interviewer: Iliyana Gudzheva

Interviewee: Jaco Fok, Manager Technology & Innovation Excellence at Shell

Topic: Cross-Industry Collaborations in Oil and Gas industry

Transcript 6

I: Could you please introduce yourself shortly and describe your position and responsibilities within your company?

Jaco: I have been working for quite a few industries up until now. Because of my education in Biochemistry and Chemical Engineering, I started working as a researcher in the bakery area and progressed to the Product Development. In fact, my whole career is based on developing or creating things from scratch. Some of it was in New Product Development, New Business Development and now in Innovation. Then, I had a job as an Internal Strategy Consultant where I was interested in the topic of Internet. It was around the year 2000, so you can imagine that it was not as popular as it is nowadays. After that, I was a part of a “growing” unit called Superfiber Dynema, a small team of about 200 people, which then grew to 800 people. I set up a sports department there. After that, I was involved in an offshore position, which later on helped me get into Shell. Then I was appointed a manager with a PML and I was managing different units. I was responsible for a factory in Japan, a factory in the USA and even in the Netherlands. After that, I was steering an innovation team, which after some time grew to a whole innovation department. The idea behind this department was to re-engineer the way we did innovation at the time. My next position was at the Business Incubator of DSM. There we cooperated with different partners in order to set up totally new businesses. We were basically making startups internally. After that, we set up an innovation team in India and China. Now, I am again in Shell and for the last three years, I have been developing their completely new Open Innovation department.

I: Okay, this is quite the journey. Moving on to the next question. What are your thoughts on innovation?

Jaco: It surprises me at the moment that innovation is "hot" again. I have been doing it for decades and all of a sudden everybody is talking about it again. I had an interesting conversation with somebody I know from Unilever. We both agreed that there is something about the whole concept of *network-entrepreneurship* under which people do new business development in another way. In the past, it was always important to have relationships, then it was always important to have networks and now it is important using the new media and the new connectivity globally. It is easier to use micro-networks and to manage really large networks as an entrepreneur. The other thing that I think has an importance is the ongoing trend "Big companies using startups". For me, it is not something new, but for some companies it has been an eye-opener. I am so amazed by how much opportunities there are in the coffee industry, for example, and how rich the startup world is. But they are addressing the situation in the wrong way. Instead of considering their network, they are trying to invest in them. This made me think of 20 years ago when my mentor said: "Jaco, it is not about competing companies, but competing supply chains". And this progressed from competing supply chains to competing networks. For example, Apple was not going to be as successful, as it is right now, if they had just developed a MP3-player. But they thought of the whole network system that they could develop in the music industry. In the end, they offered a complete solution instead of offering just the device. Therefore, my advice will be not to look at just one startup. Look at them all and only then you can see some patterns. As a result, one can connect a service-oriented company with a machine-oriented company, which then could be combined with a local initiative, for example, and all of the sudden you have an ecosystem.

And then again – everybody is trying to find a *unicorn* – the one startup that will grow exponentially and bring the biggest profit. That is not the way. A – The unicorn is highly unlikely to be found that easily, and B – all other companies are looking for it as well. And some company might get lucky and find one, but that is just sheer luck. Just work hard and try building these network systems.

I: Are you familiar with the term cross-industry innovation? I am just trying to establish whether we have the same definition of this term.

Jaco: We most certainly do. We have an enormous innovation center in Boston where we try to engineer innovative solutions for Shell. They are based on different kind of technologies that can be found in other industries. Therefore, we collaborate with various companies to develop the technology and we can further engineer it together to provide a complete solution.

I: How is Shell dealing with innovation? Is there a team, a department or a separate unit?

Jaco: Under the previous management it was structured as an Innovation department. It contained: Game Changer (GC), Shell TechWorks, a Venturing Unit, somebody who managed BestPractices, and even an Incubator. There was a clear innovation part. Now, this still exists but it has been slightly downsized. The Innovation department is a part of the Research department which tries to offer these innovation tools and best practices to the rest of Shell. But there is also an Innovation department in our Digital Innovation unit. So more or less it is an artificial separation since they work quite closely together. Apart from that, there are innovation units more locally in the business – business development or just innovation services. In our downstream unit, we have a downstream consultancy which is an internal group that also provides knowledge on innovation practices. In our lubricant business, we have a discovery unit, where the main focus is basically on developing new lubricants and additives for lubricants.

