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# STRATEGIC BUSINESS PARTNERSHIPS IN THE CONSUMER TECHNOLOGY INDUSTRY

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# Strategic Business Partnerships in the Consumer Technology Industry

A Case Study on Partner Selection Criteria and Their Influence on the Outcome of Value Constellations

**MASTER THESIS** 

by

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### **ABSTRACT**

**Title:** Strategic Business Partnerships in the Consumer Technology Industry - A Case Study on Partner Selection Criteria and their Influence on the Outcome of Value Constellations

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**Keywords:** Inter-organizational relationships; Inter-organizational collaboration; Value constellations; Partnerships; Consumer technology industry; Measures to enhance collaboration; Partner selection criteria; Collaboration influences; Competitive advantage

**Thesis purpose:** To identify relevant criteria underlying the partner selection process in a leading company in the consumer technology industry, as well as to subsequently analyse the influences which those criteria have on overall outcome. The intention is to draw valid implications for future research as well as for actors in similar market environments.

**Methodology:** The researchers of this paper have chosen to conduct exploratory research within the particular case company. An interpretivist epistemological position has been selected by orienting the emphasis on understanding the social world by specifically analysing participants in that world. A qualitative approach was chosen so that individual's opinions, thoughts, perspectives and expressions can provide insight into this world so that findings can inductively establish justifiable theory. The focus is to assimilate reliability and validity into the qualitative research with little change of meaning other than playing down the salience of measurement issue. A highly interactive process was used as it would provide the researchers with an idyllic tool with which the necessary data can be accumulated.

**Theoretical perspectives:** The main theories are based on previous literature of collaborative concepts, value constellations and business partnerships. This research study investigates important partner selection criteria in value constellations and discusses how these influence the outcome of such initiatives in the consumer technology industry. The chosen case company is seen as a good setting to examine the phenomena as it is one of the first companies to anticipate different expectations between business and private customers.

**Conclusions:** This study contributed to a framework explaining the competitive advantages of value constellations. Namely ten key partner selection criteria and ten respective influences were empirically discovered in the focal company. Seven of these criteria were found to clearly correspond with the underlying theoretical framework of this thesis, whereas three criteria were not explicitly referred to as key criteria in standard literature, although their importance for the case company was found to be significantly high.

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Lukas and John

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### 1. Introduction

### 1.1 Background

Highly turbulent external environments are forcing top managers to rethink literally every aspect of organizational life (Kuratko, 2011). Conventional management practices have simply run their course and therefore an entirely new model of management is needed in companies (Hamel, 2007). Some companies focus only on defending themselves against threats, whereas others understand that threats can present opportunities (Kuratko, 2011). Foreign competition has also made it harder for firms to continuously innovate and produce a variety of new products and services. Another way to visualize this changing landscape is the perspective of strategic inflection, denoting that point when the balance of forces shifts from the old way of doing business and the old ways of competing to the new (Grove, 1996). The guest for competitive advantage requires companies and the managers within them to continually reinvent themselves (Kuratko, 2011). Especially the internationalization of markets has made it more challenging for firms to be competitively advantageous if they simply use their own internal resources - due to assumed inefficiencies when competing on price, but especially on the speed of innovation (Ganotakisa et. al, 2012).

The before-mentioned aspects demonstrate an urge for future-directed companies to establish sustainable competitive advantages. Companies must be more adaptable and flexible, by being faster and more aggressive, hence generating higher rates of innovation in comparison to other companies and therefore satisfy and deliver a higher level of value to customers (Anderson, 2006). By developing new products and innovating processes companies protect their margins, as either additional revenue can be generated (a more effective market approach) or operating costs are reduced for a given output (a more efficient market approach).

A major development to speed up the pace of innovation over the past decade have been rapid transformations in information technology. Companies on top of many such aspects, innovation champions in their field, are even able to grow their margins and market position, by increasing both effectiveness and efficiency (Schilling, 2013).

Leading edge companies find new ways to optimize operations by considering techniques that will redefine the future. With shorter product life cycles and speed being of the essence, companies frequently face hard choices regarding the scope of activities to perform in-house and whether to perform them alone as a solo venture or to perform them collaboratively with one or more partners. In an aim to achieve more, at a faster rate and ideally even at less cost than when working on their own, companies are today joining forces and engaging in inter-organizational partnerships (Schilling, 2013).

There is particular recognition on the significance that collaboration can have on innovation (Schleimer/Shulman, 2011). This mutually beneficial alliance provides a larger pool of knowledge, which in return enhances product innovation. Annique Un et al. (2010) found that firms benefited from the ease of knowledge access rather than the breadth of knowledge that was required for product innovation through collaboration.

According to Roxana et al. (2013), another way to look at innovation is also to consider the aspect of differentiating oneself from the competition. One aspect that can encourage this necessity in today's unstable and turbulent markets is to offer personalized services and become more customer oriented (Roxana et. al, 2013). In doing so, firms can generate more customer loyalty by satisfying customer needs better than other industry incumbents. This in return can lead to a sustainable competitive advantage (Kuratko, 2011).

Overall, firms can quickly access the resources they require without having to develop the desired input on their own or spend large amounts on acquiring a partner. Firms can differentiate themselves through customer-oriented approaches. This in turn allows them to enhance their innovativeness and competitiveness, which creates more value to the end consumers, which can lead to a sustainable competitive advantage.

#### 1.2 Problem Discussion

Various fields of application for business partnerships have been researched by a large number of authors (Dacin et al., 2009; Ulijn et al., 2010; Schilling, 2011; Hill et al.; 2014), especially aimed at improving company offerings or overall competitive positions. Existing literature on collaborative innovation has highlighted reasons and advantages associated with corporate partnerships, but also emphasized challenges of successfully creating and commercializing technology together (Joglekar et al., 2001; Shane/Ulrich, 2004).

Research shows that firms must selectively choose partners, by analysing cognitive distance, depth, scope or absorptive capacity and follow specific constructs that will enhance their innovativeness, rather than remaining solo (Schilling, 2013; Hora/Dutta, 2011; Egbetokun/Savin, 2014; Nooteboom et al, 2005). Other scholars have emphasized the importance of performing a right set of collaborative activities (Bendell, 2011), finding a proper structure (Hill et. al, 2014; Hill/Jones; 2013) and deciding upon an appropriate level of integration (Ulijin et al., 2010). In this regard, value constellations were referred to as competitive constructs of companies that govern a shared set of resources to develop and commercialize new products or services, aimed at delivering customer value and maximizing transaction yield for each partner (Normann/Ramirez, 1993; Vanhaverbeeke/Cloodt, 2006; Gomes-Casseres, 2003).

In turn, Schleimer/Shulman (2011) emphasized the importance of different traits and collaborative attributes in relation to the purpose of a collaboration, whereas authors such as Hill/Jones (2012) and Nooteboom (2004) focused research on the impact of giving too much control to a partner and the outcome of undeliberate partner selection. Lastly, authors such as Sanches and Mahoney (1996) or Davis and Eisenhardt (2011) have studied mechanisms, processes and constructs that make already established partnerships easier to manage and also enhance their effectiveness.

Despite these research undertakings, Amit and Zott (2001), Gomes-Casseres (2003), as well as Vanhaverbeke and Cloodt (2006) all concluded that still a framework explaining the competitive advantages of value constellations is necessary.

In this regard, also Dacin et al. (2009, p. 13) concluded that "only relatively little attention has been devoted to the process by which partners are selected". Therefore, the aspect of partner selection is seen by the authors of this thesis as one of the missing step stones towards a holistic value constellation framework.

### 1.3 Research Question

The key aim of this paper is to contribute to the missing element in the current theory by providing further insight into how current collaborative concepts can be aligned with the teachings on value creation and constellation partnerships.

As the authors of this paper were undertaking an internship in a consumer technology company, they have opted to research the situation in that industry.

For establishing the research question, the authors followed suggestions by Bryman and Bell (2011): After gaining a first understanding of the situation at the host company, the research environment was compared to existing theory.

Through iterating between empirical and theoretical data, the research scope was continuously narrowed down - from partner selection in value constellations as a general research area towards the question:

"What are important partner selection criteria in value constellations and how do these influence the outcome of such initiatives in the consumer technology industry?"

### 1.4 Purpose

According to Bromley (1990, p. 302), case study research can be understood as a "systematic inquiry into an event or a set of related events which aims to describe and explain the phenomenon of interest".

In this regard, the case company Safetech<sup>1</sup> can be seen as a good setting to examine the phenomena of partner selection criteria and their influences for value constellations in the consumer technology industry.

This is because on the one hand, Safetech is a company with over 20 years experience in security-related technology, but on the other hand it was one of the first companies to anticipate very different expectations between business and private customers. Since then, the firm has shifted its focus towards dedicated offers to private clients and its visionary top-management, combined with a strong R&D-orientation, led it into a leading market position throughout continental Europe. And since a couple of years, Safetech is now increasingly focusing on creating a strong network of complementary business partners.

Identifying relevant criteria underlying the selection process in this leading company, as well as subsequently analysing the influence of those criteria for the overall outcome (e.g in the sense of increased customer value or a stronger market position), therefore will likely allow to also draw valid implications for other actors in this market.

Besides contributing to the before-mentioned academic quest towards a comprehensive value constellation framework, an answer to the stated research question will therefore provide reliable guidance to companies in the consumer tech industry that seek to enhance their offerings and position solutions in the market with the help of strategic partners. The findings generated in this thesis can further serve investors backing such partnerships to gain a better understanding of the situation, and they can support employees working with such partnerships to overcome obstacles.

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<sup>&</sup>lt;sup>1</sup> As agreed with interview respondents, the company's actual name is not disclosed in this thesis.

### 1.5 Key Concepts and Structure of the Thesis

In accordance to the research question and its purpose, the authors defined a set of key concepts which need to be understood in detail before collecting empirical data on the topic and establishing justified conclusions.

#### The selected key concepts are:

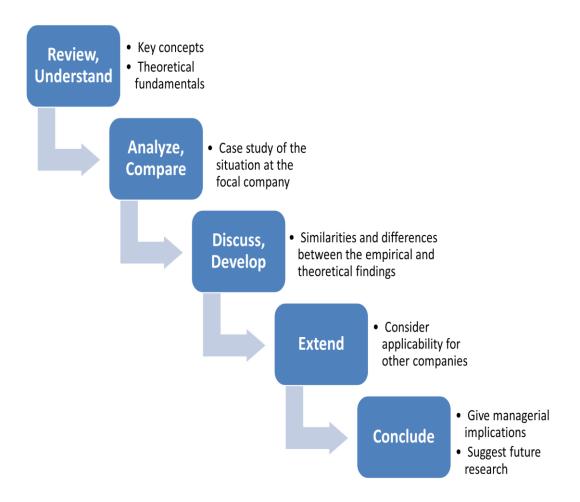
- 1) Inter-Organizational Relationships
  - o Forms of Inter-Organizational Collaboration
  - Fields of Application for Inter-Organizational Collaboration
  - Measures to Enhance a Collaboration Once Initiated
- 2) Value Constellations
- 3) Partner Selection Criteria

About 20 years ago, the term *constellation* was used to describe a group of companies that captured value at different points along the value chain (Porter, 1985; Twitchell et al., 2013). But as advancements in technology allowed collaboration to take place at faster pace and with broader scope, idea of value constellations became increasingly applied also to business model design. Today, according to Twitchell et al. (2013, p.1), the persuasive power of value constellations lies in "its expansive view of an idea's potential. Value constellations take a commercial idea beyond the binary buyer-seller value chain to more complex, symbiotic transactional webs among multiple participants, each of which may create and consume value."

But despite such significant possibilities in value constellations, studies show that over 50 percent of collaborative undertakings do not yield the anticipated outcomes or even entirely fail (Barrett, 2010). While alliances may of course fail for a variety of reasons, partner selection was concluded to be "a key factor influencing their performance" (Overby, 2005, p.23). And also Twardy-Duisters (2009, p.3) confirms that "partner selection is one of the most critical alliance capabilities in the establishment of alliances".

After this brief introduction, literature on those topics will be presented and discussed in detail in the following chapter in the form of a literature review.

In line with this, the graphic below illustrates the overall research process and structure of this thesis.



Graphic 1: Research Process and Structure of the Thesis

### 2. Literature Review

### 2.1 General Overview of Inter-Organizational Collaboration

According to Dacin et al. (2009, p. 6), there appears to be no industry in which *inter-organizational collaboration and strategic alliances* "have not been employed as a means of implementing an organization's strategic objectives."

A survey carried out as part of the 2005 World Economic Forum showed that over 90 percent of corporate executives saw *partnerships among organizations* as an important measure to solve key tasks in business and society (Bendell, 2011). It is estimated that more than half of the total Fortune 1000 revenue results from "collaborative activities", such as alliances, co-manufacturing, joint marketing and sales. At the same time, costs can be reduced and efficiency increased by *partnering with specialized outsourcing firms* that take control over formerly internal business activities (Gibbs, 2009, p. 15).

### 2.1.1 Inter-Organizational Collaboration Defined

Besides describing their practical relevance, the previous paragraph shows that terminology around inter-organizational relationships overlaps to a large extent. Terms such as alliances, collaboration, partnerships, networks or constellations are often used to describe one and the same thing, although specific literature on the topic aims to distinguish clearly between such descriptions (Cropper et al, 2008). To avoid misinterpretations in the research carried out in this thesis, the most relevant terms need to be briefly defined and distinguished.

A general definition of partnership is "the state of being a partner", which means to be closely involved with another person or organization in some way. Following the suggestions by Bendell (2011, p. 14), in this thesis an inter-organizational partnership shall be understood as "an arrangement between two or more separate organizations." These partners "collaborate", by pursuing "a common activity or interest where risks and benefits are shared."

#### 2.1.2 Types of Business Partnerships and Collaboration

Partnerships may involve formal, legally binding contracts and financial exchange, but they can also be purely informal, voluntary arrangements among two or more firms. Often, partnering companies perform different activities, which can together serve a common interest. But also can organizations work together and perform a common set of activities for different interest (Bendell, 2011).

Influenced largely by the extent to which financial resources are invested into a partnership, the continuum of collaboration can range from loosely coupled, through moderately coupled until tightly coupled relationships (Wallace, 2004). Examples for loosely coupled collaborative partnerships are co-marketing initiatives or sector alliances. Moderately coupled collaboration exists for instance when companies share their sourcing or distribution channels for a larger time frame. Investment of funds (e.g. by acquiring shares) in a partnering firm or the set-up of a new legal entity are common characteristics of tightly coupled partnerships (Wallace, 2004).

#### Value Constellations

As shortly introduced in the previous chapter, constellations are present when a bundle of firms' capabilities are governed closely together (Powel, 1990). These constellations can compete against individual firms or against other constellations. If one single firm is competing against a constellation, this firm very likely has similar or even more required capabilities in-house than the members of the constellation have together (Gomes-Casseres, 2003). These business constellations create value for a target customer group by implementing a business model which translates technological developments into new, commercially viable products (Vanhaverbeke/Cloodt, 2006).

Both the value system (Porter, 1985) and the value constellation concept are focused on delivering value for targeted customers. In the traditional way, one firm controls and owns resources through internal structures. In constellations, the resources of all members are governed by the way the group is structured and managed – and therefore also their effectiveness is highly subject to this structure. This relates closely to the relational of the firm (Dyer/Singh, 1998) and to the concept of maximizing transaction value (Dyer, 1997).

#### Joint Ventures

In a joint venture, two ore more independent organizations set up a new business with a clearly defined purpose – in order to achieve a specific outcome that they could not have been achieved by any of the firms alone (Wallace, 2004). Normally, this new joint business undertaking is brought into a new legal entity, into which the partners invest human and financial resources (Ulijin et al. 2010,). Based on the level of such investments, paired with the strategic outlook for each partner, the equity share of each firm in the Joint Venture is negotiated/determined (Hill et al., 2014).

