Learning to collaborate

A qualitative study of interorganizational relationship management

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Chapter 1

Introduction

This chapter introduces the four papers that together constitute my doctoral thesis on alliance management. I start with a theoretical overview of the main concepts under study, followed by the rationale for the research and its method. Subsequently, I present the research framework and the overarching question that is answered throughout the thesis, situating the study in existing literature. At the end of this first chapter, I highlight three themes that underlie and explain the coherence between the four individual papers, each presented in a separate chapter thereafter.

1.1. Theoretical concepts

The current thesis is about alliances and how organizations get better at managing these as they gain more experience and benefit from previous lessons learned. Consequently, the main concepts addressed are alliances, collaborative experience, alliance capability and (organizational) learning about alliance management. These concepts are extensively discussed in subsequent chapters, but for the sake of clarity, I briefly explain their definitions and applications here.

1.1.1. *Alliances and collaborative experience*

Existing literature presents a range of definitions of alliances (see Table 1). However, many studies do not properly describe the (type of) relationships constituting their research sample. This lack of rigor in defining the concepts under study leaves ambiguity about whether these studies (e.g. Gulati, 1998; Gulati, Lavie, & Singh, 2009; Khanna, 1998; Simonin, 2004) regard all possible interorganizational relationships as

alliances or just a subset of those. Avoiding this pitfall, I would like to make clear what alliances in my definition are and illustrate the possible confusion with five selected definitions from renowned scholars listed in Table 1. The five articles chosen are referenced at least three times in this thesis and provide an explicit definition of alliances.

Table 1: Definitions of alliances

Alliances are...	Reference
Purposive relationships between two or more independent firms that involve the exchange, sharing, or co-development of resources or capabilities to achieve mutually relevant benefits.	Kale and Sing, 2009
Cooperative agreements of any form aimed at the development, manufacture, and/or distribution of new products.	Zollo, Reuer and Singh, 2002
Long-term cooperative arrangements between two or more independent firms that engage in business activities for mutual economic gain.	Inkpen and Tsang, 2007
Interfirm cooperative arrangements aimed at pursuing mutual strategic objectives.	Das and Teng, 2000
Complex organizational forms that can be viewed as incomplete contracts that typically involve the transfer of know-how between firms.	Anand and Khanna, 2000

Looking at the definitions some general characteristics of alliances can be extracted: 'interorganizational', 'long-term', 'mutual objectives', 'collaborative' and 'resource exchange'. No statements are made about minimum durations or whether or not contracts have to underlie these relationships. In line with these definitions, throughout this thesis I refer to alliances as interorganizational arrangements between at least two independent organizations in which they, not just incidentally but on a longer term, collaborate by sharing resources (including knowledge and money) to achieve mutual objectives. Alliances include for example strategic buyer-supplier relationships, joint ventures, joint marketing arrangements, direct equity investments, research and development (R&D) agreements, and research consortia (Das & Teng, 2000; Hamel, 1991).

As organizations repeatedly deal with all these kinds of alliances they gain alliance experience (Sampson, 2005), also referred to as collaborative experience. This

experience consists of the lessons learned from the past and many scholars have investigated the effects of alliance experience on future alliance success (e.g. Hoang & Rothaermel, 2005; Kale, Dyer, & Singh, 2002).

> Alliances are interorganizational arrangements between at least two independent organizations in which they, not just incidentally but on a longer term, collaborate by sharing resources to achieve mutual objectives. Alliances include for example strategic buyer-supplier relationships, joint ventures and R&D agreements. By repeatedly dealing with alliances, organizations gain collaborative experience.

1.1.2. *Alliance capability*

Previous studies have claimed that future alliance success is determined by the extent to which firms are able to develop alliance capability from gained experience. Many scholars have attempted to unravel alliance capability, labeling and defining the underlying aspects of the concept. Five of those definitions, from articles used throughout this thesis, are listed in Table 2.

Table 2: Definitions of alliance capability

Alliance capability…	Reference
Is a multi-layered phenomenon: learning mechanisms (such as an alliance department) are the building blocks of routines (repetitive activities in order to deploy resources in alliances), forming the basis of a firm's alliance capability.	(Heimeriks & Duysters, 2007)
Consists of three mechanisms: alliance training, presence of an alliance specialist, and alliance evaluation.	(Draulans, De Man, & Volberda, 2003)
Consists of three elements: coordination, communication, and bonding.	(Schreiner, Kale, & Corsten, 2009)
Has the following underpinnings: knowledge management, external visibility, internal coordination, and accountability.	(Dyer, Kale, & Singh, 2001)
Is reflected by five underlying routines: interorganizational coordination, alliance portfolio coordination, interorganizational learning, alliance proactiveness, and alliance transformation.	(Schilke & Goerzen, 2010)

From Table 2 it becomes clear that authors have found different aspects that may constitute alliance capability of the firm. The first two studies focus on the presence of mechanisms that enable firms to apply previous lessons learned in the future. The last three consider the skill sets that firms may need to be successful in managing alliances. In order to avoid adding to the confusion about what alliance capability actually is, throughout the four studies presented in this thesis, I look at alliance capability in more general terms, namely as the ability of a firm to manage its alliances (Rothaermel & Deeds, 2006). This capability rests upon the ability of the firm to gain, share and apply alliance management knowledge to be able to learn from prior and on-going alliances. It is therefore closely related to the know-how of a person, a group of people or a firm to deal with alliances. Collaborative know-how, or capability, has long been considered a valuable resource (Simonin, 1997).

Further, it is relevant to stress that two different streams of research regarding alliance capability are distinguished. One addresses alliance portfolio capability (managing all alliances of a firm as a whole) and the other the capability to manage any individual alliance (Schreiner et al., 2009). Throughout this thesis, I focus on the second. The research findings do have implications for alliance portfolio capability literature and these are discussed in chapter 6.

> Alliance capability is the ability of a firm to manage any individual alliance. This capability rests upon the ability (know-how) of the firm to gain, share and apply alliance management knowledge, and to learn from prior and on-going alliances.

1.1.3. *Learning about alliance management*
When it comes to benefiting from previous lessons learned and building alliance capability, organizational learning is key. Firms learn, under the right conditions as will be explained in this thesis, from experience, repeating formulas that worked before and adjusting the ones that did not. Applying the concept of learning in the context of alliances may lead to confusion as to what is meant with this learning. Inkpen and Tsang (2007) distinguish four types of learning in the alliance context. The first is learning about alliance management, the second is learning about a partner, the third is learning with a partner and the fourth concerns learning from a partner. The first type of learning, about alliance management, is the subject of discussion in the current thesis;

organizations may get better at managing their alliances when they have done it many times before. This first type is related to the other three types of learning because firms may learn how to manage the relationship with a specific partner which is beneficial if they work with the same partner again (second type), because the partnership itself may become stronger over time (enhancing the third type of learning) and firms may learn about alliance management from their partners by observing how their partners work (fourth type). It is important to stress, however, that throughout this thesis 'learning how to manage alliances ' (Anand & Khanna, 2000; Gulati et al., 2009; Kale & Singh, 2007), as opposed to 'learning from alliances' (Hamel, 1991; Khanna, Gulati, & Nohria, 1998), is at the forefront of the studies.

> Literature distinguishes different types of learning in the context of alliances. This thesis focuses on 'learning how to manage alliances'.

1.2. Research rationale

The current thesis is about alliance management and how organizations get better at managing their alliances. In this paragraph I present the rationale of the research question, its relevance and its fit into existing research, and I argue why a qualitative approach was used to conduct the research.

