Collaboration in Interorganizational Relations

A Conceptual Study of Collaboration
Master Thesis in Business Administration

Title: Collaboration in Interorganizational Relations – A Conceptual Study of Collaboration

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Abstract

Background: Nowadays, organizations deal with many challenges in their external environment due to globalization, rapid technological advancement and increasing demand expectations. One way to face these challenges is by collaborating with other organizations. In this new globalized business world interorganizational relations are present everywhere. Nevertheless, from a theoretical perspective the field of interorganizational relations is saturated with terms and concepts. Nearly all aspects of interorganizational relations have been studied, having created a veritable conceptual swamp, idea abundance and vast fragmentation and this situation is a key rationale for the design of this study.

Purpose: The purpose of these thesis is to develop a concept of collaboration in interorganizational relations, meaning that there is a need for a synthesized typology model in which collaboration forms can be classified. The purpose of the thesis is fulfilled by researching and answering beforehand defined research questions, namely (1) what are the motives and risks of interorganizational relations and how can they be clustered, (2) which themes/dimensions are used to differentiate between collaborations forms, and finally, (3) can our proposed model be used to classify those collaboration forms?

Method: A qualitative directed content analysis was conducted. In the thesis, text from existing research from academic journals and books in the field of business administration were used as data.

Conclusion: The result of this thesis is a tentative synthesized typology model of collaboration in the context of interorganizational relations. It incorporates motives and risks of collaboration and finally seven dimensions/themes of how collaboration forms can be classified.
Acknowledgment

We want to thank our supervisor Hans Lundberg for the assistance in this thesis and furthermore for encouraging us to pursue the challenging path of collaboration in the context of interorganizational relations.

Moreover, we want to thank all people who gave us honest and valuable feedback throughout the entire process.

Lastly, we want to thank our families and friends for the support.

Thank you!

Anete Lazdina & Gregory Gittus
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1. Introduction

In this chapter, we will introduce the topic of this thesis starting from the background, followed by the problem discussion. We outline our research purpose and present the research questions showing why this problem is deserved to be studied. Finally, the delimitations of our research are stated.

1.1 Background

“The greatest change in corporate culture, and the way business is being conducted, may be the accelerating growth of relationships based not on ownership, but on partnership” – Peter Drucker

Nowadays, nearly every organization needs to face the challenges of an ever-increasing pressure on resources and demand expectations from stakeholders and customers. Lank (2006) emphasizes that obviously, no single organization can be the best and quickest in adapting to these fast-happening changes, and be the same time the most-cost effective and so on. While collaborating, organizations can achieve goals that would be impossible to solve as an individual (Kaats & Opheij, 2014). Growing attention is directed on the notion that working with others, even competitors, can bring the right combination of experiences, skills and resources (Hamel, Doz & Prahalad, 1989; Lank, 2006). Thus, collaboration is seen as a solution of challenges that organizations experience in today’s increasing competitive environment. The increasing competitive environment was caused by several developments in the recent decades, such as globalization, rapid technological advancement, increasing competition and increasing demands of customers (Lotia & Hardy, 2008). Especially in rapid changing industries, for instance, the technology industry, companies extend their boundaries to share and pool resources with partners in order to achieve their goals (Wratschko, 2009).

These external developments and the creations of numerous alliances are defining the new globalized business environment and business networking. Global companies, like IBM and General Electric, which have been inward-looking, hierarchical firms in the 1980’s have changed their strategies and now actively are involved in interorganizational relations (Child, Faulkner & Tallman, 2005). In 2003, it was reported that IBM was involved in more than 150 strategic alliances, underlining the importance they attach to alliances (Hill & Jones, 2008). Today, global companies can have more than 1,000 alliances in their network (Child
et al., 2005). Nike, the biggest athletic footwear manufacturer in the world, does not produce a single shoe by itself, neither does Gallo, the largest wine company grow any grapes (Quinn, 1995; as cited in Elmuti & Kathawala, 2001). This might be confusing, but overall that is possible because of the numerous interorganizational relationships they are engaged in, by establishing strategic alliances with their producers and suppliers (Elmuti & Kathawala, 2001).

According to a major survey, conducted in 2014 by McKinsey, executives expect their efforts towards mergers & acquisitions (M&A) (59%) as well as partnerships in form of joint ventures (69%) will grow. Moreover, executives and companies, who already had experiences (more than six in operation) with joint ventures are considering them as valuable and serious alternatives to M&A’s (90%), due to the success of previous and still operating joint ventures, compared to 40% of companies that have not been involved in joint ventures. Nevertheless, the message here is that executives and companies that were involved in joint ventures see them as a success (Rinaudo & Uhlaner, 2014). Overall, the number of different interorganizational relations has increased extensively, across all industry sectors (Child et al., 2005; Selksy & Parker, 2005).

The reasons and motivations of collaborating are diverse, but nonetheless collaborations must have benefits, which justify the invested efforts and resources. The benefits and risks vary from partnership to partnership, whereas some substantive benefits for collaboration are the development of new markets, the achievement of cost advantages, the development of new knowledge and skills and as well already mentioned to overcome pressuring external environment aspects of an increased competitive environment (Child et al., 2015; Kaats & Opheij, 2014). On the other hand, starting a joint venture or strategic alliance does not lead automatically to success. In fact, for instance, joint ventures have overall a high failure rate (Killing, 1982; Schuler & Jackson, 2002).

In line with the developments described above, research towards interorganizational relations and collaboration has increased accordingly. Nearly all aspects of interorganizational relations have been studied, having created a veritable conceptual swamp, idea abundance and vast fragmentation and this situation is a key rationale for the design of this study.
1.2 Problem Discussion

The problem with the concept of interorganizational relations is that it already is inflated due to the vast amount of existing literature. An enormous range of terms is used to describe interorganizational relations between companies such as - “alliances”, “partnership”, “network”, “coalition”, “co-operative”, “consortium”, “joint venture”, “extended enterprise”, “federation”, “forum”, “collective”, “community”, or “associations” (Barnes, Raynor & Bacchus, 2012; Gajda, 2004; Lank, 2006). Undeniably, collaboration has become increasingly important in many industries, sectors and research fields, and collaboration is studied in diverse fields from computer science to educational research, over to social work, telecommunications or business management (Barnes et al., 2012).

Nonetheless, adding to the confusion, in the outside business world, organizations define terms differently, for instance one organization’s “consortium”, might be another’s “network”. Some arrangements can be established as formal legal entities, while in other cases it can be an informal process with meetings, talking and taking action together. Furthermore, some collaboration forms can involve two organizations while others can involve several, diverse actors. Organizations may collaborate for a particular and limited purpose while others can have a long-term strategic focus. Moreover, some collaborations can be coordinated by one or more partner organizations, while in other cases it is supported by a formal coordination mechanism with its own budget and staff (Lank, 2006).

Even if the importance of collaboration is internationally recognized, there is little consensus in the academic literature regarding the terms to describe various forms of collaboration. Gajda (2004) states that collaboration is “somehow elusive, inconsistent and theoretical” (p. 66) and researchers admit that confusion exist at basic level, which in conclusion leads to confusion in the business level for the companies seeking to collaborate. This all makes it harder to use and apply collaboration in practice for business and other profit or non-profit organizations. Barnes et al. (2012) state that it is evident that confusing and inconsistent terminology in collaboration is worsen by researchers creating distinctions based on theoretical concepts rather than business realities. All over, scholars have acknowledged the need to clarify and develop concepts and a terminology that is clear and commonly agreed on, and on top of that moreover meaningful (Barnes et al, 2012).
Beside, the inconsistency with terms used to explain forms of collaborations, the same confusion exists when it comes to the overall term of interorganizational relations. Some refer to it as, cooperative relationships between organizations (Jarillo, 1988; Ring & van de Ven, 1992), intercorporate relations (Mizruchi & Schwartz, 1987), collaborative alliances (Gray & Wood, 1991), strategic alliances (Mowery, Oxley & Silverman, 1996) or cooperative strategy (Dussauge & Garrette, 1999; Dyer & Singh, 1998).

However most often, “alliance” and “collaboration” are used as generic terms, yet there are differences also between these two. Collins English Dictionary (2017) defines alliance as a “formal agreement or treaty; a merging of efforts and interests” while collaboration as “the act of working with another or others on a joint project”. Some authors (Barnes et al., 2012; Dussauge & Garrette, 1999) discuss that there are a number of points that support “collaboration” as the generic term. Firstly, alliance’s definition suggests merging aspects, while collaboration is more about strategic autonomy. Secondly, the term alliance might be confused with strategic alliance. On the other hand, collaboration emphasis on working together which should be the real purpose and benefits of interorganizational relationships. Moreover, collaboration aligns well with broader literature in collaborative relationships between companies, collaboration management and the success and failure of inter-firm collaboration (Barnes et al., 2012).

To sum up, the problem is simply the inflated terminology, which not only we but also others have already criticized. Connected with other aspects, such as the vast number of theoretical concepts to explain and classify collaboration forms, even increased the overall confusion. Thus, this problem led to our research purpose, which will be discussed in the following chapter.

1.3 Research Question and Purpose

The purpose of this thesis is to do a conceptual study on the concept of collaboration as one particular aspect of interorganizational relations. Firstly, we are focusing on motives and risks of interorganizational relations, respecting the prevailing theoretical paradigms, but incorporating several perspectives. Secondly, we collect and analyze different classification and typology models that exist in literature. Although, successful and useful classification and typology models have been created, it has increased the confusion overall, as many new perspectives and terms were introduced. Thus, we collect and present different dimensions and sub-categories of those models, examine their essential meaning and try to incorporate
as many different perspectives as possible. Thirdly and lastly, out of the two first steps we aim to create a more synthesized typology model. This purpose will be fulfilled by researching and answering the following three research questions:

- What are the motives and risks of interorganizational relations and how can they be clustered?
- Which themes/ dimensions are used to differentiate between collaboration forms?
- Can our proposed model be used to classify those collaboration forms?

This will contribute to existing knowledge in several ways. First, this study will incorporate perspectives from different empirical fields on collaboration, such as Management, Organization Theory, and Strategy. Second, by identifying and organizing these different explanations of collaborations. Third, by clarifying differences and similarities with the numerous terminologies used when it comes to the concept of collaboration in the field of business administration. Fourthly, by developing a synthesized tentative typology model. With this overall, we aim to improve and make it somewhat easier to make sense of interorganizational relations.

1.4 Structure

In Chapter 2, the frame of reference, aims to build a foundation of this thesis. In that section, we are going to introduce some concepts and understandings on collaboration and lead briefly through the existing knowledge, demonstrating that there is a clear need, to solve the issue of “messiness”, due to the vast amount of terminology used in the literature. We firstly begin with the discussion of the definition of interorganizational relations and collaboration. Secondly, we introduce the reader to existing theoretical paradigms that widely have been used to explain collaboration between organizations. This will be followed by the collaboration process. Further we give a collection of classifications or typologies developed by several authors. Finally, we finish our frame of references with the collection and definition of collaboration forms.

Chapter 3 is dedicated to the explanation of our research design and the methodology of Gioia, Corley & Hamilton (2012) that we will use, which then will be explained in detail. Further, while discussing our method we are going to briefly go into the overall context of our study and other factors to increase, for instance, the trustworthiness of our study.
This will be followed in Chapter 4 by our data analysis of our study, and consequently the presentation of our derived findings and inferences from the research. We will show our data structure, which led us to our derived and developed clusters of meaning, briefly describe them and link them to the frame of reference.

Chapter 5 will build and present our own developed typology model, to classify different forms of collaboration, including multiple dimensions to consider. This model will be explained more thoroughly and we demonstrate some examples of how this model could be applied for immediate use, but also for further research.

Finally, we will have a concluding discussion in chapter 6, reviewing and discussing what has been accomplished, which limitations occur and give implications to further research.

1.5 Delimitations

It can be said that collaboration is a daily activity of human life, from social media to student meetings, that is why it is necessary to clear out that our focus in this thesis is collaboration in interorganizational relations. In order words, we focus on collaboration between different types of organizations, for instance, business entities, governmental organization, non-governmental organizations (NGO) etc. Moreover, we also avoid including the following types of collaborations: collaboration within organizations also between employees, departments, board member, managers, and executive member within organization and, personal collaboration between individuals.
2. Frame of Reference

In this chapter, we will introduce the main themes of collaboration. We will discuss existing definitions in the field of interorganizational relations and collaborations. Further we will introduce the reader to the main theoretical paradigms in the context of interorganizational relations. Than we will discuss the process of collaboration, as well as, existing typologies and forms of collaboration.

2.1 Defining Interorganizational Relations and Collaboration

To start with, academic literature of collaboration is saturated with definitions, perspectives and aspects of collaboration. However, there is no consensus in this field neither giving one common definition for collaboration, nor creating a holistic perspective of this concept. Since our goal is not to find one superior definition over others, we rather try to illustrate the variety of definitions and explanations in the existing research.

First, it is necessary to define interorganizational relations, since that can be understood as an umbrella term, which first appeared in the 1960s (Cropper, Ebers, Huxham, Ring, 2008). According to Cropper et al. (2008) interorganizational relations are concerned with “relationships between and among organizations” (p. 4). Organizations can be business, public or non-profit, further the relationships can involve two organizations (dyadic), multiple organizations or huge networks that include many various organizations, for instance, business firms, state-owned enterprises, governmental agencies and non-governmental organizations (NGOs). Cropper et al. (2008) also discuss that existing research tend not to focus on the relations, but rather on interorganizational relationship entities (IOEs) which according to Crooper et al. (2008) are “manifestations of existence of inter-organization relationships” (p. 4). IOEs have been named in a huge variation, it can be e.g., a partnership, an alliance or a network. Descriptions of those entities can be a collaboration, collaborative and multiple others as it is shown in table 1.

---

1 Cropper et al. (2008) write inter-organizational, whereas we stick to interorganizational, according to Cambridge Dictionary (2017).
2 Which is our understanding of interorganizational relations for this thesis.
Table 1: Commonly used IOR language (Cropper et al., 2008, p. 5).

<table>
<thead>
<tr>
<th>Names for inter-organizational entities</th>
<th>Descriptors for inter-organizational entities</th>
<th>Names for inter-organizational acts</th>
</tr>
</thead>
<tbody>
<tr>
<td>an alliance</td>
<td>collaborative</td>
<td>bridging</td>
</tr>
<tr>
<td>a collaboration</td>
<td>inter-organizational</td>
<td>franchising</td>
</tr>
<tr>
<td>a federation</td>
<td>multi-agency</td>
<td>working together</td>
</tr>
<tr>
<td>a partnership</td>
<td>trans-organizational</td>
<td>collaboration</td>
</tr>
<tr>
<td>an association</td>
<td>cooperative</td>
<td>networking</td>
</tr>
<tr>
<td>a consortium</td>
<td>inter-professional</td>
<td>contracting</td>
</tr>
<tr>
<td>a joint venture</td>
<td>multi-party</td>
<td>outsourcing</td>
</tr>
<tr>
<td>a relationship</td>
<td>virtual</td>
<td>cooperation</td>
</tr>
<tr>
<td>a cluster</td>
<td>coordinated</td>
<td>partnering</td>
</tr>
<tr>
<td>a network</td>
<td>joined-up</td>
<td></td>
</tr>
<tr>
<td>a constellation</td>
<td>multi-organizational</td>
<td></td>
</tr>
<tr>
<td>a network</td>
<td>interlocking</td>
<td></td>
</tr>
<tr>
<td>a strategic alliance</td>
<td>joint</td>
<td></td>
</tr>
<tr>
<td>a coalition</td>
<td>multiplex</td>
<td></td>
</tr>
<tr>
<td>a cooperation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a one stop shop</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a zone</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Lank (2006) states that every interaction between two individuals might potentially called collaboration. In the specific context between organizations, she discusses two common factors that should uphold the collective process. First, “the need for individual human beings to engage successfully with one another” and second, “the need for their organization to engage effectively with them and with the collaborative process” (Lank, 2006, p. 6). Moreover, Lank (2006) states that there are three key distinctions which define the scope of collaboration in organizations. Firstly, organizations should work together to achieve outcomes, and secondly collaboration does not exist just by calling it such; the right aim, attitude, process and resources are needed. Finally, it requires leadership and consensus-building. In similar manner, Gajda (2004) emphasizes that collaboration is known by many names, and it “appears to signify just about any relationships between two entities” (p. 68).

However, between all definitions the key word “process” reoccurs. In fact, Gray (1989, p. 5, as quoted in Gray & Woods, 1991, p. 4) states that collaboration is a “process through which
parties who see different aspects of a problem can constructively explore their differences and search for solutions that go beyond their own limited vision of what is possible.”

Kaats and Opheij (2014) define collaboration as:

“Collaborations between organizations as a form of organizing in which people from autonomous organizations go into durable agreements and, by doing so, mutually harmonize elements of work between themselves. This results in a wide range of collaborative partnerships with a durable intention, but still with a finite duration” (p. 15).

This definition also entails a process as such, while there are scholars that generalize the collaboration as a process in any inter-organizational relations (e.g. Grey 1989), there are attempts to put it as a category, for instance:

“one particular category of inter-organizational relations – collaboration -cooperative, inter-organizational relationships which rely on neither market or hierarchical mechanisms of control to ensure cooperation and coordination, and instead, are negotiated in ongoing, communicative process” (Lawrence et al., 1999 & Phillips et al., 2000; as cited from Lotia & Hardy, 2008, p. 366).

Moreover, Lotia and Hardy (2008) state that collaboration is a traditional means of control - such as market and hierarchy – cannot be used to manage relations among partners, it requires negotiations. However, further Lotia and Hardy (2008) use a discursive method in order to explain collaboration and explain that according to Tomlinson (2005) “this term [collaboration] is being applied to a range of inter-organizational arrangements within diverse international settings – partnership between firms; between unions and employers; between purchasers and suppliers; and between private and public sector” (p. 375).

Thus, collaboration can be understood in many different contexts, but overall collaboration is seen as an “organizational form that is always in the act of “becoming” rather than discrete entity.” (Lotia & Hardy, 2008, p. 380). Since our goal is not to find the right definition for collaboration, which seems to be a very challenging task given the amount of different terms in use. We rather want to display different meanings and understandings of it in the context of interorganizational relations.
Concludingly, from the discussion above we define the collaboration between two or more separate entities as interorganizational relation, which goes beyond a simple market transaction. The act of collaboration itself, should be understood as a process, including many different aspects, such as reoccurring negotiations, adaptations to changing environmental factors, social aspects, such as trust and commitment and more. Most of these factors will be picked up in the following pages, as they might require further explanation.

In the next section, we continue to discuss different theoretical paradigms that are commonly covered in the context of interorganizational relationships.

### 2.2 Introduction to Theoretical Paradigms

Various theoretical paradigms have been widely used in the research of interorganizational relations. A theoretical paradigm is according to Ratcliffe (1983) “a world view, a way of ordering and simplifying the perceptual world’s stunning complexity by making certain fundamental assumptions about the nature of the universe, of the individual, and of society” (p. 165). Overall, many research of the authors dealing with cooperative behavior in interorganizational relationships is arranged in a distinctive theoretical paradigm, often referred to as theoretical perspective (Faulkner & de Rond, 2000; Gray & Wood, 1991). The most popular are the transaction costs theory, market power theory, agency theory, resource dependence theory as well as resource-based view. Nevertheless, other perspectives gained more attention in the last years, like social network theory or game theory (Faulkner & de Rond, 2000).

In the following we will present some theoretical paradigms more deeply, namely those which were mostly used in our investigated articles, in this case (1) transaction costs theory, (2) resource-based view (plus relational view), (3) resource dependence theory, (4) social network theory, (5) knowledge development and organizational learning and (6) cooperate behavior theory. Beforehand, we will briefly present the market power theory, agency theory and institutional theory. Nonetheless it should be born in mind, that none of those paradigms is able to explain the whole concept of collaboration. Further they should be seen as complementary (Barringer & Harrison, 2000; Gray & Wood, 1991).
As a guidance, table 2 shows in short, the following parts of the frame of reference, giving a summarized description of each presented element and explaining the relationship between each aspect and how they relate to our data analysis.

**Table 2: Roadmap of Paradigms, Classification and Forms**  
Source: Own Depiction

<table>
<thead>
<tr>
<th>Theoretical Paradigms</th>
<th>Market Power Theory</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Firms collaborate in order to gain market power</td>
</tr>
<tr>
<td>Agency Theory</td>
<td>Firms have to find the right governance structure for meeting shareholder and agent aims.</td>
</tr>
<tr>
<td>Institutional Theory</td>
<td>Firms enter collaborations to meet social and business norms or to increase legitimacy</td>
</tr>
<tr>
<td>Transaction Costs Theory</td>
<td>Firms choose the collaboration mode with the lowest transaction costs.</td>
</tr>
</tbody>
</table>

| Resource-Based View    | Firms collaborate in order to get access to crucial resources. |
| Resource Dependence Theory | Firms collaborate in order to decrease their own dependency or to increase their power over others. |
| Social Network Theory  | Explains with whom organizations form relationships. |
| Knowledge Development/Organizational Learning | Firms collaborate for learning purposes. |
| Cooperative Behavior   | Relational factors like trust, commitment or culture influence the collaboration throughout the whole collaboration process. |

<table>
<thead>
<tr>
<th>Classifications &amp; Typologies</th>
<th>One-Dimensional Models</th>
</tr>
</thead>
<tbody>
<tr>
<td>The classification and typology models will underline the complexity of interorganizational relations. Further, they will present briefly existing typology models. The distinctions are based on different dimensions. Those models lay the basis for the data analysis in our typology section.</td>
<td></td>
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<td>Classifications based on one dimension, such as equity-structure or purpose.</td>
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<th>Two-Dimensional Models</th>
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<td>Classifications based on two dimensions.</td>
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<th>Three or More Dimensional Models</th>
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<th>Collaboration Forms</th>
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<td>In the last part of the frame of reference we deal with existing collaboration forms. The table will present and describe numerous different collaboration forms. The chosen collaboration form is dependent on many factors such as the motives/risks and relational factors. Those will be also used in order to establish our typology model, as it is possible to distinguish for instance, between equity and non-equity collaboration forms.</td>
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Market Power Theory

Market power theory deals with the ability to gain market power and to position itself favorable in the external environment. A famous model was developed by Porter (1980) and deals with the well-known five forces. In short, market power theory applied to interorganizational collaboration helped to explain that “coalitions”, which describes a collaboration form, can help alliances to increase market power and profits (Faulkner & de Rond, 2000).

Agency Theory

Agency theory deals with the relationship between the agent and the principal, and the ability of the principal (shareholder) to make sure that the agent (management) follows his aims. The agency theory strives around the best governance form. Moreover, the agency relationship can be seen in many interorganizational relationships, for instance a buyer-supplier relationship or in a joint venture, as they are affected by the agency problem as well (Faulkner & de Rond, 2000; Rossignoli & Ricciardi, 2015). In the context of joint ventures, this theory can be easily applied. In this case, the relationship between the agent and the principal could be problematic as the attitude towards risks and commitments could differ between the partners or they might not have consistent goals, which could lead to the failure of the joint venture or any other interorganizational form (Faulkner & de Rond, 2000; Rossignoli & Ricciardi, 2015). The key question is to find the best contractual form (governance form), for instance, if an outcome-oriented contract (e.g. transfer of property, commissions) or behavior-oriented contract (e.g. salary; governance structure) is preferred (Eisenhardt, 1989; as cited in Rossignoli & Ricciardi, 2015).

Institutional Theory

The institutional theory deals with the pressure institutions impose onto organizations. The institutions define the rule of the game, as they provide the standards, norms of legitimacy and social norms (Barringer & Harrison, 2000; Glaser-Segura & Anghel, 2002; North, 1990). Overall, institutions can be described as formal or informal, whereas formal represent more the business environment through e.g. laws, whereas the informal institutions represent values, rituals and beliefs of a group of people (Glaser-Segura & Anghel, 2002). Thus, institutions form social behavior and values and hence influence the structure of organizations and their economic performance (North, 1990). In the context of interorganizational relations, organizations might enter collaboration to increase legitimacy.
and to meet the prevailing social and business norms. An example would be that a smaller company engages in a collaboration to increase reputation, visibility or image. Further, through increasing legitimacy organizations might get the opportunity to get access to critical resources (Barringer & Harrison, 2000).

2.2.1 Transaction Costs Theory

Collaboration and its different variations have been the study of analysis of many authors, including many different theoretical perspectives or paradigms used (Gray & Wood, 1991; To, 2016). In the following, some of the most used theoretical perspectives are introduced and discussed, to shed light on how the concept of collaboration has been studied.