#### Strategic Alliances

Strategic Alliances are "long-term agreements between two or more companies to jointly develop new products or processes that benefit all companies which are part of the agreement" (Hill/Jones 2013, p. 324). The difference to joint ventures is that each participating company remains independent. As all partners want to fulfill a similar vision, in most cases not even a contract is signed to commence an alliance (Nottonson, 2007). However, in some cases the involved partners purchase shares in one another, in order to tie the alliance closer together (Ulijin et al. 2010). Strategic alliances can substitute vertical and horizontal integration, as a relatively stable partnership allows the involved companies to achieve the same types of benefits. At the same time, as the partners stay independent, less management efforts are required to tie all components closely together. However, a firm's own influence on its partner's strategy and operations is thus also very limited – which can pose a potential risk to fulfill one's own strategic objectives (Hill/Jones 2013).

#### Co-Opetition

Co-opetition is a spin on joint venturing and business alliances, especially coined by Brandenburger and Nalebuff. According to these authors, co-opetition takes place when a business cooperates with direct competitors for mutual gain, as they acknowledge that they can create a much larger and more valuable market together than they ever could by working individually. The market itself does not get fragmented this way,

making it easier to approach. The co-opeting firms then aim to capture a share of this market through their individual value propositions (Brandenburger/Nalebuff, 1996).

Other forms of partnerships are for example exporting partnerships, licensing and franchising (Hill/Jones, 2013). However, as those are not relevant for the case company, they are also not further considered here.

#### 2.1.3 Fields of Application and Partnership Benefits

After having discussed various forms of inter-organizational collaboration under the last heading, this subchapter introduces some of the most important business areas to which partnerships apply.

#### Entering New Markets or Improving an Existing Market Position

According to a study by The Economist (1999), entering non-domestic markets was the main reason for focal companies to establish strategic alliances. This is especially the case when partnering with a local firm is a mandatory legal requirement set by a foreign government (Kale/Anand, 2006). For example in India, foreign entities are not allowed to have a majority stake in a local company and every ownership share of more than 24 percent in Indian companies requires government approval (Ulijn et al. 2010). Also in China, having a new business approved and successfully maintained was found much less challenging for Western companies if they had teamed up with a local Chinese partner (Hill et al, 2014).

In the service industry, for example in law firms, advertising agencies or management consultancies, alliances are often formed to extend the range of services offered and to gain access to new markets (Dacin et al., 2009). In other cases, different companies have jointly acquired a larger firm and then split up the target's business units among each other to improve their own competitive position in this sector. Without a collaborative bid, the target firm would have been too expensive and/or not attractive for any of the partnering firms (e.g. RBS, Banco Santander and Fortis together acquired the struggling Dutch Competitor ABN Amro) (Ulijn et al., 2010).

While such partnership are mostly limited to a single transaction, for example in the airline industry, collaboration has allowed companies to gain access to their partner's customers while at the same time enhancing their own offering (Ulijn et al. 2010): Since the 1980s airliners from all over the world have grouped into strategic alliances in a move to increase utilization of their existing flights, but at the same time being able to offer their customers more destinations

#### Inter-Organizational Learning

Senge (1990, p. 13) defines organizational learning as "a continuous testing of experience and its transformation into knowledge available to the whole organization and relevant to their mission." According to Schilling (2011), learning is an important factor in collaborative partnerships. Transferring knowledge between firms can generate new knowledge that individual firms could not have created on their own. Other authors even take the position that ability and commitment to learn decides which partner benefits the most from an alliance. Hill et al. (2014) therefore conclude that from a long-term perspective, more emphasis should be placed on learning and knowledge transfer than on pure cost-sharing or risk-sharing objectives. Related to the just discussed aspect of entering new markets, local partners often have a far better understanding of an appropriate product portfolio, proper store sites or of suitable marketing strategies than foreign entrants (Ulijn et al. 2010).

#### Raising Efficiency, Reducing Costs and Sharing Risks

In many industries the main reasons for partnering up are to establish cost cutting objectives, to increase quality, and to reduce the time to bring new products or services to market (Dacin et al., 2009). Schilling (2011) also acknowledges cutting costs and shared risk as a key factor for collaboration among firms, especially when a project is expensive and highly uncertain. Sharing R&D or production facilities with partners reduces the firm's asset commitments and therefore enhances its flexibility. This view again corresponds with research by Dacin et al. (2009), who found that R&D partnerships are mainly driven by a desire to share the risk and limit the negative impact of failure. Examples could be the costly, lengthy and highly uncertain

development of fuel cell technology for cars or the development of the world's largest airplane, the Airbus A380: Total R&D costs for the A380 are estimated to have totaled €12 billion: "Even if a single company could finance such an amount, it would put it at too much risk." (Ulijn et al. 2010, p.206).

#### Obtaining Critical Resources

Collaboration is often chosen in an attempt to obtain access to critical resources. Based on Schilling (2011), scarce resources can include necessary capabilities from a partnering firm. In rapidly changing technological markets, where innovation is the primary driver, this aspect is crucial as it allows a firm to rapidly gain access to specialized resource.

As an example, Microsoft and Nokia formed an alliance in 2011 that focused on developing and marketing smartphones. While Nokia had a competitive advantage in phone design, hardware engineering and marketing, Microsoft was excellent in programming operating systems. Together, the partners were able to bring to market a mutual product already about one year later (Hill et al. 2014). In 2013, integration among the two companies then went even further, with Microsoft purchasing Nokia's entire mobile phone segment (Cellan-Jones, 2013).

#### Tackling Competition

Eisenhardt and Schoonhaven (1996, p. 138) have empirically found that alliances are often formed when one or more partners are in a "vulnerable strategic position." Also Dacin et al. (2009) found that forming competitive alliances provides small(er) companies with a viable opportunity to develop a counterpart to tackle the bigger and stronger merged firms.

Other authors, such as Gupta et al. (2007) and Menor/Roth (2007), put more emphasis on collaboration-driven innovation as a means to keep competitors at a distance. This view is also confirmed by Davis and Eisenhardt (2011), who emphasized innovation as an opportunity to generate value for themselves, outperform competition and other market incumbents.

#### Improving Customer Value

Related to this value aspect of collaboration, in value constellations not the individual companies compete on time, attention and money of customers, but different offerings and services compete (Vanhaverbeke/Cloodt, 2006). By aligning the strategic objectives of different firms in such a way, it is argued that "value appropriation can no longer be analysed in terms of the negotiation power of individual firms, as too much fighting among the participants for a share of the pie reduces the volume of the pie" (Vanhaverbeke/Cloodt, 2006, p.3). Therefore, in the most successful value constellations, focus is on creating maximum value creation (i.e. creating a larger pie) for the customer, as well as for all participating firms (Cao/Zhang, 2013).

### <u>Development of Products & Services and Enforcing a Standard</u>

In technology markets, ensuring cooperation with partnering firms can be important in the commercialization process and ensure that products are compatible and complementary to one another (Dacin et al., 2009). This applies especially for extremely extensive projects, such as development of the Airbus A380, which comprised of so many high tech parts that no firm alone could manufacture it. In the case of Sony and Philips, collaboration facilitated the establishment of a new, worldwide, industry standard. Both companies heavily marketed jointly their Blu-ray technology for storing High Definition video and thus were able to convince major film producers to choose their format over Toshiba's HD-DVD technology (Ulijn et al., 2010).

#### **Drawbacks of Collaboration**

However, despite all these discussed potential benefits, also the drawbacks of collaboration have to be taken into account. A key aspect here is that companies are giving away technological knowhow and market access towards alliance partners, without getting much in return.

Especially when a technologically advanced company has only a share of less than 51 percent, control of not only the technology, but also over the subsidiary overall is at risk (Hill/Jones, 2012). — This can result directly in resource and financial losses and indirectly in hold-up problems and other negative psychological or social issues. If worse comes to worse, a company's overall market position and business strategy can therefore be weakened significantly through improper partnering (Nooteboom, 2004).

For these reasons, companies seeking to engage in inter-organizational partnerships need to prepare themselves well. Key aspects of preparation are therefore explained in subchapter 2.2, followed in subchapter 2.3 by measures for effective governance and performance evaluation.

### 2.2 Aspects to Consider Prior to Collaborating for Value Creation

This chapter so far has discussed in broad the different types of partnership efforts that corporations can make and more specifically the precise advantages and benefits that collaboration can have on firms. The next step is to discuss more in depth the important ways in which corporations can effectively establish themselves prior to collaborating for value creation and in addition key strategic aspects that will ensure more success for involved entities.

Important factors that are taken into consideration are both external and internal influences that will prepare the corporation accordingly. This section directly discusses what protocols and elements firms must establish and be aware of before the contracts are signed and a formal mutual agreement of a partnership is formed.

### 2.2.1 Necessary Facilitators of Value Creation

#### Corporate Strategy

According to Normann and Ramirez (1993), corporate strategy defines ways for companies to link together their most critical resources: knowledge and relationships – or more specifically, organizations' competencies and their customers. But in times of fast-changing (competitive) environments, also the fundamental logic of value creation is changing, and making strategic planning more difficult.

The authors argue that through such volatile environments, also Porter's (1985) traditional perspective of the value chain is overhauled: Rather than having companies performing the right value-adding activities, to offer the right products, to serve the right market segment, also strategy must no longer be concerned with positioning a fixed set of activities along a value chain. This means that "increasingly, successful companies do not just add value; they reinvent it." (Normann/Ramirez, 1993, p.65).

Corporate strategy must thus redirect its focus towards analysing an entire value creating system, which includes a variety of actors, such as suppliers, customers, business partners etc., instead of just adjusting company-internal processes to changes in the industry environment.

By shaping and re-configuring roles and relationships among the collaborating parties of the value creating system, value creation can take entirely new forms. Overall, if value creation is performed in collaboration with other firms or the customer, this is defined as value co-creation.

Authors such as Vargo and Lusch (2006, p.44) even go as far as saying that firms cannot deliver value, but "only offer value propositions." This statement is derived from the perspective that the customer is always a co-creator of value, as there is no value until an offering is used. However, later research discussing this matter (Grönroos/Voima, 2011, p.20), concluded that firms are "not restricted to making value propositions only [but have] an opportunity to directly and actively influence customer's value creation as well." Therefore, firms must establish a strategy and focus on which to base their partner selection.

#### Structure, Capabilities and the Environment

Besides the just mentioned collaboration strategy and the partners themselves, success of such a value alliances lies also the structure of the constellation, the firm's own capabilities, as well as the actions of rival constellations (Gomes-Casseres, 2003).

Often, one central firm initiates the value constellation, for example as it envisions a platform and then signs contractual agreements with other firms to realize the idea. Some scholars (e.g. lansiti and Levien, 2004) even go as far as saying that both value creation and value capturing can only be realized if a central company orchestrates and manages the value constellation.

It was also concluded that to maintain a winning offering, value constellation managers should not only produce and service their systems, but also provide financial, legal, managerial and technical engineering that ensures smooth operations (Normann/Ramirez, 1993). For many cases, such as in the field of agricultural biotechnology, this view was more recently confirmed again (Vanhaverbeke/Cloodt, 2006): The Central orchestrators of the value constellations were found to be mostly large corporations with large financial resources, as acquiring and maintaining the necessary tangible and intangible assets is a very costly undertaking.

A quantitative study carried out by Stuart (2000) discovered that the most important factor for innovation in alliances was not the number of alliances a firm participated in, but the resource profile of its partners. Innovation as well as sales rates were improving far better for firms that partnered with technologically innovative and revenue rich partners than for others. In this regard, Chesbrough and Rosenbloom (2002) argued that establishing a value network to market new technology together with partners shapes the role of each involved party in influencing the value captured from commercializing an innovation.

#### 2.2.2 Partner Selection Criteria

Having introduced facilitators of value creation as factors under a given firm's own influence, the following section will introduce and discuss the most relevant "hard" partner criteria – characteristics of a partner on which another firm does not have direct influence: Capabilities and actions of (potential) partners (Gomes-Casseres, 2003).

#### Collaborative Attributes and Activities

Meyer and DeTore (2001) question the reasons behind the elaborative product-related literature and suggest that in today's economy focus should be oriented towards more service-oriented research. Literature by Schleimer and Shulman (2011) evaluates the similarities and differences between service developments and product innovations by considering value adding activities and attributes that can be achieved in both constructs. The extensive focus of these two authors is to understand deeper the role collaboration plays for innovation by analysing both new service development (NSD) and new product development (NPD) mechanisms.

At times, intra-firm collaborations may not have the desired beneficial consequences that are targeted (Janis, 2004). There are circumstances where remaining solo does not have the desired effect that the firms is aiming for (Schilling, 2013). As a result, firms collaborate to achieve their desired outcome. Schleimer and Shulman (2011) analysed separately collaborative attributes and collaborative activities. Collaborative

attributes reflect the extent of joint activities by the involved parties (Hoegl et al., 2004). In short, this refers to the actual behaviors of the involved partners. Collaborative activities on the other hand refer to the actual activities that the involved partners perform. Schleimer and Shulman (2011, p. 827) state that "in any collaboration, whether within a firm or between firms, it is assumed that both groups of collaborative activity attributes co-exist and that either one by itself is insufficient to explain collaboration."

Interestingly, the findings that are established from the Schleimer and Shulman (2011) article represent interesting suggestions. Collaborative attributes such as trust and relationship commitment have no direct impact on the performance of a new product development. On that note, when looking to establish collaboration for new product development it is more important for firms to focus on collaborative activities than on attributes such as mutual trust and commitment.

On the other hand, findings in the article demonstrate that when establishing a partnership for new service development mutual trust and commitment plays a major role on the inter-firm success. Contrary to the NPD findings, collaborative activities play little to no role in the success of implementing a NSD. Suggestions to define this construct are down to the fact that partnering with outsiders is more likely to bring in the requisite variety of skills and knowledge which is required in such in the service industry, as there is more emphasis on physical resources (Schleimer/Shulman, 2011).

In summary, each concept represents a distinct dimension which companies need to be aware of and attuned to, necessary attributes and activities that their potential collaboration partner should posses. Often, key elements can be dismissed simply due to the role of the collaboration and the end goal that is aimed to be achieved.

#### **Absorptive Capacity**

Lane and Lubatkin (1998) confirmed in a number of studies that an important characteristic of a good strategic partner is its ability to teach and to learn. The concept of relative absorptive capacity which they developed was grounded in similar methods between partners to conduct research and process knowledge, but also a considerate level of similarity when it comes to organizational structures, management styles and overall business objectives. A study by Schoenmakers and Duysters (2006) concluded that organizational learning between partners works much better when the ties between the companies are weak. However, if organizational ties are not strong, a trusted relationship is even more important. Additionally, learning curve effects in searching for partners were identified in firms that already gained experiences in alliances in years before.

According to Egbetokun and Savin (2014, p.399), absorptive capacity of firms "develops as an outcome of the interaction between absorptive R&D and cognitive distance from voluntary and involuntary knowledge spillovers." These two authors provide a rendition of the work by Cohen and Levinthal (1989) who stated that the absorptive capacity concept originated from the observation that R&D investments not only create new inventions for a firm but also improve its ability to internalize knowledge from external sources. On that note, in terms of a firm's absorptive capacity, the firm can also develop through intra-departmental personnel rotation by assigning technical specialist to other functions within the firm for several years (Levinthal/Cohen, 1990).