I: What type of collaborations has Shell done so far?

Jaco: Shell has done everything. We do Joint Ventures, for example, all the time. In the oil and gas industry when a company explores a land and finds oil, that source lasts for around 15 years and afterwards it has to be replaced. Therefore, it is a constant acquisition of land and a constant capital project investment. In this industry, developing a land is anywhere between half and two billion which means that there is a sizeable investment. Investing this kind of money into a land is an extremely risky business. In order to mitigate this financial risk very often a company searches for a partner. As a result, one company is in the Lead that actually manages the whole thing and the other is just a financial partner. This is what we always do, this is our “bread and butter”.

We also have technology collaborations by default. For example, Shell does not own the equipment that is being used. Consequently, it hires companies that will do it for us. They also make many innovations for us or vice versa. It could also be the case that we work together in order to invent something new. So as a result, we have a very intricate connection with our suppliers. In my opinion, the oil and gas industry is quite the “closely-knit family”. We do a lot of collaboration inside the family and we have no problems but when we have to work with others, it suddenly gets trickier.

I: When talking about collaborations based on innovative ideas, how does one company decide to collaborate?

Jaco: That depends on what kind of collaboration you want to make. From the previous example, about the land exploration, there we have peer collaboration – collaboration with companies from the same industry as us. The main reason for this partnership has a financial character, since we want to spread the risk associated with the investment.

Then on the supplier side it is basically the same thing. We have worked with some suppliers for quite some time and have established a big supplier base. There we have already developed a framework agreement and if we want something quickly done, we just reach out to them.

Going to the other end of the scale, the beginning of the collaboration, we see many people, which are either inside or outside of our company, with different types of ideas. For the radical ones, for which the experts say that it is not going to work out because their ideas are too risky, we have the Game Changer. This is a department with a fixed budget, which evaluates the potential of these ideas. If they believe in it, then they invest a small sum of money and coach the entrepreneur throughout the whole process. Afterwards, the inventor gets to test the idea and see if it is going to be successful or not. Of course, 9 out of 10 times, it does not succeed. But 1 time it does and the Game Changer was right to invest in it. That is basically the only activity that the Game Changer is responsible for – investing in these potential radical ideas. This is difficult to steer and we do not want to steer it that much because it is a radical innovation, so it is not going to feel comfortable anyway.

It could also be the case that innovations are not as novel as originally thought and go through the regular channels. The ideas that come to the Game Changer are half external and half internal. We have a website and everybody is able to submit an idea there. However, there are certain criteria, with the help of which we screen whether the plan is doable, really novel or if it will bring a significant value. Naturally, it has to have some sort of a connection to Shell. It could be something with energy, but the ideas should preferably concern the oil and gas industry. Sometimes, we search more along the lines of a certain theme. Recently, we searched for more ideas on how to increase the recovery of oil. This is then considered as a "domain" and the applicants get extra points for such ideas in our process of portfolio evaluations. We basically search for innovation in these domains, in which we feel more innovation is needed.

That was the radical part. We then have the university collaborations. We have a whole department that manages these relationships globally. The way they select or selected universities was very simple and we once had connections to 350 universities. We used to select the universities based on previous knowledge of the people working there and even personal contacts to the employees. We soon realized that was not good selection criteria. As a result, the whole process was very fragmented and inefficient. Therefore, we changed the strategy and chose only objective and relevant selection criteria. We chose to work with the best universities in the world and look at their rankings. Another factor was proximity but just from a practical point of view. If there was a very good university near us, we would definitely want to collaborate with them. It is a very good idea since the communication is better and there is a lot of trust. In the end, we reduced the universities to only 25. Of course, there are also some exceptions, where we partnered with a university that is not on the list, but they were in a way really extraordinary.

The next phase is Venturing – looking for startups. There we also work with domains. We talk with the businesses that need support and look at which domains and technology areas are they interested in, and try to make it happen. They need to fit in the business, the future of the business, and the chosen domains which we want to invest in.