The foundation of the concept of the transaction cost theory was laid by Coase (1937), discussing why organizations exist in the first place. According to him, firms will grow whenever the costs of internally organized activities are lower than through the exchange of services or products in the open market. Nevertheless, there may be a point reached when the costs in the open market are equal, compared to carrying out the transaction by the organization itself (Coase, 1937; Wratschko, 2009).

With the help of the transaction costs theory Williamson (1994) developed a framework to explain and link modes of coordination. Transaction costs are according to Williamson (1985) the “costs of planning, adapting, and monitoring task completion under alternative governance structures” (p. 2). Transaction costs are distinguished between ex-ante and ex-post costs. Ex-ante costs refer to costs of negotiation, drafting and safeguarding the contracts or agreements. On the other hand, ex-post costs are those occurring during the process of collaborating, for instance set up and running costs of governance, bonding costs, solve disputes among partners and as well from alignment and adoption to changing circumstances (Garcia-Canal, 1996; Williamson, 1985). Furthermore, Williamson (1979) claims that based on transaction costs and minimizing the sum of production, the choice of the organization form is established (Garcia-Canal, 1996; Williamson, 1979). Following, a certain form of collaboration could be chosen as this could lead to the reduction of transaction costs (Garcia-Canal, 1996). For instance, a manager should make a make-or-buy decision. The manager would outsource an activity if the sum of the costs in the open market (external costs) plus the transaction costs (e.g. governance costs) are lower compared to performing the activity internally (Jarillo, 1988; Wratschko, 2009). Different forms of
collaboration such as alliances, networks or others are seen as “hybrids” in the two polar forms of markets and hierarchies (Williamson, 1991). Referring to the example above, these networks and alliances could be another alternative of governance structure, e.g. if the transaction costs of using market exchanges are too high, but not as high as to justify the establishment of an own hierarchy (Das & Teng, 1996; Williamson, 1985).

The transaction costs theory was applied to explain and justify collaboration efforts, with the purpose to minimize costs inefficiency and to determine the choice of collaboration modes or governance choices (e.g. Parker & Brey, 2015; To, 2016; Wolter & Veloso, 2008; Wratschko, 2009). Further, the choice of the collaboration form influences the potential opportunistic behavior of partners. Opportunistic behavior is described as “self-interest with guile” (Williamson, 1975, p. 26) meaning that partners might behave according to their self-interest which is a major transaction costs as it harms the relationship (Das & Teng, 1996; Garcia-Canal, 1996). The risk of opportunistic behavior decrease if partners share joint ownership or an entity together, due to the commitment of resources to secure the investments made, which are not recoverable. Hence, it is claimed that equity alliances for instance, help to protect against opportunistic behavior (Pisano & Teece, 1989 & Parkhe, 1993, as cited in Das & Teng, 1996).

Nevertheless, Wratschko (2009) found two main weaknesses of the transaction costs theory in explaining the formation of alliances and networks. First, the theory does not account for the value creation, established in those alliances or networks, while it could appear that the value creation could outweigh the transaction costs. But this future value creation is unclear or hard to grasp in the beginning. Secondly, also claimed by Gray and Wood (1991), Wratschko (2009) criticizes that the relationship and the transactions between the organizations are seen more as bilateral exchanges, rather than to regard its embeddedness in a multilateral set of relationships, overseeing interdependencies which

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3 Wratschko (2009) defines alliances and networks as following: "Following Gulati (1998), and for the purposes of this theoretical analysis, I define strategic alliances as “…voluntary arrangements between firms involving exchange, sharing, or codevelopment of products, technologies or services” (Gulati, 1998: 293). This definition includes joint ventures and other equity alliances. The term “strategic” reflects the focus on “long-term, purposeful arrangements” with an end to achieving sustained competitive advantage for the parties involved (Jarillo, 1988: 32). In this literature review I use the term “alliance” for dyadic alliances and the term “alliance network” in a wider sense for both alliance portfolios and larger alliance networks." (p. 4).
can exist in bigger collaboration networks, or the “efficiency of the overall social system” (Gray & Wood, 1991, p. 10). Also, Doz and Prahalad (1991; as cited Ring & Van de Ven, 1992) state that the transaction costs analysis is weak, as single transactions are examined, whereas collaborative agreements involve recurring transactions (Ring & Van de Ven, 1992). Ring and Van de Ven (1992) also remark that the decision of the managers is only motivated by efficiency considerations.

2.2.2 From Resource-Based View to Relational View

The resource-based view (RBV), today seen as a proven theory ⁴, is one of the most influential and powerful research streams in strategy research to predict, describe and explain organizational relationships (Barney, Ketchen & Wright, 2011; Wratschko, 2009). Even though the importance of resources was mentioned already in 1959 by Penrose, it was only since the 1980s the RBV was shaped thoroughly also by important prevailing frameworks like the competitive strategy of Porter (1980) (Barney et al., 2011; Wratschko, 2009). According to Porter (1997) companies could gain a competitive advantage by incorporating and developing a corporate strategy based on the structural analysis of the industry a company is acting in, the famous five forces. This framework has an external, industry-specific focus of the environment of a company (Dyer & Singh, 1998). Nevertheless, based on the framework of Porter, other authors picked up other competing dimensions, which focused internally. For instance, Wernerfelt (1984) shifted the focus from the analysis of products to the resource side of a company, making the company the unit of analysis. A resource could be anything a company sees as a strength or weakness of the firm, tangible (e.g. machinery) or intangible assets (e.g. brand name) (Wernerfelt, 1984). In the RBV it is believed that only some internal resources, so-called strategic resources⁵, can create a sustainable competitive advantage for a company (Barney, 1991; Duschek & Sydow, 2002). Those strategic resources, have to be rare, valuable and hard or unable to duplicate or substitute by competitors in order to keep the sustainable advantage (Barney, 1991; Duschek & Sydow, 2002; Wratschko, 2009). For instance, Barney (1991) states that a competitive advantage can be established if firm resources are heterogeneous and imperfect mobile.

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⁴ For a collection of articles, showing the proliferation of RBT research and the reasoning why RBT nowadays can be seen as a theory see Barney, Ketchen, Wright (2011).

⁵ Also, referred to as „critical resources“ – Dyer & Singh (1998), whereas we intend to use the term strategic resources.
Nevertheless, so far, the RBV only focused on an entity of a company. Nowadays, collaboration between companies exists nearly everywhere. With the traditional RBV, it was necessary that the assets and resources, the potential sources of a competitive advantage are owned and controlled within the firm (Barney, 1991; Wernerfelt, 1984). Thus, Dyer and Singh (1998) extended the traditional RBV. They criticized that the traditional RBV implies that a competitive advantage only results from a single company, focusing only on resources that are controlled and housed internally. Further, looking at the prevailing framework of Porter (1980) it denies any type of collaboration as, market players are rivals (Barney, 1991). However, according to Dyer & Singh (1998) the strategic resources may lay outside the firm, and cannot be acquired through a simple market transaction. Moreover, developing those specialized resources is often too costly and time consuming (Wratschko, 2009).

In contrast to the traditional RBV, the developed “relational view” suggest that strategic resources can be embedded in interfirm relations and processes, which can result in a competitive advantage. In their paper, Dyer & Singh (1998) identified four different possible sources of achieving an interorganizational competitive advantage, namely “relation-specific assets, knowledge-sharing routines, complementary resource endowments, and effective governance” (p. 676). With the help of these sources, firms can generate supernormal profits returns, through relational rents. Relational rent is defined as “a supernormal profit jointly generated in an exchange relationship that cannot be generated by either firm in isolation and can only be created through the joint idiosyncratic contributions of the specific alliance partners” (Dyer & Singh, 1998, p. 662). Concludingly, with the relational view the RBV was extended beyond firm boundaries, adapting it to environment respecting the increase of alliances in the business world (Wratschko, 2009).

Additionally, the concept was extended constantly. For instance, Lavie (2006) identified a theoretical gap between traditional theories like the RBV or the transaction costs theory in relation to the performance and strategic behavior of interconnected firms. Thus, building on the findings of Dyer & Singh (1998) her concept incorporated network resources as important driver for competitive advantage (Lavie, 2006; Wratschko, 2009). Moreover, Das & Teng (2000) adapted the RBV to strategic alliances, suggesting that firms engage in alliances pursuing to establish a competitive advantage, through getting access to resources that would be otherwise unavailable.

Concludingly, in the above text, the traditional RBV was outlined, showing the development to the related-oriented resource-based view (Wratschko, 2009). Today, alliances and
networks are means in order to get access to valuable resources, that would not be available otherwise. This unavailability occurs since some important strategic resources, are rare, hard to substitute and imperfectly imitable (Barney, 1991). Alliances increases the mobility of resources and enables companies to pool and exchange resources. Further, it was shown that firms collaborating can gain a sustainable competitive advantage (Lavie, 2006). This is not only through the access of valuable resources, but also following the extended RBV, that a competitive advantage is embedded in the relationships and interfirm connection of firms (Duschek & Sydow, 2002; Dyer & Singh, 1998). Moreover, these networks and alliances are difficult to imitate by competitors, contributing to the sustainability of the competitive advantage (Wratschko, 2009).

2.2.3 Resource Dependence Theory

Since the publication of Pfeffer and Salancik’s (1978) seminal paper a lot of research has been done about resource dependence theory. In the following, the resource dependence theory (RDT), will be explained shortly and linked to collaboration.

In contrast to the RBV, which focuses on the resources owned and controlled by a firm, the RDT perspective concentrates on the external environment of an organization and delivers a strong tool to not only analyse organizational behavior but also interorganizational relations. Thus, “to understand the behavior of an organization you must understand the context of that behavior – that is, the ecology of the organization” (Pfeffer & Salancik, 1978, p. 1). The RDT strives around reducing environmental uncertainty and dependence (Hillman, Withers & Collins, 2009). Pfeffer (1987, p. 26-27) states the basics of interorganizational relations as,

“(1) the fundamental units for understanding intercorporate relations and society are organizations; ours is a society of organizations; (2) these organizations are not autonomous, but rather are constrained by a network of interdependencies with other organizations; (3) interdependence, when coupled with uncertainty about what the actions will be of those with which the organization is interdependent, leads to a situation in which survival and continued success are uncertain; and, therefore (4) organizations take actions to manage external interdependencies, although such actions are inevitably never completed successful and produce new patterns of dependence and interdependence. Furthermore (5) these patterns of dependence produce interorganizational as well as intraorganizational power, where such power has some effect on organizational behavior. “
As stated above, the RDT focuses on resources embedded in the external environment for an organization, that it must possess to survive and grow. By acquiring these resources, dependencies are created with other units such as suppliers, competitors, governmental organizations or other organizations embedded in the society. To manage these dependencies, an organization must get hold of and control these critical resources. Secondly, it must acquire control over resources that are critical for other organizations. Thus, if an organization gets control over these resources, it will increase its power (and decrease the dependence) compared to other organizations in the environment (Barringer & Harrison, 2000; Pfeffer & Salancik, 1978).

Pfeffer and Salancik (1978) offer five different possibilities in reducing environmental dependencies, which are (1) mergers and acquisitions (2) joint ventures and other collaboration forms (3) boards of directors (4) political action and (5) executive succession (Hillman et al, 2009), thus collaboration is one way of achieving these goals (Barringer & Harrison, 2000). Compared to mergers, collaboration only partial absorbs the interdependencies (Hillman et al., 2009). Nevertheless, collaborations may exist to get hold of strategic resources, reducing uncertainty by cooperating with key partners or to protect against corporate takeover from competitors (Faulkner & de Rond, 2000).

All in all, the RBV and RDT are consistent, emphasizing that the internal capabilities and owned resources can create a sustainable competitive advantage (Barney, 1991; Faulkner & De Rond, 2000). The RDT has some limitations. For instance, Donaldson (1995; as cited in Faulkner & de Rond, 2000) identified an internal inconsistency of the RDT itself. He claims that the aim of RDT is to increase autonomy by decreasing dependencies, while collaborating companies may in fact, reduce their autonomy. Moreover, Barringer and Harrison (2000) state that another weakness of this paradigm is that it neither explains why organizations might choose other governance forms nor other possibilities like mergers & acquisition. Hence, alliances are understood as a necessity to obtain strategic resources, denying other alternatives. On the other hand, there also exists empirical support for the RDT in relation to collaboration. Faulkner and de Rond (2000) give the example of the Royal Bank of Scotland and Banco Santander. To preserve their autonomy, they engaged in an alliance to protect themselves against competitors, which were seeking for possible mergers and acquisitions. Also, the strategy of collaborating is pursued often, for example.
in biotech firms to completer assets or to gain financial resources (Barringer & Harrison, 2000; Faulkner & de Rond, 2000).

In the recent years, the RDT has evolved as well and has been adapted to the context of increasing alliances and networks. For example, Bae and Gargiulo (2004) found that a dense network of alliances can result in better firm performance, through gaining power and access to resources.

2.2.4 Social Network Theory

Another paradigm that is broadly used in interorganizational relations context is the social network theory (SNT) (To, 2016). According to Faulkner and de Rond (2000) social network in broad sense can be defined as “persistent and structured sets of autonomous players (persons or organizations) who cooperate on the basis of implicit and open-ended contracts” (p. 20). Kenis and Oerlemans (2008) discuss that SNT is related to social science and focuses on joint activities and continual exchange between actors or participants in a social system. They also state that social network perspective “is characterized by an interest in the recurrent relationships patterns that connect the actors that make up a system’s social structure” (Kenis and Oerlemans, 2008, p. 289). On the other hand, Wratschko (2009) summarizes that a social network essentially can be defined as “a set of actors (“nodes”) connected by a set of ties (“threads”)” (p. 23).

According to Kenis and Oerlemans (2008) the most important concept of SNT is the relationships between actors or ties (Wratschko, 2009). However, in SNT instead of focusing on individuals, the focus is directed on interconnected relations or interaction between actors to understand these relations contextually and systematically (Kenis & Oerlemans, 2008). Additionally, there exist key concepts, connected with SNT that are social capital and embeddedness. Many scholars discuss the meaning of social capital in SNT. Kenis and Oerlemans (2008) state that social capital is “a measure for an actor of the value of his social network” (p. 292). In comparison Wratschko (2009) state that social capital is “the total value of an actor’s connections; social capital is aggregate of resources embedded within, available through, and derives from the network of interfirm relationships possessed by a firm” (p. 24). Both - Kenis and Oerlemans (2008) and Wratschko (2009) emphasize that social capital theory is related to resource-based view and as stated by Wratschko (2009) both concepts can be better understood by merging the RBV and SNT together.
Embeddedness is widely used in SNT, which was according to Borgatti and Forster (2003) initially discussed by Granovetter (1985) it has become an important part of SNT. Borgatti and Foster (2003) state that embeddedness can be formulated as “the notion that all economic behavior is necessarily embedded in a larger social context” (p. 994). Similarly, Uzzi (1996) has written that “embeddedness is a logic of exchange that shapes motives and expectations and promotes coordinated adaptation” (p. 21). Uzzi (1996) also emphasizes that this logic implies that actors do not focus on instant gains, but rather focus on long-term relations that could lead to individual and collective benefits. Recent research in embeddedness has been focusing on performance benefits (Borgatti & Foster, 2003). Exclusive and closer business relations can generate unique information and capabilities and increase the reliability of the actors that is part of network (Kenis and Oerlemans, 2008). Furthermore, Wratschko (2009) suggests that embedded ties can speed up collaboration while former empirical studies state that the main benefits of embeddedness are learning, risk-sharing, investments, and faster product introductions to the market (Uzzi, 1996).

Kenis and Oerlemans (2008) discuss that interorganizational relations formations from the social network perspective is researched extensively while other aspects of interorganizational relations, e.g., effectiveness of ties have received limited attention. Moreover, Kenis and Oerlemans (2008) distinguish two approaches which explain why ties are formed – embedded (local) ties formation and non-local tie formation, where the general difference is whether interorganizational relations occur within a particular network or outside of a network. However, Wratschko (2009) emphasizes that the social network perspective does not focus on why firms form alliances (why alliances are established) but rather who allies with whom or in other words why certain firms choose or need to cooperate with particular types of firms. Moreover, Wratschko (2009) concludes that social network studies typically focus on two aspects – first, antecedents (causes) and second, consequences (benefits). Briefly, Wratschko (2009) states that the benefits of inter-firm network formations are the reduction of (transaction) costs, strategic positioning and valuable resources acquisition while the benefits can be distinguished in two categories – informational benefits and coordination and control benefits.

Finally, according to Kenis and Oerlemans (2008), SNT has the strengths to surpass other paradigms such as transaction costs theory or resources dependence theory, because these theories are concerned of how organizations can manage environmental uncertainty and
access resources, while social network theory provides an understanding of why actors form ties (relationships) and with whom actors should form relations. On top of that it explains how the action is related to benefits.

2.2.5 Knowledge Development & Organizational Learning

One of the paradigms that received increasing attention in collaboration theory is knowledge development and organizational learning (To, 2016). According to Hamel (1991), global competition displays skills disparity between firms. In the same time, many practitioners and scholars recognize that knowledge, skills and competencies can be acquired or accumulated in one or another form of collaboration (Benavides-Espinosa & Ribeiro-Soriano, 2014; Hamel, 1991; Nooteboom, 2008; Vauterin & Virkki-Hatakka, 2016; To & Ko, 2016). As claimed by Hamel (1991) one partner can internalize other partner’s skills and improve its position within an alliance or outside of it. Similarly, Benavides-Espinosa and Ribeiro-Soriano (2014) state “cooperative learning furthers the ability of partners. Partners acquire a level of knowledge in cooperation that becomes an additional resource and potentially gives them competitive edge” (p. 648), which is in alignment with the presented RBV. According to, Badaracco (1991) firms that want to acquire knowledge create knowledge links, in other words, collaboration with others that enable firms to access skills and capabilities of the partners. Moreover, working together and creating new capabilities, can be of tactical and strategic nature (Badaracco, 1991).

New competencies and skills is an opportunity for firms to innovate (e.g. develop new products, improve the production process, etc.). Firms need to be open for inter-organization relationships to innovate (Benavides-Espinosa & Ribeiro-Soriano, 2014; Nooteboom, 2008; To & Ko, 2016). However, Nooteboom (2008) states that “inter-firm relations for learning and innovations goes beyond inter-organizations dyads, to include network effect – effect of the structure and strength of ties between firms, and interaction between structure and strength” (p. 608), that is related to SNT.

Badaracco (1991) discusses knowledge accumulation using the term “knowledge migratory”. He distinguishes two types of knowledge. Migratory knowledge is clearly articulated and “packaged”, hence contained in design, machines or individual minds. The second type of knowledge that is not migratory can be craftsmanship’s or firm’s knowledge. Beside knowledge types, it is necessary for quick knowledge migration, taken into consideration also
complementary capabilities or firm’s “social software”, incentives, within firm and possible barriers (Badaracco, 1991).

According to Hamel (1991) firms can be perceived in two ways. As a portfolio of core competencies and disciplines, or as a portfolio of product-market entities. Firms that choose to see themselves as the former most likely will find it important to acquire new skills and knowledge (Hamel, 1991). Furthermore, the willingness to acquire new competencies can motivate firms to form an interorganizational relation. However, Hamel (1991) also states that there are differences between “accessing” and “internalizing” partner skills. Accessing skills and incorporating them in specific collaboration limits the value, because firms can use it only within the collaboration. Once skills are internalized, firms can apply it outside of collaboration, hence use it in new markets, products or businesses (Hamel, 1991).

Hamel (1991) argues that firms oriented to skills and competencies might set the main goal of interorganizational relations for skills and competencies accumulation. After achieving this goal, the collaboration will be terminated. This approach is also called competitive learning, by exploiting one’s partner knowledge (Faulkner & de Rond, 2000; Hamel, 1991). Benavides-Espinosa and Ribeiro-Soriano (2014) and To and Ko (2016) emphasize that collaboration cannot be perceived statistic, rather collaboration should be perceived as a process in which firms develop new competencies. Benavides-Espinosa and Ribeiro-Soriano (2014) use the term “cooperative learning” (especially in joint ventures where partners get to know each other and learn how to work together). Firms should learn from the process of collaboration, including operationalizing and managing collaborations, and by periodic checks with all partners, examine and monitor progress, which leads to cooperative learning (Benavides-Espinosa & Riberio-Soriano, 2014; Faulkner & de Rond, 2000). Also, Doz and Hamel (1998) discuss the cycle of re-evaluating and readjustment in cooperation to learn and adjust to changes within alliances. Moreover, according to Hamel (1991) it may be that to determine the learning outcomes from engaging in a collaboration, the collaboration process itself, could be more valuable than the governance structure.

Another important aspect is the absorptive capacity of firms. Absorptive capacity is the firm’s ability to recognize, accumulate and use the knowledge of interorganizational relationships to commercial ends. This ability is based on the prior related knowledge, background and preparation of a firm (Cohen & Levinthal, 1990). This leads to some firms having a greater
capacity and thus a better position to learn (Barringer & Harrison, 2000). For instance, Mowery, Oxley & Silverman (1996) found some empirical support of the importance of absorptive capacity for acquiring capabilities through alliances (in technological areas).

Overall, the explanation of organizational learning and knowledge development to form interorganizational collaboration is conceptually strong. Nevertheless, it shows some weaknesses. For instance, the costs of collaborating are not considered, as it focuses on skill and capability transfers. Increasing the absorptive capacity is an option, but often a very expensive one. Moreover, the risk of unintentional sharing of crucial information is higher compared to market transactions (Barringer & Harrison, 2000). Moreover, the concept of absorptive capacity which plays a significant role in the inter-partner learning of firms, was criticized by Murphy and Perrot and Rivera-Santos (2012). They claim that absorptive capacity imperfectly reflects the learning of cross-sectoral alliances. Thus, they introduced their own refined concept of relational capacity suited for the context of cross-sectorial alliances.

2.2.6 Cooperative Behavior

Rather than a focus on transaction cost and resource-based synergies, organizations should consider a cooperative behavior perspective instead according to Faulkner and de Rond (2000). This is important to maintain on a positive path of success in collaborative relations. Also, Das and Teng (1996) discuss so called “relational risk”; meaning that organizations might not work for mutual benefits, do not cooperate openly. The motives for such behavior might be rational or irrational, for instance opportunistic behavior or lack of commitment. In fact, Faulkner and de Rond (2000) discuss three behavior aspects that affect interorganizational relations – culture, trust and commitment, that will be discussed in depth as follows.

The literature that deals with culture is quite extensive, however the main notion for culture in interorganizational relations are that firms need to consider two aspects. First, set realistic expectations from the relations and second, agree on operating rules, including communication strategy between organizations and measurements of performance, meaning stepping away from internal rules within an organization (Doz, 1996). Culture can be defined as:
“a deep-seated, sense-making medium, allowing for the allocation of authority, power, status, and the selection of organization members, providing norms for handling interpersonal relations and intimacy, and criteria for dispensing reward and punishment, as well as ways to cope with unmanageable, unpredictable, and stressful events” (Faulkner & de Rond, 2000, p. 29).

The discussion appearing in the interorganizational relations literature is whether organizations should cooperate with organizations that have a similar culture or with organizations that have a different culture. Both perspectives have valuable arguments. The one side, claims that heterogeneous cultures enhances the opportunity to learn a lot from the partner. One the other side, this heterogeneity can be the source of conflicts (clash of cultures), and too much time is wasted on conflict solving or understanding the culture of the partner’s organization. If the cultures are more homogeneous the organizations can relate more likely with each other (Faulkner & de Rond, 2000).

Faulkner (1995; as cited in Faulkner & de Rond, 2000) concluded that “most alliances are established because of perceived strategic fit (complementary assets and perceived potential synergies, for instance), the alliances that fail appear to do so frequently because of poor cultural fit” (p. 29). Hence, cultural fit is of importance in the partner selection, as too heterogenous corporate cultures could harm the collaboration. In fact, a cultural fit between organizations can be the foundation to provide mutual confidence and trust (Bleek & Ernst, 1993 & Faulkner, 1995; as cited in Faulkner & de Rond, 2000).

Beside culture another key topic in interorganizational relations is trust (Cooper et al., 2008). Trust has been researched in cooperative relations and cooperative behavior for more than fifteen years (Bachmann & Zaheer, 2008). However, value and role of trust on in inter-organization relations are still somehow ambiguous and debatable. Bachmann and Zaheer (2008) explain that this is because of conflicting assumptions and premises that come from different disciplines. Additionally, Faulkner and de Rond (2000) state that the literature on trust has suffered from concept stretching.