Findings by Egebetokun and Savin (2014, p.399) demonstrate that "the cognitive distance between a firm and its cooperation partner has an ambiguous effect on the profit generated by the firms". Thus, a firm chooses its cooperation partner conditional to the investments in absorptive capacity it is willing to make, in order to solve the understandability and innovation trade-off." In addition it was found that, "firms possessing a larger R&D budget have the possibility to engage in cooperation with firms located further away in terms of cognitive distance. If the partner is too close or too far, no efficient collaboration can be established." This refers to the issue that the more non-similarity should be considered, as this will directly increase innovation (Hora/Dutta, 2013, p.1397).

The newly adapted model by Egbetokun and Savin (2014) explains that firms must be aware of the issue that a larger absorptive capacity of a partnership firm can directly affect the level of spillover that can be assimilated. This spillover can have risky consequences as it can result in more knowledge being offered to the partnership firm, which can result in a take over and out competition within that market. As an understanding, firms must be fully aware of a partner's potential absorptive capacity. Awareness will enrich the relationships in collaborative networks and enhance product innovation performance. In addition it also explains why some firms achieve better product innovation performance than other firms under the same level of collaboration, with different types of partners.

#### Cognitive Distance

As just briefly mentioned under *absorptive capacity*, alliance researchers concluded that the selection of a development partner is critical with regard to the distance between their knowledge bases (Schulz/Brojerdi, 2012), but also between their "basic perceptions, values [and] organizational focus" (Nooteboom et al., 2005, p.3).

Scholars of this research stream postulate and find support for a moderate distance, for example an inverted U-shaped relationship as being most beneficial for collaborative innovation (Liyanage/Barnard, 2003). Therefore, firms must be aware that too much cognitive distance between the firms will no longer be beneficial. Simple identification of the key elements and possible collaborative factors will implement useful resources and attributes that will lead to enhanced product or service development. Too much cognitive distance will result in no profitability and little mutual partnership progression (Schulz/Brojerdi, 2012). Prior to establishing agreements, firms must be aware of this concept as it will determine the innovativeness of the collaboration, which is important to overall performance.

#### Similar Company Size or Market Position

Similar to Daniels (1971) and Geringer (1988), Dacin et al. (2009) confirmed that an ideal partner would be similar in size and/or market position, have widely the same strategic goals, and follow them with a comparable level of sophistication.

Empirical research suggests that small and large firms have different determinants of innovation efforts (Rogers, 2004). One important element is simply the scale difference in terms of contributable resources that smaller and larger firms posses. In SMEs<sup>2</sup> behavioral activities and attributes are important factors to consider. In SMEs flexibility and internal conditions oriented towards encouraging entrepreneurship can influence positively in the collaboration. However, in SMEs there are more constraints related to being able to access critical resources and capabilities of innovation (Neito/Santamaria, 2009). Firms, prior to collaboration should consider the tangible and intangible resources that it wishes to gain and therefore take into account the issues associated with firm size.

#### Complementary Resources

Already in the 1990s, a trend was visible for value becoming denser, with more opportunities for value creation being packed into one particular offering. Therefore, Normann and Ramirez (1993) argued that the key to value creation is to co-produce offerings that mobilize customers. This means that the main source of competitive advantage is to understand and manage the entire value-creation system. To serve continuously evolving customer needs, it was suggested to form partnerships with complementary companies that have different sets of resources. Without the expense of developing new expertise alone a denser offering can be provided to the customer, and further partner's customers can be approached with the firm's core capacity, without competing against the partner (Normann/Ramirez, 1993).

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<sup>&</sup>lt;sup>2</sup> Small and medium-sized enterprises

#### Depth and Scope

Technological innovation and commercialization (TIC) represent a challenging environment in which to operate. Firms at the forefront must decide between which tasks to engage in and invest intellectual capital to produce new technology. At times it is difficult to commercialize and offer value for firms as they lack information regarding which market segments should be concentrated on and how the new product developed could be adapted accordingly to meet the specific needs of end users (Slater/Mohr 2006).

Hora and Dutta (2013) studied two dominant constructs in alliance literature. These authors analysed partner portfolio depth and partner portfolio scope to determine the relationship that these two constructs have on technological innovation and commercialization. The firm achieves portfolio depth "by forming repeated alliance partnerships with a few downstream companies." Separately, the firm can concentrate on scope, "thereby displaying a degree of breadth (vs. a narrow focus) in its joint functional activities with its partner in terms of the coverage of one or more value chain aspects within the alliance." (Hora/Dutta, 2013, p.1391).

Results from their analysis show that for young entrepreneurial firms, portfolio depth is a significant predictor of performance. The reason for this is due to the mutual trust that develops between the collaborating firms, which in return expedites the new product development process. Furthermore the authors find that widening the portfolio scope can result in additional expertise residing in various functional areas. This widening of the scope incorporates additional influence and can expand the TIC initiative.

With regards to the dynamics of alliance partnerships, Hora and Dutta (2013, p.1390) suggest that "high levels of alliance portfolio depth and scope not only allow partners to collaborate more broadly across the value chain but also enables them to do so with higher levels of trust and commitment, thus achieving greater TIC success." As a result, it is paramount for firms to consider this aspect prior to engaging in a collaboration, to set the stage for a successful endeavor as opposed to a possibly too narrow effort.

### 2.3 Practices that Enhance Commenced Collaborative Operations

After discussing considerations for companies to undertake before engaging in a collaboration, this section seeks to round up the literature review into a holistic understanding of inter-organizational value constellations.

For this reason, measures and indicators are introduced which allow not only to assess partnership outcomes, but also the participating firms' partnering performance while operating together. It is suggested that by focusing on high-level drivers, "firms are able to enjoy above average returns that partnering excellence offers." (Gibbs, 2009, p.8).

According to Gibbs (2009), the most relevant dynamic drivers for value constellations are:

#### > Collaborative Innovation

The conditions enabling innovation and effectiveness of the relationship: Factors are the speed of responding to opportunities through cooperation, adaptability and inter-partner communication.

#### Partnership Quality

The levels of commitment, investment, joint reliance, knowledge sharing and trust define the quality of relationship exchange.

#### Value Creation

How efficient the partnership is in creating and capturing the potential value from the collaboration. This can be understood as the sum of all relationship building, sustaining and developing behaviors taking place with regards to operations, quality, performance management and problem solving.

Keeping these drivers in mind, three theoretically profound enhancement measures will now be discussed.

#### 2.3.1 Modularization and Effective Governance

One way of facilitating value co-creation in a value constellation, especially when it comes to creating or combining new innovative offerings, is to use standardized interfaces between components in a product design in order to embed coordination of the product development process.

This is highly in line with the before-mentioned argumentation by Gomes-Casseres (2003) for a competitive constellation structure. Without standardized interfaces, joint product or service development requires a significant level of authority and coordination or at least tightly coupled organizational structures (Sanches/Mahoney, 1996). On an organizational level, a flexible, learning organization that constantly solves problems through coordinated and interconnected self-organizing processes is defined as a modular organization (Daft/Lewin, 1993).

Modularity can be defined as "a special form of design which intentionally creates a high degree of independence or loose coupling between component designs by standardizing component interface specifications" (Sanches/Mahoney, 1996, p.65). To create standards, in-depth architectural knowledge about component functions and interactions is required.

A modular organization is mainly driven by modularity in the organization's product designs: If product components are designed in a modular manner, also the organization itself can be structured more modularly (Sanches/Mahoney, 1996). Organizations design products, but arguably also products design organizations. Once a standard has been established, the modular product design approach is faster and more reliable than traditional sequential product design approaches and even more efficient than the overlapping problem solving approach (Sanches/Mahoney, 1996).

This means, in turn, that if all partners have agreed on a standard "language" for interaction, through creating a standard interface, each firm can simply rely on improving and developing their own component in this ecosystem – not having to worry about compatibility to other firm's offerings, as they are using the same standard, which then, results in a much broader variety of products for customers to choose from (Sanches/Mahoney, 1996).

However, it has to be kept in mind that standardization makes management easier, but not obsolete. The case study by Lorenzoni and Baden-Fuller (1995) shows that for getting a constellation to succeed, nevertheless collective decision making must be sponsored by a leading partner – and also constellation members that stray from the collective goals must be disciplined if necessary.

### 2.3.2 Rotating Leadership

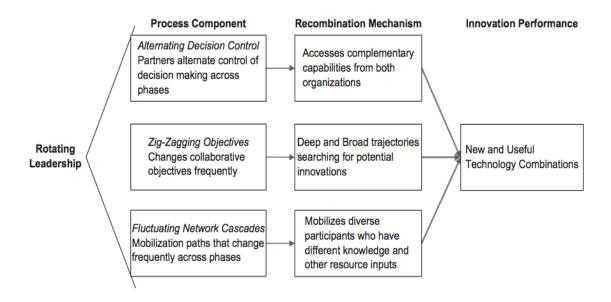
It was found by Davis and Eisenhardt (2011, p.160) that many "technology collaborations fail to achieve their technical and commercial objectives". In addition, scholars have empirically found that technology collaborations between organizations with strong R&D capabilities and relevant complementary technologies are likely to perform higher than those without (Stuart, 2000). Lastly, it is evident that collaborations with efficient governance forms between partners, with extensive collaboration experience, dedicated alliance functions, and trusting relationships likely to perform higher than those without (Singh, 2002). These factors make it clear that structural antecedents are crucial in collaboration.

In relation to this, already in 1993, Normann and Ramirez suggested that in order to mobilize value creation in their customers and partners, roles, relationships and structures must be reconfigured on a continuous basis among collaborating firms. Davis and Eisenhardt (2011) found far later that there is little understanding of the collaborative processes that actually generate innovations. Firms that were analysed generated significant variance in the findings and innovation performance is highly miscellaneous. The initial proposal by the authors was that consensus and dominating leadership would generate more innovation.

One process that produced high levels of innovation was rotating leadership. Firstly, in collaboration partners must alternate decision control, this in effect allows both organizations to tap into their complementary capabilities and zigzag between objectives, which frequently changes trajectories and in return leads to including new participants. Therefore, as a result the findings suggest that rotating leadership better

facilitates collaborative innovation than dominating and consensus leadership processes, "because it is likely to activate three major mechanisms related to the recombination of knowledge, technologies, and other resources across boundaries" (Davis/Eisenhardt, 2011, p.191).

The diagram below provides a review of the beneficial effects that rotating leadership can have and increase collaborative innovation:



Graphic 2: Rotating Leadership (Davis/Eisenhardt, 2011)

As also Gomes-Casseres (2003) suggested that a trade-off must take place between the resources added to an alliance and the assumed management burden, rotating leadership appears to be a good way to counteract this issue.

#### 2.3.3 Appropriate Group Size

As another component of the just explained trade-off between added resources and assumed management burden, Gomes-Casseres (2003) suggests that an group size has considerable influence on the success rate of value constellations, as managing a larger group generally requires more emphasis and corporate efforts (i.e. time invested).

This particularly plays a role because even though the structure of an alliances was set up well and technological feasibility is ensured (e.g. by agreeing upon interface standards), it is often not clear how the total profits of an alliance constellation can be determined or which share each member of the group can appropriate (Gomes-Casseres, 2003).

Amit and Zott (2001) showed that the total value of a constellation could be understood as the sum of all value captured by the participants. In order to achieve a higher value for all partners, Gomes-Casseres (2003) suggested that no direct competition should take place among participants.

But nevertheless Vanhaverbeeke and Cloodt (2006) concluded a couple of years later that in value constellations ultimately each firm's bargaining power decides which share of the value each participant can obtain for itself.

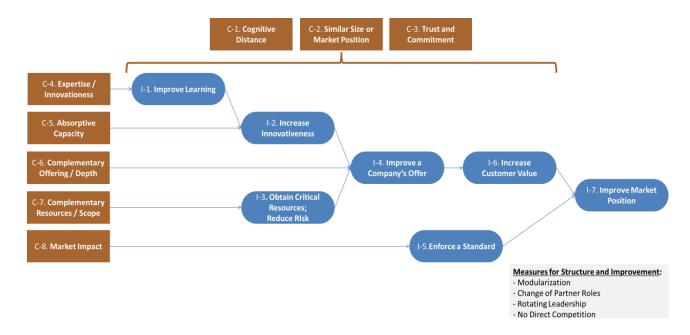
Taking these findings into account, suggestions by Gomes-Casseres (2003) on an appropriate group size (as a large group is harder to manage) can also become very relevant for the attribution of profits created in a value constellation.

When membership is not exclusive, the risk exists that different constellation boundaries overlap and resources from one can benefit a competing unit. A smaller group size further tends to go along with a higher amount of trust and commitment among partners, especially if the partners are dependent on each other. However, even in small constellations, one must be kept in mind that if a company cannot maintain a unique value proposition for the other partners, the possibility exists that it will find itself isolated or even removed from the constellation. This for example happened when Microsoft and Intel formed a close duo-partnership to develop personal computers without IBM - the company which had originally the initiated three-sided constellation (Gomes-Casseres, 2003).

### 2.4 Summary of Foundational Concepts

The previous theoretical aspects of inter-organizational collaboration had to be discussed for the reader to understand the situation in that case company and the subsequent analytical comparison to existing literature.

Acknowledging previous problem discussions from subchapter 1.2 and the literature presented in this chapter, the following graphic (please refer to appendix 1 for a larger version) shall recapture the partner selection criteria mentioned in management literature and their respective influence for the outcome in value constellations. The discussed measures for structure and improvement of value constellations are also included in this graphic.



Graphic 3: Literature Synthesis<sup>3</sup>

<sup>&</sup>lt;sup>3</sup> C-1: Hill/Jones (2013), Vanhaverbeke/Cloodt (2006); Gomes-Casseres (2003); Egebetokun/Savin (2014)

C-2: Daniels (1971); Geringer (1988); Dacin et al. (2009)

C-3: Schleimer/Shulman (2011); Hora/Dutta (2013)

C-4: Hill et al. (2014); Senge (1990); Schleimer/Shulman (2011); Normann/Ramirez (1993); Gibbs (2009)

C-5: Cohen/Levinthal (1990); Lane/Lubatkin (1998); Schoenmakers/Duysters (2006);

C-6: Bendell (2011), Hill/Jones (2013); Vanhaverbeke/Cloodt (2006); Dacin et al. (2009); Ulijn et al. (2010); Hora/Dutta (2013)

C-7: Gomes-Casseres (2003); Dyer (1997); Dacin et al. (2009); Schilling (2011); Eisenhardt/Schoonhaven (1996);

Davis/Eisenhardt (2011); Normann/Ramirez (1993); Stuart (2000); Hora/Dutta (2013)

C-8: Nalebuff/Brandeburger (1996); Ulijn et al. (2010); Eisenhardt/Schoonhaven (1996)

I-1: Schilling (2011); Hill et al. (2014); Ulijn et al. (2010); Senge (1990)

I-2: Vanhaverbeke/Cloodt (2006); Gupta et al. (2007); Hill et al. (2014); Menor/Roth (2007)

I-3: Ulijn et al. (2010); Dacin et al. (2009); Schilling (2011)

### 3. Methodology

This chapter discusses aspects and techniques that have been chosen for this research. Firstly, the overall research design, process and strategy will be introduced. Secondly, the data collection will be discussed and concerns to specific sampling techniques will be considered. Thirdly, the central data analysis procedures will be mentioned to set the arena for the discussions in chapter four and five. Lastly, reflections will be made on the research methods with regards to the researcher's positive and negative experiences whilst conducting the study.

To perform empirical research there are basically three possible approaches: Descriptive, causal and exploratory investigations. According to Kuss (2012), Descriptive investigations are constructed for representative and exact methods, utilizing mostly quantitative elements such as cross-sectional and panel studies. Causal investigations are used to justify causal correlations between two or more characteristics and mainly rely on experimental methods. Exploratory investigations aim to discover reasons for problems or to detect correlations between different variables. They are widely used to generate hypotheses and to contribute to practice areas that are not yet laid out sufficiently in theory - utilizing means such as expert interviews, data mining, qualitative market research or studies of individual cases (Lamnek, 2010).