1.2.1. *Research question*

In today's global competitive market, alliances can be strategic solutions to help firms overcome all sorts of resource limitations, to enter new markets or to protect them against environmental uncertainties (Kogut, 1991; Reuer & Leiblein, 2000). The importance of alliances is well recognized; over 80% of Fortune 1,000 CEOs believe that alliances account for around a fourth of their companies' revenues in 2007 and 2008 (Cui & Jiao, 2011; Kale, Singh, & Bell, 2009). Alliance failure and termination rates, however, are high. In their study about alliance performance of 100 contractual alliances for example, Lunnan and Haugland (2008) found that only half of the alliances in their sample were successful in the short term (of which another half was terminated abruptly) and only a third in the long term. While alliances have the potential to enhance firm performance, 'doing so is challenging because of the difficulty in managing them' (Ireland, Hitt, & Vaidyanath, 2002, p. 414). According to Bamford and Ernst

(2003, p. 323), a McKinsey study even found that '50 percent of alliance failures resulted from poor management, the process of governing and operating existing alliances'. Alliance management is a difficult organizational activity due to 'complexities and uncertainties inherent in managing projects across organizational boundaries' (Rothaermel & Deeds, 2006, p. 431). As adequate management of alliances is necessary for their potential benefits to be realized, alliance management is an important issue warranting further study (Ariño, 2001; Ireland et al., 2002). In order to improve the development of alliance capability ensuing from alliance experience it is crucial to understand what is happening within firms regarding alliance management and how firms deal with the associated challenges when trying to benefit from previous lessons learned. Scant evidence exists, however, as to how alliance experience translates into alliance capability (Heimeriks, Duysters, & Vanhaverbeke, 2007). The lack of understanding regarding *how* organizations learn from collaborative experience dictates the main research question of the current thesis. After all, if learning from alliance management experience would be simple and straightforward, how could alliance management play an important role in potential alliance failure?

The main research question, that is how organizations learn from collaborative experience in order to build alliance capability and improve alliance management, is answered through the individual papers (chapters 2 to 5) of this thesis and summarized in paragraph 6.2. Chapters 2 to 5 each revolve around a central question, which is further explained in subparagraph 6.1.1 and Table 11.

> The main research question of this thesis is:
> How do organizations learn from collaborative experience in order
> to build alliance capability and improve alliance management?

1.2.2. *Relevance and fit*

Numerous prior studies have delved into the antecedents of alliance success, linking positive outcomes to alliance experience and introducing alliance capability as a partly mediating variable (e.g. Heimeriks & Duysters, 2007; Kale & Singh, 2007). These studies offer answers to questions about the extent to which experience positively influences the development of alliance capability and about its effects on alliance performance. What these studies do not address, however, is *how* experience is used by firms and

their managers, giving rise to questions such as what alliance experience actually is, where it resides, what managers do with it and how the firm can facilitate capability development. It is exactly these questions that are answered in the current thesis. Scholars have called for answers to 'how' questions concerning alliance management (Gulati, 1998) and for further investigation into the effects of alliance experience, claiming that 'alliance experience may not directly affect alliance success' (Kale & Singh, 2007, p. 995). Such investigation requires unravelment of the concept of alliance experience and the processes through which firms try to benefit from that collaborative experience and how they increase their ability to manage alliances.

I disentangle the two main concepts of the research question, 'collaborative experience' and 'alliance capability', and explore the role that firms and their managers play in translating one into the other. The research builds on existing literature about alliances and alliance management. By applying organizational learning theory and zooming into the underlying activities of managers and processes in the firm, the diversity and complexity of the concepts under study are revealed. As such, the management of interorganizational (dyadic) relationships is studied from an intraorganizational (focal firm) perspective. Each chapter in the thesis deals with a sub question of the main research question and per chapter I discuss the relevance and conceptual background of the specific study. The four chapters each represent a separate paper, but have strong links and are all based on constructs investigated in prior (mainly quantitative) studies, as illustrated in Figure 1.

The (positive) effects of collaborative experience on alliance capability and alliance performance are pictured on the right side of the figure; these have been extensively discussed in existing literature. Chapters 2 and 3 focus on the concept of collaborative experience by discussing the consequences of different types of interorganizational relationships and the fragmentation of alliance management know-how. Chapters 4 and 5 are centered around the development of alliance capability and the relationship between experience and capability by addressing the applicability of alliance management experience and the facilitative role of alliance management structure.

The research findings have implications for literature on alliance management and organizational learning and unravel concepts and processes that have not been studied before. The contributions of the individual papers are extensively discussed in chapters 2 to 5. Implications that cut across the studies are presented in chapter 6.

Figure 1: Fit of thesis topics in existing literature

Individual papers constituting the thesis, and their core message   *Existing literature*

Chapter 2: Types of interorganizational relationships
*Categorization of different interorganizational relationships, illustrating the **diversity of collaborative experience***

Chapter 3: Fragmentation of collaborative experience
***Distinction of loci in the organization**, at individual, unit and portfolio level, where collaborative experience resides*

Collaborative experience

Chapter 4: Application of alliance management know-how
***Activities that firms and managers undertake** to capitalize on collaborative experience in order to build alliance capability*

Chapter 5: Alliance management configurations
*The role of **alliance management structure** (the setup of alliance management activities in the firm) in developing alliance capability*

Alliance capability

Alliance performance

The main part of this thesis exists of four separate papers, each presented in one chapter. Chapter 2 discusses and categorizes different types of interorganizational relationships. In chapter 3 loci where collaborative experience resides are distinguished. Chapter 4 focuses on the activities that alliance managers undertake to capitalize on their management experience. In chapter 5 the role of alliance management structure on the development of alliance capability is highlighted. All findings have implications for learning about alliance management at the organizational level. The contributions are further discussed in chapter 6.

1.3.   Methodology

Published research on alliance management often takes a quantitative approach (e.g. Heimeriks et al., 2007; Kale & Singh, 2007; Lambe, Spekman, & Hunt, 2002; Mitsuhashi, 2003; Saxton, 1997; Sivadas & Dwyer, 2000), using surveys or existing databases resulting in quantitative data on for instance the number of alliances firms have had, the mechanisms that are in place to facilitate alliance management and to what extent interorganizational arrangements have financially contributed to the overall performance of the firm. The papers presented in this thesis, however, use qualitative data (mainly from interviews with alliance managers), for the following three reasons[1].

First, through qualitative data I was able to uncover the phenomena, processes and relationships between the concepts discussed in this thesis. In the beginning of the research I envisaged gathering a large amount of quantitative data on different types of interorganizational relationships. After only a few initial interviews, to explore the topics at hand, it became clear that many different interorganizational relationships exist, all with different characteristics, and that these are not easily lumped together. This implied that asking respondents to answer questions about interfirm relationships of their organization as a whole would unjustly force them to generalize characteristics and effects. At the same time, it meant that managers responsible for only a small subset of alliances would be pressured to provide answers without being knowledgeable about all other relationships their organizations maintain. The solution was to talk to people working in different layers and at different locations of organizations who all had in common that they were responsible for at least one of their organization's alliances.

Second, I followed up on recommendations from scholars (e.g. Gulati, 1998; Gulati et al., 2009; Hamel, 1991) to clarify the nature of alliance-accumulated experience through in-depth interviews. Interview data provides the richness (Pratt, 2008) needed to uncover and disentangle the concepts of collaborative experience, alliance capability and their underlying processes. Moreover, approaching those actually involved in alliance management for interviews ensures respondents that are most knowledgeable about how firms and managers learn from alliances as opposed to relying on surveys filled out by people with widely varying perceptivity and experience. As demonstrated in subsequent chapters, the qualitative data helps to understand how firms may or may not benefit from previous lessons learned regarding alliance management and provide

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[1] Chapters 3 to 5 have a separate paragraph in which the method for that specific paper is discussed.

insight into learning opportunities and difficulties when organizations try to develop alliance capability.

Third, and most importantly, explorative '*how*' questions, such as the main research question of this thesis and just as 'why' questions, are best answered through a qualitative study (Creswell, 2009; Yin, 2003). The qualitative data has revealed concepts and processes that quantitative questions would not have brought to light. Alliance management know-how for example turns out to reside at different loci in the firm, resulting in all kinds of challenges when investigating a firm's capability to manage alliances. Aspects concerning structural configurations arise that were not discussed before simply because they did not fit existing measures or straightforward relationships between constructs. Crucial issues that have previously been overlooked or considered as peripheral phenomena are now addressed in this thesis. These issues may have great impact on future research, also that with a quantitative approach, and this will be discussed further in chapter 6.