So, the last thing that we have not talked about yet is Shell TechWorks. That is the unit that I developed from scratch, based in Boston. I always compare it to the structure of the iPad. Apple had the idea of an iPad but they did not develop any of the parts by themselves. They just worked with the best suppliers. They had specific requirements for the parts and the suppliers had then the task to deliver what was being asked of them. This is how they divided the innovations among the suppliers and then they engineered the whole iPad together. We do the same thing at the office in Boston. Every time we are in conflict with an engineering challenge in the business, we try to find the best company that can fix our problem.

When we drill a hole in the land, it is basically one big pipe going into the ground and then stacking another one right on top of it, which allows us to continue drilling. These pipes need to be carefully positioned on top of each other in order for this process to work. What did we do? We actually recognized that we can borrow the algorithm from NASA of how they dock space stations. So that knowledge was already developed and the engineers and mechanics were already trained. Furthermore, we also employ people in the Boston unit who come from different industries. There are 60 people and just two of them know something about the oil and gas industry. The rest have a different background. That whole unit is just open-oriented.

I: When having a specific project in mind, since you have quite the extensive portfolio of collaborations, how long does it take to realize it and who is involved in it?

Jaco: Well, it depends highly on the maturity of the project. If it is a Game Changer project, then it gradually evolves. The idea for one of the Game Changer projects was submitted 14 years ago, but the experts at this unit rejected it and now after reconsidering it, the professionals actually saw its potential and invested in it. As you can see, for some ideas it really takes time until they are realized. That particular project required that we partner with a shipyard company which has never built such a big ship as the one in question. As a result, they needed to do a lot of inventions themselves in order to be able to do the job. They had to build a completely new structure crane to lift the bridge on top of the ship because it was just that high and that big. And how do you find the perfect partner for this activity? Well, there are not that many companies in the world that can actually create such things. There were some in China, some in Korea and even some in Japan. And then you go through some negotiations and a selection process provided by your Procurement department because you want to make sure that they are going to be actually capable of doing what they promised.

On the contrary, for some innovations it is really only one company that is able to do it so there is no choice. In general, we try to screen several partners that are capable of doing the job and then we negotiate with them.

I: When talking about the criteria for choosing a distant partner, are these criteria the same as the criteria used when choosing a partner from the industry Shell operates in?

Jaco: Well, choosing a partner from our industry is always, always easier than choosing a foreign company. As I mentioned before, we have already an established framework agreement so that it can be very fast. Thus, there is a preference to use them. But there are reasons why we search for partners from outside our industry. Usually, it is the case that the needed technology is not available inside the industry or it is better in some foreign one. It could also be that we want to break the monopoly in the industry, and entering a collaboration with an “outside” company can create a new supplier.

I: What is the case when the company has the potential of bringing a radical innovation on the market?

Jaco: In that case, there is just one supplier/company in the market, so you have no choice. But in the case of the iPad, you look for a solution and that is based on a number of suppliers and each one supplies a component of the whole thing. That on itself already protects you against very high prices or even single-source collaboration, because everything is decomposed in parts that you can manage. But that does not work every time. Sometimes, it is just this one startup that has developed the sensor that solves the problem.

I: Have you experienced some challenges when cooperating with companies from the same industry and companies from a different one?

Jaco: Cooperating with companies from a foreign industry is much more difficult. If somebody proposes to collaborate with a partner who is outside the industry, the business unit will notoriously resist. Indeed, there are some communication problems. They cannot understand our language and we do not understand them. But there is another problem much more serious than the language barrier. Typically, we have seen it all when establishing some kind of a partnership with a smaller company or a startup. They think that they can supply us but after a short amount of time they realize that they do not have the capacity for that order. Either they do not have the resources for producing the amount needed, or the production process is not that advanced. So they end up overestimating their capabilities.

I: How does Shell overcome these challenges?

Jaco: By working very carefully with these companies and realizing that this problem exists. The first immediate reaction is to try and find the capabilities from "inside the family". If they can do it, then we go with them.

I: Were these collaborations successful?

Jaco: With the same-industry partners, most of them were successful. It could be that there are some which were not successful due to some commercial factors. When talking about cross-industry collaborations, we try to do them through more specialized departments and in this way mitigate the extra risk that is associated with them. There are professionals working in Shell TechWorks, who know the other industries and one mitigates the risks of not understanding the non-industry partners (overestimating or underestimating their capabilities).