Taking these different possibilities into account, the researchers of this thesis have chosen to conduct exploratory qualitative research within the case company and later analyse the collected data accordingly. As the objective of this research is to develop a deeper understanding of how the focal firm selects partners for an active value constellation and how the former influences the latter, it becomes clear that the necessary insights can hardly be gained in a lab environment, which makes causal investigation a non-considerable option. Further, while there is a considerable amount of general theoretical literature available on the topic of partnerships, at this stage the information available in the field of consumer technology companies does not appear sufficient enough to justify performing quantitative descriptive investigation.

I-4: Dacin et al. (2009); Schleimer/Shulman (2011); Vanhaverbeke/Cloodt (2006)

I-5: Ulijn et al. (2010)

I-6: Cao/Zhang (2013); Vanhaverbeke/Cloodt (2006); Normann/Ramirez (1993)

I-7: Vanhaverbeke/Cloodt (2006); Ulijn et al. (2010); Dacin et al. (2009)

### 3.1 Overall Research Design and Process

The researchers for this paper have chosen to take on an interpetivist epistemological position, meaning that the focus is oriented on understanding the social world by specifically analysing participants in that world. Therefore, a qualitative approach is more significant than choosing a quantitative method, because individual's opinions, thoughts, perspectives and expressions must provide insight into this world so that it can inductively establish justifiable theory (Bryman/Bell, 2011). In that respect, the focus has been to "assimilate reliability and validity into the qualitative research with little change of meaning other than playing down the salience of measurement issue" (Bryman/Bell, 2011, p.368). The trustworthiness and authenticity of the candidates chosen (to be discussed in subchapter 3.2.2) will provide the relevant insight into the company specific details that are being studied to answer the previously established research question. Therefore it is recognised that the best way to acquire the necessary data is through a highly interactive process (Bryman/Bell, 2011).

#### Theory and Research

This research acknowledges a tight relationship between established theory and empirical findings. The initial ideas for the research area are founded in the situation at the case company and the overall objective is a contribution to existing literature. Therefore, the overall research approach can be described as inductive (Byman/Bell, 2011). However, as the chosen method is very iterative – constantly "weaving back and forth between data and theory" (Byman/Bell, 2011, p.13) – elements of deduction are also very important to provide profound recommendations.

It must be noted that this is beneficial as the frequent comparisons of the data acquired to the theory allows for enhanced sharpness and generalizability of the study (Eisenhardt, 1989). In this regard it can be said that the findings discussed in chapter four are valid in the reasoning as opinions and perspectives of the individuals in relation to the theory.

One key advantage that the researchers have in this study is that they were fortunate to spend a good amount of time at the company being researched and were involved in its operations for three months prior to this study. Hence awareness and understanding

of company culture and the aspects that would be of most interest as a masters thesis research question were considered prior to carrying out interviews.

#### Research Design and Method

A case study approach was chosen as it is a very popular and widely used research design in business research (Eisenhardt/Graebner, 2007) and "some of the best-known business and management research are based on this design." (Bryman/Bell, 2011, p. 59). Given this information it was established that in terms of building and adding theory to the field, the researchers contribute study that can be considered legitimate and "elucidate the unique features of the cases in an idiographic approach." (Byman/Bell, 2011, p. 60).

The aim of this case study is to generate a holistic understanding of various collaboration processes that the firm has performed. Therefore it does not entail simply an intensive analysis of one business area, but considers elements from different departmental and management levels of the firm (Bryman/Bell, 2011). Especially when it comes to the selected sample, interview candidates were chosen in order to add variability to the data and ideally contribute more generalizability to the findings.

#### **Process**

Bryman and Bell (2011) suggest a well structured six-step qualitative research process. This investigation considers the important elements of this guide and uses them specifically to align with the research objective being studied. The following steps have been separated accordingly, and below the necessary information have been included and discussed.

The first step was to conduct general research questions. Seeing that the authors were within the company parameters and had access to important information, questions started off broad and were narrowed down through discussions with mentors and university professors. At first the focus was orientated in a different direction, however having funneled down the irrelevant information the following research question stated in chapter one was established.

The second step was to select relevant sites and subjects. This topic will be discussed in more detail later in the paper under sampling, however, vast consideration as to who to ask was considered and in essence the final choice of candidates was chosen in terms of their understanding of the collaboration cases and interaction with the relevant proceedings. It was important to use candidates that had fairly knowledgeable backgrounds and were fairly senior ranked, as this would ease the flow of questioning and legitimacy. The chosen research method structure was ideal as it allowed for flexibility, which was key to generating findings that was not previously considered or unobtainable through secondary research.

Important consideration was made to the how the data would be collected, hence step three. This was achieved as discussed above by performing interviews. In addition secondary sources were used by directly confronting the media and external communications department, to provide vital information to enhance the research.

As the six stage process includes an additional three stages, they will simply be noted in this section as a detailed overview of how the data was interpreted and how the findings were organized into conceptual theoretical framework will be discussed in section 3.3 and in chapters four and five. The key here was to introduce the teachings and explain the methodology that was chosen in accordance to the necessary theoretical guidance.

### 3.2 Data Collection

Corresponding to the analytical scope of this thesis, the main method of data collection was qualitative interviewing (Bryman/Bell, 2011). In order to obtain a full picture of the situation, however, other data sources such as internal documents, observations at the company or informal meeting notes were also taken into account. Especially in case study research it is common to apply triangulation - drawing on several different types of data sources for empirical data collection (Bryman/Bell, 2011; Eisenhardt, 1989), in order to cross-check findings and make them more substantial.

Before collecting primary data, the authors therefore made use of secondary data such

as company publications to quickly and efficiently gain a first overview of the firm's business areas and overall strategy. Company-internal documents were used during and after primary data was collected, in order to verify certain aspects discovered during the research process (Eisenhardt/Graebner, 2007).

### 3.2.1 Qualitative Interviewing

The nature of qualitative interviewing is its focus on words and the interviewee's point of view, rather than on quantifiable data and aiming to reflection the researcher's concerns (Bryman/Bell, 2011). The qualitative approach can give a significant level of freedom to the researchers to dig deeper into interesting aspects that are brought up during an interview.

As the present research is of rather exploratory nature, and thus could not be entirely planned out in advance, being supported by interview guide for data collection, but not necessarily bound to it, ensures a necessary level of flexibility (Bryman/Bell, 2011).

Awareness of this need for flexibility also determines the structure of the qualitative interviews to be carried out. In order to gain a sufficient quantity of empirical data from research but at the same time ensure sophisticated quality of this data, two iterative rounds of interviews were conducted over the course of two months, in April and May 2014. In total, the authors of this thesis conducted eight formal interviews with eight employees of the case company.

#### <u>Unstructured Interviews</u>

The first set of open, rather unstructured, interviews was directed at gaining a good overall understanding of the host company's internal processes and its external environment, in order to determine overall similarities and differences to the theoretical frameworks reviewed in chapter two. Therefore, employees with a good overall understanding of Safetech's business partnerships and related strategy were interviewed - namely Peter Overgaard, the company CEO; and Paul Norling, Head of Corporate Communication.

After a brief introduction to the research objective, rather broad and open questions on the firm's strategy for business partnerships were asked in order to gain a broad understanding, which allowed to redefine the preliminary research question in an appropriate way.

#### Semi-Structured Interviews and Interview Guide

After obtaining a first close look at the situation at the host company through the open and rather unstructured expert talks, the second set of interviews was focused more on specific aspects of the present and previous partnerships Safetech engaged in. The questions were developed further after each interview, in order to narrow down the research focus. This procedure is in line with suggestions made by Bryman and Bell (2011) about how to set up reliable interview guides in qualitative research.

Despite not asking the exact same questions in every semi-structured interview, in order to ensure cross-case comparability (Eisenhardt, 1989), the questions asked were all structured in a similar way and followed the same overall logic (Bryman/Bell, 2011). In this regard, special emphasis was placed on neither being too narrow nor leading with the questions asked, allowing the researchers to follow up on aspects of interest but nevertheless maintain a natural flow of the conversation.

Questions were directed especially on technical, marketing and financial aspects in the collaboration between partners of the value constellation. These guiding questions built up directly on knowledge gained in previous interviews, but just as well on theoretical constructs referenced in chapter two. Key concepts here were Hora and Dutta (2013) on depth and scope, Vanhaverbeke and Cloodt (2006) on partner financial resources, Sanches and Mahoney (1996) on standardization in R&D, and Dacin et al. (2009) on the relevance of similiar partner size. For a complete understanding, however, also aspects from literature that goes into depth on already established partnerships – such as Davis and Eisenhardt (2011) suggesting rotating leadership or Normann and Ramirez (1993) covering more general role changes throughout the collaboration lifecycle – were included in the interview guides.

### 3.2.2 Sampling

In order to allow for in-depth evaluation of value creation through business partnerships at the host company, the semi-structured interviews had to be carried out with a large enough number of relevant people (Bryman/Bell, 2011).

The selection of interview partners was based on a non-probability snowball sampling approach: Initial contact was made with a small group of people known at the company, and referrals to other individuals that could be relevant for the research were requested (Bryman/Bell, 2011). When this method is applied, "some units of the population are more likely to be selected than others" (Bryman/Bell, 2011, p.176), essentially meaning that the interviewees are not randomly selected. As the main objective of the present research is not to obtain statistically profound data (which focuses on external validity and generalizability of the findings), but to obtain the most relevant data to answer the research question, this method proved to be the most efficient and effective way of empirical data collection.

The interview partners were systematically chosen in accordance to their level of expertise and involvement in the areas subject to discussion. Obtaining a balance in job positions was also aimed for, in order to limit a potential bias internalized by the respondents (Eisenhard/Graebner, 2007).

A list of the selected interview respondents, along with a description of their job role (which shall serve as a means of justification) is presented on the following page.

Name of Respondent	Position in the Company
Peter Overgaard	Chief Executive Officer (CEO)
Daniel Mathiasen	Chief Financial Officer (CFO)
Rafael Meijer	Managing <b>Director</b> BeNeLux
Sabrina Ahlgren	Head of Brand and <b>Marketing</b>
Paul Norling	Head of Corporate Communication
Lars Karlsson	Head of Apartment <b>Sales</b>
Alex Steffensen	Team Leader <b>Mobile Development</b>
Carl Brandt	Project Manager <b>Technical Development</b>

Table 1: Selected Interview Sample

### 3.2.3 Interview Setting

Most of the expert talks were carried out as face-to-face interviews of about one hour duration in the Safetech headquarters in Copenhagen, Denmark. This interview setting was preferred by the researchers as it does not limit the obtainable data to the spoken word but allows to enhance the interpretation of given statements by analysing the respondent's body language in certain situation (Bryman/Bell, 2011). However, due to restrictions in time and budget, especially when an interview partner was working abroad, two interviews were also conducted via telephone.

To ultimately ensure a high level of reliability and data transparency, all conducted interviews were recorded with mobile phones upon approval by the interviewee and later transcribed word by word (Bryman/Bell, 2011). This procedure also helps greatly to avoid misinterpretation of what was said and to recapture important statements that might have been missed or misunderstood by the researchers at the time of the interview.

### 3.3 Method for Data Analysis

According to Eisenhardt (1989), data analysis is at the heart of building theory from case studies, but also a rather different undertaking as it is the least codified part of the research process and no standard procedure exists. Therefore, advice by Bryman and Bell (2011) was used as guidance to break down, compare and categorize the collected data.

As the majority of information was obtained through interviews, the data analysis process was tailored to get the best insight out of the interviews conducted – although other data sources such as public and internal company documents were constantly considered as well.

#### Within-Interview Analysis

Before conducting the first interviews (i.e. before getting the first deep company insights) it was intendend to follow Eisenhardt's (1989, pp. 540, 546) suggestions of "within-case analysis" and "cross-case analysis" in a sense that each partner(ship) of the focal company would be treated as a unique case. However, as soon as a deeper under-standing was achieved on what the value constellation is actually intended for (will be presented in subchapter 4.1), it became clear that each (potential) partner is carefully considered only if it fits Safetech's overall strategic objective: The partnerships are a means to achieve one overall company goal and therefore they do hardly differ from each other in regards to selection criteria applied.

To nevertheless discover a set of key partner selection criteria and their influence on the value constellation, it was instead looked at each department of Safetech that is involved with these partnerships - in order to see how (or if) demands of all these come together in some way – and thus determine which partnership is most appropriate to initiate. Accordingly, the first step of analysis was conducted based on the meeting minutes taken for each interview – pointing out the main statements made. While allowing for detailed and intensive analysis of the individual cases, such measures also support reliability, replicability and validity of the study as a whole (Bryman/Bell, 2011).

As already mentioned, in the section on data collection, first the key aspects of the interviews with company executives were identified, leading to a set of follow-up questions to ask key employees in different departments. The same analysis technique was then performed with those subsequent, department-specific interviews. Overall, at this first phase of data analysis, becoming "intimately familiar with each [response] as a stand-alone entity" was the main focus (Eisenhardt, 1989, p.540). - Visualizing unique patterns and gaining insights on each respondent's perspective on constellation and relevant partner selection criteria.

#### **Cross-Interview Analysis**

The second step of analysing the collected data was searching for cross-interview patterns, investigating beyond initial impressions in a structured way, in order to improve accuracy and reliability in proposed amendments to theory. The method chosen here was contrasting of interview respondents as well as categorizing validated statements into proper groups. In order to break simplistic frames, seemingly similar interviews were analysed for differences. But in order to develop a more sophisticated understanding it was also searched for similarities among all interviews (Eisenhardt, 1989).<sup>4</sup>

After this preliminary step of contrasting, all valid(ated) statements related to partner selection criteria and their influences were highlighted in each interview transcript. Following this, each of these statements were transferred to a separate document as bullet points. To identify overlaps (meaning that a statement is further confirmed by another interviewee), all aspects (criteria and influences) were put into thematical order one after another. This way it was easy to identify patterns in the statements, which the

(Eisenhardt, 1989).

<sup>&</sup>lt;sup>4</sup> Dividing data by data source was not seen as a feasible option, as the majority of data was obtained through interviews with high-rank employees at the company – people who also created most of the interal documents or at least reviewed them. Also categorizing all interviews to extract similarities and differences within or among the different groups was not seen as a viable option, as main input was obtained from the business side of the case company and often no more than one expert could be interviewed for the specialized business fields

authors were eventually able to categorize into ten subheadings for both criteria as well as influences. These subheadings and their respective influence will be presented throughout chapter four.

During the iterative phases of data collection, within-case and cross-case analysis, emerging hypotheses were *constantly compared* among the cases, to the underlying *theoretical frame of reference* as well as to scientific articles that were not considered from the start. During this process, the interviews became more focused and also foundational theory was being refined, as additional literature covering similar findings was examined (Eisenhardt, 1989).

In terms of reaching closure (Eisenhardt, 1989, p.545), it was refrained from adding more empirical data once the situation at the case company was fully understood (once "saturation was reached"). As a consecutive step, also iteration between comparing empirical findings to existing literature was ended once the study's contribution to existing theory was clearly visible (Bryman/Bell, 2011).

#### 3.4 Reflections on Research Methods

Reflecting critically back on the research carried out, it was found very beneficial to have implemented data collection and analysis with two investigators. Inspired by Bryman and Bell (2011) one interviewer was thus able to focus entirely on the conversation with the respondent, while the other researcher observed the body language, took notes on what was mentioned, and was able to state additional questions that were not brought up by the active interviewer. Through all of this, both researchers developed their own view on the data collected, which in fact helped greatly during the data analysis part of empirical research as different perceptions could be discussed and this the room for misinterpretations of interview responses was minimized.