1.4. Thesis themes

In order to illustrate the coherent character of the thesis and the strong links between the four individual chapters, I have identified three themes that cut across the boundaries of the individual papers. The themes are summarized in Table 3 and are discussed below.

Table 3: Thesis themes

	Chapter 2	Chapter 3	Chapter 4	Chapter 5
A. Diversity	√ (of inter-organizational relationships and experience)		√ (of collaborative know-how)	√ (of configurations and capabilities)
B. Organizational structure		√ (departmentali-zation, categorization of alliances)		√ (alliance management configurations)
C. Barriers to learning	√ (due to types of relationships)	√ (due to loci of learning)	√ (due to applicability)	

1.4.1. *Theme A: Diversity*

Across several chapters, diversity is an important issue. With diversity I refer to the differences between various types of interorganizational relationships, collaborative experience, and even structural configurations to organize alliance management activities. In existing alliance research, diversity has mainly been used to explain the differences between firms that enter the alliance and their environments (e.g. Kumar & Andersen, 2000; Parkhe, 1991; Sampson, 2007; Saxton, 1997). In my research I look at alliance management from an *intra*organizational perspective and as such I have not focused on interorganizational differences but observe diversity in the types of experience, knowledge and structure *within* the firm.

Chapter 2 addresses different types of interorganizational relationships and illustrates the consequences these may have for efficient relationship management. It explains the importance of recognizing the differences and suggests that applying experience from managing one type of collaborative relationship to other types of interorganizational relationships may not necessarily be beneficial and can even be detrimental to their performance. Prior studies have also looked at different types of interfirm connections (e.g. Kale & Singh, 2009; Oliver, 1990), but have not considered ensuing consequences, such as different types of collaborative experience or the inapplicability of that experience to future relationships. Chapter 2 contributes to existing literature on interorganizational relationship management by qualifying the positive effect of experience with interfirm collaboration on future relationships by distinguishing different types of experience. Further, diversity of collaborative know-how is highlighted in chapter 4 by distinguishing classifications that are relevant for organizations when trying to learn from previous alliances. In chapter 4, activities are described that alliance managers undertake to be able to apply previously gained experience to future relationships and how they do so. The diversity in chapter 5 concerns the different types of alliance management configurations and what kind of capability these configurations are likely to produce. Configurational characteristics are discussed and conditions are presented under which the configurations work. Chapter 5 contributes to existing literature on alliance capability and organizational learning by showing that firms may develop different alliance capability, depending on their alliance management configuration. It also explicates that dedicated alliance functions do not necessarily imply articulated (written) know-how.

1.4.2. *Theme B: Organizational structure*

In chapters 3 and 5 intraorganizational arrangements regarding the management structure of alliances is a key issue. Existing literature on the setup of alliance management activities has mainly focused on the presence and responsibilities of a dedicated alliance function (Kale, Dyer, & Singh, 2001; Kale et al., 2002) by looking at the (positive) effects of having such a function. Other scholars have studied the relationship between organizational structure and learning from the alliance partner (Zhang, Baden-Fuller, & Mangematin, 2007). The characteristics and potential of different organizational configurations regarding alliance management, however, have not been explored. Chapter 3 reveals that collaborative experience may reside at different loci in the firm, originating from management design choices about where and how to capture experience and share alliance management know-how. As such, this chapter presents boundary conditions to illustrate impediments to organizational learning, due to intraorganizational alliance management arrangements. Chapter 5 extends these insights by showing that different alliance management configurations, also those where a firm does not have a dedicated alliance department for example, may result in different alliance management capabilities, depending on the characteristics of those configurations.

1.4.3. *Theme C: Barriers to learning*

Chapters 2, 3 and 4 all reveal impediments as to why and how firms may (not) learn from prior alliances when trying to improve the management thereof. In their book chapter on barriers to organizational learning, Berthoin Antal, Lenhardt and Rosenbrock (2001) explain that organizational learning is 'neither an effortless nor an automatic process' (p. 865). The findings presented in the current thesis clearly support their statement. Linking to the literature gap that no systematic analyses of barriers to organizational learning are provided, this thesis identifies barriers to learning about alliance management. Berthoin Antal et al. (2001) recapitulate extant literature regarding the blockages to organizational learning and state that previously identified impediments to learning were mainly theoretically derived. The studies in the current thesis add to their insights by exploring the case of alliances. The two previously identified key issues (themes), cutting across the studies in this thesis, form the main barriers to learning. The diversity of relationships and experience may hinder firms to benefit from lessons learned regarding alliance management and the organizational

design choices may impede capturing and sharing of related know-how. At the same time, these barriers offer opportunities for capability development if firms are able to overcome them.

1.5.   Presentations and publications

This chapter introduced the papers that together constitute my doctoral thesis. What follows are the four chapters that each present one paper. I conclude the thesis with a discussion of the implications of the studies and suggestions for future research in chapter 6. An overview of presentations and publications of the individual papers is presented in Table 4. Chapter 2 has been published as a book chapter and has a slightly different outline from the other chapters. Chapters 1, 5 and 6 are written in the first-person singular and chapters 2, 3 and 4 in the first-person plural, reflecting the number of authors involved.

Table 4: Published and presented papers

Chapter	Paper title, authors and current status
2	Wiel, A.A. ter & Vlaar, P.W.L. (2011). When firms do not benefit from collaborative experience: Differences in the intensity and nature of interorganizational relationships. In K. Mccarthy, M. Fiolet & W.A. Dolfsma (Eds.), The Nature of the new firm: The blurring of boundaries within and between organisations and institutions (pp. 138-153). Cheltenham: Edward Elgar, Book Chapter, Publication
3	Wiel, A.A. ter, Vlaar, P.W.L. & Elfring, T. (2012, July). Fragmentation of knowledge as impediment to organizational learning: The case of alliances. Second round of review at Organization Studies (revise and resubmit)
	Wiel, A.A. ter, Vlaar, P.W.L. & Elfring, T. (2011, August). Why (some) firms fail to learn from collaborative experience: Fragmentation of interorganizational relationship management. San Antonio, Academy of Management Conference, Presentation

Chapter	Paper title, authors and current status
4	Wiel, A.A. ter (2010, March). When alliance experience does not lead to alliance performance: Discontinuity and coping mechanisms. Breukelen, PREBEM Conference, Presentation Wiel, A.A. ter & Vlaar, P.W.L. (2011, November). Matching and Mixing Collaborative Experience: Applicability of Alliance Management Know-How. Miami, Strategic Management Society (SMS) Conference, Presentation Wiel, A.A. ter (2011, September). Matching and molding collaborative experience: Improving the applicability of alliance management know-how. Rotterdam, PREBEM Conference, Presentation (runner-up best paper award)
5	Wiel, A.A. ter (2012, June). (Dis)organized collaboration: How structure of the alliance organization influences alliance management". Singapore, Strategic Management Society (SMS) Special Conference, Presentation Wiel, A.A. ter (2012, April). (Dis)organized collaboration: How structure of the alliance organization influences alliance management". Los Angeles, USC Marshall School of Business, Presentation

Chapter 2

When firms do not benefit from collaborative experience: Differences in the intensity and nature of interorganizational relationships

In this chapter, we argue that experience with one type of collaborative relationships is different from experience with other types of collaborative relationships, depending on the intensity of cooperation (that is, transactional versus relational) and the type of interdependency characterizing a relationship (that is, horizontal versus vertical). Lessons learned from repeated interactions with suppliers, for example, may not be applicable when the same firm enters a strategic alliance with one of its competitors. Worse, experience with some types of collaborative relationships may even be detrimental to the performance of other types of relationships. The competitive attitude and short-term perspective that suits transactional relationships, for instance, may harm long-term cross-industrial alliance relationships in which a focus on cooperation and long-term benefits is generally more appropriate. Based on extant theory and illustrating our arguments with quotes from managers of collaborative relationships, we contend that it is important to distinguish different forms of collaborative relationships and to recognize that relationship managers should adapt their management style to the type of interfirm relationship they are dealing with.