Van de Ven and Ring (2006) state that there are two broad definitions of trust. The first defines trust as “reflect confidence or predictability in one’s expectations” (p. 146). The second definition defines trust as “a faith in the goodwill of others not to harm your interest when you are vulnerable to them” (p. 146). McEvily and Zaheer (1998) argue that trust originates from
individuals, yet the object can be not only another person but also an entity or organization. McEvily and Zaheer (1998) represent the idea that “trust, both inter-organization and inter-personal, enhanced performance by lowering the transaction costs of exchange” (p. 280). Faulkner and de Rond (2000) add on, that trust in interorganizational relations enhances higher investment returns, rapid innovations and learning. Moreover, Niederkofler (1991) found that “goodwill and trust were found to have a stabilizing effect on the relationship at all development stage. They increased the partners’ tolerance for each other’s behaviour and helped avoid conflicts” (p. 30, as quoted in Faulkner and de Rond, 2000). However, scholars not always recognize the importance of trust in inter-organizational relations, for instance, Williamson (1993) excludes the importance of trust in business relationships claiming that business relationships are based generally on a calculative rational (as cited from Bachmann & Zaheer, 2008).

Finally, trust and commitment are two distinctive, but still related aspects. Organizations can be highly committed to each other, but still might not trust each other. Commitment can be shown in various ways, for instance, large capital investment or determination to hold on to inter-organizational relations even though it does not appear profitable (Faulkner & de Rond, 2000).

2.3 Collaboration Process & Evolution

The process of collaboration has often been neglected or ignored by researchers (Doz, 1996; Ring & van de Ven, 1994). Moreover, collaboration is a dynamic process and cannot be understood as a static approach. Thus, the evolution of collaboration was often missed (Ariño & de la Torre, 1998). Hence, Ariño & De la Torre (1998) created a model of collaboration evolution out of the proposed models from Ring & van den Ven (1994) and Doz (1996).

Doz (1996) examined the evolution of alliances in a longitude study, related to the learning processes. He investigated how the learning processes are constrained by the conditions of the initial starting point of an alliance. The findings were that the initial conditions are of uppermost importance, as those conditions affect subsequent learning and are “a key enabler of alliance evolution” (p. 81). In alignment with Knowledge Development and Organizational Learning (Section 2.2.5) partners learn from each other. From joint interaction and the coordination of tasks, re-evaluation and adaption takes place (Ariño & de la Torre, 1998; Doz & Hamel, 1998). Re-evaluation and adaption can be done by monitoring the efficiency
of the alliance, as well as the partner for equity and adaptability (Ariño & de la Torre, 1998). To succeed, it is a necessity for alliances to go through stages of transition. The process of learning and readjustment is influenced by other behavioral aspects, for instance commitment or quality of relationship, in which trust plays an important role (Ariño & de la Torre, 1998; Doz, 1996).

On the other hand, Ring and van de Ven (1994) developed a process framework for the emergence, evolution and break up of interorganizational relations. The concept evolves around the three recurring steps of negotiations, executions and commitments. These steps involve repeated interactions, in which the outcomes are assessed in terms of efficiency and equity. In the negotiation steps the motivation, possible investments and perceived uncertainties are jointly discussed to develop expectations about the relationship. Hence, it’s a formal bargaining process. In the commitment stage, the partners agreed on future actions and commitments of the relationship. Furthermore, the governance structure and terms of the relationship are established. Last but not least, the agreed commitments and actions are carried out in the execution stage (Ring & van de Ven, 1994). One major contribution of this work, was according to Ariño and de la Torre (1998) the introduction of equity in this framework.

All the above-mentioned steps are assessed in terms of efficiency and equity. Efficiency, reflecting the transactions cost theory, refers to the “most expeditious and least costly governance structure for undertaking a transaction“ (Ring & van den Ven, 1994, p. 93). Equity is defined as “fair dealing”, meaning that the inputs and outputs do not have to be divided equally. This concept goes beyond economic rationality as the norms of fairness affect economic exchange, including the sociological meaning of obligation (Ariño & de la Torre, 1998; Ring & van de Ven, 1994). In their study Ariño & de la Torre (1998) proved that external effects had an impact onto the relationship and interaction of the investigated joint venture. They conclude that the reoccurring assessment of partners, leads to renegotiations of the contractual terms or influences the behavior unilaterally, to restore balance. Either, a new mutual understanding of equity could be agreed on, otherwise the collaboration could be terminated. Besides, efficiency and equity, relationship quality is a mediating variable for building trust in a relationship (Ariño & de la Torre, 1998).
2.4 Configurations & Typologies

In this chapter, we are going to introduce and present different configuration and typology models of interorganizational relations. Organizational configuration is “any multidimensional constellation of conceptually distinct characteristics that commonly occur together” (Meyer, Tsui & Hinings, 1993, p. 1175). The configuration approach can be further classified into either typologies or taxonomies; typologies are developed conceptually while taxonomies are gathered empirically (Meyer et al., 1993).

The configuration approach is described as multi-dimensional, in which several dimensions can be represented, such as industries, strategies, cultures, processes, beliefs, or outcomes (Wratschko, 2009). Essentially, the configuration approach is a way of analyzing organizations including interorganizational relations (Wratschko, 2009). The main goal is to create systems that can represent the structure of a particular population that is under consideration (Wratschko, 2009). Both - typology or taxonomies - can situate multiple levels of analysis, identifying patterns that are common across organizations. Furthermore, patterns of organizational and environmental attributes are identified and clustered in homogeneous groups (Meyer et al., 1993). Two guiding principles should be followed by creating classification systems. First, different organizational elements correlate with each other and thus there exist a coherence. This leads to the second principle, which is to depict the holistic nature of the organizational phenomena and show the interconnectedness of organizations (Meyer et al., 1993).

In what follows, we summarize our collected classification models that exist in the interorganizational relations literature. There exist plenty of different collaboration configurations. Those differ by different level of analysis used. Börjeson (2015) concluded that previous research in interorganizational relations configurations are divided into two strands - “one is oriented towards comparable and coherent typologies, and the other is oriented toward extended and nuanced descriptions of IOR [International Organizational Relation] types” (p. 191). Some studies focus on simple distinction, e.g., by distinguishing between the dichotomy of equity alliances versus non-equity alliances (e.g., Colombo, 2003; Garcia-Canal, 1996 – depicted in figure 1). Others include multiple level of analysis, which we divided into two-dimensional models (figure 2) and three or more dimensional models (figure 3). In the green rectangle, the dimensions used for classification are named. This is followed, by the name of the model, author and year and the collaboration types.
Figure 1: One-Dimensional Models
Source: Own Depiction

Figure 1 depicts the one-dimensional models of collaboration configuration. They are based on purpose of cooperative relations (Cardell, 2002; Gersony & Peters, 1996), on ownership structure (Garcia-Canal, 1996; Colombo, 2003) or on governance structure in interorganizational relations, meaning integration and formalization relations (Todeva & Knoke, 2005). In the last model under hybrids, a term coming from the transaction costs paradigm, different collaboration forms are listed.

In figure 2 the two-dimensional models are shown. Overall, many authors prefer to use two dimensions for distinguishing collaboration forms. Some scholars combine competitiveness characteristic in cooperation with other dimensions. For instance, Dussauge and Garrette
(1999) distinguish alliances based on competitiveness characteristics. Firstly, they differentiate between partnership of non-competing firms and alliances between competitors. Secondly, after the first classification he distinguish between different forms in the respective field. In the partnership with non-competing firms section, the different forms are separate by their expansion options. In alliances between competitors, they distinguish by the contribution of assets and skills. For instance, if both partners bring different skills and resources to the partnership, it is a complementary alliance, and so on. Ragan and Yoshin (1996) differentiate alliances based on competitiveness characteristics and extent of organizational action or conflict potential. Basically, this created a model of four different fields of collaboration. Other scholars, similarly as one dimensional models, differentiate collaboration types based on collaboration purpose but adding an additional dimension (Barnes et al., 2012; Kaats & Opheij, 2014). Kaats and Opheij (2014) base their collaboration models on purpose and variables such as sharing versus exchange and improvement versus renewal. Barnes et al. (2012) differentiate collaboration types based on structural characteristics and purpose. On the other hand, Pisano and Verganti (2008) differentiate collaboration types on governance structure, hierarchy in collaborative relationships and the membership characteristics of networks. Other scholars consider ownership structure in interorganizational relations or financial sharing and combine it with, for instance, independence degree (Chen et al., 2015), how decision-making is distributed (Killing, 2002), or linking collaboration forms with risk (Das & Teng, 1996). Otherwise, Börjeson (2015) has used another approach as he was concerned that almost every model does not show the evolution and development of a relationship. Hence, he has developed a situational typology model, looking from two perspectives – collaboration’s immediacy level and collaboration’s establishment level.
Figure 2: Two Dimensional Models
Source: Own Depiction
Still, there are configuration attempts that use even more than two dimensions of collaborative relations. Those models are depicted in figure 3 on the next page.

Caglio & Ditillo (2009) use social structure, bureaucratic characteristics and ownership structure for a first distinction. Furthermore, within each field he divides different collaboration forms into symmetric (centralized) or parity-based. Baum and Schütze (2012) look at collaboration forms from five dimensions – purpose, function, degree of organization, legal form and market type. Within each dimension, other characteristics are described and listed. Vauterin and Virkki-Hatakka (2016) have developed a typology specific for knowledge collaborations, differentiating types based on mutual benefits, mutual knowledge and mutual meaning. Faulkner (1995) on the other side, considers three dimensions of how to construct alliances – complexity (interdependence level), structure and flexibility and finally number of partners in alliance.

Unfortunately explaining each model more in depth would overextend the scale of this thesis. Some models are more specified (e.g., Pisano & Vergati, 2009; Vauerin & Virkki-Hatakka, 2016), whereas others are having one similar dimensions but with the introduction of a second-dimension this leads to different named collaboration types (e.g., Gersony & Peters, 1996 – Kaats & Opheij, 2014).

The idea here was, to show briefly that those typology models exist, and depict the complexity of interorganizational relations. Additionally, it shows the diversity of collaboration types.
Figure 3: Three or More Dimensional Models

Source: Own Depiction
2.5 Forms of Collaboration

In the following we will present definitions of different forms of collaborations. This will give a good overview about which forms exist in practice and theory, showing the variety of terms used. Table 3 shows the terms used and identified in the literature.

Table 3: Overview of Different Forms of Collaborations – Defined
Source: Own Depiction

<table>
<thead>
<tr>
<th>Terms</th>
<th>Description</th>
<th>Examples of Authors</th>
</tr>
</thead>
</table>
| (Strategic) Alliance          | Voluntary agreements between at least two partners, which is not linked to a specific form. This form neither lead to the creation of a new entity nor joint ownership. The partners remain independent, but rewards, risks, control and benefits are shared among partners. | Barringer & Harrison, 2000
|                               |                                                                                                                                                | Dussage & Garrette, 1999
|                               |                                                                                                                                                | Todeva & Knoke, 2005
|                               |                                                                                                                                                | Das & Teng, 2000
|                               |                                                                                                                                                | Wratschko, 2009
|                               |                                                                                                                                                | Porter, 1985; as cited in Buzday, 2005                                             |
| Coalitions                    | Voluntary agreements between at least two partners, which is not linked to a specific form. This form neither lead to the creation of a new entity nor joint ownership. The partners remain independent, but rewards, risks, control and benefits are shared among partners. | Barringer & Harrison, 2000
|                               |                                                                                                                                                | Dussage & Garrette, 1999
|                               |                                                                                                                                                | Todeva & Knoke, 2005
|                               |                                                                                                                                                | Das & Teng, 2000
|                               |                                                                                                                                                | Wratschko, 2009
|                               |                                                                                                                                                | Porter, 1985; as cited in Buzday, 2005                                             |
| Joint Venture                 | Equity alliances between at least two partners, which leads to the creation of a new entity, which is jointly owned and controlled. Ownership, control, risks and rewards are shared among the participating firms, according to their percental residual value of the new entity. Normally created for a specific, limited strategic purpose. | Porter Lynch, 1989; as cited in Barnes et al., 2012
|                               |                                                                                                                                                | Garcia-Canal, 1996
|                               |                                                                                                                                                | Harrigan, 1988
|                               |                                                                                                                                                | Todeva & Knoke, 2005
|                               |                                                                                                                                                | Pfeffer & Nowak, 1976
|                               |                                                                                                                                                | Das & Teng, 2000
|                               |                                                                                                                                                | Killing, 2002
|                               |                                                                                                                                                | Dussauge & Garrette, 1999                                                          |
| Joint Subsidiary              |                                                                                                                                                | Porter Lynch, 1989; as cited in Barnes et al., 2012
| Equity Joint Venture          |                                                                                                                                                | Garcia-Canal, 1996
| Traditional Joint Venture     |                                                                                                                                                | Harrigan, 1988
| International Expansion JV    |                                                                                                                                                | Todeva & Knoke, 2005
| (Minority) Investments        | Shared equity investments between partners, whereas the equity purchased is too small to give the investor any control, thus minority investments. Do not lead to the creation of a new entity. | Harrigan, 1988
|                               |                                                                                                                                                | Todeva & Knoke, 2005
|                               |                                                                                                                                                | Das & Teng, 2000
|                               |                                                                                                                                                | Killing, 2002
|                               |                                                                                                                                                | Ohmae, 1989
|                               |                                                                                                                                                | Barnes et al., 2012
|                               |                                                                                                                                                | Das & Teng, 1996                                                                  |
| Research Contract             | Unilateral contractual agreement between at least two partners, defining, e.g. the transfer of property rights (“technology for cash”\(^6\)). Partners work independently. | Das & Teng, 2000
|                               |                                                                                                                                                | Colombo, 2003                                                                    |
| Joint R&D                     | Bilateral contractual agreement between at least two partners, in which all partners contribute resources and work jointly together on an ongoing basis. | Das & Teng, 2000
|                               |                                                                                                                                                | Colombo, 2003                                                                    |
|                               |                                                                                                                                                | Barnes et al., 2012                                                             |
|                               |                                                                                                                                                | Contractor & Lorange, 2012                                                       |

\(^6\) Das & Teng, 2000, p. 43
| Research Consortia | The partners do not share ownership or profits. | Todeva & Knoke, 2005  
Barringer & Harrison, 2000  
Caglio & Ditillo, 2009  
Pisano & Verganti, 2008 |
|-------------------|------------------------------------------------|-------------------------------------------------|
| Licensing         | A commonly known formal approach in which companies getting the right to use or copy a product/service, in exchange of royalties and fees. | Todev & Knoke, 2005  
Das & Teng, 2000  
Barnes et al., 2012  
Contractor & Lorange, 2002 |
| Franchising       | Formal agreement between franchisor and franchisee. Franchisee gets the right to use a brand-name identity, product or/and service owned by the franchisor. Franchisor keeps control over certain aspects, e.g., service norms, marketing efforts or pricing. | Todeva & Knoke, 2005  
Caglio & Ditillo, 2009  
Contractor & Lorange, 2002 |
| Cartels           | Large cooperation’s connive in order to hinder/avoid competition by controlling prices or production in a specific industry. A classic example is OPEC. | Todeva & Knoke, 2005  
Worstall, 2016 |
| Subcontractor Network | Central firm delegates tasks to often specialized firms, negotiating prices, delivery schedules and similar. | Todeva & Knoke, 2005  
Caglio & Ditillo, 2009  
Das & Teng, 2000 |
| Inter-firm associations | Often referred to as trade associations, which provides services to firms from the same industry, e.g., information, legal or technical advices and might create a platform for collective lobbying. In an Industry Standard Groups, a committee search members to join the association to adopt certain standards (e.g., technological, trade or manufacturing). | Caglio & Ditillo, 2009  
Barringer & Harrison, 2012  
Todeva & Knoke, 2005 |
| Joint Production  | Agreement in which partners produce separate parts of a product, and thus supports one partners to assemble the final product (often found in the airplane industry). Both partners share the risks and rewards of this partnership. | Das & Teng, 2000  
Barnes et al., 2012  
Contractor & Lorange, 2002 |
| Joint Marketing and Promotion | Another firms takes over tasks and parts of marketing activities and sales of another. | Das & Teng, 2000  
Barnes et al., 2012  
Gersony & Peters, 1997  
Contractor & Lorange, 2002 |
| **Risk and Revenue sharing partnerships** | Suppliers can invest into a specific program/product of their customer, helping the customer to reduce financial risks. On the other hand, the supplier can get partial hold of future revenues of the sales from the invested product. | Barnes et al., 2012 |
| **Joint Service Agreements** | Another firms takes over after sales or support of another. | Barnes et al., 2012 |
| **Parallel Production** | Two or more partners produce the same or similar product together in several countries. One partner normally takes care of the production whereas the other is responsible for launching the product in a market. Throughout the learning process, they can save costs and time which is shared among the partners. | Barnes et al., 2012 |
| **Networks** | Long-term arrangements between several companies, aiming to create a sustainable advantage compared to organizations outside the network. A network can take different forms and purposes, e.g., pooling resources or jointly strategic decision making. | Jarillo, 1988
Barringer & Harrison, 2000
Baum & Schütze, 2012
Jarillo, 1988
Todeva & Knoke, 2005
Todeva & Knoke, 2005 |
| **Action Sets** | Short-term coalitions of partners, to influence public policy making. | Todeva & Knoke, 2005 |
| **Informal Agreements** | Agreements between partners based on verbal agreement. Generally, do not include meaningful transfer of resources but often starting point for establishing a relationship. | Barnes et al., 2012
Caglio & Ditillo, 2009
Dussauge & Garrette, 1999 |
| **Enhanced Supplier Partnership** | A supplier – customer agreement, in which both partners commit essential resources to the collaboration. | Das & Teng, 2000 |
| **Trading Alliance** | Alliances between competitors to trade information, goods or services. | Killing, 2002
Garcia-Canal, 1996 |

Concludingly, it can be said that there exists a diversity of collaboration forms. Nonetheless, even extensively literature can be found for collaboration forms, in some, there still exist no consensus. For instance, according to the given definition of strategic alliances these do not include joint ventures or other forms of equity alliances. Nonetheless, there is no clear
consensus in the literature, where to draw the line between alliances, strategic alliances and joint ventures. For instance, Wratschko (2009) includes joint ventures into the overall term of strategic alliances (see footnote 3, p.14). Nevertheless, based on our collected articles and authors we distinguish between strategic alliances and joint ventures, as this was most often the case.
3. Methodology

In this chapter, we will present our research philosophy, and the research design. Further we discuss how data was collected and which method we used to analyse our data. As we follow a content analysis the context of our data will be shown and briefly discussed. Finally, the trustworthiness of our thesis is discussed.

3.1 Research Design and Philosophy

Creswell (2014) suggests looking at research design as a process with interlinked decisions. In order to plan a study, researchers should think through the philosophical assumptions that she/he brings into any study, as this affects choices of specific methods, interpretation of data, among many other things. The starting point are our assumptions about the nature of reality – ontology (Easterby-Smith, Thorpe & Jackson, 2015) etc.). For our research, we choose relativism as our position regarding the nature of existence and reality’s construction. As Gray (2014) states, “relativist has multiple realities and ways of accessing them” (p. 19). Also, Easterby-Smith et al. (2015) discuss relativism in social science as the way where there is no single reality that could be discovered and that there are many perspectives on issues and different observers might represent different viewpoints. Related to this is the second step of describing our epistemology. Gray (2014) states that “while ontology embodies understanding “what is”, epistemology tries to understand “what is means to know”” (p. 20). It is therefore essential to underline how we enquire the nature of knowledge and how research should be constructed (Easterby-Smith et al., 2015). Or in the terms of Creswell (2014) – the philosophical worldviews, which reflect the basic beliefs that will guide our action and thus underlie our research approach (Creswell, 2014) needs to be declared. Overall, there are different and diverse worldviews, going from Positivism, Pragmatism, Constructionism and its different variations, for instance Post-positivism or Interpretivism (Creswell, 2014; Gray, 2014). Social constructionism or constructionism is often linked to qualitative approaches (Creswell, 2014). Social constructionists believe that the world is socially constructed, and thus meaning is given subjectively, towards objects and things (Creswell, 2014; Gray, 2004). As this meaning are subjectively, this concludingly means that there exist multiple understandings and truths, which strengthen our relativistic understanding of the nature of reality (Easterby-Smith et al., 2015). As noticed, there exist plenty different meanings linked to the term collaboration overall. Thus, a positivistic perspective would not be appropriate in our study. Therefore, a constructionistic epistemology will guide our research. Our research design will be both descriptive and exploratory in nature. Descriptive in the sense,
that existing concepts are collected and derived from the literature. Exploratory, in the sense that this thesis aims at sorting, organizing and clarifying the concept of collaboration. In sum, our research design is summarized in figure 4:

### Figure 4: Elements of Research Process

Source: Adapted from Saunders (as cited in Gray, 2014)

#### 3.2 Research Method

Based on our purpose, we conduct a qualitative content analysis. Text used as data will be collected in the existing research on collaboration. The authors collected data from academic journals and books, in the field of business administration including journals such as Journal of Management, Journal of Strategic and Management, Journal of Business Research, Europeans Management Journal, The Academy of Management Review etc.

Sometimes researchers of qualitative study, which follow an inductive approach, are criticized for not being rigorous and thus not meeting the standards for scientific progress (Gioia et al., 2012). Thus, for our data analysis we followed the concept and methodology of Gioia, which argues that following this holistic approach ensures both rigidity of data and the inductive development of a new concept (Gioia et al., 2012). The certain steps of this approach will be explained in a deeper manner in the data analysis section.
3.3 Data Collection

Easterby-Smith et al. (2015) refers to snowballing and tracing citations, when researcher needs to deal with wide body of literature. Essentially it works that it starts with studies written on a topic over years and leads to looking for citations and references that these have used. In our study, we started with Web of Science database and started with keywords, such as “collaboration”, “collaboration forms” and so on. Since collaboration as keyword offers over 100’000 articles it was needed to change our search terms, also because interorganizational relation is described with various terms. Through refinements and other terms used in the search, such as “strategic alliances” and “typology”, we collected more specific articles. Afterwards, those were briefly checked and if considered suitable, we used the method of tracing citations to extend our number of articles.

3.4 Data Analysis

For our aim and our nature of our theoretical study, a content analysis strategy seemed a rational choice. This is because a content analysis aims at “drawing systematic inferences from qualitative data that have been structured by a set of ideas or concepts” (Easterby-Smith et al., 2015, p. 188). Over the last decades, the concept of content analysis has evolved. Berelson (1952) definition of content analysis was as a research quantitative research technique, aiming also at drawing systematic and objectives inferences and descriptions of contents of communication. However, nowadays content analysis is not only limited to a quantitative approach, and in order to capture the qualitative aspect of the data analysis Krippendorff (2004) offered a boarder definition, incorporating quantitative and qualitative applicability. He defines content analysis as “a research technique for making replicable and valid inferences from texts (or other meaningful matter) to the contexts of their use” (p. 18). Often content analysis is only distinguished between qualitative versus quantitative research method, missing out diverse analytical approaches from interpretive or intuitive analysis to more strict and systematic textual analysis (Hsieh & Shannon, 2005). Still, it should be stated what kind of content analysis will be used in our research and motivate our choice. Hsieh & Shannon (2005) discussed and presented different approaches of conducting a content analysis. The first approach is the “conventional qualitative content analysis”, describing an inductive approach of deriving codes and categories inductively from raw data, which is usually used to describe a phenomenon, where existing literature and research is limited (Hashemnezhad, 2015; Hsieh & Shannon, 2005). Content analysis are often seen as only inductive approaches, nevertheless, they don’t have to be limited to that, but can also incorporate a deductive
reasoning (Patton, 2002). This is in alignment with the second approach of Hsieh & Shannon (2005) the “directed content analysis”. Hereby, the first initial coding is based on existing literature and key concepts, thus is a more structured approach, aiming at the validation or conceptually extension of a theoretical framework or theory (Hsieh & Shannon, 2005). Due to the fact, that there is immense amount of literature about the concept of collaboration already available, which should not be neglected or ignored by the researchers, and according to our aim of this thesis this directed content analysis approach was pursued. The main advantage of directed content analysis is that an already existing theory, can be supported or extended.