There was also one case where we could not make the collaboration work, even though the other company was a very large and established on the market. The reason why it did not work out was because just two research teams were communicating. And that, of course, was not enough. When there is a partnership between two companies with so many layers, the manager of the alliance has to include people from the rest of the functions as well in order to be successful.

I: Would you say that in the collaborations that you have established/seen, one of the partners was more dominant?

Jaco: Usually, collaborations are set up in this way – the one leads and the other one follows. For the more important partnerships, Shell is in the "director" seat and takes the lead. In that sense we are more dominant. However, if Shell collaborates with a company that is smaller than it, but it owns the IP, well, in that case, the smaller company comes across as being the more dominant one. Therefore, it highly depends on the IP situation and who is in the lead.

Project: Master thesis: Cross-Industry Innovations, Hasselt University

Date and location: 9th August 2016, 17.00 pm – 17.30 pm, Skype interview

Interviewer: Iliyana Gudzheva

Interviewee: Michael Frank, AR Supplier Innovation, Adhesive Technologies, Henkel

Topic: Partner Selection Process for Supplier Innovation

Transcript 7

I: Können Sie sich kurz vorstellen und Ihre Position beschreiben? Was ist Ihre Tätigkeit bei dem Unternehmen?

Michael: Mein Name ist Michael Frank. Ich bin bei Henkel im Bereich Adhesive Technologies tätig. Diese Business Unit generiert einen Umsatz von 9 Mrd. Euro. Das ist grob 50% des Gesamtumsatzes von Henkel. In dieser Geschäftseinheit haben wir vor etwa 3 Jahren angefangen ein Programm aufzusetzen, das hieß Supplier Innovation. In diesem Programm ging es darum, dass wir mit Rohstofflieferanten (Firmen, die chemischen Rohstoffe an uns liefern) arbeiten. Sie können sich vorstellen, bei 9 Mrd. Euro Umsatz, dass wir dementsprechend die Rohstoffe in Milliardengröße einkaufen müssen und das ist für uns der Grund zu sagen – bevor wir jetzt jedes Mal auf Möglichkeiten oder auf Produktangebote von chemischen Firmen warten … Warum gehen wir nicht in einem relativ frühen Stadium auf diesen Partner zu und sagen ihm, welche Rohstoffe wir eigentlich von ihm brauchen. Für dieses Programm haben wir ein Team von 7 Leuten, das mit allen möglichen Lieferanten auf der ganzen Welt zusammen arbeitet. Das Team gehört organisatorisch zur Forschung und Entwicklung. Der Bereich „Adhesive Technologies" ist nochmal in 6 Unterbereiche untergliedert. 5 davon sind die sogenannten Strategic Business Units, also strategische Geschäftseinheiten. Das sind die Einheiten, die jeden Tag in verschiedenen Weisen mit unseren Kunden zu tun haben. Das können Kunden im Automobilbereich, im Bereich

Verpackungsklebstoffe oder im Bereich Hygiene (z. B. Windelproduktion) sein. Zu der letzten Spalte – die Corporatespalte, die bereichsübergreifend ist, gehört unser Team.

I: Was ist Innovation für Sie?

Michael: Eine Innovation für mich ist im Endeffekt etwas, wofür unsere Kunden bereit sind, Geld zu bezahlen bzw. mehr Geld zu bezahlen. Eine Innovation ist für mich nicht etwas, aufgrund dessen wir neue Patente genieren können. Das ist natürlich eine sehr strikte Definition, das weiß ich, und wahrscheinlich werden viele Leute sagen, Innovation ist etwas, was neu ist… und das stimmt. Aber da wir keine Universität sind, wo wir akademische Forschung machen, muss sich eine Innovation am Ende des Tages immer rechnen. Warum? Denn wir investieren relativ viel Geld in R&D, um neue Produkte hervorzubringen, und wenn am Ende des Tages niemand diese Produkte kauft, dann haben wir etwas falsch gemacht. Das ist dann eine Innovation vielleicht nur auf dem Papier, aber wenn die keiner kauft oder wenn die Innovation - auf Englisch würde man sagen - overengineered ist (zu viele Features hat, zu viele Eigenschaften, für die keiner bereit ist, Geld zu bezahlen), dann haben wir den Markt falsch geschätzt und nur Geld verbrannt.