In order to cope with changing demands and to survive in turbulent environments, organizations are increasingly looking for solutions beyond their own boundaries, joining forces with other firms. Entering into interorganizational relationships, such as research and development alliances or buyer-supplier partnerships, creates new opportunities for firms, allowing them to share resources, to open up new markets or jointly develop new products. Firms can accordingly collaborate with suppliers, customers or competitors in different arrangements, such as informal collaborations and joint ventures. Conventional wisdom indicates that firms with more collaborative experience, gained while managing their relationship with those partners, become more successful in future collaborative initiatives, because they accumulate experience and learn how to manage collaborative relationships.

2.1.   Types of interorganizational relationships

Interfirm relationships can take a variety of forms, including joint ventures, supplier relationships, joint marketing efforts, and collaborative research and development (Das & Teng, 1996). Scholars discussing such relationships usually specify the subjects they study based on the governance structure characterizing a relationship and the content of a relationship. Regarding governance structure, firms can collaborate informally, establish connections through contracts, or partially integrate through equity investments in, for example, joint ventures (Grandori & Soda, 1995). A commonly used distinction to group collaborative relationships based on governance structure is the one between non-equity and equity agreements, the latter involving the creation of a new and independent jointly owned entity, or a minority equity position from an organization in their partner (Gulati, 1995). Other categorizations based on governance structure involve collaborative forms such as license agreements, cross-licensing, alliance contracts, joint ventures and several mixed modes (e.g. Mowery, Oxley, & Silverman, 1996). Concerning relationship content, we observe that managers responsible for a collaborative relationship are often selected for the job because of their expertise in a certain area, which generally connotes the activities conducted in the relationship. Based on this content, various groups of relationships can be distinguished. Anand and Khanna (2000), for instance, distinguish marketing, production and R&D relationships. Other collaborations can entail joint purchasing agreements, or finance and logistics contracts, where partners combine forces to negotiate with their suppliers or outsource part of their operations.

Although each of the previously discussed dimensions has its merits, offering valuable means to characterize distinct types of collaborative initiatives, they do not directly concern the nature of the interaction process itself. Such a classification of collaborative relationships would be useful, since differences in the nature of this process may have different implications for managing collaborative activities. Moreover, presuming that different types of relationships and interaction processes require other kinds of management styles, collaborative experience with one type of relationship may be less valuable or even detrimental for firms managing a greater variety of collaborative relationships and a larger number of distinct relationship portfolios.

Extant literature has primarily referred to two dimensions to categorize the nature of collaborative relationships: (i) the intensity of cooperation, involving the exchange spectrum from transactional to relational exchanges; and (ii) the type of interdependency involved with cooperation, represented by the distinction between horizontal and vertical collaborative linkages. In Table 5, we have combined both dimensions to classify interorganizational relationships.

Table 5: Classification of interorganizational relationships

Linkage (interdependency)	Cooperation intensity (exchange relationship)	
	Low (transactional)	*High (relational)*
Horizontal (generally: pooled interdependency)	Cell A (Informal) joint agreements (pooling and exchanging information) with organizations from the same levels of the value-added chain	Cell B Formal and long-term partnerships with organizations from the same levels of the value-added chain
Vertical (generally: sequential interdependency)	Cell C Preferred connections (short list) – formal or informal – with organizations from different levels of the value-added chain	Cell D Formal and long-term partnerships with organizations from different levels of the value-added chain

First, we consider cooperation intensity. Cooperation can range from simple exchanges of information or resources, to limited collaboration in accomplishing a specific functional purpose, to extensive cooperation involving the production of a product or service or collaboration across several domains and functions (Alter & Hage, 1993). Transactional exchanges on one side, and relational exchanges on the other, constitute the two extremes of the cooperation intensity spectrum (Macneil, 1978). Since true transactional exchanges are simple, discrete, one-time events (see Dwyer, Schurr, & Oh, 1987), we exclude such arm's-length market exchanges from our discussion. Similarly, extreme cases of relational exchanges generally connote new organizational forms, such as network organizations or virtual organizations, so we stop short of this extreme side of the aforementioned spectrum as well. Instead, we focus subsequent discussions on dyadic interorganizational relationships that emerge when two organizations go beyond the pure transactional type of exchange and move to ongoing (longer term) connections involving repeated transactions.

Second, we consider different types of interdependency involved with interfirm relationships. In this respect, one can distinguish vertical and horizontal linkages. Vertical relationships occur when firms cooperate across different levels of the value-added chain, whereas horizontal linkages involve collaboration between actors at the same level (Kotabe & Swan, 1995). As such, vertical relationships concern firms specialized in sequential activities of a particular supply chain and horizontal relationships exist between companies that are located in the same industry segment or produce complementary products (Mesquita & Lazzarini, 2008). In these different linkages, the level of firms' interdependency varies. Kumar and Van Dissel (1996) have put Thompson's (1967) view, on how organizational units may depend on one another, in the interorganizational context. Where two firms share resources but are independent, they speak of 'pooled interdependency'. Pooled interdependency generally occurs in horizontal relationships: firms may share products or knowledge but remain independent entities. When the output from one firm becomes input to the other we may speak of 'sequential dependency'. This is mainly the case in vertical relationships where one firm is dependent upon input from the other, vertically linked, firm. With 'reciprocal dependency', each firm receives input from and provides output to the other. This happens in vertical relationships; for example an engineering team consisting of customers, suppliers and distributors that develops a new automobile

(Kumar & Van Dissel, 1996), but also occurs in horizontal relationships, especially when firms collaborate across industries.

Before we indicate what it means for the management of a particular relationship to be classified in one cell rather than another, and which implications are involved when a relationship moves from one cell to the next, we further explain each of the four cells presented in Table 5. We also illustrate each of these cells with quotes from a qualitative, explorative study conducted in 2009 and 2010 in the health care sector in the Netherlands. The simplest form of horizontal cooperation, with low cooperation intensity and with a more transactional character, entails the exchange of information between firms in a dyadic relationship (cell A in Table 5). This kind of 'agreement' is often informal, witnessing the following example:

With one other hospital, which we do not consider to be our competitor because of different geographical locations, we have 'friendly' relations so to say. We exchange, for example, information on prices of products or services that we both buy (X08).

An example of a relationship between two firms with a horizontal scope and a relational character (i.e. cell B in Table 5) consists of an R&D alliance or a joint purchasing agreement between two competitors. In our empirical study several hospitals joined forces to approach suppliers for strategic purchases and share the resulting profits, as is illustrated by the following quote:

We joined forces with four other hospitals in the Netherlands and a large foreign purchasing collaboration to negotiate better prices and conditions for our supplies [...]. We share the generated savings pro rata: the bigger the organization, the bigger its share (X19).

Parties in vertical interfirm relationships of a more transactional character are often referred to as 'preferred' partners (cell C). If a firm, for instance, needs to purchase the same materials over and over again, and they tend to use the same supplier, we talk of a 'preferred' supplier:

We have a list with a limited number of preferred suppliers. Some we use regularly and we have simple, standard contracts with them. Some we use incidentally, but they are – per event, let's say twice a year – selected without separate tenders simply because they are on our preferred supplier list. I do not actively monitor or manage the relationships with these suppliers, it is very operational. The guys in the back office stay in touch and order when necessary (X02).