Further, we followed the methodology of Gioia et al. (2012), which offers a systematic and rigor approach for conducting qualitative research. This process consists out of three steps to organize and analyze raw data (Lundberg, 2017). Firstly, like grounded theory analysis, the first step is to identify the meanings of collaboration in an open coding procedure, derived from our literature, which is called the 1st-order categories. It is likely, that to the huge amount of literature and the different meanings linked to collaboration, that there will be a huge amount of terms and the danger of getting overwhelmed, but nevertheless there will be no attempt made to create categories already. According to Gioia et al. (2012), getting lost is important as “You gotta get lost before you can get found” (Gioia, 2004, as quoted in Gioia, et al., 2012, p. 20). In the second step, similarities and differences are examined, leading to the reduction of existing categories (2nd-order categories). This is followed by the third step by refine the 2nd-order categories into 2nd-order aggregate dimensions. At the end of this process, we can build the data structure, a vital step in the research and analysis process. The data structure, according to Pratt (2008) and Tracy (2010) “not only allows us to configure our data into sensible visual aid, it also provides a graphic representation of how we progressed from raw data to terms and themes in conducting the analyses - a key component of demonstrating rigor in qualitative research” (as cited in Gioia et al., 2012, p. 20).

These steps are in alignment with the findings of Bengtsson (2016), which have identified four mains steps in qualitative content analysis. The final step will be our compilation, meaning that, with the help of he created categories and 2nd-ordered dimension, the analyzing and writing up process begins (Bengtsson, 2016).
3.5 Context of Content Analysis

According to Krippendorff (2004), while conducting a content analysis it is of uppermost importance, to make the chosen context explicit to the reader, to avoid misinterpretation and misunderstandings of the findings. Additionally, Kohlbacher (2006) states in his article, falling back on Ritsert (1972) that the context of the text components is often not taken properly into account while conducting a qualitative content analysis. Context is important because texts, as we use mainly as our source of data collection, can have different meanings depending on their context. Thus, to show the context of our analysis, we give a more transparent look into which articles and book has been used as our sources. The collection of sources used is depicted in figure 5.

![Figure 5: Sources Used for Content Analysis](Source: Own Depiction)

For the content analysis, we have used in total 48 sources from a diverse range of journals and books. A lot of research on interorganizational relations has been published in the strategic management literature. For instance, we have used seven articles from the Strategic Management Journal, a renowned journal or others such as Journal of Strategy and...
Management. Further, management journals were another important source for our content analysis, like Academy of Management Journal, Journal of Management or Management Decision. Other sources have been from fields of Business Research, Organizational Studies, Harvard Business Reviews and others. Beside academic journal articles, we also incorporate academic books. These books were included because we consider many of them as famous and accepted books in the research as those were often reoccurring references for our examined articles, such as Contractor and Lorange (2002) or Faulkner and de Rond (2000). For instance, the book of Contractor and Lorange is a compilation of 36 contributions of different academics. Another example is The Oxford Handbook of Inter-Organizational Relations, which benefits from contributions by famous academics e.g., Barbara Gray, Jean-Francois Hennart or Peter Smith Ring. Furthermore, despite the various journals from diverse fields, the articles themselves focused on several themes, going from typology models (e.g., Barnes et al., 2012; Buzady, 2005), joint ventures (e.g., Harrigan, 1988; Kogut, 1988), strategic alliances (Mowery, Silverman & Oxley, 1996) over to value creation of interorganizational relations (Barringer & Harrison, 2000) and others. Overall, this diversity of used sources strengthens our research design, showing that we used diverse literature from the context of business administration.

3.6 Trustworthiness

Trustworthiness is an important concept of qualitative studies in which typical quantitative terms, such as generalizability, internal validity, objectivity and reliability are adapted to the context of qualitative research. Hence, the concepts of credibility, dependability, confirmability and transferability emerged (Given & Saumure, 2008). Nonetheless, it depends on the researchers on which terms to focus or how to name them. For instance, reliability and validity are key factors and of uppermost importance of content analysis to underpin its robustness (according to Julien, 2008). Further it makes a qualitative study rigor and ensures the quality (Bengtsson, 2016). Errors and mistakes can always occur in the process of analyzing data, through personal bias or interpretation errors (Bengtsson, 2016). Especially in our case, the coding process will be approached through the examination of existing literature, and researchers could be more bias while working with the data. Therefore, several steps were undertaken to increase the trustworthiness of our thesis.

Credibility refers to the process of data analysis, how it is carried out and how the researcher proceeded. Credibility can be corresponding to internal validity (Bengtsson, 2016; Given &
Saumure, 2008). To increase our credibility, both researcher individually coded the 1st order concepts on their own. This is of importance, as in the context of a content analysis, researchers can imply different meanings to text as it is a subjective process and can lead to different interpretations of text (Julien, 2008). Thus, it was needed that the researchers came to an agreement of how to establish the 1st order categories and which excerpts are inserted. The same procedure applies for the following two steps of developing the 2nd-order themes and the 2nd-order aggregate dimension. This not only increased the credibility, but also to some extent the reliability (or dependability). Dependability, deals with the reproducibility of a study. This is especially difficult in qualitative studies as researchers draw different conclusions out of text (Bengtsson, 2016). Thus, the method of Giaoi et al. (2012), is very helpful in depicting in a transparent way how the data was coded and clustered into the final dimensions. Furthermore, all used excerpts, including references and page numbers, are included in the appendix. This also shows, that they are not pulled out of context, as some excerpts seem rather short, and thus underlines the confirmability, as we do not claim any findings without having any data as prove (Given & Saumure, 2008). At the end of the coding process, it is essential to describe and define the groupings, in order to show the differences in justifying their establishment in a comprehensive way (Julien, 2008).

Moreover, from the transition from our data structure to our tentative model, further refinements and interpretations can be observed. That is, in somewhat related to dependability (showing how the data has changed and different decision have been made by the researchers during the whole analyzing process) (Bengtsson, 2016). Overall, all these aspects help us to increase the trustworthiness of our study.
4. Data Analysis & Interpretation

In this chapter, we will introduce our data analysis and interpretation. In the following we will lead the reader through our collected and analysed data of risks and motives of collaboration. This will be followed by typologies of collaboration, in which we identified different dimensions of how collaboration can be categorized. Each category will be explained briefly, also showing the data and sub-categories that lead to our final dimension. For each aspect, we will show our data structure.

4.1 Risks of Collaboration

The first aspect we examined more thoroughly were the risks associated with collaboration as depicted in figure 6 and 7. Overall, we distinguish between two overall risks – organizational and interrelationship risks. The distribution of risks associated with organizational risks or interrelationship risks is quite equal. Moreover, comparing it to the following data structures it already can be said, that the risks seem to be not as present as for example motives overall, concluding that the risks might be underestimated as important factor, influencing the choice of collaboration form, as well as risks occurring during the collaboration process. In the following the risks will be explained briefly and in some cases the relations to other 2nd order themes outlined.

4.1.1 Organizational Risks (OR)

The organizational risks consist out of risks associated directly with the organization itself. We identified loss of resources (OR1), loss of autonomy (OR2), limited flexibility (OR3) and dependencies (OR4) shown in figure 6.

![Figure 6: Organizational Risks (OR) - Data Structure](Source: Own Depiction)
**Loss of Resources (OR1)**

The loss of resources is a risk which describes the fear of a company that the collaboration partner will gain access to valuable resources and internalize them. As Das & Teng (2000) state: “Essentially, the principle is to find the structure that balances the two issues: being able to procure valuable resources from another party without losing control of one’s own resources” (p. 44). The loss of resources are risks mainly derived from the resource-based view.

**Loss of Autonomy (OR2)**

Loss of autonomy describes the risk of losing partial control of the own organization and losing some of its operational autonomy. Overall, this risk seems to appear more in the context of joint ventures and joint activities, as “joint planning and decision making may result in a loss of decision autonomy” (Barringer & Harrison, 2000, p. 386). Ohmae (1989) states: “The second problem with joint ventures is that parent companies behave as parents everywhere often do” (p. 150). Nevertheless, this is not only a matter of joint ventures, but to appear in other collaboration forms, for instance, in networks, as Cygler & Stroka (2014) referring to Capaldo claim, that a company may become a “prisoner” in the network, losing its autonomous operation capability.

**Limited Flexibility (OR3)**

Loss of autonomy is closely related to the limitation of flexibility, that is the next risk in organizational risk category. Consequently, if one organization loses autonomy it can limit its flexibility to change and adapt to changing circumstances in its environment. Nonetheless, limitation or decrease of organizational flexibility do not appear in literature often. Our only statement found in reviewed literature, was from Barringer and Harrison (2000) who claim that “establishing a partnership with one firm may foreclose the possibility of establishing a partnership with another firm (p. 386).” The reasons why this is the case are not discussed or mentioned, leaving room for interpretation. Finally, limited flexibility has not necessarily been seen as a synonym of losing autonomy, we believe it has its eligibility to be seen as a separate risk.

**Dependencies (OR4)**

As already discussed in our frame of reference dependencies play an important role in interorganizational relations, derived from the resource-dependence theory. Dependencies can be two-folded. Either they can be a motive (which will be discussed in “Motives for Collaboration”) but on the other hand, can also bear risks of getting more dependent on
other partners in your interorganizational relations. Thus, if one partner gains excessive power over another an imbalance of power arises. This can be a risk, especially for smaller companies if they collaborate with bigger companies who have more available resources. This is expressed as “a power imbalance also increases the chances that the alliance will lead to an acquisition” (Barringer & Harrison, 2000, p. 386). In the context of networks there might be a distinction of more and less powerful and influential companies, whereas the former may have some privileges due to their power. According to Cygler & Sroka (2014), “the roaches bear the costs of network functioning and are dependent on stronger companies, including when making the decision to withdraw from the system itself (p. 61).” This statement, not only underlines the risk of becoming dependent on others, but also additionally brings up, indirectly, the risks and costs associated with exit strategies of collaboration.

7 Referring to the weaker partner in the Network.
4.1.2 Interrelationship Risks (IR)

Interrelationship risks are for our understanding risks that could appear in the process of collaborating, in an established collaboration form, occurring in the interaction between the partners. We identified opportunistic behavior (IR1), structural issues (IR2), cultural issues (IR3), increasing complexity (IR4) and competing interest (IR5) as depicted in figure 7.

Opportunistic Behavior (IR1)

Opportunistic behavior is a reappearing term throughout the investigated literature. It is mainly used from a transaction costs perspective. Opportunistic behavior, for instance, increases the operating costs, needing reactions in the structuring or expansion of management structure (Cygler & Sroka, 2014), and impacts the total transaction costs. The term opportunistic behavior implies that partners might follow their own interest and thus harm the relationship. This is in somehow related to trust, for instance, if the trust decreases the likelihood of opportunistic behavior increases (Cullen, Johnson & Sakano, 1995). Conclusively, the risks that a interorganizational relationship will be failing, due to opportunistic behavior, is always present if there is not a high established trust.
**Structural Issues (IR2)**

The term structural issues is not often found throughout our literature. It could be due that the general understanding might be, that those risks always are related to the structure and thus form of collaboration. Nonetheless, we think it is important to mention them as separate risks, as not all of the mentioned and following risks can be explained just through the chosen collaboration forms. Essential insights are that structural issues due not only raise the potential for conflict, but “moreover, a lot of benefits from the functioning of the network are thereby eroded” (Cygler & Sroka, 2014, p. 55).

**Cultural Issues (IR3)**

Cultural issues or barriers are a recognized problem in the organizational literature. Therefore, it is not surprising to find this aspect in the literature of interorganizational relations. The importance of cooperate culture has already been discussed in cooperative behavior. According to, Sherman & Sookdeo (1992) the demands of solving personal relationships on the management level, due to cultural barriers, is underestimated in many cases. Moreover, the cultural issues might hinder the implementation of management systems and structures (Barringer & Harrison, 2000) (especially in the case of equity alliances) and concludingly to our understanding can limit the speed of actual collaborating and additionally increase transaction costs. Moreover, of course other motives that led to the decision to collaborate may be delayed and additionally conflicts could arise (which also could affect the trust of the partners). Cultural issues are related to the trust and commitments, as it is discussed above in cooperative behavior, main notion is that cultural fit can create mutual trust and commitments (Bleek & Ernst, 1993; Faulkner, 1995; as cited in Faulkner & de Rond, 2000).

**Increasing Complexity (IR4)**

Complexity arises as two firms have to combine their efforts, which might be difficult to manage. Complexity is an important issue in the process of collaborating and thus will be explained in a deeper manner in the section of typologies (Section 4.3.6). Nonetheless, for now it should be mentioned that the aim of the managers is to create collaboration forms that are easy to manage in order to avoid costly delays, frustration and thus conflict potential and eventually termination or failure of the collaboration (Barringer & Harrison, 2000; Killing, 2002).
Another risk that must be considered is the awareness that besides the purpose and goals pursued in interorganizational relations, that each partner has own goals and interests, which is another aspect of potential conflict (Das & Teng, 2000; Dussauge & Garrette, 1999). Thus, the importance of the collaboration to each partner, and the commitment play an important role. Moreover, it might be said that in equity alliances where more resources are committed to the partnership, the risk that the partner will follow its own interest instead of the collaborative goals, will decrease (Pisano & Teece, 1989 & Parkhe, 1993, as cited in Das & Teng, 1996). A connection with the potential opportunistic behavior can be seen, nonetheless this aspect gives another insight, as it shows that it must be considered that there are more goals, but the collaboration goals, of interest.

4.2 Motives of Collaboration

The next research area we focus on are the motivations of collaboration (Figures 8 - 13). Overall, 23 2nd Order themes were collected and clustered into four aggregate dimensions. In total, this section was derived out of 89 excerpts from the literature. Compared to the number of excerpts found in risk, it underlines our claim that most research has focused more on motives instead of risks of collaboration. Moreover, the problem we see is that the motives were often incomplete as authors naming only a few of many, depending on their theoretical perspective.

4.2.1 Market and External Environmental Motives (ME)

The first aggregated dimensions from motive dimension is what we call “Market and External Environment”, meaning motives that are related to the market and external environment that surrounds firms. Market and external environment motives consists of seven themes, namely, market access (M1), market power (ME2), time (ME 3), flexibility (ME4), protection (ME5), external pressure (ME6) and lastly collective lobbying (ME7), which is depicted on the following page (Figure 8).
Market Access (ME1)

The motive of accessing new markets is the third biggest theme in our data structure of motives. Overall, market access seems self-explanatory. Organizations use collaborations to enter new international markets (e.g., Child et al., 2005) whereas the underlining motives can
be multifaceted. For instance, in the context of multinational companies, referring to Harrigan (1984) and Kogut (1988), Tallman and Shenkar (1994) state that those companies establish equity joint ventures in less developed countries, as this collaboration form is less costly and easier compared to establishing a wholly owned subsidiary. Staying in the context of less developed countries, the equity joint venture is in many instances the most convenient way of entering a foreign market (e.g., China). This is often due to governmental policies of the host country (Contractor & Lorange, 2002). Moreover, partnering up with a partner who already has established itself in a marketplace can make the expansion less stressful and easier (Elmuti & Kathawala, 2001). Whereas, Ohmae (1989) clearly states that “alliances are not tools of convenience (p. 144)”, they are tools to avoid establishing a complete, new business system in a foreign country. Another aspect is, that besides the usage of already existing business system (e.g., distribution networks) relationships and connections with suppliers and customers can be achieved faster. Another opportunity is to incorporate the local knowledge of the market and culture (Contractor & Lorange, 2002).

**Market Power (ME2)**

A reappearing motive is market power that is also related to market power theory, which implies that organizations can increase market power by collaborating. Already in the 1980s evidence was found for market efficiency and power motives for the creation of joint ventures (Kogut, 1988). Moreover, Child et al. (2005) claim that market power is the prime motivation for interorganizational relations. Collaborations can be seen as a mean to gain market power in a faster and cheaper manner compared to mergers and acquisitions or organic firm growth (Faulkner & de Rond, 2000).

**Time (ME3)**

The term “time” was already present in the section of market access. Organizations may use collaboration to enter markets faster and thus in time-saving manner. Moreover, this can also apply in the case of increasing market power. Already in 1989, Ohmae identified that in order to server your clients globally, alliances are the tools to do so. Besides the cost factors by building, for instance, distribution by yourself, time is a pressuring factor as companies face the struggle to act in important markets simultaneously (Ohmae, 1989). Furthermore, time plays an important role when companies identify an opportunity. Even though they might have the needed resources for organic development of new markets, an organization may not be able to build up a market presence fast enough to gain advantage of the opportunity.
Thus, Child et al. (2005) conclude that “alliances are the fastest means of achieving market presence to meet an opportunity, if the partners each have strong resources and competencies, but alone insufficient to achieve critical mass” (p. 88).

**Flexibility (ME4)**

Flexibility was already discussed in the risk section, but besides that it can also be a motive for collaborating. The “hub firm” could, in the context of strategic networks, outsource activities to other participants of the network, who could solve these activities more efficiently, giving the hub firm more flexibility to concentrate on its more important aims (Jarillo, 1988). Moreover, interorganizational relations could help to avoid regulatory concerns, that might arise in a merger or acquisition (Barringer & Harrison, 2000).

**Protection (ME5)**

Protection deals primarily with the aim of blocking or neutralizing moves from competitors. Through interorganizational relations organizations might be able to get access to the competencies to do so. Moreover, an organization will try to save its market power (Barringer & Harrison, 2000). From a strategic behavior view, Kogut (1988) concluded that the motives of joint ventures could be more substantive than theoretical grounded, for instance in the context of a national oligopoly to coopt foreign participants.

**External Pressure (ME6)**

Besides above mentioned motives, the external environment is crucial. Firstly, organizations are forced into interorganizational relations by political pressure (Contractor & Lorange, 2002; Kaats & Opheij, 2014). In other cases, changes in the external environment could be the impulse to collaborate, to pursue new opportunities in domestic or international markets. Moreover, Harrigan (1988) gives some environmental traits which could lead to the kick-off for collaborating such as demand uncertainty, customer traits, infrastructural and product development. Furthermore, organizations must consider pressure by the media or competing initiatives, where they feel they must react to them (Kaats & Opheij, 2014).

**Collective Lobbying (ME7)**

Concerning the aspect of political pressure, organizations might choose the opportunity to engage in interorganizational relations (e.g. Trade associations; Action Sets) to increase their political pressure aiming at improving policies concerning their industry (Barringer &
Harrison, 2000). For instance, action sets are small shot-term coalitions in order to influence public policy making (Todeva & Knoke, 2005) and thus decrease political pressure or regulations that harm the organizations themselves.

4.2.2 Competitiveness (C)

The second aggregate dimension is what we call “Competitiveness”, depicting the increasing firm’s competitiveness environment. This dimension consists of following motives: competition (C1), competitive advantages (C2) and strategic motives (C3). In the following analysis, it appears that all themes are strongly interrelated in this dimension and moreover to other dimensions in the motive section.

![Figure 9: Competitiveness Motives (C) - Data Structure](Source: Own Depiction)

**Competition (C1)**

Competition is the first theme in our data structure related to competitiveness. Competition represents three main aspects. First, improvement of a firm’s competition position (Kogut, 1988), second the increasing intensity of competition in markets (Harrigan, 1988; Palakshappa & Gordon, 2007) and third, competitor power can be reduced by cooperating with them (Telesio, 1977, as cited in Contractor & Lorange, 2002).

**Competitive Advantages (C2)**

Competitive advantage is another motive that is considered. In many cases, it is left out of discussion since it is closely related to other dimensions that are discussed above or seen as the main goal of interorganizational relations (e.g., Barney, 1991; Culpan, 2002). Excerpts also clearly display the link between gaining competitive advantages and other dimensions
such as knowledge development and access to resources. As Tallman (2000) states competitive advantages are gained by creating alliances and combining resources and capabilities that are not otherwise available, which is closely related to resource-based view.

Strategic Motives (C3)

Strategic motives are the last theme from the competitiveness dimension. Strategic motives are strongly related to the previous discussed themes and means that strategic behavior can weaken competitors and strengthen a firm’s position in markets (Kogut, 1988). Overall, strategic motives aim to increase firm’s strategic position in the market, compared to its competitors.
4.2.3 Financial and Risk Aspects (FR)

The third aggregate dimension is the financial and risk aspect. It consists of cost advantage (FR1), economies of scale (FR2), risk sharing (FR3), production rationalization (FR4) and relational rents motives (FR5).

**Figure 10: Financial & Risks Motives (FR) - Data Structure**

Source: Own Depiction

**Cost Advantage (FR1)**

Cost advantage motive is the biggest theme in financial and risk dimension, meaning firms engage in collaborative relationships to minimize production and transaction costs (Dussauge & Garrette, 1999). Mostly, collaborative relations that imply joint ownership (Child et al., 2005; Dussauge & Garrette, 1999; Kaats & Opheij, 2014) are recognized as a
potential solution for new firms or firms with low bargaining power, high uncertainty and high asset specificity to minimize transaction and production costs and to overcome (avoid) high investments (Hamel et al., 1989; Kaats & Opheij, 2014). Evidently, the cost advantage motive is related to transaction costs paradigm, often used in collaboration literature to analysis how transaction and production costs can be reduced by certain forms of collaboration (Garcia-Canal, 1996).

*Economies of Scale (FR2)*
Economies of scale is the second biggest theme in the dimension, meaning that firms choose to work together in order to achieve economies of scale (Jarillo, 1988). Ohmae (1989) and Barringer and Harrison (2000) emphasize that firms which experience high fixed costs or are willing to amortize fixed costs, need to find a partner that can help maximize contribution to fixed costs and expand production volume.

*Risk Sharing (FR3)*
Another theme that is part of the financial and risk dimension is risk sharing, and it is closely related to financial motives to collaborate. Collaboration that includes risk sharing is recognized to be important for firms which aim for innovation – new product development or pursuing large projects or any other business ventures (Contractor & Lorange, 2002; Elmuti & Kathawala, 2001; Mowery, 1988; as cited in Mowery et. al, 1996). As Barringer and Harrison (2000) state “interorganizational relationships allow two or more firm to share risk and costs of a business endeavor” (p. 385), that also clearly shows close linkage of the financial aspect with risk sharing.

*Production Rationalization and Relations Rents (FR4 and FR5)*
Finally, the last two themes within the financial and risk dimension are production rationalization and relations rents. Production rationalization means that a joint venture is established to deal with capacity excess and industry’s restructuring (Contractor & Lorange, 2002). Relation rents are jointly generated profits in exchange relationships that cannot be generated individually but only by idiosyncratic contribution such as assets, knowledge, resource or capabilities (Dyer & Singh, 1998). That all goes back to transaction costs theory and resource-based view in such that strategic resources may lay outside the firm and cannot be acquired through a simple market transaction (Dyer & Singh, 1998).
4.2.4 Value Creation (V)

The fourth dimension is value creation that unites the discussed themes, that are closely related as we will see in discussion as follows. Value creation dimensions include resource accessibility (V1), resource retention (V2), dependencies (V3), specialization (V4), knowledge development and organizational learning (V5), innovations (V6) motives. Value creation in collaboration is related clearly to many paradigms, such as the resource-based view, resource dependence theory, social network theory and knowledge development and organizational learning. Moreover, this dimension is interrelated to other dimensions discussed above such as financial and risk aspect, competitiveness and others.

![Diagram](https://via.placeholder.com/150)

**Figure 11: Value Creation Motives (V) - Data Structure - Part 1**

Source: Own Depiction
Resource accessibility (V1)

Resource accessibility is the first theme representing the value creation motive. Resource accessibility expresses that firms, by engaging in collaborative relations, can obtain resources from their partners (Hennart & Reddy, 1997; Beamish, 1987 & Yan & Gray, 1994; as cited in Das & Teng, 2000) and deal with resource constrains (Palakshappa & Gordon, 2007). Moreover, firms can create values by combining existing resources with other firm’s resources to gain optimal returns (Das & Teng, 2000). Firms can acquire various types of resources, for instance, access to financial resources, expertise, skills and processes, and markets (Faulkner & de Rond, 2000), while other authors also mention local facilities, knowledge, connection, industry and/or geographical information, legal and technical advice, research and development capabilities, skills and manpower (Aiken & Hagen, 1968; as cited in Child et al., 2005; Beamish, 1987 & Yan & Gray, 1994; as cited in Das & Teng, 2000). Most often, (international) joint ventures are discussed as a form of collaboration that would provide complementary resources (Hennart & Reddy, 1997; Aiken & Hagen, 1968; as cited in Child et al., 2005; Beamish, 1987 & Yan & Gray; 1994; as cited in Das & Teng, 2000), while Palakshappa and Gordon (2007) add on that strategic alliances are “popular mechanisms for dealing with resource constraints” (p. 41). Moreover, Contractor and Lorange (2002) mention production partnerships and licensing as ways to gain access to resources.