I: Was halten Sie von Kooperationen mit anderen Unternehmen?

Michael: Was beobachten wir… Früher, vor 10-20 Jahren, was man in Business Schools gelernt hat – es gibt eine Value Chain. In dieser Wertschöpfungskette hat jeder einen Platz zugewiesen bekommen. Beispiel: Es gibt Firmen, die chemischen Rohstoffe herstellen, z. B. BASF; dann gibt es eine Firma wie Henkel, die aus diesen Rohstoffen Klebstoffe herstellt und dann kommt eine Firma wie Daimler, die diese Klebstoffe zum Bau eines Autos einsetzt. Und das ist die klassische Wertschöpfungskette. Das hat damals richtig gut funktioniert. Was ich aber zunehmend feststelle ist, um wirklich erfolgreich zu sein, muss man extrem viel über das wissen, was bildlich gesprochen in dieser Wertschöpfungskette links und rechts von einem stattfindet. Beispiel: BMW hat vor 1,5-2 Jahren angefangen, Elektroautos auf den Markt zu bringen – BMW i3 und BMW i8. Das Revolutionäre daran aus der Henkelsicht ist, dass sie mit Werkstoffen gebaut werden, die es früher im Automobilbau so nicht gab. Ich spreche hier insbesondere von diesen sogenannten Kompositen - Faserverbundstoffen. Und wenn Sie als Klebstofflieferant (in diesem Fall Henkel), wenn Sie nicht wissen, dass BMW plant, in den nächsten Jahren mit so einem Modell auf den Markt zu kommen, dann können Sie die Bedürfnisse von BMW nicht erfassen und wissen nicht, was der Kunde eigentlich braucht. Im umgekehrten Fall muss BMW sehr frühzeitig auf seine Lieferanten zugehen und sagen, dass die bisherig genutzten Werkstoffe nicht mehr ausreichend sind, um dieses neue Modell Auto zu bauen. Und das ist natürlich nur ein Beispiel aus der Schnittstelle zwischen einem Klebstoffhersteller und einem Automobilbauer. Dabei wird klar, dass wenn jeder nur sein eigenes Interesse berücksichtigt, also sich selbst zu optimieren, das heutzutage zu großen Schwierigkeiten führen wird. Noch ein Beispiel dafür wäre Airbus. Damals gab es extreme Verzögerungen beim Bau von Flugzeugen, dadurch entstanden, dass sie nicht frühzeitig die Lieferanten in den Prozess geholt haben und Airbus geglaubt hat, dass sie es auch allein schaffen.

I: Wie trifft ein Unternehmen die Entscheidung zur Kooperation?

Michael**:** Ich glaube, heutzutage ist weniger die Frage OB man das machen soll, sondern man sollte sich eher mit der Frage beschäftigen, WIE man das machen will. Ich glaube, es ist gar keine Option alles allein zu machen. Das ist natürlich nur meine persönliche Meinung. Und deswegen muss man frühzeitig darüber nachdenken, wenn man etwas zusammen machen will, welche Partner man dafür braucht. Das ist wichtig. Man wird nicht mit allen Partnern immer das Gleiche erreichen, d. h. man muss sich frühzeitig Gedanken machen, wer die relevanten Partner für ein Projekt sind und das kommt immer wieder auf ein paar Punkte an.

- Wer sind meine möglichen Partner?
- Wie können wir eine solche Kollaboration gestalten, so dass jeder am Ende des Tages davon profitiert?