Similarly, a firm may work with a preferred buyer or distributor. However, if a firm guarantees trade to a business partner – the supplier is assured that materials will be bought for a long period of time – and they work together more closely, interfirm linkages take on a more relational character. The same applies to firms working closely together with customers; partners may, for example, agree on a long-term contract and share the costs of investments in relation-specific assets. Firms could also develop a product jointly with a buyer or a supplier. All these connections with a relational character across different levels of the value-added chain fit in cell D in Table 5. An illustrative example is offered by a relationship manager:

> *We just signed a contract with [one of our suppliers]. It is a three year joint research project in which we improve part of an existing product and test it. The greater part of the development will be done by the supplier in which we take a more advisory role; the testing will take place in our hospital. We assigned a manager to this project and together with a director he coordinates (X11).*

Now that we have illustrated the four different types of collaboration along both dimensions as presented in Table 5, we turn to explaining the differences between each type of relationship in terms of suitable management styles. Moreover, we pay attention to the managerial consequences associated with firms initiating and maintaining a wide variety of different types of relationships, or with relationships changing in terms of the nature of the interaction with partners along one or both dimensions. Finally, we combine these arguments to suggest that collaborative experience with one type of relationship is not necessarily beneficial, and can even be detrimental, to future collaborative initiatives of firms.

2.2. Types of relationships and skills

If the relational character of a horizontal or vertical relationship increases (moving from cell A to B or from C to D in Table 5), the properties of the relationship change. To explain the managerial consequences, we summarized the most important properties of the two extremes of the interorganizational exchange spectrum, transactional versus relational exchanges, in Table 6.

Table 6: Transactional versus relational exchanges

	Properties	Transactional	Relational
1	Cooperation intensity and timing	Low cooperation intensity	High cooperation intensity
		Short time perspective	Long time perspective
		Distinct beginning, short duration, and sharp ending	Commencement traces to previous agreements; exchange is longer in duration; reflecting an ongoing process
2	Transferability	Complete transferability; it does not matter who fulfills contractual obligation	Limited transferability; exchange is heavily dependent on the identity of the parties
3	Scope	Discrete transactions are characterized by very limited communications and narrow content	The basis for future collaboration may be supported by implicit and explicit assumptions, trust, and planning
4	Communication, personal involvement and exchange	Minimal personal relationships; segmental, limited, non-unique, transferable, ritual-like communications predominate	Important personal relationships: whole person, unlimited, unique, non-transferable, non-economic satisfactions derived; both formal and informal communications are used
		Limited, linguistic, formal communication	Extensive, deep, not limited to linguistic, informal communication in addition to or in lieu of formal
		Simple, monetizable economic exchange only	In addition to economic, complex personal non-economic satisfactions very important; social exchange
		The identity of parties to a transaction must be ignored or relationships creep in	Relational exchange participants can be expected to derive complex, personal, noneconomic satisfactions and engage in social exchange

Adapted from from Dwyer, Schurr & Oh (1987), Khanna, Gulati and Nohria (1998), and Macneil (1978)

To explain the different approaches required for a transactional 'relationship' and those for a long term relationship with high cooperation intensity, we label the manager responsible for the latter relationship 'MR' (manager relational), and the one responsible for the transactional connection 'MT' (manager transactional). We distinguish four main properties that define the different management approaches.

First, as is shown in Table 6, the MR needs to be able to focus on long term results and invest in the relationship, even if the short-term does not immediately pay off. Traditional purchasing managers, for example, are very much focused on monetary advantages and tend to overlook the long term effects of their actions. If a manager negotiates prices and adopts a hostile approach in doing so, (s)he might damage the longer term relationship with, in this example, the supplier. Second, the MR needs to realize that (s)he cannot just cross over to another partner should that desire arise, as could easily be done in a relationship of a more transactional nature. Related to a long-term management approach, this requires more tactical solutions in situations of stress or conflict. Third, the MT usually works with more straightforward content of limited scope and complexity. The MR, on the other hand, deals with more complicated matters, encounters all kinds of assumptions and needs to be able to develop, maintain and repair trust throughout the relationship. Fourth, the character of the interaction between partners differs for the MT and the MR. More is demanded from the MR because, for intense and long term relationships, personal relationships are important and multiple communication techniques are used. The social exchange component in relationships managed by the MR is much more prominent. The MT deals with relatively simple, often straightforward, economic exchanges while the MR takes care of complex, personal and non-economic satisfactions. We now conduct a similar exercise for the dimension distinguishing horizontal and vertical relationships, as summarized in Table 7. Comparing horizontal to vertical relationships (cell A versus cell C, and cell B versus cell D in Table 5), we distinguish five main properties that can be used to explain what the distinction between horizontal and vertical relationships means for the management of collaborative relationships.

First, collaborations in vertical connections differ from those involving horizontal connections, primarily in terms of interdependence (Smith, Carroll, & Ashford, 1995). The type of parties' interdependence will generally be more clear and direct in vertical links than in horizontal links. With pooled interdependence the least amount of

Table 7: Horizontal versus vertical exchanges

	Properties	Horizontal	Vertical
1	Interdependence	Generally pooled	Generally sequential
		Ambiguous	More clear and direct
2	Resources	Overlapping (scale)	Exclusive, more complementary (link)
3	Contracts	Open, tacit, output based	Closed, explicit, input and output based
4	Relationship strength	Stronger institutional and interpersonal connections	Weaker institutional and interpersonal connections
5	Expropriation	Higher potential	Lower potential

interdependence is involved: a firm can be plucked out, and as long as there is no significant corresponding withdrawal of resources, the others can continue to work uninterruptedly. This shows that the level of interdependency between firms is key when assessing the potential for one firm to harm the operations of the other. A manager responsible for relationships with high interdependency, continuously has to be aware of the intentional or accidental harm the firm can inflict upon the other (Kumar & Van Dissel, 1996). With sequential interdependence the manager needs to realize that pulling out (or making the other pull out) is like breaking a chain whereby in extreme cases the whole subsequent set of activities may cease to function (in vertical relationships). This implies that the relationship manager needs to thoroughly oversee the whole chain of activities. Changes or problems in a situation of reciprocal interdependence could affect downstream as well as upstream parties, because the participants in the relationship feed work back and forth to each other (Kumar & Van Dissel, 1996). Thus, different types of interdependence generate various degrees of risk and conflict to be managed by the responsible manager.

Second, related to the interdependence property, is the nature of the resources that are exchanged between partners. In horizontal connections in the same industry firms contribute similar resources pertaining to the same stage or stages in the value-chain while in vertical linkages firms aim at combining different and complementary skills and resources that each partner contributes (Dussauge, Garrette, & Mitchell, 2000). Hennart (1988) classified these as respectively scale and link alliances. Firms

possessing complementary skills and resources have the incentive to reduce their interdependence by acquiring skills and other intangible capabilities that underlie their partner's contributions, as well as acquiring any new skills that arise as the result of combining their partner's complementary resources (Dussauge et al., 2000). Managers responsible for vertical partnerships have to find a balance between sharing enough knowledge and resources to make the collaboration work while not divulging their sources of competitive advantage.

Third, and also related to the clear and direct interdependence in vertical relationships, 'vertical contracts' are often clearer and more quantitative than agreements between two horizontal partners. A buyer-supplier contract is more straightforward than the one in a joint-development project where the exact process is yet to be determined, only the outcomes might be roughly drafted, and more uncertainty is involved (Mayer & Teece, 2008). The contract content affects the restrictions concerning the management of the relationship, and some situations go beyond what is in the contract. More open contracts leave room for interpretation from both sides and the managers involved need the know-how and skills to deal with such contracts requiring communication that is most likely less explicit than in vertical relationships.

Fourth, partners in horizontal interorganizational relationships display stronger institutional and interpersonal connections compared to participants in vertical interorganizational relationships (Rindfleisch, 2000). Managers may belong to a common social circle and are likely to share similar educational backgrounds or belong to the same associations. Prior to establishing a formal relationship, horizontally-related firms often participate in informal information sharing activities. To be able to establish the stronger interpersonal connection, it would help if the responsible manager has been involved in the linkages that occurred prior to the formal collaboration. While managing the formal relationship the manager may draw from earlier experiences with the same partner.