As mentioned above, resource accessibility is closely related to other dimensions; one dimension is competitiveness, “firms may use alliances or mergers/acquisitions to obtain resources possessed by other firms that are valuable and essential to achieve competitive advantages” (Beamish, 1987 & Yan & Gray, 1994; as cited in Das & Teng, 2000, p. 37). Resource-based and relational view are two of the paradigms that are used to describe collaboration which suggest that necessary or complimentary resources might be embedded in interfirm relations and processes (Dyer & Dingh, 1998). Another paradigm that can be related to resource accessibility, is social network theory; social capital refers to resources that are gained in relations with other organizations (Wratscko, 2009).

Resource retention (V2)

Resource retention is another side of the resource-based view and the second theme for value creation motives. Resource retention deals with a firm’s need to learn or seek to retain capabilities and keep own valuable resources within the firm (Das & Teng, 2000; Kogut,
1988). Kogut (1988) also discusses that resource retention most often implies knowledge retention more specific tacit knowledge retention.

Depending (V3)
Organizations aim to reduce their dependency to other firms, hence increase their independence or increase their control over other firms (Faulkner & de Rond, 2000; Kogut, 1988). Evidently, dependencies have a close link to resource dependency theory. According to Barringer and Harrison (2000) dependency can be organized by, firstly, acquiring resources (or control of resources) that other firms are dependent on, or secondly, acquiring resources that could increase the firm’s independency. As said, the dependency motive is discussed in one of the paradigms in collaboration theory; resource dependency theory. First discussed by Pfeffer and Salancik (1978) the RDT focuses on the surroundings of organization behavior and how to reduce environmental uncertainty and dependence (Hillman et al., 2009). In short, independence or control over other firms is recognized as a noteworthy motive for firms to engage in interorganizational relations.

Specialization (V4)
Specialization is another theme in value creation dimension, describing that collaboration help firms to concentrate on activities they are specialized on. Interorganizational relations might bring together firms, each with its own specialization (Jarillo, 1988; Kaats & Opheij, 2014; Mowery et al, 1996). Moreover, with specializing on valuable activities of the value chain firms can create a competitive edge. On top of that, firms could outsource less valuable activities to other partner firms in order to concentrate on the essential activities (Jarillo, 1988).
Knowledge Development and Organizational Learning (V5)

Knowledge development and organizational learning represents the biggest section in our data structure. It is not only a widely recognized motive for interorganizational relations but a distinct paradigm that has received a lot of attention in collaboration theory.

Hamel (1991) states that global competition has revealed unequal distribution of skills between firms. Those that recognized this, see collaborative relations as an opportunity to acquire partner’s skills. Knowledge development certainly is recognized as a solid motive for collaboration. Kogut (1988) and Parkhe (1991; as cited by Simonin, 1977) call knowledge development as an intangible benefit. Others talk about how to internalize their partner’s
knowledge and skills (Gray, 2000; as cited in To, 2016), learning about interorganizational cooperation or learning how to behave cooperatively (Lane & Beamish, 1990 & Lyles, 1988; as cited in Simonin, 1997). Kaats and Opheij (2014) states that learning and development assure firm’s continuity and it is better to learn together than on your own. Additionally, Faulkner and de Rond (2000) suggest that knowledge development and organizational learning have a correlation in creating sustainable competitive advantages.

As it is mentioned above, knowledge development and organizational learning is one of the paradigms that are extensively used in collaboration theory. According to Badaracco (1991) firms create knowledge links, e.g., alliances which enable firms to access skills and capabilities. Moreover, To and Ko (2016) discuss that collaboration process shouldn’t be perceived as something statistic but as a process where the process itself gives valuable learning opportunity whereas period checking could be effective for organizational learning (Bernavadies-Espinosa & Riberio-Soriano, 2014; Faulkner & de Rond, 2000).

Another paradigm – the social network theory – is related to knowledge development and organization learning. Similar to resource accessibility, knowledge can be perceived as social capital (resource) which is acquired in interorganizational relations. On the top of that, embeddedness implies that, the more exclusive and closer the relations are, the more unique information and capabilities they deliver (Kenis & Oerlemans, 2008). Beyond any doubts, knowledge development and organizational learning is generally a recognized motive for firms to engage in interorganizational relations.

Innovations (V6) Innovations are related to paradigms such as knowledge development and resource-based view. Nooteboom (2008) states that firms have recognized the need of collaboration to innovate. Innovations in this case includes products, production process, market or organizations development (Nootemboom, 2008), as well as technological advancement (Palakshappa & Gordon, 2007). Innovations are closely connected with knowledge development and organizational learning, as such that interorganizational relations is a pre-essential source of knowledge development and organizational learning, which can increase an organization’s ability to innovate (To & Ko 2016).
**Value Creation (V7)**

Finally, the last theme of this dimension is value creation itself. It is related to previous themes, moreover summarizes them. Many scholars have recognized that value creation derives from partnerships where all partners contribute with their unique resources and in combination achieve optimal results (Das & Teng, 2000). Moreover, Colombo (2003) explains the value creation process in interorganizational relations from a financial perspective, stating that:

“alliances are established when net present value of the pay-off partners expect from the collaboration that is, the difference between revenues and the production and transaction costs of the collaboration exceeds that of proceeding alone. Following a similar reasoning, partners will cooperatively choose the organizational form that maximize the net present value of the pay-off of the alliance” (p. 1211).

To sum up, we believe that the creation of value is a term, which incorporates all the above-mentioned categories.

4.2.5 Irrational Motives (IM)

Irrational motives is the final dimension that has received the scholar’s attention. However, irrational motives have received limited attention in the literature. We find it important to introduce them, since it is very different from all other motives. Irrational motives imply that managers might find some irrational motives for collaborating that afterwards can be covered by rational reasons (Kaats & Opheij, 2014). Since research is limited, we think it would be an opportunity to explore these motives more in depth in future research.

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*Source: Own Depiction*
4.3 Typology

The next research area we focus on is the typology of interorganizational relations. Overall, 30 2nd Order themes were collected and clustered into 6 aggregate dimensions. In total, this section was derived out of 56 excerpts from the literature. The 6 aggregate dimensions are geography (G), coopetition (CO), formalization and structural complexity (FS), power dependence (PW), purpose (P) and task complexity (CY). The aim was to find dimensions from the literature, which can give us ground to develop our own typology model.

4.3.1 Geography (G)

Geography deals with the scope of the collaboration. We have identified four categories, namely domestic (G1), international (G2), multinational (G3) and global (G4) in which different forms of collaborations can be sorted in.

Figure 14: Geography (G) - Data Structure
Source: Own Depiction

The first theme related to the scope of collaboration is named domestic. Domestic implies that the collaboration occurs within one country or that organizations have the same nationality (Roots, 2002). Roots (2002) states that “therefore, any interfirm cooperative agreements are domestic in nature” (p. 70). Roots (2002) named these alliances as “unnational”, whereas we stick to domestic.

Further, we have identified “international” collaborations. In this case, the collaboration has an international nature (various country context) (Garcia-Canal, 1996; Roots, 2002).
However, scholars address it differently. Garcia-Canal (1996) states that international collaboration can be distinguished between collaborations that perform in one country but with organizations of different nationalities. Garcia-Canal (1996) states that those international collaborations usually occur when a company wants to introduce its product and service to another country. On top of that, collaborations can be performed in multiple countries (p. 781). On the other hand, Roots (2002) indicates that international collaboration or as he calls them binational “indicates two firms belonging to two different countries” (p. 70), hence limiting international collaboration by two organizations and two countries, without discussing if this binational collaboration could be established in multiple countries.

The next dimension - multinational collaboration is introduced by Roots (2002) as a collaboration with “three or more firms belonging to three or more different countries” (p. 70). Roots (2002) distinguishes international and multinational alliances between two countries and organizations (international) and three and more countries and organizations (multinational). Garcia-Canal (1996) uses the term “multicountry” collaboration, however as part of international alliances, meaning that multicountry collaboration is performed in two countries and more, with organizations from various countries. The main difference between Garcia-Canal and Roots is that Roots (2002) distinguishes international collaboration and multinational collaboration, while Garcia-Canal (1996) calls all of them international collaboration but specify that two and more firms and countries can be also called as multicountry collaboration.

Last, but not least we have identified that the term “global alliance” is used (e.g. Culpan, 2002; Ohmae, 1989), but neither of them give a clear definition of them. Culpan (2002) describes global alliances, as alliances created by multinational companies.
4.3.2 Coopetition (CO)

Coopetition is a term, derived from the terms competition and cooperation and thus recognizes the duality of coopetition (Culpan, 2002). Figure 15, shows the data structure of coopetition.

Vertical Partial Integration (CO1)

Vertical agreements bring organizations together that work at two different stages of the value chain – often related to a buyer-seller relationship (Garcia-Canal, 1996). In the context of collaborations, the terms vertical partnerships or vertical quasi integration are more precise terms. Vertical Partnerships describe the hybrid form between a simple market transaction or a merger and acquisition (full vertical integration) and are described as partial vertical integration (Contractor & Lorange, 2002; Dussauge & Garrette, 1999).
**Non-Competing (CO2)**

According to Dussauge and Garrette (1999) firms from unrelated or different industries that collaborate can be described as non-competing. These interorganizational relations are a useful tool to explore new fields of interest.

Nonetheless, there exist also a contradiction view, given by Rangan and Yoshino (1996) who describe noncompetitive alliances as intra-industry collaboration, but whereas the partners themselves are not competing.

**Procompetitive (CO3)**

Another term that appeared in the typology of Rangan and Yoshino (1996) was procompetitive. According to them, procompetitive relations tend to be inter-industrial, in form of vertical relationships. Thus, procompetitive and vertical partial agreement, according to data can be used as synonyms.

**Horizontal (CO4)**

In horizontal agreements, compared to vertical agreements, all participants are directly involved in performing the agreed activities and can be understood as partnering among firms at the same stage of the value chain (Culpan, 2002; Garcia-Canal, 1996).

**Precompetitive (CO5)**

Another term introduced by Rangan and Yoshino (1996) was precompetitive alliances. These alliances consist out of partners from unrelated and different industries. They are established, for instance, for the development of innovative technologies or products which could not be done by the companies themselves. Nevertheless, after the development is finished, each partner will manufacture and market the product themselves independently (Rangan & Yoshino, 1996).

**Competitive (CO6)**

A term that more often was detected in our data was collaboration between competitors. Even though this might sound paradox, older studies have already recognized the establishment of interorganizational relations between rivals, which according to a study of Morris and Hegert (1987) made up to 70% of their investigated cooperative agreements (as cited in Dussauge & Garrette, 1999). In competitive forms of collaboration, the partners are
direct competitors. A used example is the joint manufacture between General Motors and Toyota, two global car companies (Hamel et al., 1989; Rangan & Yoshino, 1996). Moreover, according to Culpan (2002) these flexible approaches are more vivid than ever or to say it in the words of Hamel who already wrote in 1989 – “collaboration between competitors is fashion” (p. 133).

4.3.3 Formalization and Structural Complexity (FS)

In some cases, authors differentiated between different collaboration forms by looking at the formalization and structural complexity. This dimension consists out of non-equity (FS1), bilateral (FS2) or unilateral agreements (FS3), equity (FS4), minority equity (FS5), traditional equity joint ventures (FS6), as well as informal agreements (FS7).

![Figure 16: Formalization & Structural Complexity (FS) - Data Structure](image)

Source: Own Depiction
Non-Equity (FS1)
Non-equity forms of collaboration are any forms of collaboration that do not include any transfer of equity, nor do they lead to the creation of new entity (Das & Teng, 1996; Killing, 2002).

Bilateral Agreements (FS2)
Bilateral agreements are contractual forms of collaboration, in which the partners work jointly together on an ongoing basis, for instance by sharing production facilities, distribution networks or other resources. Other examples of bilateral agreements are, for instance, joint R&D agreements or joint marketing and promotion efforts. Thus, compared to the following unilateral agreements, they can be described as more integrative and are often not limited to a specific duration (Colombo, 2003; Das & Teng, 2000).

Unilateral Agreements (FS3)
On the other hand, in unilateral agreements, the partners work more independently from each other, with less coordination and collaborative interaction, resulting in a less integrative way of collaborating as each partner focuses on its specific activity (Colombo, 2003; Mowery et al., 1996; as cited in Das & Teng, 1996). For instance, according to Colombo (2003), unilateral non-equity agreements include forms of collaboration like technology transfer agreements, franchising or R&D contracts.

Equity (FS4)
Equity forms of collaboration include the transfer of equity and can take two main forms – joint ventures and minority equity investments (Pisano, 1989; as cited in Buzady, 2005).

Minority Equity (FS5)
The field of equity forms can be distinguished between traditional joint ventures and minority equity alliances, which are also called minority investments or direct investments (if they don’t gain a majority interest). Those minority investments were already described in our frame of reference. In those cases, there is an exchange of equity. In minority investments one partner purchases a minority equity position in their partner. Moreover, minority equity alliances do not lead to the creation of a new entity (Harrigan, 1988; Killing, 2002).
Equity Joint Ventures / Traditional Equity Approach (FS6)

Equity forms of collaboration are linked to joint ventures, which is a specific form of collaboration that has been studied extensively. Overall, joint ventures lead to the creation of a new separate entity, in which both or more partners have equity invested and are represented at the board of directors (Killing, 2002; Pfeffer & Nowak, 1976).

Informal (FS7)

Informal agreements are the least formalized or structural complex mode of collaboration as they do not include any contractual agreements neither do they lead to the creation of a new company. Informal agreements are purely social links and verbal agreements between the managers or chairpersons of different firms, e.g., gentlemen agreements. (Caglio & Ditillo, 2009; Ul-Haq & Morison, 2001 & Dussauge & Garrete, 1999; as cited in Barnes et al., 2012).

4.3.4 Power Dependence (PW)

Depending on the collaboration form chosen, there will exist different power dependencies in the relationship. We have already discussed power dependence in the section of risks and motives but in order to gain a more complete overview, it is necessary to discuss different dimensions of dependence, such as independent (PW1), partner dominates (PW2) and mutual dependent (PW3).

![Figure 17: Power Dependence (PW) - Data Structure](Image)

Source: Own Depiction

Independent (PW1)

In the context of joint ventures, it might be considered that if each partner contributes equally, the joint venture will be controlled equally as well. Nevertheless, there is also the
possibility to create a more independent structure. The so-called independent ventures are joint ventures in which the general manager is given great autonomy to run the venture (Killing, 2002). If the collaboration partners want to keep their independence another option would be informal agreements (Chen et al., 2015). Furthermore, in the context of contractual agreements, unilateral agreements, can depict a more independent power relationship, as the partners work separately and focuses on its specific activity.

One Partner Dominates (PW2)
In the context of joint ventures, one company can take a dominant role in the management and thus take control of the venture (Killing, 2002). Additionally, again unilateral agreement could be pursued if an organization depends on another, to get access for example to technological knowledge or do a distribution network (Chen et al., 2015). Still, as discussed in the risks before, it must be borne in mind, that a highly dependency on partner might increase the potential of opportunistic behavior of the partner (Barringer & Harrison, 2000).

Mutual Dependent (PW3)
In case of mutual dependence partners depend on each other equally. According to Chen et al. (2015) joint ventures or bilateral agreements would be used more likely in this situation. An example Chen et al. (2015 give is the joint venture between Volkswagen and Shanghai Automotive Industry Corporation. Volkswagen identified the enormous potential of the Chinese market, whereas the Chinese partner saw an opportunity to gain technology knowledge and management skills. With the help of creating a joint venture, Volkswagen could overcome trade barriers and access a new market, whereas the Chinese partner could gain and internalize its aimed knowledge. Thus, they both were mutual dependent on each other (Chen et al., 2015).

Another scenario, can be identified in the decision-roles of a joint venture. For instance, in the case of a shared management ventures, both organizations participate actively in the management of the venture. So, both are dependent on each other to reach consensus in their decision-making process (Killing, 2002).
4.3.5 Purpose (P)

Collaborative purpose is another dimension that is crucially important for interorganizational relations. The purpose in cooperative relationships gives the strategic intent for collaboration (Barnes et al., 2012). We have found seven themes that represent different strategic intents for collaborative relations. Namely, product and production (P1), research and development (P2), foreign access (P3), sales and marketing (P4), supply (P5), social (P6), knowledge and information sharing (P7), while each of them represent distinctive characteristics. In many cases, various purposes are combined and interrelated.

Despite that purpose is a logical part creating cooperative relations, not many scholars discuss these intentions. Moreover, there is lacking consistency in the terminology of intention of collaboration. However, the purpose is clearly and closely related to motives and risks that are presented above, for instance, market access, knowledge development, as well as, financial aspect etc.

![Figure 18: Purpose (P) - Data Structure](Source: Own Depiction)
The first theme we found, is *product and production purpose* (P1), that is self-explanatory. Cooperation activities are linked to products and production (Barnes et al. 2012). Next purpose is *research and development* (P2). Gersony and Peters (1997) state that cooperation are established for new product creation through sharing technological strengths and capabilities. Moreover, Deeds and Hill (1996; as cited in Barringer & Harrison, 2000) state that resources and development alliances usually bring together small firms with unique skills and pool them together to produce faster and cheaper than doing it separately.

Furthermore, *foreign access purpose* (P3) has been identified. Gersony and Peters (1997) state that cooperative relations can help firms expand globally by using local partners. Foreign access is closely related to market motives that are discussed above, as organizations often use collaboration to enter new international markets (Child et al., 2005).

Another purpose is *sales and marketing* (P4). According to Gersony and Peters (1997) firms engage in cooperative activities in order to increase sales or market share, while marketing purposes are related to bind to suitable partners with matching distribution systems (Barringer & Harrison, 2000) or just simply to distribute marketing tasks to others.

Furthermore, *supply* (P5) is identified as one of purposes why firms choose to cooperate, meaning partnerships between suppliers and buyers (Barnes, et al., 2012; Dussauge & Garrette, 1999). Shared-supply intention is another form of a supply purpose in which partners share elements of components or on a stage in the production process, in order to achieve economies of scale. This form is highly related to the production and product purpose (P1) as the aim is to improve the production by shared-supply agreements (Dussauge & Garrette, 1999).

One more purpose is of *social* (P6) nature, considering collaboration with partners in order to improve a firm’s social environment including social and political aspects (Baum, 2011). Finally, we have identified *knowledge development and information sharing* (P6) as a strong purpose for collaboration, derived from the knowledge development and organizational learning paradigm and motives presented before.
4.3.6 Complexity (CY)

The next aggregated dimension is complexity. Depending on the form of collaboration, it can be differentiated by three levels – task complexity (CY1), number of activities (CY2) and partners involved (CY3) (2nd order theme aggregated from excerpts).

![Diagram](image.png)

**Figure 19: Complexity (CY) - Data Structure**

Source: Own Depiction

Task complexity (CY1)

According to Killing (2002) “the simpler the task that an alliance has been created to carry out, the simpler can be its organizational arrangement” (p. 63). Essentially, Barringer and Harrison (2000) state that “task complexity refers to the number of different inputs needed to produce a product or service” (p. 388). While Killing (2002) states that trading alliances are the simplest form of collaboration regarding task complexity, Barringer and Harrison (2000) state that high task complexity is observed in fast-paced industries, for instance, IT-industry, aircraft manufacturing or biotechnology.

Number of activities (CY2)

Next theme that we aggregated from excerpts is the number of activities, meaning that collaboration can immerse the number of activities (Killing, 2002). “The Honda – Austin Rover alliance, for example, involves production under license of two cars, the joint design and development of two other cars, and component supply agreements” (p. 780). Essentially, Garcia-Canal (1996) states that the more activities are involved in collaboration, the more complex it is to manage these relations.
Partners involved (CY3)

Similar notion is represented in next theme – number of partners – as Garcia-Canal (1996) and Killing (2002) state that the larger the number of partners involved, the more complex the coordination of relation. Moreover, Garcia-Canal (1996) suggests that joint ventures can ease the relations when a large number of partners are involved.

4.4 Summary

In some cases, the 2nd Order themes could be also clustered in other dimensions. For instance, new market access can also be strategic moves by organizations in order to increase for instance profits and thus to increase market power. Or as Kogut (1988) states: “the motivation to joint venture for strategic motives are numerous (p. 321)”. Thus, our data structure and aggregate dimensions should not be seen as ultimate but depicts our understanding of the literature. Overall, it should be clear by now that all these many themes are related in some way. In some cases, our 2nd order themes where the goal of other concepts of collaboration. For instance, for Culpan (2002) the final goal of strategic alliances is in his depiction to achieve a competitive advantage, whereas in our understanding it is another motive. In the next chapter, we are going further into the different dimensions of our typology analysis. The goal is to create and present our own, synthesized typology model.
5. Building a Typology Model

In this chapter, we will conclude our tentative typology model. Each dimension that is represented in our model will be explained. Finally, we will depict the complete model and illustrate with the help of two case examples, how the model can be used to classify different collaboration forms.

Derived from our above described data analysis and the frame of reference, we will develop our own model of a typology of collaboration in the context of interorganizational relations. This is based on the discussed frame of reference, as well as our data structure, analysis and interpretation.

Our model’s structure includes nine themes of risk that are clustered in two broader groups, namely, organizational risks (OR) and interrelationship risks (IR). Furthermore, it includes 23 motives for collaboration, which are clustered in four groups - market and external environment (ME), competitiveness (C), financial and risk aspects (FR) and finally value creation (V). On top of that, we developed seven different themes or dimensions, in which different collaborations can be organized. In the following we going to recap what each aspect represents and at the very end, give some examples of how the model can be used to determine distinct aspects of various collaborations forms.

The first aspect to create a more complete picture of collaboration is to consider risks and motives for engaging in such relations. From our data, we can infer that motives and risks come in the first place for collaborative relations establishment as they influence the form of collaboration. Moreover, the aspects of risks and motives are crucially important throughout the entire collaboration process and can lead to the evolution of collaboration. Also, they are strongly interrelated to all dimensions in which collaboration can be organized, so it is essential that motives and risks are considered throughout the entire collaboration process.

5.1 Collaboration Risks

From our collected data, we consider nine themes of risks that are clustered in two groups, namely, organizational risks (OR) and interrelationship risks (IR). Organizational risks describe risks that are associated with the individual organizations. We identified four main
risks that organizations have to face when they engage in a collaborative relationship. First, loss of resources (OR1), as the partner can take over valuable resources and internalize them. Second, loss of autonomy (OR2) meaning that organizations can lose control over its own operations or overall decision autonomy. Third, limited flexibility (OR3), that is connected to the previous risks and shows that if an organization loses control over its own organization, it can result to limited flexibility, hindering the adaptation to changing circumstances. Also, it might hinder organizations to engage in new partnerships, for example, when the invested resources that are not available anymore but bounded in the existing collaboration. Finally, dependencies (OR4) can be a serious risk, if organizations become to overly dependent on their partners.

Figure 20: Summary of Risks
Source: Own Depiction

Interrelationship risks (IR) is the second group which we derived from our data; interrelationship risks are risks that appear during the process of collaboration, namely, opportunistic behavior (IR1), structural issues (IR2), cultural issues (IR3), increasing complexity (IR4) and/or competing interest (IR5). Opportunistic behavior (IR1) means that one partner might be driven by self-interest and not for mutual benefits; structural issues (IR2) is another risk that can occur in collaboration. Structural issues arise when the wrong structure (collaboration form) was established, and consequently the relation is not running smoothly. On the other hand, cultural issues (IR3) appear when partners have different company cultures, which may not be very suitable to merge and can lead to distrust, lack of
commitment, and create barriers for collaboration to be successful. Increased complexity (IO4) is another risk. Essentially, in some cases, wrongly chosen collaboration form can lead to difficulties to manage the relations, which might cause the failure of collaboration. Finally, competing interest (IR5) is a risk that is related to opportunistic behavior, expressing that every partner can have their own goals they pursue next to the collaboration goals. This can lead to potential conflicts in collaborations and hinder successful collaboration.