Wenn das so klassisch läuft wie in der Vergangenheit, dass Sie einen Kunden haben, der dem Lieferanten mehr oder weniger diktiert, was er machen soll und dass es natürlich „nur 1 € kosten darf“, dann haben Sie diese klassischen Kunden-Lieferanten-Beziehungen, von denen die Automobilindustrie viele Jahrzehnte geprägt war. Meistens gewinnen davon nur die Automobilbauer, weil sie eine relativ hohe Marktmacht haben, und am Ende des Tages werden die Margen von ihren ganzen Zulieferern ruiniert. Dadurch haben die Zulieferer weniger Geld an ihren eigenen Forschungen und Entwicklungen zu arbeiten. Ein anderer Punkt hier wäre:

- Wie gehen wir mit den gemeinsamen Schutzrechten um, d. h. wenn man zusammen etwas entwickelt, wer hat welche Patente und wie dürfen diese Patente vermarkt werden, zu welchem Zweck und mit welchen Kosten? (IP, Kosten und Exklusivität)

Beispiel: Vor 15-20 Jahren (grob geschätzt) gab es bei Mercedes ein Auto, die A-Klasse. Die A-Klasse war damals ein relativ kleines, kompaktes Auto. Als Mercedes diese A-Klasse auf den Markt bringen wollte, gab es diesen sogenannten Fahrtest und die A-Klasse hat den Test nicht bestanden. Deswegen war die Markteinführung damals in Gefahr. Dann hat aber Bosch Mercedes ein sehr intelligentes Bremssystem angeboten – ABS. Die Bedingung von Bosch war damals, dass sie Mercedes bei der Markteinführung unterstützen würden, aber sie dieses System an deren Konkurrenten verkaufen dürften. Sie haben sich geeinigt, denn Daimler hat damals dieses System dringend benötigt. Im Endeffekt konnte Bosch mit dieser uralten Technologie, die keiner haben wollte, flächendeckend in den Markt gehen.

I: Also, so wie ich das verstehe, hat der Kunde ein Problem und sucht dann eine Lösung für das Problem?

Michael: Die Probleme, die die Unternehmen heutzutage haben, gehen in richtig viele Richtungen. Was jetzt hier wichtig ist, ist zu entscheiden, ob man dieses Problem eher protektionistisch zu lösen versucht, d. h. mit ganz wenigen Partnern kooperieren und es danach keinem auf dem Markt mit dieser Technologie weiterzuarbeiten ermöglicht, oder man hat einen gewissen Zeitvorsprung, aber am Ende des Tages muss man die Technologie für alle freigeben, damit jeder einen Vorteil hat und damit die Technologie als solche auf dem Markt etabliert wird.

I: Wie sieht der Partnerauswahlprozess bei Adhesive Technologies aus? Haben Sie bestimmte Voraussetzungen, die erfüllt werden müssen?

Michael: Im Grunde genommen geht es um zwei Einsätze. Nummer 1 – wir müssen intern überlegen, wofür wir überhaupt einen Partner brauchen. Zunächst muss zumindest intern die Problemstellung klar sein, d. h. nicht jede Firma, die chemische Rohstoffe herstellt, ist in

Bezug auf ein bestimmtes Problem ein guter Partner. Danach setzt man sich mit den internen Experten und mit den Einkaufspersonen zusammen und überlegt, welche Firmen für diese Problemlösung in Frage kommen. Daraufhin stellt man eine Liste mit 6-7 Firmen auf. Es wird noch eine Geheimhaltungsvereinbarung von diesen Firmen unterschrieben und im Rahmen dessen teilt man das zulösende Problem mit denen. Für AT ist es aber auch wichtig, ob der Partner eine globale Präsenz hat. Die meisten Anwendungen, die wir haben, können sich überall auf der Welt befinden, d. h. wir müssen sicherstellen, dass dieser Lieferant uns weltweit beliefern kann. Eine Checkliste ist dafür zu gebrauchen, um zu prüfen, ob der Lieferant alle Kriterien von Henkel erfüllt (bspw. keine Kinderarbeit, keine Diskriminierung, usw.).

Wenn man ein Problem hat und man nicht weiß, wie man das Problem lösen könnte, dann ist sehr entscheidend, dass man irgendwo auf dieser emotionalen Ebene ist, die man nicht mit Rechtsdokumenten abdecken kann. Man kann viele Geheimhaltungsvereinbarungen unterschreiben, aber man muss das Gefühl haben, dass die Information, die man mit dem Partner teilt, von diesem sinnvoll genutzt wird und er nicht zu der Konkurrenz geht. Wenn das Vertrauen an dieser Stelle fehlt, dann führt das dazu, dass die Sachen unklar bleiben.