Fifth, in horizontal alliances the potential for opportunism is high as partners may use the alliance only as a means to gain market position at the expense of a partner (Bucklin & Sengupta, 1993). The relationship manager needs to actively manage the partners' role, influence and actions in horizontal relationships to avoid expropriation.

The differences between horizontal and vertical relationships can affect both the organization's learning from collaborative experience and the management skills and

styles that are necessary to effectively manage different interfirm linkages. Managers comfortable in personal and open relationships with their business partners, might encounter problems in dealing with relationships under strict and formal contracts. At the same time, those responsible for horizontal relationships have to guard over the expropriation potential when setting up and managing their interfirm collaborations. Our explanation of the properties that define the dimensions along which we classified interorganizational relationships exemplifies the necessity of distinguishing different styles in managing collaborations. In the next paragraphs, we explain how the classification of interfirm relationships as presented above is also relevant when trying to understand how collaborative experience may influence the performance of future collaborative initiatives. In particular, we contend that the frequently promoted notion that this association tends to be positive has to be nuanced. In fact, we believe that experience with one type of relationships may not be applicable to other types of relationships, and that it could even have a negative effect on the performance of these relationships.

2.3. Collaborative experience

Organizations learn by direct experience; the more organizations engage in certain activities the better they are able to manage these types of activities (Harbison & Pekar, 1998; Sampson, 2005). Conventional wisdom suggests that firms repeatedly dealing with interfirm relationships gain collaborative experience (Simonin, 1997), which results in a host of positive outcomes, such as learning (Kale & Singh, 2007), collaborative capability development (Schilke and Goerzen, 2010), and eventually interorganizational performance (Sampson, 2005). The general assumption seems to be that the more organizations collaborate with other organizations, the better they are able to do so in the future. Authors have argued, for example, that systematically learning from alliance experience is extremely valuable as it influences firms' abilities to avoid pitfalls (Kale et al., 2002), and because it allows organizations to unleash the full potential of exchanging resources and managing joint activities (Sampson, 2005).

Previous studies, however, often deal with collaborative performance at the organizational level, not elaborating on the type of experience involved and thereby generalizing and tarring different interorganizational relationships with the same brush. As explained earlier, Anand and Khanna's article (2000) is an exception, but these authors do not look at the effects of collaborative experience within the

organization itself – the intrafirm level of analysis. If firms do really well in managing buyer-supplier partnerships, for instance, this does not necessarily mean that they are able to successfully manage other types of interorganizational relationships, such as horizontal strategic alliances. We illustrate this point using several quotes from our qualitative study, suggesting that researchers should recognize the differences among collaborative relationships when ascertaining the influence of collaborative experience on interorganizational performance. In the study, 23 relationship managers were interviewed about the collaborative relationships in their organization. An alliance manager explains that the relationships his organization has with other organizations differ in nature, explaining why he is responsible for only a subset of these external relationships:

> *The management of strategic supplier partnerships is very different from that of the management of other alliances. And the management of collaborations with other hospitals is again different from managing R&D alliances. It is a different setup with different goals, a different context and different interests (X03).*

In this hospital, different managers are responsible for different types of collaborative relationships. A procurement manager of another organization further clarifies that his organization also tends to change the person responsible for managing a relationship when relationships develop towards a different point on the transactional-relational dimension, for instance assuming a more strategic position in the relationship portfolio:

> *When the relationship develops, the complexity of the relationship management increases. Often the person responsible for that relationship changes because we need someone with more competencies and capabilities to manage the relationship (X02).*

The relationship manager herewith demonstrates that his organization distinguishes types of interorganizational relationships based on the intensity of cooperation. In this example, he talks of interorganizational relationships that can be plotted in cells C and D of Table 5; a buyer-supplier relationship with a relative low intensity of cooperation (cell C) develops into a relationship with high cooperation intensity (cell D). It is not surprising that one collaborative relationship is different from the other, but it remains unclear how experience with one type of relationships influences the performance of other types of relationships, now and in the future. The four types of interorganizational relationships, as presented in Table 5, require different approaches regarding the management of the relationship itself. A manager of a Dutch teaching hospital explains:

Managing a strategic supplier relationship is quite different from managing a collaborative relationship with another hospital. [...] I think that is the case because of the origin of the relationship. It requires adaptation from both sides if you have gone through some rough negotiations with a supplier before and eventually form a partnership. You have to be able to let go of your old habits and form new positions. That is similar to the difference between collaborating with a supplier or an associate hospital. Other things are involved. For example the extent to which an alliance contract needs to be sound (X03).

Besides addressing differences between horizontal (collaboration with a competitor) and vertical relationships (collaboration with a supplier), this alliance manager elaborates on a situation where an interorganizational relationship that formerly fitted cell C in Table 5 shifts to cell D. Several difficulties ensue from moving from a straightforward buyer-supplier connection (low cooperation intensity) to a vertical partnership (high cooperation intensity). In a straight-forward buyer-supplier relationship firms do not necessarily take a long-term perspective or consider transferability issues for instance (see Table 6 for all differences in properties). The process of bargaining and negotiation is at least minimally adversarial and not always conducive to developing long-term relationships (Achrol, 1997), but inevitable in buyer-supplier relationships. The original (transactional) setup of the relationship described above required a different approach, not taking into account the effects of management decisions and tactics on a possible partnership with high cooperation intensity. Such a situation suggests that experience with one type of interfirm relationships can be detrimental to managing other types of collaborative relationships. As the manager states: "You have to be able to let go of your old habits and form new positions". Relationship management needs to be customized to the type of relationship that one is involved in, which may vary with the degree of interdependency between partners and the intensity of cooperation among them. The following quote from a manager of one of the leading hospitals in the Netherlands further clarifies this matter:

Well, one type of relationship is different from the other. The experience that we have with our R&D alliances is not necessarily useful for other collaborative relationships. Collaborating with other hospitals, especially neighboring ones - our direct competitors - is much more pulling and pushing, than collaborating with for example research institutes. The way you work with competitive alliance partners, is different. We would be more careful with sharing certain information for instance. If you were to deal with all partners the same way, it might work out unfavorably (X01).

This statement – that the management approach for horizontal relationships should be different from the approach in vertical relationships – is supported by literature suggesting that firms in horizontal alliances display lower levels of interorganizational trust compared to firms in vertical alliances. This differential role of trust results, among others, from the opportunity that firms in such relationships have to behave opportunistically, from lower interdependency, and from stronger institutional and interpersonal linkages among horizontal collaborators (Rindfleisch, 2000). Imagine a situation where a manager, responsible for collaborative relationships with competitors in the same market as the focal firm, is made responsible for an interorganizational relationship with a research institute. He or she might be reluctant to share information, remain hesitant to share insights, knowledge, or experience with the staff from the partnering organization, simply because the person is used to working with business partners that simultaneously have to be regarded as competitors. Thus, sticking to the management style appropriate for such relationships might jeopardize an effective collaborative relationship with the research institute.

Not only are there differences between horizontal and vertical collaborations, but within these portfolios interorganizational relationships may also vary in terms of the intensity with which they cooperate with various partners (see Table 6). This is illustrated by the following quote:

> *Our hospital has had an alliance with [a big neighboring hospital] for a long time. There are a lot of dyadic relationships between physicians here and there, but it is a relatively low key alliance. We leave the intensity of the collaboration up to the separate divisions. [...] In our alliance with a smaller hospital the board of directors is much more involved in the collaboration and has a leading role; in contrast to the bigger hospital where the principal part of the collaboration lies in the lower regions of our organization and the alliance agreement covers it all. These physicians would not accept us being too much on top of the collaborative activities (X08).*

This manager adapts his management style to the type of alliance he is dealing with. In the case of the low-key alliance with the bigger hospital, he adopts a more *laissez-faire* approach and takes a peripheral role. Besides highlighting the differences between managing various types of interfirm relationships, the last two quotes illustrate that collaborative experience with one type of interorganizational relationships might have detrimental effects on other types of future collaborative relationships.