5.2 Collaboration Motives

Motives for collaboration are essential to consider before establishing a collaboration. Moreover, it is necessary to revise them throughout the entire process of collaboration. Collected data shows four groups of motives for collaboration, namely, market and external environmental motives (ME), competitiveness (C), financial and risk aspect (FR), and value creation (V). Market and external environment motives (ME) touch upon motives that occur externally and affect firms leading to collaboration in order to improve or change the current situation. First motive we have identified is gaining market access (ME1), where organizations aim to access new markets, most often new international markets. The second motive we identified is market power (ME2), meaning that firms aim to increase their market efficiency and power within existing markets. Time (ME3) is another motive that is part of market and external environment motives. Firms find themselves in a fast-changing environment and in order to follow or be ahead, firms consider collaboration efforts as a time-saving option. Fourth motive is increasing flexibility (ME4) that is also related to potential risks, discussed above. Collaboration can increase firm’s flexibility in markets and the environment, for instance, through outsourcing not essential activities to their partners. Overall, we believe that flexibility, even though not often mentioned, is also a motive interrelated with others. For instance, through collaboration, organizations can enter markets faster, increase market power and avoid building costly infrastructure by themselves. This can save valuable resources which can be used in other fields, giving the organization the possibility to proactively act or react more flexible to their environment. Furthermore, protection (ME5) builds another motive, meaning that firms might enter in collaborations and in that way blocking their competitors, setting the entry barriers higher and, for instance, create oligopolies. External pressure (ME6) deals with the external environment. For instance, political pressure forces firms into creating collaborative relations to protect their interest and achieve their goals, or to finally get access to a foreign market. Finally, collective lobbying
(ME7) is closely related to previously mentioned external pressure as firms might engage in interorganizational relations, to increase and influence their political pressure in their favor.

Another group of motives is called competitiveness (C). It includes three motives, which are competition (C1), competitive advantages (C2) and finally strategic motives (C3). Competition (C1) as a motive means that a firm can improve its competitive position, reduce competitor power, as well as intensify competition in markets. Further, competitive advantages (C2) is another motive for firms, that might be self-explanatory, but essentially means that by entering in collaborative relations, firms can create competitive advantages, for instance, by combining resources and capabilities with their partners. Last, strategic motives (C3) are related to other competitiveness motives as collaboration can improve the overall firm’s position in market.

The third aggregated group of motives are financial and risk aspects (FR) which include five subcategories – cost advantage (FR1), economies of scale (FR2), risk sharing (FR3), production rationalization (FR4) and rational rent (FR5). The first motive is cost advantage (FR1). A firm can minimize its costs such as production and transaction costs by collaborating. Similar notion is represented in the second motive that firms can achieve economies of scale (FR2) in inter-organizational relations. Risk sharing (FR3) is another motive in this group, meaning that firms might recognize opportunities to share risk, for instance, share financial risk by sharing investments with others in a new venture. Finally,
there are two comparably smaller motives in this section, production rationalization (FR4) that means that collaborative relations can help firms restructure the existing industry (their production facilities). Finally, relations rents (FR5) entail that jointly generated profits can be motive for collaborative relations, which otherwise could not be generated by the individual firms themselves.

The final dimension of motives is value creation (V). Value creation includes resource accessibility (V1) and retention (V2), dependencies (V3), specialization (V4), knowledge development and organization learning (V5), innovations (V6) and value creation (V7). Firms that engage in collaborative relationships have the potential to gain various resources, (V1) such as financial resources, skills, machines and others. On the other hand, firms might want to collaborate to retain their resources (V2). This means, that they want to keep resources which they possess, but do not use properly, and through collaborative learning, make use of them. The third motive is dependencies (V3). Essentially, firms might want to increase their own independency from one partner by collaborating with other organizations or the other way around, as they might want to increase the dependence of their partners on them. Knowledge development and organizational learning (V5) shows that firms choose to collaborate to learn and to acquire knowledge that firms find useful or necessary. Innovations (V6) is another motive. For instance, through learning firms might get the capabilities to innovate. Moreover, they might only start an innovation project if they can spread the financial risk with a partner beforehand. Specialization (V4) is identified as another motive, stating that a firm might collaborate in order to keep their own specialization and not wasting energy and resources for activities that they do not consider as important, or give tasks to specialized companies, which can fulfill those activities more successfully. Finally, as kind of a summary, value creation (V7) is the framing term we use for these motives as all result in the creation of value.

5.3 Dimensions of Collaboration

Finally, we reach the stage where risks and motives should be very clear. That leads us to our dimensions of how organizations can construct their collaboration efforts. We identified seven dimensions that help to classify different collaboration forms. Evidence shows that collaboration is not statistic and it tends to change over time. Every dimension that we will discuss below has its own characteristics and the ability to differentiate collaboration.
First dimension is the purpose of collaboration (P). The purpose is of course related to motives and risks, as each purpose might entail specific motives and risks, that must be considered more than others. However, in many cases a firm’s purpose might be combined with more than one purpose and not has to be limited to one. For instance, an organization’s purpose might be product and production related (P1), knowledge and information sharing (P7), marketing and/or sales (P4), supply-related (P5), foreign access (P3), social purposes (P6) or simply R&D (P2).

![Purpose of Interorganizational Relations](image)

**Figure 22: Purposes of Interorganizational Relations**

Source: Own Depiction

First, product and production purpose (P1) are linked to products and production. Marketing and sales purpose (P4) expresses, that organization collaborate to improve sales, increase market share or delegate other sales/after-sales/marketing tasks to the partners. Supply or shared supply (P5) purpose are those in which firms want to collaborate to access necessary components for its needs or to secure the supply. Furthermore, foreign access (P3) describes the purpose of accessing foreign markets. Another purpose is social intention (P6), meaning collaborate in order to improve the social surrounding (environment). Research and development (P2) also related to knowledge development, helps organizations combine their unique skills and capabilities and in that way creating new values (e.g. products/technology/knowledge) in faster and cheaper way. The last purpose is knowledge and information sharing (P7) that obviously is related to the motive to acquire the partner’s knowledge, jointly develop new knowledge or simply is expressed by the exchange and sharing of information.

The next dimension in the nature of collaboration is named formalization and structural complexity (FS), which describes the collaboration form. Derived from our data we identified three main options in starting a interorganizational relation. Firstly, organization can make informal agreements (FS7) which do not include any written and binding contractual agreement but a verbal agreement between, for instance, managers or chairpersons of collaborating firms. Second option is a contractual agreement (non-equity collaboration) (FS1). In these cases, a binding contractual agreement exists between all involved partners.
Moreover, these contractual agreements can be distinguished between unilateral (FS3) and bilateral agreements (FS2). Last but not least, firms might choose an equity based collaboration (FS4) in which partners invest or exchange equity. In this case, it can be distinguished between minority equity forms (FS5) and “traditional” joint ventures (FS6). To sum up, from the left to right the formalization and structural complexity increases.

![Figure 23: Dimension of Formalization and Structural Complexity](image)

Source: Own Depiction

The next dimension is called coopetition (CO). In this dimension, we merged our data into four different forms (from six). Firstly, procompetitive modes (COS1 and CO3) describe vertical partnerships (CO3). This is, for instance, a supplier-buyer relationship or a producer-retailer relationship. The next mode is non-competitive (CO2), in which the companies can be from different, unrelated or the same industry. This differs from procompetitive, as they are not value chain related and thus no partial vertical partnership takes place. Nevertheless, even if firms are from the same industry they are not competing directly with each other. The third possible mode is competitive (CO6), in which competing companies partner up as they are for example at the same stage of the value chain or produce the same product (also referred to as horizontal agreements (CO4)). The last mode we identified is precompetitive (CO5). Precompetitive modes (CO5) are those, in which two or more companies work jointly together, for instance, to produce a product which both will market and sell independently.

![Figure 24: Dimension of Coopetition](image)

Source: Own Depiction
The dimension of geography (G) describes the scope of the activities and the nationalities of the involved organizations in the interorganizational relation. We distinguish between three different geographical scopes: Firstly, domestic forms (G1), in which domestic companies collaborate in their home country. Secondly, international alliances (G2) describe that the involved organizations come from two different countries. Multinational collaborations (G3) means three and more organizations coming from three or more different countries. This entails, that (except in domestic) we differentiate the collaboration forms by the nationality of the involved firms, despite the number of markets they may operate (in relation to Roots, 2002).

![Figure 25: Dimension of Geography](source: Own Depiction)

Power dependencies (PW), describe how power is distributed and how decisions are made. We differentiate between three cases that appear in interorganizational relations. Low level of interdependence (PW1) in which firms maintain their independence and work mainly independently on their tasks. Another option could be that one partner dominates (PW2) and take decisions. Finally, firms can be mutually dependent (PW3), meaning that partners depend on one another and often are jointly involved in the collaboration tasks.

![Figure 26: Dimension of Power Dependence](source: Own Depiction)

Complexity of collaboration (CY) is also the most complex dimensions as it is build out of three distinctive aspects: number of partners (CY3), number of activities (CY2) and the complexity of the tasks (CY1). Overall, we simply rate the complexity into low, medium or
high. For instance, a simple R&D contract, a unilateral-contract form between two partners shows low complexity. Whereas, a joint R&D project, with three or more partners is more complex. High complexity could arise, when several partners are involved in several activities together, in multiple countries.

![Figure 27: Dimension of Complexity](image)

Source: Own Depiction

Finally, last dimension that we identify is time or duration of collaboration. We found evidence that the time aspect is important in collaboration and it can be beneficial to determine whether it is short-term or long-term collaboration. Nevertheless, little had been found in our literature concerning duration of interorganizational relations, when it comes to specific duration times. Although mentioned, specific time frames were not given. Logically, interorganizational relations seem to be always time limited, as they end at some time. In reliance on Dressel (2014), we distinguish between short-term and long-term agreements whereas everything longer than three years is of long-term nature.

![Figure 28: Dimension of Duration](image)

Source: Own Depiction
5.4 Tentative Typology Model of Collaboration

Figure 29 shows our tentative typology model, whereas each dimension was explained and describe in the chapter above. Thus, in the following we will give some examples of how our proposed model could be used to classify forms of collaboration that exist or existed in the business environment.

5.5 Case 1: Joint Venture of Shanghai Volkswagen Co. Ltd.

Based on an example we want to illustrate, how our proposed model could be used and how it works. Following example depicts the Shanghai Volkswagen Co. Ltd. which is an international joint venture between the German car manufacturer Volkswagen (VW) and the Chinese Shanghai Automotive Industry Corporation. The initial motive of VW was to gain access to the highly promising Chinese market (Circle VW), whereas the purpose for the Chinese partner was to acquire management skills and other critical resources (Circle CH). Both were mutual dependent on each other as both needed the other to reach their initial purposes (Chen et al., 2015). The complexity is rated medium as only two partners are involved, striving around the same industry and production purpose (and thus competitive).
In this case, we do not consider the complexity overall as low, as for instance, a joint venture implies a high formalization and structural complexity. Overall, the duration is long-term as this example was already established in 1984 and exists till today. The example is depicted in figure 30.

![Figure 30: Joint Venture of VW & Shanghai Automotive Industry Corporation](source)

With the model, one can depict on the one hand all purposes from all involved partners. On the other hand, it could be possible to show the development or evolution of an interorganizational relation over time, which we will outline in the next example.
5.6 Case 2: The Evolving Relationship Between Honda and Rover

Another salient example occurring in the literature is the collaboration between Honda and Rover. The relationship lasted more than 16 years and was extensively discussed in the research literature\(^8\) (Barnes et al., 2012; Chen et al., 2015). For our purpose, we will not go into depth but just show a simplified usage of our model, as depicted in the following model.

![Figure 31: Collaboration between Honda & Rover - Example of Evolution](chart)

In the figure 31, the relationship is divided into three stages. The first stage is indicated by the circles with number 1, followed by the second stage (circle number 2) and the last stage (circle number 3). Circles with an X indicate that these dimensions have not changed during these stages.

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\(^8\) See for example „When Honda Met Rover“ by Carver, Seale and Yungson (2008).
Overall, the relationship was between two partners from two different countries (hence, international) and as we determine of low complexity, as the tasks were limited to specific purposes and projects, only two partners were involved and both were coming from the same industry, collaborating in order to fulfill their strategic goals in that industry respectively.

Stage 1 (Circle 1):
In the beginning of the relationship of Honda and Rover, the relation was based on an informal agreement for the first two years, with both searching opportunities by sharing information among each other (Pilkington, 1991).

Stage 2 (Circle 2):
After that the relationship became more formal, as both companies now had an idea what they needed from each other. While Rover was looking for skills and expertise for the development of new products, for instance in the designing of engines and gearboxes, due to cut investments. Honda was interested in the European design studios from Rover and also to penetrate the European market (Chen et al., 2015; Pilkington, 1991) The interest into the design studies existed, as Honda was aiming to improve their own products, respectively for not only the European but also for their home market. (Pilkington, 1991). The relationship evolved to a more bilateral contractual agreement as several projects were accomplished through joint production, joint development or parallel production agreements, with both committing financial and other resources. Furthermore, Honda acquired a minority equity position in Rover, and Rover became 20% owner of the Manufacturing Ltd. of Honda in the UK (Carver, Seale & Youngson, 2008).

Stage 3 (Circle 3):
Nonetheless, as the relationship continued Rover became increasingly dependent on Honda, especially on the designing and development technologies of Honda. The relationship evolved to a unilateral relationship, in form of distribution agreements, in which Honda supplied Rover product components and facilities of the factories (Chen et al., 2015).

In 1994, the collaboration ended as the parent company British Aerospace, sold Rover to BMW, as Honda was not willing to beat the offer of BMW (Carver et al., 2008).
This depiction example, shows in one model how the collaboration has evolved, from an informal agreement to a contractual form, including also a minority equity form. Further, it shows how the power dependencies or the purposes of the collaboration have changed. Nurtured with small explanations an easy to follow evolution path can be described, showing the flexibility and changing conditions of the collaboration. It should be respected that these examples, are simplified for illustration purposes.
6. Concluding Discussion

In this chapter, we will conclude and discuss our results of the thesis. Firstly, our research questions will be answered. Secondly, we will discuss our results in a more general manner. Thirdly, the limitations of this thesis are presented and lastly this thesis will end with further research implications.

6.1 Discussion

“Alone we can do so little; together we can do so much” – Helen Keller

Following this notion, our purpose was to conduct a conceptual study of collaboration in the context of interorganizational relations.

RQ1: What are the motives and risks of interorganizational relations and how can they be clustered?

In this thesis, a huge amount of motives and risks that are related to interorganizational relations were shown. During our data analysis, it was possible to cluster those into different dimensions. First, we identified two main risks that organizations can face by having interorganizational relations, namely organization risk (see data structure OR) and interrelationship risk (IR). Further, we identified four dimensions of motives of interorganizational relations, namely, market and environmental motives (ME), competitiveness (C), financial and risk motives (FR) and lastly, value creation motives (V). Thus, we identified motives and risks and showed how they can be clustered.

RQ2: Which themes/dimensions are used to differentiate between collaboration forms?

We identified various dimensions that differentiate collaboration forms. We stuck to the names authors gave to the dimensions to avoid introducing again a new set of terms. First, our collection of typologies and classification shows which dimensions were used to differentiate between collaboration forms (Figures 1-3). Second, based on this collection, in our data analysis we identified seven dimensions in collaboration; purpose of collaboration (P), formalization and structural complexity within the collaboration (FS), coopetition between partners (CO), geographical aspect (G), power dependencies between partners (PW), dimension of collaboration’s complexity (CY) and finally duration of these relations.
RQ3: Can our proposed model be used to classify those collaboration forms?

Based on the findings to RQ1 and RQ2 we developed a synthesized, tentative typology model, which includes seven dimensions. Moreover, with the help of two cases from the business environment, we illustrated how the collaboration forms can be classified. We demonstrated an example of an international joint venture (Joint Venture of VW & Shanghai Automotive Industry Corporation – Figure 30). Moreover, we showed a case in which the collaboration evolved, touching upon several collaboration forms (The Case of Honda and Rover – Figure 31), and thus proved that our model can be used to classify collaboration forms and depict the evolution of a relationship.

The tentative typology model is applicable for different organizations, for instance, new created ventures or well-established organizations. Furthermore, it is not industry specific, hence can be used despite the industry context. This model is also applicable for new ventures or start-ups. Since, in many cases, new firms face with resources constrains, one way how to deal with that is by entering in interorganizational relations. Our model can help new ventures to consider all the aspects beforehand especially if they do not have any prior experience with interorganizational relations and concludingly be a useful tool.

Overall, we have created a model that shows the multidimensionality of interorganizational relations, but also have managed to cluster those into groups that represent most popular themes from existing research. Thus, from a theoretical perspective, we contributed to existing knowledge by presenting a collection of classifications and typology models. Further, our tentative model represents a unique way of merging the existing classification and typology models.

Moreover, we believe our model can be used not only before collaboration is established, but also when firms already collaborate, since we have determined collaboration as a process. This model can help to assess the current situation to achieve improvements if it is necessary. On top of that, the evolution of an interorganizational relation can be depicted.

6.2 Limitations

Our study has some limitations that should be discussed. The first limitation is that our study did not cover all aspects of interorganizational relations. Our research dealt around
collaboration forms, motives, risks and classifications of collaboration forms. Even in these cases, some aspects might have been missed. In fact, we did not discuss other important aspects, such as the partner selection process, nor in detail the collaboration process but rather giving a brief description of it. Furthermore, to round up the whole concept of collaboration other stages of the collaboration process, such as exit strategies should not be neglected. Concludingly, this study does not represent a holistic picture of the whole field of interorganizational relations, and as such should not been understood as one.

Our tentative model, which we presented also shows some limitations. Firstly, some dimensions seem to be rather static and objective and not displaying the dynamic of the process. For instance, the dimension complexity consists out of three sub-categories, namely number of partners, number of activities and task complexity. Nevertheless, we argue that complexity is something, that is perceived subjectively by each organization. If an organization has a lot of experience in interorganizational relations, yet a joint venture could be a very normal and easy task to establish and keep running. This also applies for tasks, as some tasks seem very complex to an outside observer, but if the company is specialized in this field, it may be not.

Secondly, it could be argued that a similar problem occurs in the dimension of power dependency. From a theoretical viewpoint, unilateral contractual agreements are often described as a relation with very low interdependence and thus no company has real power over another, as the partners work more independently from each other. Nonetheless, in the outside practical world, conflicts can reveal the real power relations. For instance, in 2016, because of arising conflicts, the supplier of Volkswagen stopped the delivery of parts to the global car manufacturer. Even though, these suppliers are only a fraction of size and generated profits compared to VW, they forced VW into a production stop, revealing that the supplier had a mentionable power over VW (Cremer, 2016). The same applies for the Rover-Honda case shown above.

Further limitations are related to our research approach and method. Firstly, personal bias always plays a role, especially in the context of content analysis. It could be criticized that no third personal was involved in our data analysis. However, by each coding ourselves and then discuss and merge our coding after reaching agreement, we tried to reduce this risk as much as possible. Secondly, our model is based on theoretical concepts. Even though, some
empirical work also has been included, most of the articles are of theoretical nature. Our tentative model has not been proven or discussed with managers or similar in the business environment, and this should be respected. For further development, it should be tested in practice in the business world.

6.3 Research Implications

Picking up our last limitation, our tentative model should be tested in an empirical way. This could be done, for instance, by presenting our model to business managers that work in companies which are engaged in interorganizational relations. This might help, to support our findings and can help to extend and improve our model, including practical implications. This could help to make the model more practical relevant bringing it nearer to the “outside business environment”.

Further, as discussed in the problem discussion, companies give their collaboration efforts different names, even though they would be declared the same according to theory. Our tentative model might be helpful to find similarities, between different named forms finding that they are essential the same but just declared differently. Furthermore, in this steps the reasons why those different names for similar collaboration forms occur, could be investigated.

Another interesting aspect, we consider worth mentioning is how interorganizational relations might change with recent industrial, technological advancements. Keyword here, in the context of the manufacturing industry, is the concept of industry 4.0 which is gaining increasing attention, and how smart devices, social networks and increasing interconnectivity changes the way of collaborating (e.g. Schuh, Potente, Wesch-Potente, Weber & Prote, 2014). Do these developments, lead to a change in the distribution of power; or how effective in time-saving are these technologies compared to the installation and running costs? Further, not so much is known about the irrational motives and might be a new fruitful perspective to nurture motives and the selection of the partners.

Overall, it can be said, that the field of interorganizational relations and collaboration is a very dynamic, changing research field with plenty of opportunities to conduct future research.
7. References


Appendix

Appendix 1: Table of Excerpts - Organizational Risks (OR)

<table>
<thead>
<tr>
<th>Number</th>
<th>Excerpts</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Loss of Resources</strong></td>
<td></td>
</tr>
<tr>
<td>1a</td>
<td>From a resource-based view, firms are interested not only in accessing or acquiring their partners’ valuable resources through an alliance, but also in protecting their own valuable resources during the alliance-making process. Thus, the partners’ structural preferences will be based on their consideration of these two issues simultaneously. Essentially, the principle is to find the structure that balances the two issues: <em>being able to procure valuable resources from another party without losing control of one’s own resources</em> (Das &amp; Teng, 2000, p. 44).</td>
</tr>
<tr>
<td>1b</td>
<td>Furthermore, although firms will ordinarily want to acquire their partners’ know-how, they are also wary about losing their own knowledge-based resources in a highly integrated operation characteristic of a joint venture (Das &amp; Teng, 2000, p. 45).</td>
</tr>
<tr>
<td><strong>Loss of Autonomy</strong></td>
<td></td>
</tr>
<tr>
<td>2a</td>
<td>The second problem with joint ventures is that parent companies behave as parents everywhere often do. They don’t give their children the breathing space—or the time—they need to grow. Nor do they react too kindly when their children want to expand, especially if it’s into areas the parents want to keep for themselves. “Keep your hands off” is the message they send, and that’s not a good way to motivate anyone, let alone their own children (Ohmae, 1989, p. 150).</td>
</tr>
<tr>
<td>2b</td>
<td>Joint planning and decision making may result in a loss of decision autonomy (Barringer &amp; Harrison, 2000, p. 386).</td>
</tr>
<tr>
<td>2c</td>
<td>In an extreme case, within the framework of strong multiple links, the company will essentially become a prisoner within the network, without the possibility of its own autonomous operation (Capaldo, 2007; as cited in Cygler &amp; Sroka, 2014, p. 57).</td>
</tr>
<tr>
<td><strong>Limited Flexibility</strong></td>
<td></td>
</tr>
<tr>
<td>3a</td>
<td>Establishing a partnership with one firm may foreclose the possibility of establishing a partnership with another firm. In addition, the organizational routines created by an alliance may make it difficult for a firm to act independently (Barringer &amp; Harrison, 2000, p. 386).</td>
</tr>
<tr>
<td><strong>Dependencies</strong></td>
<td></td>
</tr>
<tr>
<td>4a</td>
<td>A power imbalance arises if one partner becomes overly dependent on the other. This situation increases the potential for opportunism on the part of the stronger partner. A power imbalance also increases the chances that the alliance will lead to an acquisition (Barringer &amp; Harrison, 2000, p. 386).</td>
</tr>
<tr>
<td>4b</td>
<td>Inter-organizational networks with developed pathological phenomena become a kind of pitfall for the companies operating within them. Due to the distribution of companies into sharks (stronger, privileged) and roaches (weaker), the latter lose their organizational independence as a result of structural pathologies. The roaches bear the costs of network functioning and are dependent on stronger companies, including when making the decision to withdraw from the system itself. Thus, the network is a waste rather than a benefit for these companies (Cygler &amp; Sroka, 2014, p. 61).</td>
</tr>
</tbody>
</table>
Appendix 2: Table of Excerpts - Interrelationship Risks (IR)