I: Wer nimmt an diesem Prozess teil und wie lange dauert er?

Michael: Typischerweise nehmen die Kollegen aus dem Einkauf an diesem Prozess teil und die Kollegen aus dem Bereich R&D, die die Vorschläge machen können (z. B. wer wäre ein potentieller Partner) und die Probleme besser technisch beschreiben. Wie lange dauert dieser Prozess? Das hängt von der Problemstellung ab. Ich würde sagen mindestens 1 Monat, das kann aber auch bis zu 2-3 Monate dauern.

I: Würden Sie sagen, dass Sie bei diesem Auswahlverfahren eher strategisch vorgehen (Industrie-Screening) oder wird eine Kooperation überwiegend aufgrund vorheriger Erfahrungen mit einer Firma gegründet?

Michael: Es hängt meistens von dem Problem ab. Es wird bevorzugt, mit Partnern zusammen zu arbeiten, mit denen wir schon eine längere Geschäftsbeziehung haben. Aber, wie gesagt, es könnte sein, dass der Partner für das Problem nicht geeignet ist und dann muss man einen neuen Partner suchen.

I: Arbeiten Sie auch mit Unternehmen, die einer anderen Industrie angehörig sind?

Michael: Das hängt sehr stark von der Segmentierung ab. Die Themenfelder, die ich zu verantworten habe, gehören zu dem Großraum der chemischen Industrie. Henkel ist in der Grauzone der chemischen Industrie. Früher waren wir sicher ausgeprägter ein Chemieunternehmen, mittlerweile zählen manche auch zum Konsumgütersegment, aber grundsätzlich würde ich sagen, dass das eine Industrie ist.

Aber es gibt Projekte zwischen uns und unseren Kunden, die aus verschiedenen Industrien sind.

I: Was ich gern wissen würde ist, ob der Auswahlprozess bei Partnern aus verschiedenen Industrien der gleiche wie bei Partnern aus der gleichen Industrie ist?

Michael: Der Fall ist mir persönlich noch nie so häufig vorgekommen, aber ich würde grundsätzlich sagen, wenn ich vor dieser Fragenstellung stünde, vom Prozess her dürfte es keine Unterschiede geben. Ich denke, die Schwierigkeit besteht eher darin, dass wenn man mit einer Industrie selbst nicht viel zu tun hat, es sicher in der Anfangsphase schwieriger ist, mögliche Partner zu identifizieren. Wenn ein Kollege mit einer Problemstellung auf mich zukommt, ist sie relativ nah an dem, was wir sowieso machen – nah an den Produkten, nah an den Rohstoffen, die wir eh kaufen. Dann ergibt sich die Liste mit den potentiellen Partnern schnell. Aber wenn einer aus einer anderen Industrie auf mich mit einer Problemstellung zukäme und wir beide überhaupt nicht wüssten, mit wem wir sprechen sollen, und wir nach möglichen Partnern suchen müssten, die wahrscheinlich außerhalb unseres Industriebereichs sind, dann kostet das mehr Zeit und der Scoutingprozess ist eher ein anderer. Aber der Prozess danach – wie man die Patente usw. teilt – wäre für mich identisch.

I: Haben Sie Schwierigkeiten bei der Kooperation mit einem Partner aus der gleichen Industrie gehabt?

Michael: Regelmäßig. Das Problem ist immer das gleiche. Wir reden immer noch über Kapitalismus. Jeder versucht möglichst viel Geld und Gewinn aus diesen Partnerschaften rauszuziehen.

I: Und wieso gibt es diese Unstimmigkeiten? Ist das nicht in dem Vertrag vereinbart?

Michael: Ich nehme ein Beispiel aus dem realen Leben. Wenn ich mich entscheide zu heiraten, dann kann ich mich entscheiden, diesen Vertrag zu haben. Jeder weiß, dass es einen Ehevertrag gibt, aber was drin steht ist richtig unterschiedlich in den verschiedenen Situationen. Klar, es gibt Eheverträge, aber wie sie gestaltet sind, hängt von den Partnern ab.

I: Und wenn Sie an eine Kooperation mit Partnern aus verschiedenen Industrien denken, denken Sie, dass da manchmal auch Probleme auftauchen werden?