2.4. Conclusions and implications

Our primary aim in this chapter was to explain the importance of recognizing the differences between distinct types of collaborative relationships and some peculiarities that enter into the management of those relationships. We distinguished four (extreme) categories of interorganizational relationships based on horizontal versus vertical linkages, and low versus high cooperation intensity. Our quotes from relationship managers illustrate the nuances in managing different types of interfirm relationships, for example a procurement manager who is responsible for strategic buyer-supplier relationships would not necessarily be the right person to manage an interfirm joint development project. We further suggest that applying experience from managing one type of collaborative relationship to other types of interorganizational relationships may not necessarily be beneficial and can even be detrimental to their performance. In fact, relationship management needs to be customized to the nature of the collaboration, which may vary with the degree of interdependency and the cooperation intensity between partners. We have nuanced the presumed positive effect that more experience with interfirm collaboration may have on the performance of future relationships, by distinguishing different types of experience. Additionally, if one type of collaborative experience is not complementary to the other, it depends on the relationship whether firms and relationship managers can apply their experience from the past. We suggest organizations looking for collaborative opportunities beyond their own boundaries take into account that different skills are required for the effective management of various types of interfirm relationships.

Chapter 3

Fragmentation of knowledge as impediment to organizational learning: The case of alliances

Previous studies suggest that through experience organizations learn how to manage alliances, developing firm-wide alliance capability. Witnessing the modest average success rate of alliances, however, firms appear to find it difficult to capitalize on collaborative experience. Based on 84 interviews with alliance managers we suggest that firms struggle with learning how to manage interorganizational relationships, due to the fragmentation of experience across individuals, alliance portfolios, and organizational units. Our results put extant literature on alliance capability development in a new perspective and add to the understanding of organizational learning in the alliance management context, clarifying under which conditions firms may possess precious alliance management know-how, but remain incapable of capitalizing on that know-how at firm level.

3.1. Introduction

Researchers have identified the accumulation of collaborative experience as an important predictor of a firm's ability to create value in future alliances (Gulati et al., 2009). Correspondingly, various scholars have proposed a positive relationship between collaborative experience and organizational learning[2] (e.g. Anand & Khanna, 2000; Gulati, 1998; Lavie, 2007; Sampson, 2005; Simonin, 1997). Yet, the success rate of alliances has remained modest (Koza & Lewin, 2000; Schilke & Goerzen, 2010). Organizations appear to encounter difficulties in managing their external relationships properly, due to challenges associated with the complexity and uncertainty of managing projects across organizational boundaries (Rothaermel & Deeds, 2006). As firms repeatedly deal with interorganizational issues in this complex and uncertain context, they learn from past actions and collaborative experience may help to overcome their challenges, but we know relatively little about how it does. Most extant literature that takes an organizational learning perspective to look at alliances addresses (interorganizational) learning from partners (e.g. Doz, 1996; Inkpen & Tsang, 2007; Janowicz-Panjaitan & Noorderhaven, 2009; Khanna et al., 1998; Liu, Ghauri, & Sinkovics, 2010; Lui, 2009) as opposed to learning how to manage alliances. Furthermore, prior studies focus on characteristics of firms as a whole while studying alliance learning processes (e.g. Gulati et al., 2009; Kale & Singh, 2007). These studies do not address where alliance management experience resides in the firm and how alliance managers go about learning from experience. When trying to understand alliance learning processes it is imperative to further explore those issues in order to find out what happens with collaborative experience that firms gain and that could potentially be of great value in future situations.

This chapter provides explanations as to why it may be more difficult for firms to learn from experience than may be expected from previous studies that identified positive relationships between alliance experience, organizational learning and the capability of organizations to manage their alliances. We explore, based on 84 interviews with alliance managers, where alliance experience resides in organizations and how organizations learn (or not learn) from this experience. Our data shows that

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[2] Gulati et al. (2009, p. 1216) distinguish two types of learning: (a) learning *from* alliances (Hamel, 1991; Khanna, Gulati & Nohria 1998), and (b) learning *how* to manage alliances (Anand & Khanna, 2000; Kale & Singh, 2007). Like Gulati et al. (2009), we focus on the second type of learning.

collaborative experience may not converge properly in order for it to eventually be translated into alliance capability because it may: (i) reside within separate organizational units; (ii) pertain to distinct alliance portfolios; and (iii) be held by different individuals. Such fragmentation reduces the accessibility of collaborative experience to other members of the organization and hampers its applicability to future alliances, explaining why experience does not have to (that is, without specific coordination mechanisms) translate into alliance capability.

Our findings offer contributions to two main streams of literature. First, we extend alliance management literature by exploring what happens with collaborative experience when firms try to get better at managing their alliances over time. We argue that the positive relationship between alliance experience and alliance capability (and eventually performance) may be interrupted by intraorganizational arrangements of alliance management activities. The aforementioned positive relationship therefore needs to be regarded in the light of several boundary conditions with implications for existing measurements of alliance experience and capability. Second, the presented arguments complement prior work on organizational learning. Without being prescriptive about desired levels of coordination, we argue that researchers should take both tendencies towards fragmentation and demands for coordination of activities into account when exploring the net effects of experience. We identify three different levels at which experience is assimilated, stored, processed and applied, two of which are confirmed in existing literature about fragmented learning in organizations. The third impediment to learning at firm level, where experience resides within a specific subset of activities, transcends learning on a unit or individual basis, but without appropriate coordination mechanisms also hinders organizational learning. Throughout this chapter we argue that organizations can possess precious know-how that may never be translated into an organization wide capability and we explain how and why that may happen.

We begin with a brief overview of existing literature on organizational learning and learning how to manage alliances, highlighting the benefits that firms may reap from collaborative experience and clarifying the role of alliance capability. Subsequently, we present our findings, demonstrating that collaborative experience tends to be fragmented throughout organizations and we illustrate how this intervenes with organizational learning, hampering organizations' attempts to capitalize on experience. We end our treatise with a discussion of the main implications of these

findings by situating them in literature on organizational learning, and we expound the limitations of our study and associated opportunities for future research.

3.2. Learning how to manage alliances

Organizational learning literature holds the key premise 'that as firms accumulate experience in undertaking particular kinds of organizational activities, they become more proficient at managing these activities' (Ariño & De la Torre, 1998; Cyert & March, 1963; Pangarkar, 2009, p. 984). Learning can be described 'as the ways firms build, organize and supplement knowledge' (Dodgson, 1993, p. 377). Correspondingly, scholars advance that firms may invest deliberate efforts in learning, accumulating and leveraging alliance management experience and know-how in order to develop or improve their partnering skills. Learning stimulates the development of firm level routines that guide businesses to proactively identify and select partners, choose appropriate governance mechanisms, and coordinate, communicate and bond with counterparts (Anand & Khanna, 2000; Gulati et al., 2009; Sarkar, Aulakh, & Madhok, 2009; Schilke & Goerzen, 2010; Schreiner et al., 2009). Such capability to manage alliances may be present, for example, in terms of the application of standardized 'collaborative performance metrics,' 'evaluation procedures,' and 'partner selection criteria' (Heimeriks & Duysters, 2007; Lambe et al., 2002). Firms' alliance capability[3] may be institutionalized in the form of a dedicated alliance department in charge of capturing alliance-management experience and know-how from all collaborative activities within the organization, established with the intent of strategically coordinating alliance activity and disseminating alliance-related knowledge (Kale et al., 2002).

Kale and Singh (2007) have theorized the 'alliance learning process' by defining four distinct aspects through which firms with a dedicated alliance function build alliance capability. The first is 'articulation' which refers to individual alliance managers putting their know-how in spoken or written words. The second aspect is 'codification' and involves "creating and using knowledge objects or resources such as guidelines, checklists or manuals to assist action or decision making in future alliance situations"

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[3] Schreiner et al. (2009) distinguish two different streams of research regarding elements of alliance capability. One being alliance portfolio capability (managing all alliances of a firm as a whole) and the other the capability to manage any individual alliance. Like Schreiner et al. (2009), we focus on the second.