It might, however, be challenging for future researchers to replicate the findings, as they would have to be engaged with the anonymised host company and interview respondents as well (Bryman/Bell, 2011). Especially as qualitative research methods in general possess a thread of being (too) subjective, this aspect might be seen as a potential downside. However, transparency of data collection and analysis is emphasized on by a clearly structured methodology (Bryman/Bell, 2011) and biased interpretations are minimized due to two researchers involved. These measures seek to balance off this issue.

In this regard, as typical with qualitative case study research, it will be hard to justify a generalization of the findings as data collection and in-depth analysis was based only on one company. Although managerial implications are given in chapter six of this thesis, it must be taken into account that a single-case study offers limited possibility to generalize findings for other companies or industries. However, typically a case study is therefore also not aimed at representing a population, but to contribute to theory (Bryman/Bell, 2011). With the discussion of findings to be presented in chapter five, valid aspects are brought into the academic arena to contribute to theory.

On that note it can be said that the findings discussed in chapter four are valid in their reasoning as opinions and perspectives of the individuals in relation to the theory. However, in order to make sure that the data is fully validated, it is suggested that follow up research could be performed using further qualitative or even quantitative approaches in other corporate environments. This will help to gain more scientific reliability in the data – to ensure full validation as well as a greater level of generalizability (Eisenhardt/Graebner, 2007). Due to limitations in this thesis the researchers were unable to do so given time scales.

### 4. Findings

Having introduced the overall research methodology in the previous chapter, this section focuses on those findings of the conducted case study that relate to the stated research question.

In this regard, subchapter 4.1 will briefly introduce the value constellation in which the case company participates. In subchapter 4.2 the empirically identified partner selection criteria will be presented, followed in subchapter 4.3 by their influence on the outcome of the constellation.

The aim of these subchapters is to set the scene for later comparison to foundational literature and generalization. To give the reader a full understanding of the situation in the case company, in subchapter 4.4 those findings are presented that can not be classified as selection criteria nor as influence, but are still related to the underlying theoretical framework presented in chapter two.

#### 4.1 Safetech SmartX

Safetech Services A/S ("Safetech") is a leading provider of professionally monitored home alarm systems and smart home appliances. Based in the Danish city Copenhagen, Safetech employs over 10,000 people and serves around 2.6 million customers in 18 countries across the globe, especially in Western and Central Europe.

Looking to keep growing fast in the future, the company has identified a new business area with enormous sales potential: Europe alone consists of more 210 million households, but the market is still relatively under-penetrated in the area of home alarms and smart home solutions (Norling, 2014).

For these reasons, Safetech is constantly looking to broaden its offer related to the connected smart home. But even it the company did not want to grow, management perceives it as dangerous "to stick to security and safety only" and limit its product portfolio to this area (Meijer, 2014). Security companies that do not anticipate change

in the market are seen facing struggles "to remain relevant for people in the home", because the internet-of-things offers significant business opportunities for new entrants as well as established consumer technology companies inside people's homes. If no actions were taken, the relevance of a company that only offers intrusion and fire alarms is very likely to decrease in this fast-changing environment (Meijer, 2014).

"How do we view ourselves; how do we view what we call "Safetech SmartX"?

We see it as collaboration platform." – Peter Overgaard, CEO

To stay on top of these developments around private homes, Safetech is currently setting up partnerships with providers of home-focused professional services in areas such as energy control, smart locks, indoor climate monitoring and pest control. Selected partners are offered entry to a mature, proven ecosystem with app-centric concepts and a simple business model for mutual gain called Safetech SmartX.

Through existing partnerships, Safetech customers are already using the firm's collaboration platform several times a day to monitor and manage home-related aspects of their lives. To achieve an even better customer experience, it was decided to increase the scope of these offerings and to collaborate more closely with partners - both on a technological level as well as in aspects directly related to the firm's business model (Safetech A/S, 2014).

"Alliances are about leads, about marketing leads. Partnerships on the other hand are really about sharing a vision, sharing a strategy, sharing the idea of the connected smart home." – Peter Overgaard, CEO

At Safetech, alliances are understood as a basic setup for lead generation. They are contractual agreements, especially with insurance companies and retail stores, focused on recommending the company's services. In return for a recommendation, either the new customers receive a discount or a commission is paid to the insurance or retail firm (Overgaard, 2014).

Partnerships on the other hand are for one part also focused on endorsing the Safetech brand and generating leads, but more importantly they are used as a means to enrich the customer offering and providing a unique customer experience. Common use of channels for customer interaction increase the go-to-market potential of such offerings and also allow the participating firms to significantly accelerate volumes – in the sense of people making use of the common platform (Overgaard, 2014).

The partners are provided with SmartX technology that can be inserted into their individual offerings. All components included in the system are inter-operable: They are designed to work together. "Safe, smart and simple" the system offers customers a "holistic experience" (Overgaard, 2014).

This structure acknowledges all participating firms as experts in their "vertical space" of the joint offering – when it comes to financial or legal aspects, all actors therefore remain fairly independent. Each party brings to the table (only) its knowledge and knowhow, but together the firms provide a broad(er) scope of products and services for the smart, connected home. Close integration of selected offerings into one intuitive smartphone application is ultimately aimed at satisfying also advanced customer expectations in this emerging market segment.

### The partnerships considered for this thesis were namely: 5

a) Safetech and Karchera (a multinational company offering professional services to control and remove mold and pest):

Here, Safetech developed a set of technical devices that can monitor moist levels as well as pesticide infestation and transmit the status to customer smartphones as well as to the company itself. This way, the Karchera exterminators need to perform less regular personal checks at people's homes and therefore can offer their services at a cheaper price and eventually to a wider range of customers. In turn, Karchera subscribers need to register their smartphone application with Safetech.

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<sup>&</sup>lt;sup>5</sup> These three partnerships are the only ones already established at the case company and therefore the only ones possible to take into account for this research. However, overall research focus was anyways not focused on these individual sub cases but rather on the partner selection criteria of each relevant department of Safetech – those criteria that apply to literally all of the current and future partners.

**b)** Safetech and Burga (an international company offering professional, high quality lock systems to private and business customers):

Here, a door lock with remote and numpad-control was enhanced to allow locking, unlocking as well as status monitoring via smartphone application. Burga does have technical knowledge in the area of electronic locks, however not in smartphone and internet-related aspects (for example to ensure protection against hackers). Therefore, the digital (un)locking procedures are controlled through Safetech's normal homemanagement application, as the company has over 20 years of experience in digital security. Again, the locks are sold by Burga distributors but in order use them with the application customers need to register their personal data into the Safetech database.

c) Safetech and Sansang (a Korean conglomerate with operations in very different segements throughout the world):

As a first step of their European partnership, Sansang will make its heat pumps read to be monitored and controlled via the Safetech smartphone app. Main driver of the collaboration was that Sansang does not have an own *gateway router* in people's homes which is needed to connected heat pumps to the internet. By routing through the Safetech gateway, Sansang can obtain maintenance as well as live usage data of their heat pumps – increasing the knowledge about actual customer behaviour as well as service needs. Benefit for customers is an easy control of energy consumption and temperature, again through the easy-to-use but multi-feature Safetech smartphone application.

#### 4.2 Partner Criteria at Safetech

At Safetech the overall purpose for collaboration is to create together a service for the end customer that is meaningful – valuable but still easy to understand.

Through systematic processing of the empirical data, the authors of this thesis were able to identify the ten partner selection criteria that are most relevant for the success of the initiated value constellation. In the following, these criteria are presented in a logical order.

"It depends on their thinking, on their strategy, on their vision, on how they want to earn money." (Peter Overgaard, CEO)

### 1. Sharing a Vision and Acknowledging the Strategy

In terms of selecting a partner and integrating it with Safetech SmartX it is extremely important that both corporations share the same vision. This refers to an ideal partner being one that follows a vision of offering customers a user-friendly interface with basic functionality to control and monitor the most important elements of their connected smart home. The partner should be in line with Safetech's collaboration apparition, which is to remain fairly independent when it comes to organizing one's own core business, but still acknowledging the dependence in the field of shared technology and customer bases.

An aligned strategy regarding the smart home can be realized in larger scale is fundamental: Top management perspectives must be in line when it comes to creating a joint business model with "customer first" orientation – focusing on the customer value add from the collaboration before haggling over collaborative profits. Because there are mass possibilities that technology can provide, but they are only effective when paired with a unique business model (Overgaard, 2014; Meijer, 2014; Norling, 2014; Steffensen, 2014).

### 2. Management Commitment and Capacity

Looking more closely into aspects of management in a possibly partnering firm, there are a few key aspects that should be considered. It is important that management in the partner firm has a similar agenda - "partners need to set the smart home as top priority" (Mathiasen, 2014). In that sense, it is important that the motivation is correctly affiliated. This will be essential in making sure that the partner will be proactive and prepared to communicate whenever necessary. Proactivity ensures that time is not wasted and management efforts therefore will not be too high or too costly (Meijer, 2014; Overgaard, 2014, Mathiasen, 2014). This energy demonstrates the partnering firm's commitment. Enduring proactiveness is especially needed to internally spread and market alliance tasks throughout their organization – from top management throughout different country-organizations, down to the individual employee with customer contact (Meijer, 2014).

#### 3. Openness and Willingness to Compromise

When selecting a partnering firm, it is vital for Safetech that the partner will offer a certain level of openness and be willing to compromise. The firm must be open to visibly print the Safetech logo onto their products and wiling to share distribution channels. Even the existing customer bases are mutually accessible by all constellation partners in order to allow cross- and upselling (Ahlgren, 2014; Meijer, 2014). When it comes to technical development, naturally technical details of product components must be disclosed to Safetech in order to be able to programme the smartphone application (Brandt, 2014; Steffensen, 2014). At the same time, all companies wishing to participate in the constellation must accept Safetech's claim to take the visionary lead of the group (Meijer, 2014). This compromise in essence is a form of trust and being open to compromise eventually leads to a stronger partnership.

#### 4. Trustworthiness and Reliability

Having briefly been mentioned in criterion three, it is important to acknowledge the significance that trust plays when selecting a partner for Safetech. Trust has many dimensions, however in this instance it is a very important aspect in partner selection as the connected smart home is oriented around a "security system" (Overgaard, 2014). The partner must be sure not to infiltrate other verticals (each partner's core business)<sup>6</sup>, as it could result in decreased customer value, which can jeopardized the overall customer experience and hence customer loyalty. On that note, the reliability of the partner must be a firm that is high quality and has a good reputation. Consistency over past experiences ensures that the firm will deliver what it states and therefore it can be considered a dependable partner – one with which it is worth creating a strong ecosystem for the long term (Meijer, 2014; Overgaard, 2014).

#### 5. Expertise

At Safetech, partner expertise is an important selection criterion. Access to a firm's knowhow and capabilities are important when coming together. There are mutual interests for both parties in being able to tap into this knowledge. On this note is important to understand that Safetech should be able to deliver a complementary expertise to the partnering firm as well. One example is the extremely well protected and hacker-secure system Safetech provides its partners (Meijer, 2014). To understand in more detail what contributions a partner can bring to the field is its track record. If over the past the products needed to be frequently replaced, then it is likely that their expertise is fairly fragmented – overall customer satisfaction would be fairly low under such conditions (Mathiasen, 2014). Another consideration before signing with a partner is to understand their expertise in regards to working remotely. It is possible that at times location can jeopardize expertise in the sense that firms are too distant for a collaborative activity to be successful. The cultural expertise and knowhow geographically should be aligned (Brandt, 2014).

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<sup>&</sup>lt;sup>6</sup> One core element of the Safetech constellation is that only complementary partners are selected. This means that there is only one company in each country taking responsibility for a defined area of the connected smart home. In turn, this means that there is no direct competiton among partners, as each company is in charge of marketing its own core products or services to the customers.

### 6. Complementary Offering

From a management perspective, it is most important that a partner's offering actually brings additional value to the customer if it is integrated into SmartX. Further, a new partner's offering should not overlap with that one of an existing partner (within one country), as competition among the is sought to be avoided.

From a technical and management perspective it is extremely important to ensure that Safetech SmartX can actually be inserted into the partner's offering. Partners should be able to adapt slightly their products components to be able to include Safetech SmartX technology to be integrated onto the secure system (Norling, 2014; Overgaard, 2014; Meijer, 2014; Ahlgren, 2014). It is also important that the products or services a partner provides align with the core functionality of the smartphone application (Steffensen, 2014).

#### 7. Market Position

When selecting a partnering firm, another fundamental selection criterion at Safetech is to ensure that their partner has a complementary and growing customer base (Karlsson, 2014; Overgaard, 2014; Norling; 2014). By collaborating, both firms are able to access more customers and therefore both benefit from aligning as they can mutually distribute their offerings to a larger audience than remaining solo (Karlsson, 2014; Ahlgren, 2014; Overgaard, 2014). Ideally a partner should be a market leader with a large customer base (Overgaard, 2014). This is due to the ideology that such a partner will seek to remain market leader and therefore will strive to grow quickly in order to increase their customer base year upon year. Also, a firm with this view will seek to expand into new markets and develop internationally – potentially allowing other constellation partners to co-locate. Joint market entry was already experienced to be a more effective and less capital consuming than expanding solo (Mathiasen, 2014; Meijer, 2014; Overgaard, 2014).

#### 8. Complementary Sales Orientation

Partner selection criteria should also be considered in regards to which candidates will be ideal from a sales perspective. Certain partners can provide firms with the opportunity to access their sales and distribution channels. On the other side, a partnering firm too will be able to access Safetech's channels and hence the collaboration will be beneficial to both parties (Karlsson, 2014; Ahlgren, 2014; Norling, 2014; Meijer, 2014). The collaboration criteria in regards to sales is fairly simple in essence, it is to "generate good, hot leads at a low cost" (Mathiasen, 2014).

### 9. R&D Capacity and Capability

To insert Safetech SmartX into the partners' offerings and integrate them onto the platform, a potential candidate needs to possess the necessary research and development capabilities, so that hardware can be altered accordingly (Larrson, 2014; Brandt, 201, Overgaard, 2014). In that sense, the selected firm must not only offer a product that can integrate SmartX but also sufficient capacity (human and intellectual capital as well as time) is needed to develop new technology and to implement changes to hardware and software.

A failing company could present challenges and therefore a reliable connection that has strong technological knowhow is paramount in terms of a selection criterion (Norling, 2014; Meijer, 2014). In simple terms, the partners must know their applications and components extremely well in order to make sure it can be integrated effectively (Brandt, 2014). Ideally, a partner must have a software development department that already experienced in integration projects (Brandt, 2014; Meijer, 2014). In regards to learning, the key factor stated in the interviews was that the partnering firm can learn from projects previously performed together - to ensure that future projects run more smoothly and efficiently (Brandt, 2014).

#### 10. <u>Brand</u>

When joining together with a new firm it was also found important that the candidate's reputation is good and worthy, as once integrated the joining firm will be directly affiliated with Safetech (Brandt, 2014; Norling, 2014). Therefore, the last major criterion is to ensure that the partnering firm has a strong brand and a big name (Norling, 2014; Ahlgren, 2014, Mathiasen, 2014). The reason for this is due to the fact that brand plays a significant role on the impact it provides to its customer. Customers who feel trust towards a company are more likely to continue to use that organization's products and services. (Mathiasen, 2014). Therefore, joining together with a firm that has loyal customers will ensure that the two collaborating firms can grow as the projects progress. In essence, joining with leading firms that have a good reputation decreases the risks associated with the collaboration and also makes marketing the partnership simpler (Ahlgren, 2014). Safetech would be able to "steal a little bit of these firm's fame and glory" (Norling, 2014) and at the same time increase trust in their own products and services (Ahlgren, 2014).