Michael: Ich denke nicht, dass das von der Industrie abhängt, sondern von der Größe. Aus meiner Erfahrung, wenn Sie relativ gleichgroße Partner haben (im Sinne von Umsatz), dann werden solche Gespräche auf Augenhöhe geführt. Der andere Aspekt ist wie gravierend das Problem ist. Unser Beispiel von vorhin – die A-Klasse. Hätte Daimler nicht eine Lösung mit Bosch gefunden, hätte Daimler nicht die A-Klasse in den Markt einführen können. Das hätte einen Riesenschaden zur Folge gehabt und hätte auch einen gewissen Imageschaden verursacht. Und wenn eine sehr große Firma (ein Milliardenkonzern) mit einer kleinen Firma kooperiert, die nur 100 Mio. oder 10 Mio. Umsatz macht, dann wird die Vertragsverhandlung anders laufen, als wenn groß mit groß kooperiert.

I: Denken Sie, dass Vertrauen wichtig ist?

Michael: Ich würde sagen nein, wenn ein Vertrag unterschrieben ist. Verträge werden immer so gestaltet, dass man vom Worst-Case-Szenario ausgeht. Juristen neigen dazu, wenn sie Verträge gestalten, immer von dem Worst-Case-Szenario auszugehen. Wenn sie unterschrieben sind und die Kooperation läuft, dann bin ich bei Ihnen. Dann, glaube ich, ein Projekt erfolgreich zu gestalten, würde sehr stark vom Vertrauen abhängen. Aber in einer Kontraktphase spielt das Vertrauen nicht mehr die Rolle wie früher der Fall war und vor allem müssen Sie immer bedenken, dass heutzutage viele unterschiedliche Parteien einen Vertrag schließen und keine der Firma gehört.

I: Waren diese Kollaborationen erfolgreich? Wenn nein, was ist schief gelaufen? Was könnte man besser machen?

Michael: Öfters scheitern die Kooperationen, denn ich glaube, dass sie sich ganz am Anfang nicht lange darüber unterhalten haben, was genau die eine Seite von der anderen will. Die Problemstellung und die mögliche Lösung sind von Anfang an nicht gut genug definiert.

B. Interview Guide

General Questions

No.	General Questions
1.	Could you please shortly introduce yourself and describe your position and responsibilities within your company?
2.	What are your thoughts on innovation?
3.	Is innovation important for your company? How is innovation being handled? (Team, Department, as another entity?)
4.	Are you familiar with the term cross-industry innovation?
5.	What are your thoughts on collaboration with other companies in the market?
6.	Has your company already participated in an alliance?
7.	When did your company first enter a collaboration and with whom?
8.	What type of collaborations has your company done so far?
9.	How many partners does your company co-operate with today?
10.	Have you considered choosing a partner from a distant industry?
	Main Questions
11.	How do you make a decision to collaborate?
12.	What aims does your company have when entering collaborations?
13.	Have these aims changed over time?
14.	What competitive advantage does your company expect to achieve through collaborating?
15.	How do you search for partners?
16.	Could you please describe the process of partner selection at your company?
17.	Who is involved in this process? How long does it take?

18.	Is your company planning the co-operations strategically (Industry screening) or are these based on previous experience with companies (personal contacts/preferences)?
19.	How do you evaluate the capabilities of the potential partners? What are the crucial criteria for the perfect partner? Can you order it according to relevance if 1 is being the least important and 10 the most important one? What are the criteria that will be a deal-breaker?
20.	Is this process based on a previously established “criteria framework”?
21.	Do you use the same criteria for choosing a partner from a distant industry? If, no – which points are different?
22.	Have you experienced some kind of difficulties when co-operating with an intra-industry partner? Are those the same as when co-operating with an inter-industry partner? Can you give some examples?
23.	Is trust important for an intra-industry partnership? And for an inter-industry partnership? How do you create sufficient levels of trust between partners operating in the same industry and those operating in different industries?
24.	Were these collaborations successful? If, not, why do you think they failed? What could you have done better?
25.	Were the partnerships balanced or was there a party that clearly dominated the partnership? How did you control the situation? Again – is there a difference when the partner is from a distant industry?

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Gudzheva, Iliyana

Datum: **22/08/2016**