<table>
<thead>
<tr>
<th>Number</th>
<th>Excerpts</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Opportunistic behavior</strong></td>
<td></td>
</tr>
<tr>
<td>5a</td>
<td>Conflict erodes trust, increases the potential for opportunistic behavior, and reduces the likelihood of partners dedicating necessary idiosyncratic assets to the relationship (Cullen, Johnson &amp; Sakano, 1995, p. 95).</td>
</tr>
<tr>
<td>5b</td>
<td>Opportunistic behavior and an increase in competitive actions also result in higher operating costs due to the need to expand or build completely new management structure. As a result, these higher operation costs have to be borne by the member companies (Cygler &amp; Sroka, 2014, p. 59).</td>
</tr>
<tr>
<td>5c</td>
<td>The failure rate for interorganizational relationships is high. In addition, participation in interorganizational relationships subjects a firm to potential opportunistic behavior on the part of alliance partner (Barringer &amp; Harrison, 2000, p. 386).</td>
</tr>
<tr>
<td><strong>Structural Issues</strong></td>
<td></td>
</tr>
<tr>
<td>6a</td>
<td>Pathologies in inter-organizational networks may arise in different areas of the constellation; however those of a structural nature are probably the most significant. They generate major conflicts within the system; moreover, a lot of benefits from the functioning of the network are thereby eroded. They are, therefore, a significant threat to the success of the network (Cygler &amp; Sroka, 2014, p. 55).</td>
</tr>
<tr>
<td><strong>Cultural Issues</strong></td>
<td></td>
</tr>
<tr>
<td>7a</td>
<td>Like newlyweds, newcomers to corporate alliances are often surprised by the demands placed upon them. The difficulty lies not only in the management of the business but also in fuzzy areas, such as the personal relationships between managers from different corporate cultures (Sherman &amp; Sookdeo, 1992, p. 78).</td>
</tr>
<tr>
<td>7b</td>
<td>The corporate cultures of alliance partners may clash, making the implementation and management of the alliance difficult (Barringer &amp; Harrison, 2000, p. 386).</td>
</tr>
<tr>
<td><strong>Increasing Complexity</strong></td>
<td></td>
</tr>
<tr>
<td>8a</td>
<td>Because interorganizational relationships require the combined effort of two or more firms, they are often difficult to manage. Frustrations and costly delays often occur in executing alliance strategies (Barringer &amp; Harrison 2000, p. 386).</td>
</tr>
<tr>
<td>8b</td>
<td>Although they used different words to do so, virtually all of the twenty or so managers interviewed in this study suggested that the key to successful alliance building is to create an alliance that is simple enough to be manageable. Complexity, they argued, leads to failure (Killing, 2002, p. 57).</td>
</tr>
<tr>
<td><strong>Competing Interest</strong></td>
<td></td>
</tr>
<tr>
<td>9a</td>
<td>The importance of inter-firm conflicts in strategic alliances has been widely recognized in the literature (Buckling &amp; Sengupta, 1993; Hardy &amp; Phillips, 1998; Kogut, 1988) One type of interfirm-conflicts is in terms of competing interests (Das &amp; Teng, 2000, p. 51).</td>
</tr>
<tr>
<td>9b</td>
<td>The second main characteristic of interfir cooperation is related to the potentially conflictual nature of the interests and objectives embodied within it. The partner companies which remain independent entities, continue to pursue their own agendas of interests and objectives (Dussauge &amp; Garrette, 1999, p. 6).</td>
</tr>
</tbody>
</table>
### Appendix 3: Table of Excerpts - Market & External Environment Motives (ME)

<table>
<thead>
<tr>
<th>Number</th>
<th>Excerpts</th>
</tr>
</thead>
<tbody>
<tr>
<td>10a</td>
<td>Motivated by strategic attempts to deter competitive market entry and improve oligopoly profit potential, MNEs establish EJVs in less developed countries in order to extend their home country market power into a new location at lower cost and with less interference than a wholly owned subsidiary (WOS) would generate (Harrigan, 1984 &amp; Kogut, 1988, as cited in Tallman &amp; Shenkar, 1994, p. 93).</td>
</tr>
<tr>
<td>10b</td>
<td>As Ohmae (1992) points out: “(companies) simply do not have the time to establish new markets one-by-one”. In today’s fast-paced world economy, this is increasingly true. Therefore, forming an alliance with an existing company already in that marketplace is a very appealing alternative. Partnering with an international company can make the expansion into unfamiliar territory a lot easier and less stressful for a company (Elmuti &amp; Kathawala, 2001, p. 206).</td>
</tr>
<tr>
<td>10c</td>
<td>Alliances are not tools of convenience. They are important, even critical, instruments of serving customers in a global environment. Glaxo, the British pharmaceutical company, for example, did not want to establish a full business system in each country where it did business. Especially given its costly commitment to topflight R&amp;D, it did not see how it could—or why it should—build an extensive sales and service network to cover all the hospitals in Japan and the United States. So it decided to link up with first-class partners in Japan, swap its best drugs with them, and focus its own resources on generating greater sales from its established network in Europe. That kind of value creation and delivery is what alliances make possible (Ohmae, 1989, p. 144).</td>
</tr>
<tr>
<td>10d</td>
<td>A particular motive for adopting a cooperative strategy and entering into alliances is provided by the challenge of entering new international markets (Child, Faulkner &amp; Tallman, 2005, p. 78).</td>
</tr>
<tr>
<td>10e</td>
<td>Moreover, faster entry into a market may be possible if the testing and certification done by one partner are accepted by the authorities in the other’s partners territories. [. . . ]. By pooling or swapping patents, companies also pool or swap territories (Contractor &amp; Lorange, 2002, p. 13).</td>
</tr>
<tr>
<td>10f</td>
<td>Firms are turning in increasing numbers to strategic alliances as a means for entering and operating in domestic and international markets (Tallman, 2000, p. 96).</td>
</tr>
<tr>
<td>10g</td>
<td>Potential strategic advantages under the distribution-type joint venture category include rapid access to an existing marketing establishment, links with key buyers, knowledge of the local market and culture, and benefits from a recognizable brand name – in total, better market access (Contractor &amp; Lorange, 2002, p. 17-18).</td>
</tr>
<tr>
<td>10h</td>
<td>Here we come to one of the oldest and still common rationales for joint ventures – in many instances, host government policy makes the joint venture form the most convenient way to enter a market. An abundance of examples can be found, particularly in developing countries (Contractor &amp; Lorange, 2002, p. 14).</td>
</tr>
</tbody>
</table>

**Market Power**

| 11a    | In summary, studies to date show that there is evidence both for a market power and efficiency argument for joint venture motivations (Kogut, 1988, p. 326). |
| 11b    | Cooperative strategies between companies are carried out with the prime purpose of increasing the market power of the partners (Child et al, 2005, p. 30). |
| 11c    | Market power theory thus provides several insights into cooperative strategy, one of which is that greater market power, with consequentially enhanced returns, can be attained through collaborating. Cooperation may be a faster and cheaper way to gain market power that mergers, acquisitions, or organic growth (Faulkner & de Rond, 2000, p. 5). |
| 11d    | Multilateral network links reduce transaction costs but also increase transaction value, which may lead to an increase in the bargaining power of the network members compared to the other participants in the market (Clarke-Hill, Li & Davis, 2003; as cited in Cygler & Sroka, 2014, p. 53) |

**Time**

| 12a    | You can expand brands and build up distribution yourself—you can do everything yourself—with enough time, money, and luck. But all three are in short supply. In particular, you simply do not have the time to establish new markets one-by-one throughout the Triad. The “cascade” model of expansion no longer works. Today you have to be in all important markets simultaneously if you... |
are going to keep competitors from establishing their positions. Globalization will not wait. You need alliances and you need them now. But not the traditional kind (Ohmae, 1989, p. 147).

12b In the economic world of the 1990s, firstmover advantages are becoming paramount, and often the conclusion of an alliance between a technologically strong company with new products, and a company with strong market access is the only way to take advantage of an opportunity in time. Even if a company has sufficient funds to approach an opportunity through organic development, this may not lead to substantial market presence fast enough to take successful advantage of the opportunity. Alliances are the fastest means of achieving market presence to meet an opportunity, if the partners each have strong resources and competencies, but alone insufficient to achieve critical mass (Child et al., 2005, p. 88).

Flexibility

13a The other activities are then farmed out to members of the network, that carry them out more efficiently than the 'hub' firm would, since they are specialized in them. At the same time, all the forms in the network enjoy the added flexibility of not having fixed commitments to activities which are not essential to them (Jarillo, 1988, p. 35).

13b Interorganizational relationships provide a valuable alternative to markets and hierarchies, and are subject to fewer regulatory concerns than acquisitions (Barringer & Harrison, 2000, p. 385).

Protection

14a There is the danger, however, that more profound reasons for the use of joint ventures may be obscured by focusing only on theoretical explanations for joint ventures at the cost of more substantive explanations. Two alternative views are worthy of attention. The first is a reformulation of strategic behavior but only writ large—namely, that joint ventures are a response of leading members of national oligopolies to coopt foreign entrants (Kogut, 1988, p. 330).

14b Through an interorganizational relationship, firms can gain the competencies and market power that is needed to neutralize or block the moves of a competitor (Barringer & Harrison, 2000, p. 385).

External Pressure

15a To fully grasp a situation, it is important to understand the different actors with a role in the cooperation, the way the cooperation process is being given form and substance, and the environmental factors that influence the issue. Topics necessitating cooperation do not just appear 'out of the blue'; they are always a product of an environment. The history of the issue needs to be clear. Have earlier attempts been made to address it? If so, why were they unsuccessful? Clarity is also needed on the demographic, ecological, social, technological, economic and political elements that influence the partnership (DESTEP analysis). Finally, it is important to know what external factors could be of influence, such as the role of the media, competing initiatives and political pressure (Kaats & Opheij, 2014, p. 42).

15b It considers possible motives for alliances, noting that there are generally at least two; a company’s response to changes in the external environment and that company’s feeling of vulnerability or deficiency in certain areas of its operations. It may have inadequate market access, technology, brand strength, product range or other factors; it may lack financial muscle, or feel the need for speed to take advantage of a market opportunity that will not be there for long (Child et al., 2005, p. 75).

15c The key environmental traits to consider when formulating cooperative strategies include: (1) demand uncertainty, (2) customer traits (especially their sophistication in assessing a product’s differentiation and their abilities to command customized products from vendors), (3) infrastructure development, (4) production technology (5) the volatility of competitive behavior and the (6) nature and extent of linkages between the venture and its owners (Harrigan, 1988, p. 142).

Collective Lobbying

16a Organizations form interorganizational relationships to increase their collective clout and pressure their governments into adopting policies favorable to their industries (Barringer & Harrison, 2000, p. 385).

16b Action sets: short-lived organizational coalitions whose members coordinate their lobbying efforts to influence public policy making (Todeva & Knoke, 2005, p. 125).
Organizations (typically nonprofit) that are formed by firms in the same industry to collect and disseminate trade information, offer legal and technical advice, furnish industry-related training, and provide a platform for collective lobbying (Barringer & Harrison, 2000, p. 383.)

Appendix 4: Table of Excerpts - Competitiveness Motives (C)

<table>
<thead>
<tr>
<th>Number</th>
<th>Excerpts</th>
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<tbody>
<tr>
<td><strong>Competition</strong></td>
<td></td>
</tr>
<tr>
<td>17a</td>
<td>Their use represents an exciting change in competitive behavior because the many joint ventures (and other cooperative strategies) that managers are using to build strengths for their firms’ business units can change industry structures to the disadvantage of competitors. Because joint ventures can (1) exacerbate competition, (2) stabilize profit levels, or (3) precipitate structural changes in vertical integration, technological scale, or other industry traits, managers must understand how they might best use joint ventures, especially within industries where cooperative strategies are being used with increasing frequency (Harrigan, 1988, p. 141).</td>
</tr>
<tr>
<td>17b</td>
<td>Collaborative business relationships including strategic alliances, joint ventures, clusters, and consortia are popular mechanisms for dealing with resource constraints, accelerating technological advancement, and heightened levels of competition in the global marketplace (Palakshappa &amp; Gordon, 2007, p. 264).</td>
</tr>
<tr>
<td>17c</td>
<td>Potential (or existing) competition can be co-opted by forming a joint venture with the competitor or by entering into a network of cross-licensing agreements (Telesio, 1977, as cited in Contractor &amp; Lorange, 2002, p. 14).</td>
</tr>
<tr>
<td>17d</td>
<td>A strategic behavior perspective of joint venture choice implies that the selection of partners is made in the context of competitive positioning vis-a-vis other rivals or consumers. Though this area has not been investigated, the prediction of which firms will joint venture is unlikely to be the same for both transaction cost and strategic behavior perspectives. Whereas the former predicts that the matching should reflect minimizing costs, the latter predicts that joint venture partners will be chosen to improve the competitive positioning of the parties, whether through collusion or through depriving competitors of potentially valuable allies (Kogut, 1988, p. 322).</td>
</tr>
<tr>
<td><strong>Competitive Advantage</strong></td>
<td></td>
</tr>
<tr>
<td>18a</td>
<td>Companies enter into such relationships in the hope of accessing resources, skills, or markets, and in doing so minimizing the effect of their weaknesses or building or maintain competitive advantages. These motives may be greatest for small firms who may lack the internal resources to respond to threats and take advantage of opportunities, and for companies based in countries with small domestic markets since internationalisation is an even greater imperative for them than for companies based in countries with larger domestic markets (Palakshappa &amp; Gordon, 2007, p. 264-265).</td>
</tr>
<tr>
<td>18b</td>
<td>Alliances permit firms to create new joint competencies by rapidly and inexpensively combining sets of resources and capabilities that are not available to them individually, but which are in some way complementary (Geringer, 1988). This possibly would seem to provide considerable competitive advantage (Tallman, 2000, p. 96).</td>
</tr>
<tr>
<td><strong>Strategic Motives</strong></td>
<td></td>
</tr>
<tr>
<td>19a</td>
<td>The motivations to joint venture for strategic reasons are numerous. [. . .] Many joint ventures are, on the other hand, motivated by strategic behavior to deter entry or erode competitors' positions. (Kogut, 1988, p. 321 - 322).</td>
</tr>
<tr>
<td>19b</td>
<td>Strategic behavior posits that firms transact by the mode which maximizes profits through improving a firm's competitive position vis-a-vis rivals (Kogut, 1988, p. 322).</td>
</tr>
</tbody>
</table>
### Appendix 5: Table of Excerpts - Financial & Risk Sharing Aspects (FR)

<table>
<thead>
<tr>
<th>Number</th>
<th>Excerpts</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cost Advantages</strong></td>
<td></td>
</tr>
<tr>
<td>20a</td>
<td>Overcoming investment impediments – Establishing joint support services (extracted from Table 2.1 – Kaats and Opheij, 2014, p. 10).</td>
</tr>
<tr>
<td>20b</td>
<td>Though transaction cost and strategic behavior theories share several commonalities, they differ fundamentally in the objectives attributed to firms. Transaction cost theory posits that firms transact by the mode which minimizes the sum of production and transaction costs (Kogut, 1988, p. 321-322).</td>
</tr>
<tr>
<td>20c</td>
<td>Indeed, when the limited number of potential suppliers for a customer-specific product creates conditions favorable to opportunism, thus increasing transaction costs, and when internalizing production increases transactions costs too drastically, collaboration which can be viewed as only partial internalization, may allow a decrease in both transaction and production costs (Dussauge &amp; Garrette, 1999, p. 37).</td>
</tr>
<tr>
<td>20d</td>
<td>Also, this study addresses the various theories relating to reasons why firms pursue the strategic alliance option. Despite Larson’s (1992) articulation of the short-term deficiencies of transaction costs theory, our study indicates that for new technological firms, cost is an overriding reason why these organizations seek these alliances. In many technology-intensive industries, high initial capital outlays are required for entry (Gersoyny &amp; Peters, 1997, p. 69).</td>
</tr>
<tr>
<td>20e</td>
<td>Western companies, on the other hand, often enter alliances to avoid investments. They are more interested in reducing the costs and risks of entering new businesses or markets than in acquiring new skills (Hamel, Doz &amp; Prahalad, 1989, p. 134).</td>
</tr>
<tr>
<td>20f</td>
<td>As we noted in Chapter 2, the transaction-cost motive deals in particular with situations where there would be small number bargaining, high asset specificity, and high uncertainty over specifying and monitoring performance. Joint ownership largely eliminates the potential costs that arise in such situations, as there is a mutual hostage position through joint commitment of financial or real assets which thereby align partners who otherwise may have potentially conflicting incentives (Child et al., 2005, p. 77).</td>
</tr>
<tr>
<td>20g</td>
<td>The perspective on cooperative behavior offered by transaction cost theory views such arrangements as potentially costs-reducing methods of organizing business transactions (Faulkner &amp; de Rond, 2000, p. 7).</td>
</tr>
<tr>
<td><strong>Economies of Scale</strong></td>
<td></td>
</tr>
<tr>
<td>21a</td>
<td>Production rationalization means that certain components or subassemblies are no longer made in two locations with unequal costs. [. . .] Because volume in the more advantageous location is now higher, further reduction in average unit cost is possible due to economies of scale (Contractor &amp; Lorange, 2002, p. 12).</td>
</tr>
<tr>
<td>21b</td>
<td>In many industries, high fixed costs require firms to find partners to expand production volume (Barringer &amp; Harrison, 2000, p. 385).</td>
</tr>
<tr>
<td>21c</td>
<td>The hub firm in the network can enjoy lower costs because it captures economies of scale (or whatever source of efficiency) from its associated firms, that other competitors cannot obtain because TC [Transaction Costs] forces them to integrate (Jarillo, 1988, p. 35).</td>
</tr>
<tr>
<td>21d</td>
<td>Shared-supply Alliances bring together companies which join forces to achieve economies of scale on a given component or on an individual stage in the production process (Dussauge and Garrette, 1999, p. 63).</td>
</tr>
<tr>
<td>21e</td>
<td>To compete in the global arena, you have to incur and somehow find a way to defray – immense fixed costs. You need partners who can help you amortize your fixed costs, and with them you need to define strategies that allow you to maximize the contribution to your fixed costs (Ohmae, 1989, p. 146).</td>
</tr>
<tr>
<td><strong>Risk Sharing</strong></td>
<td></td>
</tr>
<tr>
<td>22a</td>
<td>Some companies may find that the financial risk that is involved in pursuing a new product of production methods is too great for a single company to undertake. In such cases, two or more companies come together and agree to spread the risk among all of them (Elmuti &amp; Kathawala, 2001, p. 207).</td>
</tr>
</tbody>
</table>
Motives for the formation of these more recent alliances include the need to spread the costs and risks of innovation, as capital requirements for development projects in industries such as pharmaceuticals, telecommunications and commercial aircraft have risen (Mowery, 1988, as cited in Mowery et al., 1996, p. 79).

Cooperative ventures can reduce a partner’s risk by (1) spreading the risk of a large project over more than a firm, (2) enabling diversification in a product portfolio sense, (3) enabling faster entry and payback, and (4) cost subadditivity (the cost to the partnership is less than the cost of investment undertaken by each firm) (Contractor & Lorange, 2002, p. 11).

Interorganizational relationships allow two or more firms to share the risk and cost of a particular business endeavor (Barringer & Harrison, 2000, p. 385).

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Interorganizational relationships allow two or more firms to share the risk and cost of a particular business endeavor (Barringer & Harrison, 2000, p. 385).

Production Rationalization

In many situations, too, particularly in more mature businesses, there may be excess capacity and need for industrial restructuring. A joint venture approach may be a practical vehicle for achieving this. Thus, production can be rationalized and output level reduced within the joint venture context, thereby avoiding a “winner-loser” situation and a protracted stalemate (Contractor & Lorange, 2002, p. 12).

Relational Rents

We define a relational rent as a supernormal profit jointly generated in an exchange relationship that cannot be generated by either firm in isolation and can only be created through the joint idiosyncratic contributions of the specific alliance partners. In summary, at a fundamental level, relational rents are possible when alliance partners combine, exchange, or invest in idiosyncratic assets, knowledge, and resources/capabilities, and/or they employ effective governance mechanisms that lower transaction costs or permit the realization of rents through the synergistic combination of assets, knowledge, or capabilities (Dyer & Singh, 1998, p. 662).

<table>
<thead>
<tr>
<th>Number</th>
<th>Excerpts</th>
</tr>
</thead>
<tbody>
<tr>
<td>25a</td>
<td>Controlling for other relevant factors, our results failed to support Balakrishnan and Koza’s view that joint ventures are a mechanism to reduce the information costs of acquisitions. They support Hennart’s (and Kay’s) prediction that joint ventures will be chosen when the desired assets are packaged in a way that would raise the costs of managing the merged unit. In other words, our results suggest that a joint venture is primarily a device to obtain access to resources which are embedded in other organizations (Hennart &amp; Reddy, 1997, p. 11).</td>
</tr>
<tr>
<td>25b</td>
<td>Firms may use alliances or mergers/acquisitions to obtain resources possessed by other firms that are valuable and essential to achieving competitive advantage. In the international arena, multinational companies may enter foreign markets by acquiring a local company. They may also seek the resources of their local partners, such as local facilities, knowledge, and connections, by forming international joint ventures (Beamish, 1987 &amp; Yan &amp; Gray, 1994; as cited in Das &amp; Teng, 2000, p. 37).</td>
</tr>
<tr>
<td>25c</td>
<td>It is to aggregate, share, or exchange valuable resources with other firms when these resources cannot be efficiently obtained through market exchanges or mergers/acquisitions (M&amp;As). In sum, it is about creating the most value out of one’s existing resources by combining these with others’ resources, provided, of course, that this combination results in optimal returns (Das &amp; Teng, 2000, p. 37).</td>
</tr>
<tr>
<td>25d</td>
<td>Collaborations is one way for organizations to gain access to critical resources, including industry and/or geographical information, legal and technical advice, research and development capability, as well as knowledge and learning (Kogut, 1988 &amp; Inkpen &amp; Crossan, 1995 &amp; Larsson et al., 1999 &amp; Dyer &amp; Nobeoka, 2000; as cited in Lotia &amp; Hardy, 2008)</td>
</tr>
<tr>
<td>25e</td>
<td>Organizations go into joint ventures because of the new for resources, notably, money, skill and manpower (Aiken &amp; Hagen, 1968, p. 915; as quoted in Child et al., 2005, p. 76).</td>
</tr>
<tr>
<td>25f</td>
<td>Other motivations have come into prominence more recently. They include the need to access superior capabilities, often in related, but not core, business areas, without</td>
</tr>
</tbody>
</table>

Appendix 6: Table of Excerpts - Value Creation (V)

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
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<td>25a</td>
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<tr>
<td>25f</td>
<td>Other motivations have come into prominence more recently. They include the need to access superior capabilities, often in related, but not core, business areas, without</td>
</tr>
</tbody>
</table>
Referring to the resource-based view, it has been argued that alliances are a means of combining complementary skills and resources held by different firms in order to exploit new business opportunities (Teece, 1986; Itami and Roehl, 1987; Grant, 1996; Mitchell and Singh, 1996; Singh and Mitchell, 1996). Firms that do not possess all the necessary capabilities and assets to develop a business successfully on their own can nevertheless do so by collaborating with partners which can contribute the resources they lack (Dussauge & Garrette, 1999, p. 41).

Collaborative business relationships including strategic alliances, joint ventures, clusters, and consortia are popular mechanisms for dealing with resource constraints, accelerating technological advancement, and heightened levels of competition in the global marketplace (Palakshappa & Gordon, 2007, p. 264).

Organizational behavior is thus accounted for, and justified by the context in which an organization finds itself. Consequently, cooperation may exists primarily to provide organizations with access to financial resources (a typical motive for biotech start-ups), expertise, skills, or processes (a typical motive for pharmaceuticals), or markets (more typical of financial institutions and automotive manufacturers) (Faulkner & de Rond, 2000, p. 18).

Alliances permit firms to create new joint competencies by rapidly and inexpensively combining sets of resources and capabilities that are not available to them individually, but which are in some way complementary. This possibly would seem to provide considerable competitive advantage (Geringer, 1988; as cited in Tallman, 2000, p. 96).

Joint ventures, production partnerships, and licensing agreements may be formed in order to pool the complementary technologies of the partners. [...] In general, it is important to consider joint ventures as vehicle to bring together complementary skills and talents which cover different aspects of state-of-art know-how needed in high technology industries (Contractor & Lorange, 2002, p. 13).

Whereas the motive of obtaining resources is to reach others’ resources, the motive of “retaining resources” is to keep one’s own valuable resources securely in the firm (Das & Teng, 2000, p. 38).

There is, however, a third rational explanation for joint ventures which does not rest on either transaction cost or strategic behavior motivations. This explanation views joint ventures as a means by which firms learn or seek to retain their capabilities. In this view, firms consist of a knowledge base, or what McKelvey (1983) calls 'comps', which are not easily diffused across the boundaries of the firm. Joint ventures are, then, a vehicle by which, to use the often-quoted expression of Polanyi (1967), 'tacit knowledge’ is transferred. Other forms of transfer, such as through licensing, are ruled out not because of market failure or high transaction costs as defined by Williamson and others, but rather because the very knowledge being transferred is organizationally embedded. (Kogut, 1988, p.323).

To successfully manage these dependencies, resource dependence theorists argue that organizations must (1) acquire control over critical resources in an effort to decrease dependence on other organizations, and (2) acquire control over resources that increase the dependence of other organizations on them (Barringer & Harrison, 2000, p. 372).