### 4.3 Influences of the Discovered Partner Selection Criteria

Along with the ten key partner criteria at Safetech, ten different aspects were identified as dependent variables. The focus of this subchapter therefore lies in the explanation of each of these influences.

#### 1. Decreasing Dependency on Own Channels

Interviews with a country top manager as well as with the company's Head of Communication showed that complementary sales orientation of partners can reduce the dependency on a firm's own sales and marketing departments. Benefits found were on the one hand additional channels of the same type (parallel channels) (Meijer, 2014), but then also entirely new ways of customer interaction – ways of public communication or marketing that were not utilized by the focal company before (Norling, 2014).

#### 2. Realization of Cost Savings

Ideally, the enhanced structure of channels for customer interactions and/or a stronger brand position also bring down the cost per contact with each customer (Ahlgren, 2014). Driven by this, the total cost for customer acquisition can be lowered – a major impact for respondents from corporate marketing (Ahlgren, 2014), corporate finance (Mathiasen, 2014) as well as by general management (Meijer, 2014). Especially when alternatives can be found to personal-intensive door-to-door sales models, cost savings can be immense, because "in the end it all comes back to cash" (Mathiasen, 2014).

### 3. Enhancing the Sales Position

It was also clearly found that proper partner selection can enhance the overall sales position of a firm (Norling, 2014). A strong market position of the partner was found a key aspect by corporate management to get "more people onto the platform"

(Overgaard, 2014). Especially from sales and marketing perspectives, obtaining access to a partner's customer base was found as a major opportunity for cross-selling (Overgaard, 2014; Ahlgren, 2014). If the offering of both firms is complementary, then the larger a shared customer base is, the better. The increased range allows leads to generate (Meijer, 2014; Ahlgren, 2014; Norling, 2014) to own offerings – which often result in actual sales (Karlsson, 2014). If the partnering company is growing fast or two firms are co-locating into new countries (Mathiasen, 2014), entirely new markets can be accessed (Meijer, 2014) - even at lower costs as an individual approach, due to the potential of scope and scale economies (Mathiasen, 2014; Meijer, 2014). An overall stronger (or unique) offering also makes it easier for own sales staff to (up-)sell the products and services to new and existing customers (Meijer, 2014; Overgaard, 2014).

#### 4. Increasing Customer Value

Given sufficient R&D capacity, joint product and service development can take place between the partnering firms. Staying "relevant for people in the home" was mentioned as one simple reason for joint development in the case company (Meijer, 2014). In that firm it was emphasized that the joint development efforts must add a real benefit to the customer experience (Meijer, 2014; Mathiasen, 2014), by adding closely combining products and services that are meaningful (Steffensen, 2014; Overgaard, 2014). "The partnerships we pick, we need to get them right" (Mathiasen, 2014) - This especially means that customers must be able to relate to the joint offering and fully understand the characteristics and impact (Norling, 2014; Meijer, 2014). The participating firms all agreed on a "customer first" approach (Overgaard, 2014), which was to provide customers with a user-friendly application to control core functions of the connected devices (Norling, 2014; Meijer, 2014). In order to offer a holistic experience (Overgaard, 2014), each partner's product or service had to be closely integrated into one single software solution.

#### 5. Improving a Company's Offer

Once the requisites of value creation are met and agreed upon, joint collaboration can turn an existing offering into something unique (Overgaard, 2014; Norling, 2014) and very valuable for the customer. Through technology of the case company, Karchera is for example able to offer a similar service as before, but at a much lower price (Meijer, 2014). For Sansang, Safetech's technology serves as "a bridge to the home" that allows it better product maintenance, but also detailed analysis of usage patterns – knowledge that in the medium to long-term can even result in better (more appropriate for actual usage, and thus also price) product versions (Meijer, 2014). Overall it can be said that at the case company, partnerships broaden the customer offer (Norling, 2014; Ahlgren, 2014), without all participants having to obtain deep knowledge in a new field. That way, the partnering firms can enhance their offering and do a better (more appropriate or cheaper) job for their customers. (Meijer, 2014). To speed up and facilitate technical adjustments, previous expertise with integration projects was found very beneficial (Brandt, 2014).

#### 6. Increasing Customer Retention Time

If a joint, maybe even unique, offering has been created by the participating firms, it can become an important competitive differentiator. Not only can this joint offering be marketed and sold to new customers (as discussed above), but also can it reduce the churn rate of existing customers: A valuable and logical solution was found as a key aspect to tie customers to the platform (Mathiasen, 2014). Especially in business models that are based on regular subscription fees (and possibly even come along with subsidized hardware), it is important to retain the customer in the ecosystem as long as possible. Quantitative studies showed that customers are more satisfied with a system, the more possibilities they have to use it (Mathiasen, 2014). Enhancing the scope of an existing offering through closely integrating the value proposition of partners therefore greatly helps to increase customer retention time.

#### 7. Gaining a Competitive Advantage / Differentiation

Taken together, the above-mentioned influences are closely related to obtaining a competitive advantage, serving as a differentiator in the market (Mathiasen, 2014; Meijer, 2014). By tying together already strong existing products and services into an integrated offering, a surprise advantage can be the result – instead of the traditional objective of first-mover advantage (Meijer, 2014). For some departments in the case company, close integration of strong and market-relevant partners was also acknowledged as a key parameter to increase the likelihood for setting industry-wide technology standards (Norling, 2014).

#### 8. Gaining Knowledge to Improve Operations

Especially when it comes to technical collaboration, it was found much easier to work with partners that clearly understand and the overall strategy and agree on common tactics (Steffensen, 2014). To allow for close integration, the technicians at the case company had to understand the partner's products to a certain extent (Brandt, 2014), so also the technical department at partnering companies had to be willing to grant access and actively share relevant knowledge. Learning curve effects were achieved in the sense that (knowledge of) existing software code, could be used in future applications. But also getting to know more about each partner's strengths and weaknesses was considered a good asset to speed up common projects in the future (Brandt, 2014).

#### 9. Raising Awareness of Brand and Offering

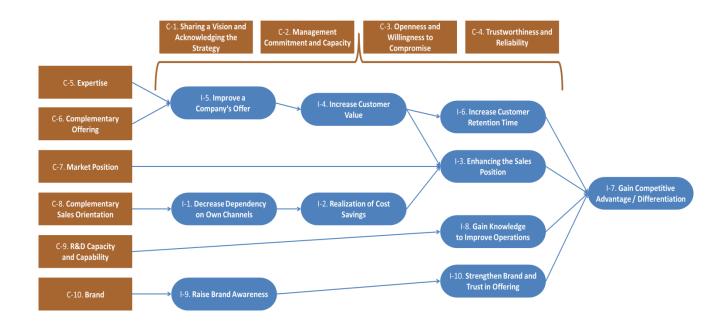
Complementary sales and marketing orientation of its partners allowed the case company to have its brand endorsed to a wider range of individuals (Meijer, 2014). Strong, trusted partner brands with a considerable market impact also allowed the case company to promote its own brand and make it renowned among a larger scale of both potential customers as well as potential partners (Hermannson, 2014; Ahlgren, 2014). Being positively affiliated with strong partner brands and trusted market leaders also was viewed as a key asset to promote own offerings or raise awareness even of more strategic objectives (Norling, 2014).

### 10. Strengthening a Firm's Brand Overall and Trust in its Offerings

Over time, the before-mentioned increased awareness of a firm's own capabilities also gave the case company significantly more credibility for its offerings in public perception. Borrowing from partner's "fame and glory" also can make a specific brand much stronger and closely affiliated with the vision of (for example) the connected smart home (Norling, 2014). If offers of large, growing companies rely on a partnering firm's products and bring them to market that way, their customers automatically establish a tiny relationship with the other firm. Referring back to influence number one (and thus closing the loop), this could be a (almost) free channel of company-customer interaction – which provides viable cross- and upselling opportunities.

Even though not explicitly mentioned in every case, all of the above ten influences of partner selection criteria can only come to prosperity if the partnering firms are sharing a very similar vision, top-management is willing to commit to the joint strategy and also open to compromise in some areas (especially in business and technology). One interviewee even went as far as saying that "if [the common agenda] is not a top priority in every firm, it is not going to fly" (Mathiasen, 2014).

To round things up, the following graphic visualizes the influence of each of the empirically discovered criteria for the constellation as a whole - directly in line with the research question stated in subchapter 1.3. As can be noted, the constellation studied could not exist without criteria C-1, C-2, and C-3. Also C-4 has (positive) influence on all ten dependent items. For these reasons, criteria C1-4 stand "on top" of all influences. A larger version of this graphic can be found in appendix 2.



Graphic 4: Empirical Selection Criteria and Influence

### 4.4 Further Literature-Related Findings in the Case Company

In this subchapter, interesting findings from the case company are presented that relate to the underlying literature but go beyond the just-mentioned partner selection criteria and influences. Introducing these additional discoveries is important to develop an even deeper understanding of the case company, in preparation for the analysis presented in chapter five.

For instance, it was expressed by top management that the size of a potential partner is not per se a criterion that decides whether or not collaboration should be initiated. In principle, companies of every size are invited to join the collaboration platform – as long as their offer is complementary, management shares the same vision – and is equally committed to the undertaking (Mathiasen, 2014). In reality, however, the case company experienced that especially large companies (that are active in a number of different fields), tend to be reluctant towards joining an alliance which limits their contribution to one or two vertical segments (Overgaard, 2014). Interesting quotes to mention here are for example "So when a new partner comes, they need to make the decision: Do I want to be everything to everybody or do I want to be something" – because "if you want to be in a collaboration platform, you need to have a collaboration view on it. But if you say you want to do everything, they you have to do it on your own. Because one cannot say, 'I want to collaborate' but then demand to do everything by themselves" (Overgaard, 2014).

Another interesting insight was that for the focal company, the business side (i.e. of the business model) is seen as driving value of the collaboration far more than the technical side. In this sense, the company seeks to focus on customer experience rather than technological novelty and inexhaustibility (Overgaard, 2014).

Related to who is managing or driving the value constellation, it was expressed that of course Safetech will become only a rather small player in the overall offering as the number of participating firms increases (Meijer, 2014) – and the company therefore can not streamline all technical aspects of partner components by itself. However, at the same time the company views itself as a very visionary actor that has a good feel for future developments in this volatile environment. Despite its size, Safetech top

management is therefore willing to remain the driving strategic force in the constellation – acknowledging that some partners are committed to the overall vision, but do not have all the insights to take care of strategic decisions (Meijer, 2014; Overgaard, 2014). For this reason, the company's CEO also doesn not see added benefits by establishing a steering committee – rather it would result in a loss of flexibility, agility and an increased level of confusion among the partners (Overgaards, 2014).

However, alignment is of course nevertheless necessary among all participating firms. It was concluded that although partnering may even be slower than going solo (in terms of decision making and market entry), market reach would also be significantly smaller. And these benefits clearly overweight the cost of collaboration (Meijer, 2014).

From a technical standpoint, it was mentioned that standardization of components would make it much easier to manage the collaboration (Steffensen, 2014). Once a standard is in place, it was mentioned that technical alignment would require a lot less resources (i.e. time) (Brandt, 2014).

However, at this stage, with only three partners so far in the value constellation, the efforts needed to create a common/standard interface were seen to overweight the time spent on aligning each partner's components individually (Steffensen, 2014; Brandt, 2014). But also in the long term it is not sure whether a standard interface will ever be implemented: "As this is a security system", partners need to be selected carefully and "not everyone can be allowed in: Collaboration quality will not be compromised just to scale up" (Steffensen, 2014). This means that the number of partner components to handle might likely always remain at a level which is manageable without having agreed on a standard interface.

On the other hand, one interviewee from the management site suggested that despite alignments in the technological foundations, the majority of knowledge sharing within the present value constellation will take place on the top-management level. Close alignment also in terms of business model development would be necessary to really get the most out of the common value proposition. For that reason, Safetech offers partners help in strategic aspects, for example when it comes to identifying key influencers for sales and marketing (Meijer, 2014).

To round up this proactive approach towards a changing market environment, first efforts were already made by Safetech to also take open innovation - especially user and customer ideas - closer into consideration, for example by setting up a dedicated online "laboratory" (Meijer, 2014).

As an overall conclusion of this chapter it can be said that although the present value constellation does not require any financial commitments in the sense of direct remuneration to other partners, the collaborating firms are still interdependent (Meijer, 2014). Although so far no payments were made to another party for their R&D efforts, the underlying technology is already closely integrated (Overgaard, 2014). In addition to that it is noteworthy that so far no (to hardly any) contracts had to be signed – because commitment comes naturally if a common vision is shared by all parties (Overgaard, 2014).

### 5. Analysis

In this chapter the empirical findings of the case study are contrasted with existing theory. Subchapter 5.1 discusses how the discovered partner selection criteria and respective influence relate to the theoretical frame of reference introduced in chapter two. Subchapter 5.2 then takes on the opposite perspective, by demonstrating aspects where the case company takes a very different approach as suggested by common research. Subchapter 5.3 ultimately concludes the analysis with a synthesis model of theory and empirical findings, clearly illustrating similarities and differences.

### 5.1 Analysing Key Partner Selection Criteria at Safetech

The following section has been split according to whether; a) the criterion has already been discussed in the underlying frame of reference; or b) the findings appear to be a new criterion.

#### 5.1.1 Partner Selection Criteria Corresponding to Underlying Literature

The analysis will combine three key elements: Firstly, the relevant theory that was provided in chapter two will be summarized in relation to the key criteria. Secondly, the situation at Safetech will be discussed and contrasted with what theory has previously suggested in relation to the partner selection criterion. Thirdly, the overall influences that these criteria can provide for Safetech and the overall outcome that these influences provide will be presented.

#### 1) Sharing a Vision and Acknowledging the Strategy

The theory suggests that the most successful value constellations are focused on a maximum creation of value, for the customers and the participating companies (Vanhaverbeke/Cloodt, 2006; Cao/Zhang, 2013). According to Normann and Ramirez (1993) corporate strategy defines ways for companies to link together their most critical resources, and also Gomes-Casseres (2003) suggests that partnering companies should possess a unifying vision.

Egebetokun and Savin (2014) demonstrated that the cognitive distance between a firm and its cooperation partner has an ambiguous effect on the profit generated by the firms. Further, Hora and Dutta (2013) stated that that if a partner is too close or too far, no efficient collaboration can be established. Hence the literature demonstrates a slight understanding of the criterion suggested and therefore coin the term cognitive distance.

At Safetech the situation is somewhat different, however there are key similarities. There is relevance in the sense that collaboration has an ambiguous effect. Also there is a similarity between cognitive distance, in the sense that there is also a point where no collaboration can be established.

When selecting a partner it is crucial that the partners share a common vision and follow the same strategy to achieve it. Without this common understanding, no collaboration can be established (Overgaard, 2014). For Safetech, the strategy is to improve customer awareness of connected smart home possibilities, augment own offerings to increase customer value – and that way enhance both parties' competitive advantage.

Also in contrast to Dacin et al. (2009), who vouched for a similar size and/or market position as partner selection criterion, for the case company a similar size explicitly is not per se a decisive factor for ex- or inclusion (Overgaard, 2014). Rather, companies of any size are invited to join the constellation as long as they share the same vision, strategy and tactics – and thus also obey the common rules (Overgaard, 2014). The Safetech CEO did mention that he himself found that smaller companies are generally more likely to fit into such a scheme, as it is not in their nature to seek control over

everything. But he already found some big companies that are also ready to go this path – and he is convinced that the "collaboration society" will bring even more big corporations to the same mind-set over time (Overgaard, 2014).

This selection criterion suggested at Safetech is extremely important as it influences virtually every aspect of the constellation - without it, the collaboration would not take place. It is therefore suggested that other scholars take a close look at the extent to which a similar vision and cognitive distance overlap: Whether sharing a similar vision should be included in the scope of cognitive distance considerations or whether the two aspects rather must be looked at individually in order to determine the potential success of a new partnership in value constellations.

### 2) Management Commitment and Capacity

The literature by Hill and Jones (2013) states that if partners stay more independent, less management efforts are required to tie all components of corporate strategy together. Furthermore they state that a firm's own influence over a partner's strategy and operations is very limited and that this can pose risk to fulfil strategic objectives. Besides that, Dyer and Singh (1998) discuss that a value constellations is directly affected by the way a group of partners is structured and managed. At the same time, Schleimer and Shulman, (2011) suggest that "relationship commitment" is not important for joint new product development but for new service development.

This suggested selection criterion is extremely important at Safetech is extremely important. Just as sharing a common vision, it is a *pillar criterion*, one that needs to be present in a partner before Safetech is willing to consider collaborating with it. Therefore, without it no influences can be achieved - on the other hand, with this key criterion all ten influences can be accomplished.

The underlying literature does not go much into depth on management commitment and capacity, although at Safetech it is another key partner selection criterion. The reason for this is that Safetech aims to maintain a significant level of independence over its operations.

To contrast the theories presented by Hill and Jones (2013), this is the exact situation on which Safetech strives. Remaining widely autonomous to the partner firm's operations and strategy allows Safetech and its partners to keep improving their respective core business. Management of each partner remains separate, but still the final offering is the coming together of two and more distinct elements onto one secure platform. It does not pose additional risk, rather it shares it. It helps fulfil strategic objectives and contributes to establishing the end outcome of creating greater value for the consumers. As also in the studied constellation different components have to be aligned to one another (and in fact Safetech even developed new technical devices for Karchera) in order to create an integrated solution for the customer, these findings are not in line with the conclusions by Schleimer/Shulman (2011) – at Safetech, at least indirectly management commitment plays a major role for both product as well as service development.

#### 3) Trust and Reliability

Similar to relationship commitment, Schleimer and Shulman (2011) also suggest that mutual trust among partners (as a collaborative attribute) does not have a direct impact on the performance of a new product development. Therefore, when developing a new product, focus should rather lie in the collaborative activities of a partner.

Schoenmakers and Duysters (2006) found that if organizational ties between partners are not strong, then a trusted relationship is even more important. Hora and Dutta (2013) found that portfolio depth can enhance trust which therefore in return expedites the new product development process. Therefore these authors overall found that higher levels of scope and depth not only allow partners to collaborate more broadly across the value chain but also enable them to do so with higher levels of trust and commitment, thus achieving greater TIC success. Trust in the literature seems to be a fairly common theme that is important to both before and throughout collaboration.

In contrast, however again, the findings of Schleimer and Shulman (2011) suggesting that attributes such as trust and relationship commitment have no direct impact on the performance of a new product development is somewhat different at Safetech. Trust is important as it provides freedom for the expert company. The trust is that together, once the product and Safetech's control systems are aligned onto the secure platform, then together the customer value co-creation will be a lot greater than remaining solo. Hence at Safetech their integration model is very much in line with Schoenmakers and Duysters (2006). Furthermore, Safetech portray a significant level of depth in their portfolio as the smart home can have a lot of different features. Therefore their knowledge will not be high in those new areas and consequently the article presented by Hora and Dutta (2013) fits accordingly with Safetech's way of collaborating, in that a higher level of trust can achieve greater success.

For Safetech it is important that each partner holds true to what it stated to contribute, so that the agreed strategy can be processed in a reliable way. So far, all partners around Safetech SmartX have maintained this attitude - and a strong partnership standard was the result. For example, Sansang is looking towards commencing new projects in the future and at the same time scale up existing operations into other countries. Maintaining a good relationship is a key aspect of the collaboration for the company, as Korean culture assures that once a commitment is made then they are in it for the long term. Therefore, Safetech only engages with corporations that will hold true to what they offer and will be seeking to maintain a good relationship. This suggested selection aspect is the fourth pillar criterion at Safetech. Although not as significant as Sharing a Vision, Management Commitment and Willingness to Compromise, a certain level of trust needs to be present among the partners before any collaboration can take place. In turn, the level of trust influences each other component towards a successful end result.

#### 4) Expertise

Nalebuff and Brandenburger (1996) suggest that through collaboration firms can create a much larger and more valuable market together than they could by working individually and that collaboration is often chosen in an attempt to obtain access to critical resources. Schilling (2011) suggests that scarce resources can include necessary capabilities from a partnering firm. But despite all the potential benefits there are also drawbacks of collaboration have to be taken into account. For example firms can give away too much technological knowledge to partners. If worse comes to worse, a company's overall market position and business strategy can even be weakened significantly through improper partnering (Nooteboom, 2004).

Stuart (2000) states that the most important factor for innovation is the resource profile of partners; Schleimer and Shulman (2011) found that partnering with outsiders is more likely to bring in the requisite variety of skills and knowledge which is required. Further, Liyanage and Barnard (2003) state that a simple identification of the key elements and possible collaborative factors will implement useful resources and attributes that will lead to enhanced product or service development. So overall there is significant emphasis in the literature on the importance of expertise and it is suggested frequently that firms must be aware of this criterion as it will determine the innovativeness of the collaboration, which is important to overall performance and outcome.

The situation at Safetech is very much in line with the literature. In regards to their partner selection the expertise of the firm is most important. Their ability in the necessary industry is significant to success. The smart home has a broad offering capability. As a result it is important to obtain the knowledge and skills in areas that they wish to enter. For example, the intelligent connected heat pump that they wish to develop is a challenge as they do not have any own expertise in such a product area. Through collaboration Safetech gains access to these skills allows the partnering firm to build accordingly a high quality device (Steffensen, 2014). On the other spectrum Safetech creates a technology that can be implemented into this new device and together an enhanced offering is provided (Overgaard, 2014; Meijer, 2014). A key aspect to consider here is to partner with leading firms that possess high levels

of skills - as this will increase the likeliness of success. Hence this process relates to the findings of Schleimer and Shulman (2011); Liyanage and Barnard (2003); as well as to Nooteboom (2004).

By selectively choosing the correct partner with the necessary expertise and skills required, provides a firm such as Safetech with the necessary influences required to achieve its overall targeted outcome. The influences that were found to be of great significance to expertise is a) improve a company's offer; b) increase customer value; c) increase customer retention time; d) enhance the sales position; and e) achieve a competitive advantage and differentiate themselves in the market.

### 5) Complementary Offering

The literature by Ulijn et al. (2010) demonstrates that collaboration has allowed companies to gain access to their partner's customers while at the same time enhancing their own offering. These authors analysed the airline industry and found that strategic alliances are a way to increase utilization of their existing flights, but at the same time being able to offer their customers more destinations. Hence it is important to partner with complementary firms that have different resources as it will decrease the costs of developing expertise alone and also provide a denser customer offering (Normann/Ramirez, 1993). The literature has briefly mentioned the importance of seeking a complementary offering however it is not in depth elaborated on. It seems to be a consideration that is given in relation to other factors.

At Safetech the complementary offering criterion is very important. The resources the firm wishes to access from partners are no less than the products or services they offer along with the necessary knowledge to make them fit into a new and integrated collaborative solution. The new bundle of products and services can then be promoted and distributed throughout the partner's customer base (Brandt, 2014; Meijer, 2014). The partner on the other hand further gains access to the secure gateway and the expertise that Safetech has in protection against hackers. In relation to the literature,

this aligns with Normann and Ramirez (1993) as well as with Ulijn et al. (2010) in the sense that Safetech's customer base increases, whereas at the same time each partner gets a better offering, at a lower cost than remaining solo.

Selectively choosing partner with value-driving complementary offerings provides a firm such as Safetech with the necessary influences required to achieve its overall targeted outcome. Again, the influences that were found to be of great significance to the complementary offering criterion are; a) improve a company's offer; b) increase customer value; c) increase customer retention time; d) enhance the sales position and; e) achieve a competitive advantage and differentiate themselves in the market.

### 6) Market Position

In line with the study by The Economist (1999) which found that a main reason that firms collaborate is to enter non domestic markets, Dacin et al. (2009) stated that across a broad range of industries alliances are often formed to gain access to new markets. This author also discussed that forming competitive alliances provides small(er) companies with a viable opportunity to develop a counterpart to tackle the bigger and stronger merged firms. Ulijn et al. (2010) further discussed the aspect of entering new markets and the issue that local partners often have a far better understanding of store locations, an appropriate product portfolio, or of a suitable marketing strategy than foreign entrants. Eisenhardt and Schoonhaven (1996) empirically found that alliances are often formed when one or more partners are in a "vulnerable strategic position." Other authors, such as Gupta et al. (2007) or Menor and Roth (2007) put more emphasis on collaboration-driven innovation as a means to keep competitors at a distance. This view is also confirmed by Davis and Eisenhardt (2011), who emphasized innovation as an opportunity to outperform competition and other market incumbents. Overall, market position is a well discussed topic and the literature has a fairly extensive view of it significance.

The situation at Safetech is interesting to analyse as the company is currently seeking to expand into new markets. In relation to the study by The Economist (1999), the vision at Safetech is to seek attractive products that would effectively work in a foreign market that they currently are not part of. One example is that in Germany there is a strong market for energy saving devices as energy prices are higher than abroad. Therefore, the recent collaboration with Sansang allows them to produce a device which will align with that market and be attractive to customers there. So far the German market has widely rejected home alarm systems, however by offering a valuable set of product and services through collaborating with technology that also allows saving energy, this could possibly provide an attractive way to crack this market in the future. – For alarm systems as well as for connected smart home offerings in general (Meijer, 2014; Mathiasen, 2014).

This view does not relate to Gupta et al. (2007) as Safetech is market leader and therefore is not in a vulnerable strategic position. However, similarities can be found to research by Menor and Roth (2007) and Davis and Eisenhardt (2011), as this strategy is an attempt to keep competitors at a distance and outperform competition and other market incumbents. Safetech overall ideally seeks out a partner that has a strong market position as it makes for ease of process in generating a competitive advantage.

The influences that this strategic partnering has are to simply enhance Safetech's sales position. With that advantage Safetech can therefore gain a competitive advantage and differentiate themselves accordingly.

#### 7) R&D Capacity and Capability

Schilling (2011) acknowledges that sharing R&D or production facilities with partners reduces a firm's asset commitments and therefore enhances its flexibility. Collaboration is often chosen in an attempt to obtain rapid access to specialized critical resource. Dacin et al. (2009) found that R&D partnerships are mainly driven by a desire to share the risk and limit the negative impact of failure. Lane and Lubatkin (1998) confirmed in a number of studies that an important characteristic of a good strategic partner is its ability to teach and to learn. According to Egbetokun and Savin (2014) absorptive

capacity of firms "develops as an outcome of the interaction between voluntary and involuntary absorptive R&D spill-overs. The work by Cohen and Levinthal (1989) stated that "the absorptive capacity concept originated from the observation that R&D investments not only create new inventions for a firm but also improve its ability to internalize knowledge from external sources. On that note, in terms of its absorptive capacity, this firm can also develop through intra-departmental personnel rotation by assigning technical specialist to other functions within the firm for several years (Levinthal/Cohen, 1990).

At Safetech the situation is somewhat different than the literature suggests. Referring to scholars such as Lane and Lubatkin (1998) or Schoenmakers and Duysters (2006), who argued for absorptive capacity as a very important criterion for partner selection, it must be said that in the case company, organizational learning was not a key strategic concern for anyone interviewed. Especially when it comes to R&D or technology-related learning (emphasized for example by Egbetokun and Savin, 2014), it was articulated by Safetech management that no transfer of technology should take place from Safetech to any partner: Knowledge in technical and R&D-related aspects is exchanged to enhance joint development for products and services, but not transferred or absorbed by another party (Meijer, 2014).

Also internal resources (e.g software code) can be re-used for other projects in this sense (Brandt, 2014), but on an R&D level no capacity or technology is really absorbed by a partner to strengthen its competitive position. Also on a management level, related to business aspects, knowledge is exchanged in the sense that Safetech provides professional guidance to solve ad-hoc problems - for example when a partner's own business or sales model did not proof to be effective (Meijer, 2014).

But also this has to be understood more as a temporary exchange of knowledge for a common good, rather than a longer-term process to inherit new strategic capabilities in a new field. In conclusion this means that yes, expertise and knowledge - particularly R&D capacity - was found a key aspect for partner selection, but not the transfer of these intellectual assets per se.

The influences that this strategic partnering selection criterion has are to simply gain knowledge and improve operations. With that advantage Safetech can therefore gain a competitive advantage and differentiate themselves accordingly.

### 5.1.2 Partner Selection Criteria with Significantly New Aspects

The following partner selection criteria have been identified at Safetech but *nothing* comparable could be found in the in the underlying, foundational literature of this thesis. Therefore the authors went back to search for articles that explicitly made use of these aspects, in order to see if these were really only unique criteria of the case company.

Based on this approach, the following subchapter will discuss firstly the situation at Safetech and demonstrate why each criterion has been identified as important. Secondly, it will discuss additional literature that was researched, which sought to find whether these are completely new phenomenon or not.

### 1) Openness and Willingness to Compromise

This suggested selection criterion is the third pillar criterion at the case company. The value constellation studied is founded on shared sales and distribution channels and even mutually accessible customer bases. Openness to share technical component details and programme code among partners is also very important to speed up technical development. At the same time, Safetech claims for it the clear role of being the visionary leader of the collaboration – so without a certain degree of flexibility and adaptability, no collaboration could take place. Safetech does not set up any financial agreements or sign contracts, so the other parties are flexibility to withdraw from the collaboration should they wish to (Overgaard, 2014). Openness and willingness to compromise enhances freedom, encourages that a strong constellation can be established that goes a step beyond looking only at maximizing the outcome for each company individually.

Despite this importance at the case company, the theoretical framework in chapter two made not reference to any of these aspects. An explicit search for additional research papers covering openness and willingness to compromise found that thee aspects have been marginally presented among joint ventures in education (Peck, 2009) in the automotive industry (Li/Mellgren, 2000) and in the perceptions of host-country rule of law and partner-related characteristics (Roy/Oliver, 2009). Even in these articles, however, willingness to compromise is not presented as a key selection criterion.

### 2) Complementary Sales Orientation

It is important for a partner to have a complementary sales orientation. In this regard being able to access a large distribution channel and being able to offer a customer base enhances the scope of the offering. Gaining access to hot leads at low costs, to large complementary customer bases as well as acquiring additional communication and distribution channels, will help Safetech to grow and therefore generate more profitability. – as "in the end it all comes down to cash" (Mathiasen, 2014).

The influences of this partner selection criterion are a) decreasing dependency on own channels; and b) that way a new opportunity to realize cost savings. This combination of additional channels at lower cost will directly c) enhance the sales position and ultimately; d) will provide Safetech with a competitive advantage against competition.

In additionally enfolded literature, for example Friedman and Furey (2012) acknowledged that business partners and distributors can expand market reach of a company. Also Paul (2008) mentioned additional sales channels as a potential benefit of international joint ventures. However, neither in these articles nor in the key literature underlying this thesis, complementary sales organization was explicitly mentioned as an important criterion for partner selection, although at Safetech it definitely is one.