From this point of view [Institutionalization and increasing bureaucratic dominance of the economy], joint ventures are another mode by which markets are replaced by organizational coordination. In this sense, joint ventures are a means by which large corporations increase their organizational control, through ties to smaller firms and to each other (Kogut, 1988, p. 330).

Pfeffer (1972b) has argued that interorganizational activity is undertaken to manage the organization's interdependence, and that a focus on the resource interdependence of organizations provides a useful analytical perspective (Pfeffer, 1972; as cited by Pfeffer & Nowak, 1976, p. 398).

Alternatively, firms may seek to reduce uncertainty in their environment by cooperating with key parts of it (e.g. Faulkner, 1995), though that may merely replace one source of risk with another (e.g. opportunism, free-riding) (Faulkner & de Rond, 2000, p. 18).
The strategic implications of a network arrangement are important. It allows a firm to specialize in those activities of the value chain that are essential to its competitive advantage, reaping all the benefits of specialization, focus and, possible size. The other activities are then farmed out to members of the network that carry them out more efficiently than the “hub” firm would, since they are specialized in them (Jarillo, 1988, p. 35).

These results provide some support for the arguments in Nakamura et al. (1996) that participation in an alliance may produce either convergence of capabilities through interfirm knowledge transfer or divergence through complementary specialization. In addition, these results suggest that international alliances result in less interfirm knowledge exchange or specialization, reflecting the greater logistical and cultural complexities of managing such undertakings (Mowery, et al., 1996, p. 87).

It is also increasingly the case that only organizations of a certain size are able to offer good quality or competitive products or services; so, if you are not big enough to achieve your goals, then you are well advised to collaborate in a partnership in which everyone concentrates on the activities he excels in (Kaats & Opheij, 2014, p. 9).

Knowledge Development & Organizational Learning

Knowledge management conceives collaboration as a means to advance knowledge collectively both at organizational and social levels (Gray 2000; as cited in To, 2016).

Global competition highlights asymmetries in the skill endowments of firms. Collaboration may provide an opportunity for one partner to internalize the skills of the other, and thus improve its position both within and without the alliance (Hamel, 1991, p. 83).

Competition among alliance partners appears to be engendered by the presence of learning opportunities. The learning motive is strong in alliances where the firms desire to discover opportunities or to acquire new capabilities (Koza & Lewin, 1998; as cited in Nti & Kumar, 2000).

While there are several motives leading to the formation of alliances (Harrigan, 1988; Hagedoorn, 1993; Glaister and Buckley, 1996), authors in the competence perspective contend that alliances are often aimed at expanding a firm’s set of distinctive capabilities through interorganizational learning; this especially applies to alliances that involve technological activities (Kogut, 1988 & Hamel, 1991 & Hodgson, 1998 & Loasby, 1998; as cited in Colombo, 2003, p. 1210).

Alliances may also be an avenue for learning and internalizing new skills, in particular, those which are tacit, collective, and embedded (and thus hard to obtain and internalize by other means) (Doz & Hamel, 1998, p. 5).

Collaboration indicates management intention for new competence and knowledge development by collective and inter-supportive means (To, 2016, p. 4737).

It is also essential for organizations to continue to develop and learn to be able to assure their continuity. It is often better to learn together than to leave everyone to think and work in his own context; after all, you can invariably learn a great deal from partners with different backgrounds and mentalities (Kaats & Opheij, 2014, p. 10).

Kogut’s third motive, that of capitalizing on an opportunity for organizational learning, may depend upon the setting up of a JV in order to transfer tacit knowledge (Polanyi 1966). By definition, tacit knowledge cannot be transferred by contractual codified means, and is communicated only by teams working together. A JV may be sought in order to achieve this (Child et al., 2005, p. 77).

Intangible benefits are learning or knowledge-based: learning specific skills and competencies (Kogut, 1988; Parkhe, 1991), learning about interfirm cooperation (Lyles. 1988), and learning how to behave cooperatively (Lane & Beamish, 1990); or, in an emerging area of interest to both scholars and practitioners, simply learning how to learn from collaborations (Crossan & Inkpen, 1994; Hamel, 1991). (as cited by Simonin, 1997, p. 1154).

Learning from partners is paramount. Successful companies view each alliance as a window on their partners’ broad capabilities. They use the alliance to build skills in areas outside the formal agreement and systematically diffuse new knowledge throughout their organizations (Hamel et al., 1989, p. 134).

Before discussing the specific drivers behind cooperative strategy it is worth noting that there are two distinct rationales for such a strategy: (a) learning and (b) skill substitution.
In the complexity of an actual cooperative arrangement they may well get muddled, and substitution may turn into learning, but both exist conceptually as distinct rationales and they carry with them different risks (Child et al., 2005, p. 79).

29l The correlation between unique capabilities and sustained competitive advantage provided in the resource-based view, and the recognition that corporate performance depends in some measure on the external environment on which the firm relies for those resources it does not already possess, suggest opportunities for organizational learning by way of cooperating (Faulkner & de Rond, 2000, p.19).

**Innovations**

30a Increasingly, it has been recognized that firms need outside relationships for innovation in the development of new products, production processes, markets or forms of organizations; and for learning in the development of new competencies. (Nooteboom, 2008, p. 607)

30b Collaborative business relationships including strategic alliances, joint ventures, clusters, and consortia are popular mechanisms for dealing with resource constraints, accelerating technological advancement, and heightened levels of competition in the global marketplace (Palakshappa & Gordon, 2007, p. 264).

30c The management literature considers collaboration as one of the pre-essential sources for organizational learning, through which groups of functional teams with diverse expertise share knowledge and conceive innovative products or process concepts collectively (To & Ko, 2016, p. 1604).

30d In an era where great ideas can sprout from any corner of the world and IT has dramatically reduced the cost of accessing them, it’s now conventional wisdom that virtually no company should innovate on its own. The good news is that potential partners and ways to collaborate with them have both expanded enormously in number (Pisano & Verganti, 2008, p. 78).

**Value Creation**

31a In sum, it is about creating the most value out of one’s existing resources by combining these with others’ resources, provided, of course, that this combination results in optimal returns (Das & Teng, 2000, p. 37).

31b In this paper, I adhere to the view that alliance formation is driven by joint value maximization (Zajac and Olsen, 1993). Accordingly, alliances are established when the net present value of the pay-off partners expect from the collaboration that is, the difference between the revenues and the production and transaction costs of the collaboration exceeds that of proceeding alone. Following a similar reasoning, partners will cooperatively choose the organizational form that maximizes the net present value of the pay-off of the alliance (Colombo, 2003, p. 1211).

31c Partner contribute unique and differentiated resources – skills, brands, relationships, positions and tangible assets – to the success of their alliances, and alliances create value when those resources are cospecialized, that is, they become substantially more valuable when bundled together in a joint effort than when kept separate (Doz & Hamel, 1998, p. 5).

31d Collaboration provides organizations with the opportunity to continuously diversify and expand their portfolio and so achieve whatever vision they may have (Vangen & Huxham, 2005, p. 3)

**Irrational Motives**

32a Research has also shown that collaboration is not only driven by rational motives. Managers are often motivated to cooperate with other organizations based on their personal convictions. Those reasons are then invariably articulated in rational terms “on the night” in arguments based on the aforementioned motives (Kaats & Opheij, 2014, p. 9-10).
## Appendix 7: Table of Excerpts - Geography (G)

<table>
<thead>
<tr>
<th>Number</th>
<th>Excerpts</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Domestic</strong></td>
<td></td>
</tr>
<tr>
<td>33a</td>
<td>Uninational means that the firms in question belong to the same nationality or country. Therefore, any interfirm cooperative agreements are domestic in nature and excluded from my definition (Root, 2002, p. 70).</td>
</tr>
<tr>
<td><strong>International</strong></td>
<td></td>
</tr>
<tr>
<td>34a</td>
<td>The nationality of the partners gives the alliances different peculiarities. Aspects such as processes of globalization of markets or the development of international networks are important in international alliances. In this sense, it is possible to distinguish among international alliances where the cooperative activities are performed in only one country and those whose activities are performed in several countries (Garcia-Canal, 1996, p. 781).</td>
</tr>
<tr>
<td>34b</td>
<td>Binational indicates two firms (or a parent company and its controlled affiliate) belonging to two different countries (Root, 2002, p. 70).</td>
</tr>
<tr>
<td><strong>Multinational</strong></td>
<td></td>
</tr>
<tr>
<td>35a</td>
<td>Multicountry alliances are a more recent phenomenon, related to market globalization (Porter &amp; Fuller, 1986; as cited in Garcia-Canal, 1996, p. 782).</td>
</tr>
<tr>
<td>35b</td>
<td>Multinational indicates three or more firms (or a parent company and its controlled affiliates) belonging to three or more different countries (Root, 2002, p. 70).</td>
</tr>
<tr>
<td><strong>Global</strong></td>
<td></td>
</tr>
<tr>
<td>36a</td>
<td>Global alliances are not the only valid mechanism for boosting contribution to fixed costs (Ohmae, 1989, p. 147).</td>
</tr>
<tr>
<td>36b</td>
<td>Also, Hitachi of Japan and TRW of the United States formed a strategic alliance to pursue opportunities in space technologies. McDonnell-Douglas Space Systems and Shimizu, a Japanese architectural and engineering company, announced their collaboration to develop space exploration technologies for the United States lunar/Mars initiative. All of these examples show that global alliances between companies are well underway in different countries (Culpan, 2002, p. 2).</td>
</tr>
</tbody>
</table>

## Appendix 8: Table of Excerpts - Coopetition (CO)

<table>
<thead>
<tr>
<th>Number</th>
<th>Excerpts</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Vertical Agreements</strong></td>
<td></td>
</tr>
<tr>
<td>37a</td>
<td>In vertical agreements a unilateral buyer-seller relationship exists between partners: the activities subject to the agreement are carried out by one of the parties who transfer output to the other party in exchange for cash (Garcia-Canal, 1996, p. 773).</td>
</tr>
<tr>
<td>37b</td>
<td>Vertical Partnerships bring together companies that operate at two successive stages within the same production process; partner companies are therefore – or, at least, could well be – suppliers or customer of one another. [ . . . ] Vertical Partnerships offer an alternative both to simple transactions between suppliers and customers and to full vertical integration. They are a form of partial integration, [ . . . ] nor does it integrate fully and become a competitor of its own suppliers or customers (Dussauge &amp; Garrette, 1999, p. 53).</td>
</tr>
<tr>
<td>37c</td>
<td>Several cooperatives ventures involve each partner making essentially similar contributions, as described already. However, joint ventures, coproduction, research partnerships, and management or marketing service agreements can also be a form of vertical quasi integration, with each partner contributing one or more different elements in the production or distribution chains. The inputs of the partners are, in this case, complementary, not similar (Contractor &amp; Lorange, 2002, p. 15).</td>
</tr>
<tr>
<td><strong>Non-Competing</strong></td>
<td></td>
</tr>
<tr>
<td>38a</td>
<td>Partnership between non-competing firms are formed, by definition, by companies belonging to different industries. This type of alliance is a means for the companies concerned to expand into areas new to them, areas in which the partner can make valuable contributions. These alliances</td>
</tr>
</tbody>
</table>
are an alternative to more traditional forms of expansion: greenfield investment or acquisition (Dussauge & Garrette, 1999, p. 48).

The noncompetitive alliances [...] tend to be intra-industry partnering among firms that do not compete with one another (Rangan & Yoshino, 1996, p. 8).

**Procompetitive**

These tend generally to be interindustry and involve vertical relationships in the value chain, as between manufacturers and suppliers or distributors. Joint development by General Motors (GM) and Hitachi of certain electronic components for automobiles falls into this category (Rangan & Yoshino, 1996, p. 8).

**Horizontal agreements**

In horizontal agreements however, all partners participate directly in the performance of the activities, subject to the agreement: all of them sharing part of their assets (Garcia-Canal, 1996, p. 773).

Cooperation with a competitor(s) refers to horizontal alliances (Culpan, 2002, p. 67).

**Pre-competitive**

Pre-competitive alliances typically involve firms in different, frequently unrelated, industries in well defined activities often related to a new technology, the cooperative development of optical memory storage products by DuPont and Sony being an example. Neither partner possesses the full complement of technologies and skills needed to succeed alone, but they expect to develop a product that each will manufacture and market independently (Rangan & Yoshino, 1996, p. 8-9).

**Competitive**

From a strategic point of view, multinational corporations (MNCs) have changed their traditional views competition and have adopted a variety of new and flexible approaches for achieving sustainable competitive advantages. Such a shift in their business strategies has become more vivid today than ever before. In particular, the frequent use of business alliances as an indispensable tool in their strategic repertoire has manifested itself in the global business. MNCs have started to build alliances even with their competitors (Culpan, 2002, p. 1).

The very existence of alliances between rivals is paradoxical: competitors are expected to compete with one another rather than to join forces. [...] However, far from being unusual, these alliances between rivals account, according to certain studies, for approximately 70% of all cooperation agreements (Morris & Hegert, 1987; as cited in Dussauge & Garrette, 1999, p. 57).

In competitive alliances, the partners are direct competitors. The joint manufacture by GM and Toyota of compact cars in the United States and by Toshiba and Motorola of microprocessors and memory chips in Japan are examples. [...] Adding value, maximizing learning opportunities and, above all, protecting core competencies are the usual preoccupations of managers engaged in competitive alliances (Rangan & Yoshino, 1996, p. 8).

Collaboration between competitors is in fashion. General Motors and Toyota assemble automobiles, Siemens and Philips develop semiconductors, Canon supplies photocopiers to Kodak, France’s Thomson and Japan’s JVC manufacture videocassette recorders. But the spread of what we call “competitive collaboration” – joint ventures, outsourcing agreements, product licensing, cooperative research – has triggered unease about the long-term consequences (Hamel et al., 1989, p. 133).

**Appendix 9: Table of Excerpts - Formalization and Structural Complexity (FS)**

<table>
<thead>
<tr>
<th>Number</th>
<th>Excerpts</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Non-Equity</strong></td>
<td></td>
</tr>
<tr>
<td>43a</td>
<td>Non-equity alliances, on the other hand, do not involve any equity transfer, so that they include all kinds of contractual arrangements (Das &amp; Teng, 1996, p. 828).</td>
</tr>
<tr>
<td>43b</td>
<td>Nonequity agreements are agreements between partners to cooperate in some way, but they do not involve creation of a new firm, nor does either partner purchase equity in the other (Killing, 2002, p. 62).</td>
</tr>
</tbody>
</table>
## Bilateral Agreements

### 44a

The “non-equity bilateral agreement” category comprises joint R&D agreements, technology-sharing agreements, cross-licenses, arrangements aimed at sharing production facilities, logistics resources and/or distribution networks, and co-marketing agreements. All such arrangements involve joint performance of activities sharing, and/or exchange of resources among partners (Colombo, 2003, p. 1216).

### 44b

On the other hand, alliances are called bilateral contract-based when the partners have sustained production of property rights. These alliances require partners to put in resources and work together on a continuing basis. Joint & R&D, joint marketing and promotion, joint production, and enhanced supplier partnership are some good examples of bilateral contract-based alliances. (Mowery et al., 1996; as cited by Das & Teng, 2000, p. 43). These alliances require partners to put in resources and work together constantly, so that they are integrated in a tighter manner. As compared to unilateral contracts, bilateral contracts are usually incomplete and more open-ended (Das & Teng, 2000, p. 43-44).

## Unilateral Agreements

### 45a

Alliances are unilateral when they embody a well-defined transfer of property rights, such as the “technology for cash” exchange in licensing agreements. Licensing, distribution agreements and R&D contracts are the main forms of unilateral contract-based alliances. The key feature here is that individual firms carry out their obligations independently of others. Such contracts tend to be complete and specific, and partners are expected to perform on their own accordingly, without much coordination or collaboration. This the level of integration is relatively low in unilateral contract-based alliances. (Mowery et al., 1996; as cited in Das & Teng, 1996).

### 45b

The 'non-equity unilateral agreement' category includes R&D contracts, technology transfer agreements, licenses, customer-supplier relations, franchising agreements, and other unilateral commercial agreements (e.g., value added retailer, original equipment manufacturer). These agreements generally rely on the division of labor and the specialization of tasks among partners; each partner is in charge of a specific activity and transfers the output to the other parties. The extent of the interaction between partners is low (Colombo, 2003, p. 1216).

## Equity

### 46a

Equity alliances involve the transfer or creation of equity ownership, and they take two primary forms: direct investment and joint ventures. Direct investment occurs when one of the partners acquires partial ownership of the other partner or partners. In joint ventures, partners invest in a new, jointly owned entity (Das & Teng, 1996, p. 828).

### 46b

The most basic and more frequent line of distinction drawn between alliances is linked to ownership in companies. As already described in detail in the section on transaction theory, equity is used to differentiate between so-called equity alliances. They are defined to be either organised as an equity joint venture, which involves the creation of a new independent jointly owned entity, or alternatively equity alliances can occur when one of the partners takes a minority equity position as the other partners (Pisano, 1989; as cited in Buzady, 2005, p. 133).

## Minority Equity

### 47a

Minority equity alliances are similar to nonequity partners except that one partner has taken a minority equity position in the other (Killing, 2002, p. 62).

### 47b

Minority investments” are shared equity arrangements that do not create a separate entity (Harrigan, 1988, p. 142).

## Equity Joint Ventures / Traditional

### 48a

The joint venture concept involves the creation of a new, separate, organizational entity, jointly owned and controlled by the parent organizations (Pfeffer & Nowak, 1976, p. 400).

### 48b

Two or more partners join forces to create a new incorporated company in which each has an equity position and representation on the board of directors (Killing, 2002, p. 62).

## Informal

### 49a

These interfirm collaboration relationships include purely social links, which are not coupled with formal agreements (Caglio & Ditillo, 2009, p. 3).
Collaborations between businesses can be informal agreements between their respective senior managers or chairpersons, based entirely on a verbal agreement (Ul-Haq and Morison, 2001 & Dussauge and Garrette, 1999; as cited by Barnes et al., 2012, p. 89).

Appendix 10: Table of Excerpts - Power Dependencies (PW)

<table>
<thead>
<tr>
<th>Number</th>
<th>Excerpts</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Independent</strong></td>
<td></td>
</tr>
<tr>
<td>50a</td>
<td>Independent ventures: Joint ventures in which the venture general manager is given a great deal of autonomy to manage as he sees fit (Killing, 2002, p. 62).</td>
</tr>
<tr>
<td>50b</td>
<td>Thus, in a contract-based collaboration, the resource and financial commitments are often agreed and formalized beforehand within the contract. Considering the interdependence level, when organizations rarely depend on each other and they only interact for the searching of opportunities, informal agreement would be suggested (Chen et al., 2015, p. 23).</td>
</tr>
</tbody>
</table>

| **One Partner Dominates** | |
| 51a | Dominant parent ventures: Joint ventures in which one partner plays a dominant managerial role (Killing, 2002, p. 62). |
| 51b | A unilateral contract-based structure would be a good choice if one organization depends on the other (Chen et al., 2015, p. 23). |
| 51c | A power imbalance arises if one partner becomes overly dependent on the other. This situation increases the potential for opportunism on the part of the stronger partner. A power imbalance also increases the chances that the alliance will lead to an acquisition (Barringer & Harrison, 2000, p. 386). |

| **Mutual Dependent** | |
| 52a | Shared management ventures; Joint ventures in which both parents play an active managerial role so all significant decisions are shared (Killing, 2002, p. 62). |
| 52b | For the mutual dependent situation, legal entity-based and also bilateral contract-based would be much more used (Chen et al., 2015, p. 23). |

Appendix 11: Table of Excerpts - Purpose (P)

<table>
<thead>
<tr>
<th>Number</th>
<th>Excerpts</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Product &amp; Production</strong></td>
<td></td>
</tr>
<tr>
<td>53a</td>
<td>An area in which collaboration is widely utilised through a range of collaborative forms, is that of products and their production (Barnes et al., 2012, p. 92).</td>
</tr>
</tbody>
</table>

| **Research & Development** | |
| 54a | A research and development alliance – two or more firms working jointly on new project ideas through the sharing of technology strengths (Gersony & Peters, 1997, p. 66). |
| 54b | R&D alliances, for example, often bring together small firms with specific technical skills and larger firms with experience in development. By pooling their complementary skills these firms can typically produce a product faster and cheaper than either firm could alone (Deeds & Hill, 1996; as cited in Barringer & Harrison, 2000, p. 391). |

| **Foreign Access** | |
| 55a | A foreign access alliance – firms increasing their global reach through relationships with entrenched local organizations (Gersony & Peters, 1997, p. 66). |

| **Sales/ Marketing** | |
| 56a | Sales / Marketing alliance – an agreement between two or more firms in which one or more of the forms is hoping to increase its sales or market share beyond what it could accomplish on its own (Gersony & Peters, 1997, p. 66). |
| 56b | Marketing Alliances: Another area of considerable collaborative activity is in marketing, which in this case will be also be taken to include licensing (Barnes et al., 2012). |
Marketing alliances typically match a company with a distribution system that is attractive to a company that is trying to increase the sales of a product or service (Lynch, 1993; as cited in Barringer & Harrison, 2000, p. 391).

Supply

Collaborative partnerships between suppliers of components, facilities or services and companies who purchase and use their products, developed rapidly after the Western world was first exposed to the partnering approach and Kieretsu arrangements of the Japanese, pioneered primarily by Toyota (Barnes et al., 2012, p. 94).

Shared-supply Alliances bring together companies which join forces to achieve economies of scale on a given component or on an individual stage in the production process. These shared elements are then incorporated in product that remain specific to each partner company, and that compete directly in the market (Dussauge & Garette, 1999, p. 63).

Supply chain collaboration – Which recognize that delivery of the firm’s products or services to the end customer is more effectively achieved when strategic suppliers and customers are managed in a collaborative manner (Cardell, 2002, p.2)

Social

Social goals refer to the social environment including its political and social aspects, for instance saving ecological resources as well as power and prestigious goals (Baum, 2011, p. 65).

Knowledge & Information Sharing

See excerpts in number 29.

Appendix 12: Table of Excerpts - Complexity (CY)

<table>
<thead>
<tr>
<th>Number</th>
<th>Excerpts</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Task Complexity</strong></td>
<td></td>
</tr>
<tr>
<td>59a</td>
<td>The simpler the task that an alliance has been created to carry out, the simpler can be its organizational arrangements. Perhaps the simplest of all alliances is the trading alliance in which firms that are otherwise competitors agree to buy or sell goods and/or services to one another (Killing, 2002, p. 63).</td>
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<tr>
<td>59b</td>
<td>Task complexity refers to the number of different specialized inputs needed to produce a product or service. A high degree of task complexity, coupled with intense time pressures, makes the sequential production of a product or service through a traditional industry value chain unfeasible. These factors help explain the high number of interorganizational networks observed in complex and fast-paced industries such as computers, semiconductors, aircraft manufacturing, and biotechnology (Barringer &amp; Harrison, 2000, p. 388).</td>
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<tr>
<td><strong>Number of Activities</strong></td>
<td></td>
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<tr>
<td>60a</td>
<td>This [Number of Functional Areas] is another factor linked to the connectedness to other transactions. Not only the number of partners increases the interconnections that might arise between the activities of the alliance and those of the partners. These interconnections also increase according to the dimension of the activities subject to the cooperation. Killing (1988: 57-69) believes that the number of functional areas covered by the alliance is one of the factors which worsens the problem of coordination; the higher the number (the extreme case would be an alliance involving R&amp;D, production and marketing) the greater the difficulty of drawing up a satisfactory contractual agreement which justifies the establishment of a joint venture (Garcia-Canal, 1996, p. 780).</td>
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<td>60b</td>
<td>Multiple-activity alliance: A nonequity alliance that has many component parts. The Honda-Austin Rover alliance, for example, involves production under license of two cars, the joint design and development of two other cars, and component supply agreements (Killing, 2002, p. 62).</td>
</tr>
<tr>
<td><strong>Number of Partner</strong></td>
<td></td>
</tr>
<tr>
<td>61a</td>
<td>Consequently, a large number of partner intensifies the problem of coordination; there are more interest to be harmonized. The situation increases the difficulty of drawing up ex-ante a contract which satisfies all parties. This would make it advisable to establish a joint venture since the more</td>
</tr>
<tr>
<td>61b</td>
<td>The more partners there are in an alliance, the greater is the potential for organizational complexity (Killing, 2002, p. 61).</td>
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