### 3) Brand

The last criterion found at Safetech is the importance that brand has on partner selection. Brand is significant when collaborating as there are definitive benefits associated with alignment. Partnering with a large firm with a strong brand provides a wider pool of loyal customers that can be accessed. The Safetech logo is present on the partnering brand's marketing brochures and in many cases even directly printed on products. This increases the awareness of the Safetech brand, thus allowing a greater competitive advantage (Ahlgren, 2014). Besides the additional sales and distribution channels mentioned under "complementary sales orientation", also collaboration with leading brands can greatly help Safetech gain more customers. Not only will strong partnering brands be able to promote awareness for the connected smart home in general, but being affiliated with their offerings also can increase trust and awareness for Safetech's own products and services. The importance of having a strong brand to connect with ensures that a strong reputation is upheld, which in return leads to more customer loyalty (Norling, 2014).

Having researched this partner selection criterion further it was presented briefly by Rumpunen (2011) as a likely preferred selection criterion for international joint ventures. Further, "brand partner quality" was for example emphasized by Franzen and Moriarty (2009, p. 312) in their book "The Science and Art of Branding."

#### Conclusion After Enfolding Additional Literature:

Naturally a number of studies were discovered that covered the relevance of these three criteria not explicitly covered in the theoretical frame of reference.

However, it can still be concluded that *willingness to compromise*, a *complementary sales orientation* and a strong *brand* are hardly mentioned as *key* partner selection criteria in foundational management literature on inter-organizational relationships, despite their high importance at the case company. Therefore, these aspects can be seen very relevant input for future theory building in entrepreneurship and management science on partner selection in value constellations.

### 5.2 New Perspective: Comparing Literature to Empirical Finding

Having already analysed the case company's key selection criteria in relation to previous literature, it was observed by the researchers that there are still are interesting differences between the underlying literature and empirical findings not yet discussed. These aspects go beyond the topic of partner selection and are especially concerned with ways to structure of value constellations and ways to enhance collaboration once established. In order to provide a well-rounded, holistic analysis of the case findings, these aspects are now presented, following headings and structure of chapter two.

### Constellation Structure and Firms' Capabilities as Facilitators of Value Creation

#### Large Financial Resources

Referring to the work by Lansiti and Levien (2004), who concluded that successful value constellations are driven mostly by one central company that orchestrates and manages the collaboration of partners, the practical relevance can definitely be supported by the present case study. The collaboration platform was initiated by Safetech and the company then sought complementary partners to join and participate. Safetech as the initiator of the platform is also taking the managerial as well as strategic/visionary lead – strongly supportive for this literature.

However in the same turn, Normann and Ramirez (1993) as well as more recently Vanhaverbeke and Cloodt (2006) wrote that these central value orchestrating firms should be large corporations with large financial resources, because acquiring and maintaining the necessary tangible and intangible assets is a very costly undertaking. At Safetech, however, the situation is very different.

Although the company clearly provides managerial as well as technical assistance to its partners, explicitly no financial exchange takes place (Mathiasen, 2014; Overgaard, 2014). But the technical systems are nevertheless closely integrated and therefore present an interesting and maybe even unique phenomenon. The aspect that large companies with large financial resources are needed to get a value constellation

running therefore definitely can not be confirmed from this case study. However, in contrast, a company with very limited R&D capacity (e.g. driven by the lack of financial resources) will very likely have a hard time to initiate a value constellation. Partners may question the firm's ability to be sustainable and therefore trust too might decrease, due to the firm not even being able to get its core business operable correctly.

#### Change of Roles Over Time

The case company views itself situated in a volatile environment and thus is looking for ways to "not just add value, but reinvent it" by creating a whole new value system (Normann/Ramirez, 1993, p. 65). However, unlike suggested by Normann and Ramirez (1993), roles between the partners are not planned to change at any time while the value constellation is in place (Meijer, 2014): Every participating partner company has agreed to "stay in its vertical" (Overgaard, 2014) – and also leadership and visionary thinking will basically lie with Safetech (Meijer, 2014).

But even though roles of the partners are merely going to become a bit more shaped over time, through sharing a similar vision and by each partner compromising in some aspects, nevertheless unique value is already being created in the researched constellation. So unlike concluded by Normann/Ramirez (1993), a constant change and adjustment of partner roles seems not necessarily needed in that case. The authors of this thesis therefore suggest to research the extent to which each partner's nature/willingness to compromise influences the need for role change in value constellations.

#### Rotating Leadership

Regarding the suggestions made by Davis and Eisenhardt (2011) to introduce rotating leadership in value constellations as an important measure to strengthen joint innovation power, again it must be recalled that at Safetech, explicitly no rotation in leadership is intended: Important management decisions for the group are of course

made in occasional partner meetings, but the visionary leadership will remain at Safetech (Meijer, 2014). A simple but strong reason for this is that the other partners want to benefit from the alliance, but do not see themselves as capable to take the strategic and visionary lead. This may be partly due to a high utilization of management already, but also because some "companies are run by accountants..." (Overgaard, 2014). So even though rotation leadership has so far not played a role in the value constellation studied, all partners together were yet able to bring to market an innovative and very competitive joint offering.

#### Attribution of the Value Obtained in Constellations

Lastly, the findings published by Amit and Zott and by Vanhaverbeke and Cloodt are analysed. The empirical findings made in this case study of Safetech support the view by Amit and Zott (2011) that the total value of a constellation can be understood as the sum of all value captured by the participants. However, the perception that each firm's share of this value is determined by its bargaining power (Vanhaverbeeke/Cloodt, 2006) should be looked at with a large degree of diligence. The authors of this thesis interpret the described bargaining power aspect in a way that firms of a constellation compete among each other for the sum of profits made by all companies together (i.e. if one partner gets more profit, due to a higher bargaining power, another partner must get less.) This way of interpretation is also supported by Gomes-Casseres' (2003) example given for the Microsoft-Intel-(IBM) constellation, where Microsoft and Intel excluded IBM after some time in order to reap higher profits for themselves.

But the way how Safetech and its partners set up their alliance, there is no fighting for profits created by the constellation as a whole. This is because the companies are collaborating, but each firm is getting some very individual benefit out it for itself. Karchera is able to offer customers technological high tech products for a low price; Sansang is able to better monitor the utilization of their heat pumps in the home as a form of constant market research and R&D input; and Safetech is getting access to a huge range of potential new customers for its alarm systems. All aims of the partners

align very well together, which ultimately makes the "cake" bigger for everyone rather than having the companies compete for the same piece of a given cake.

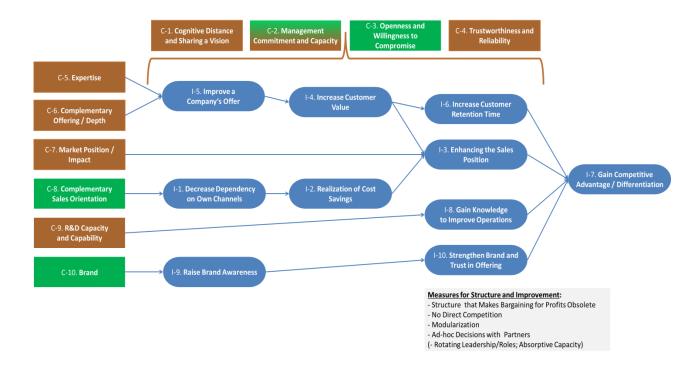
Coming back to the example given by Gomes-Casseres (2003), also the "IBM-risk" hardly applies for Safetech. The way the constellation is structured, the partners are mutually dependent on one another. But as there are no direct costs involved with participation – only the overall cake (i.e. the number of households that want a connected, smart home) increases – no partner has any real reason to exit the constellation. Safetech's CEO even goes as far as encouraging partners to participate in additional value constellations in countries where the firm is not yet active – because that way the overall awareness for the connected smart home will keep increasing (Meijer, 2014; Overgaard, 2014). And a great solution (if the participating firms stick together) will always attract customers.

### 5.3 Summary of Analysis Outcomes

In order to reach closure in this chapter, the most important aspects discussed in subchapters 5.1 and 5.2 are now merged into the theoretical model previously presented at the end of chapter two.

Empirically found new aspects and partner criteria very different from the underlying literature are highlighted in green color. Their respective influences are still presented in flowchart format right next to them, to also allow easy consideration in future research.

Aspects which, in contrast to theory, empirical findings found not important (such as rotating leadership and absorptive) are factored out in the graphic, also in order to suggest re-definition, reshaping or broadening of existing theory.



Graphic 5: Synthesis of Literature and Findings

### 6. Conclusions and Implications

### 6.1 Conclusions

This study intended to contribute to a framework explaining the competitive advantages of value constellations. In this mission, aligned with the research question, important partner selection criteria for value constellations were identified in the case company along with their influences on the overall outcome of this joint initiative.

For the focal constellation, namely ten key partner selection criteria were discovered. These attributes for example allow constellation members to realize cost savings, increase customer value and strengthen their brand, as well as to speed up and improve overall operations. The ultimate benefit of all these influences for the partners is the gain of competitive advantage or differentiation from competitors.

One key finding related to this is that without (the criteria) Sharing a Vision, Management Commitment and Willingness to Compromise, the observed value constellation would not be taking place at all. And also Trustworthiness / Reliability of partners was seen as a *key pillar* - a criterion that to some extent influences each aspect of the collaboration.

Seven<sup>7</sup> of the empirically discovered criteria were found to clearly correspond with the underlying theoretical framework of this thesis, whereas the criteria "Openness and Willingness to Compromise", "Complementary Sales Orientation", as well as "Brand" were not explicitly referred to as key criteria in standard management literature - although their importance for the case company is significantly high.

<sup>&</sup>lt;sup>7</sup> C-1: Cognitive Distance/Shared Vision; C-2: Management Commitment and Capacity;

C-4: Trustworthiness and Reliability; C-5: Expertise; C-6: Complementary Offering/Depth;

C-7: Market Position/Impact; C-9: R&D Capacity and Capability

Also an additional search for literature, dedicated to these explicit aspects, supported the perception that, although mentioned by some scholars<sup>8</sup>, these three aspects are not acknowledged as key partner selection criteria in management theory.

Implications that derive out of this situation for other researchers as well as for managers facing similar environments are presented in the following.

### 6.2 Implications for Research

This case study found that, especially at earlier stages of value constellations, changing roles not necessarily result in more effective joint operations. Scholars should therefore reconsider, or at least refine, the impact which role changes of partners – especially regarding the concept of rotating leadership – have on the outcome of value constellations at different life stages of such initiatives.

Future research should also analyse the extent to which the criterion "Sharing a Vision" overlaps with the concept of cognitive distance. While these two aspects seem to be very related to one another, few scientific articles discuss whether both aspects are complementary, correlated or yet distinct.

Besides this, the presented qualitative research found that a partner's absorptive capacity was of much less importance as selection criteria than candidate's deep knowledge of their own offering and sufficient R&D capacity. It would be interesting to back these suggestions up with additional qualitative or even quantitative research, to really see to which extent experience, R&D capability and capacity can compensate the need for absorptive capacity.

Scholars such as Schleimer/Shulman (2011) suggested that management commitment and trust in partners have no major influence on joint product development. The underlying case study shows, however, that in value constellations, aspects of

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<sup>&</sup>lt;sup>8</sup> Franzen/Moriarty (2009); Friedman/Furey (2012); Li/Mellgren (2000); Paul (2008); Peck (2009); Roy/Oliver (2009); Rumpunen (2011)

relationship commitment and trust very well can have a major (indirect) influence on the outcome of such initiatives, especially when joint product development is a fundamental requirement to be completed before joint service development can take place.

Also strong partner brands and the organization's willingness to compromise were found to play important to fundamental roles in the case company. But nevertheless these aspects were also hardly considered in management literature as key criteria for partner selection. Lastly, also this gap between existing management theory and empirical findings should therefore be subject to future research.

### 6.3 Managerial Implications

For managers considering to take part in a value constellation or even initiating one, it was found that the approach of "customer first", which focuses on increasing customer value through creating a unique and meaningful offering, has proven very successful.

So instead of looking into the direct financial aspects (such as the profit formula), it is suggested to truly consider this customer first approach – because if a unique value is offered by collaborating firms to the customer, then the KPIs (key performance indicators) will naturally rise along with this. Consequently it was found extremely beneficial to structure value constellations in a way that makes bargaining for profits obsolete but at the same time increases the overall market size - and therefore the profit prospects for all participating firms.

For this to take place, constellation focus should lie on a selected set of partners rather than on scaling up a scattered ecosystem to the maximum. Firstly, a common vision is needed, along with a mutual implementation strategy that is shared and driven by top management of the participating firms. Secondly, complementary partner products and services - whose combination and integration turns into a distinct and logical customer offer - very likely can lead to increased customer satisfaction and retention for all participating firms in their core business. Without rivalry among the partnering firms in a shared market, bargaining for profits is not necessary as the newly created value for large enough for everyone to succeed.

The business environment of tomorrow will very likely be a *collaboration world*, one in which company's of various countries, sizes and market segments partner up to meet increasing customer demands.

If companies stay on top of these developments and make wise decisions on partner selection criteria, structure and strategy of their value constellations - which also includes taking some of the conclusions from this thesis into account - then the risk of failure for such initiatives can be greatly reduced. In turn, safety and effectiveness of such collaborative initiatives are maximized – for the long-term benefit of participating firms, customers, consumers, users, and employees.

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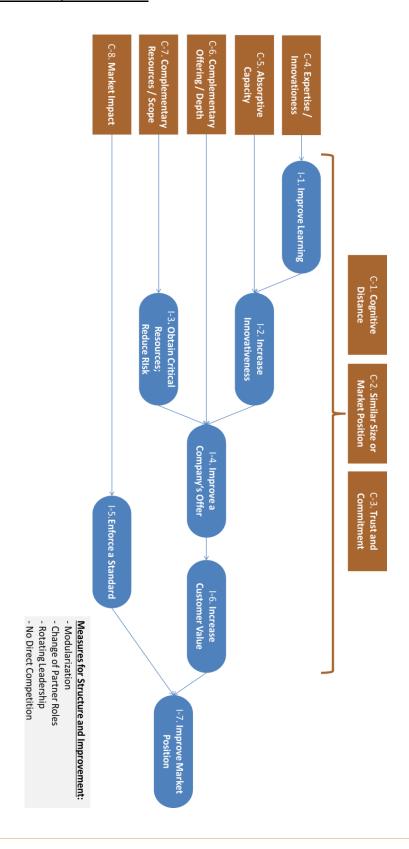
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# Appendix

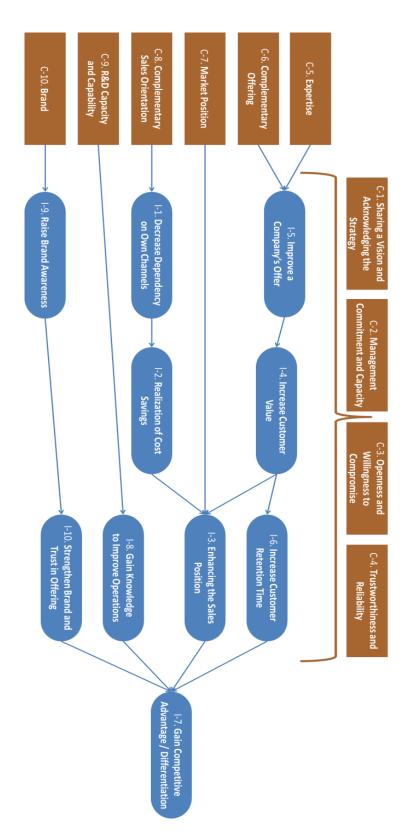
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Appendix 1: Literature Synthesis Model



Appendix 2: Model of Empirical Selection Criteria and Influences



Appendix 3: Model of Empirical and Theoretical Synthesis