(p. 985). 'Sharing' is third and entails exchanging and disseminating alliance management knowledge through interpersonal interaction. Finally, 'internalization' is the absorption of accumulated organizational level know-how by individuals.

Like Kale and Singh's (2007) research, most prior studies take a firm level perspective when looking at learning how to manage alliances, asking respondents about capabilities of their firm as a whole, thereby overlooking what may happen deeper in the organization. Consequently, lesser attention has been paid to how collaborative activities are spread throughout organizations, and where the locus of attention regarding the development of alliance management capability lies (Schilke & Goerzen, 2010).

3.3.   Alliance experience and capability

Alliances have become a central part of most organizations' competitive strategies (Kale & Singh, 2009). They may take a variety of forms, including direct investments, joint ventures, supplier relationships, technology licensing, joint marketing efforts, and collaborative research and development projects (Das & Teng, 1996; Lavie & Miller, 2008). Following the premise that the more organizations engage in activities the better they get at managing these types of activities (Harbison & Pekar, 1998; Sampson, 2005), prior work on alliance management suggests that experience with managing previous alliances has a positive impact on several outcome variables. Collaborative experience, also referred to as alliance experience, may, for instance, enable organizations to improve the ways they exchange information and manage complex activities with uncertain outcomes (Schilke & Goerzen, 2010). The general idea is that participants in collaborative relationships are exposed to diverse alliance management practices, that they learn from this experience and hence become better at managing interorganizational exchanges (i.e. their ability to manage alliances increases), resulting in improved performance of future alliances (e.g. Anand & Khanna, 2000; Schreiner et al., 2009). As such, alliance (or: collaborative) management know-how, resulting from experience, is considered highly valuable, allowing organizations to better manage joint activities (Sampson, 2005), and influencing their ability to avoid pitfalls in future alliances (Kale et al., 2002).

Despite the general increase in firms' collaborative experience, their attempts to learn from prior alliances and their efforts to build alliance capability, the success rates of interorganizational relationships remain modest (Geringer & Hebert, 1991; Hoang &

Rothaermel, 2005; Walter, Lechner, & Kellermanns, 2008). Researchers to date have presented mixed outcomes concerning the role of experience in collaborative relationships (e.g. Gulati et al., 2009; Sampson, 2005; Zollo, Reuer, & Singh, 2002), and various scholars have hinted at the need to investigate the interplay between firm level factors and other characteristics influencing the development of alliance capability (e.g. Knudsen & Nielsen, 2010; Schilke & Goerzen, 2010; Tsai, 2002). Our study adds to the understanding of how firms may learn from previous alliances by looking at the locus of learning processes. We explore why firms may not capitalize on their alliance experience and fail to develop alliance capability at the firm level.

3.4. Research method

In order to clarify why firms that obviously possess collaborative experience still find it difficult to capitalize on their know-how by integrating it into an organization-wide capability, we interviewed 84 managers responsible for managing alliances across 30 organizations in various industries, including health care, consulting, fast-moving consumer goods and electronics.

We opted for this research design for two main reasons. First, existing theoretical perspectives on alliance management only shed light on a small part of the collaborative phenomenon (see Hamel, 1991), prompting us to extend theory in this field through qualitative research (Eisenhardt, 1989; Eisenhardt & Graebner, 2007). Second, our research question led us to retrieve information from those individuals that are most knowledgeable about and directly responsible for particular (sets of) alliances. We followed up on recommendations to clarify the nature of alliance-accumulated experience through in-depth interviews (e.g. Gulati, 1998; Gulati et al., 2009; Hamel, 1991). Interview data provides the richness needed to disentangle the organizational arrangements underlying the accumulation of experience and development of alliance capability. Adopting a research design focusing on the different experiences of multiple individuals within distinct organizational units is more likely to lead to insights that are unlikely to emerge from more predefined quantitative research.

3.4.1. *Data collection*

In order to maximize variation on the core construct of collaborative experience and enhance the generalizability of our findings, we selected organizations with a wide variety of practices that are active in distinct industries (health care, fast moving

consumer goods, consultancy and electronics). Such a contextual choice allowed us to assess whether our results are industry transcendent and generic, reinforcing the external validity of our findings. For each organization, we first identified one interviewee via the organization's internet site or previously established professional contacts. Before meeting our interviewees we made sure to check whether they actually managed one or more alliances of their organization through contact by email or telephone. To further ensure that our sample included knowledgeable informants, we then used the 'snowballing technique', asking our initial informant to refer us to others in their organization responsible for (other) alliances. By doing so, we were sure not to waste time on interviewees that had no experience with alliance management whilst we could use the name of our first contact person to persuade new interviewees to talk to us. Details on the interviewees are listed in Appendix A. Each interview started with questions about the responsibilities of the interviewee concerning alliance management activities, allowing us to check actual alliance involvement before proceeding with the interview. The number of interviewees per organization ranged from 1 to 10. While all of our interviewees assumed the role of alliance manager, most of them also had other responsibilities ensuing from their positions in procurement or marketing departments or from their jobs as directors. In order to be able to uncover the locus of alliance experience and the development of alliance capability, we interviewed people in different layers of the organization, as is shown by the job titles in Appendix A.

We conducted semi-structured interviews, using the protocol presented in Appendix B. This protocol was designed with the central constructs of our study in mind (i.e. 'collaborative experience', 'learning' and 'capability development'), but it did not include terms such as 'fragmentation' and 'local capability'. All the interviews began with questions about the role of the interviewee and his or her responsibilities in the organization. We proceeded with questions about the management of collaborative relationships, collaborative experience, learning and capability development.

The interviews were all conducted on site and in the native language of the interviewees. They varied in length between 38 minutes and two hours, averaging around one hour. All interviews were transcribed ad verbatim to ensure reliability (Eisenhardt & Bourgeois, 1988), apart from three instances in which the interviewees did not give permission due to the strategic and sensitive nature of the information they were about to provide. In view of confidentiality issues on the part of participating respondents and organizations, we guaranteed anonymity and only present job titles,

industry backgrounds and organization sizes here (see Appendix A). Overall, we solicited information from 56 male and 28 female alliance managers, working for 30 different organizations ranging in size from 50 to over 150,000 employees. The organizations were all located in the Netherlands, and consisted of 13 hospitals, 2 youth care and mental health institutes, 1 health care-related governmental institution, 6 consultancy agencies, 6 fast-moving consumer goods companies, and 2 electronics firms. The 84 interviews generated sufficient data to achieve theoretical saturation (Strauss & Corbin, 1990), providing rich raw material for the arguments that we present in the remainder of this chapter.

3.4.2. *Data analysis*

In order to balance what Golden-Biddle and Locke (1997) denote as 'showing' versus 'telling', the importance of 'balance between providing raw data for your readers (showing) and explaining your data (telling)' (Pratt, 2008, p. 486), we conducted a thematic content analysis to analyze our empirical material (in contrast to interpretive analysis, Ritchie & Spencer, 2002). All transcribed interviews were coded using Atlas.ti. Our coding categories were initially based on a detailed topic list underpinning the interview protocol. Examples of codes were 'alliance portfolios', 'types of experience', 'learning from prior collaboration' and 'alliance capability'. Further data analysis and conceptualizing of these codes or names led to higher order concepts (Strauss & Corbin, 1998) derived from the original codes (such as: 'knowledge residing in individuals' and 'variation across portfolios'). These higher order concepts have shaped the categories by which we present our findings.

Building on the categorization of relevant text fragments and scrutinizing possible interrelationships between codes, we gradually developed the argument that collaborative experience is fragmented within organizations, hindering learning, capability development and cross-fertilization across various alliances. Following Pratt (2008), we selected a number of 'power quotes' in which informants provide concise and insightful illustrations of our assertions to be included in the body of our text, at the same time providing 'proof quotes' in summary tables to illustrate the prevalence of our observations in the data (see Appendices C, D and E).

3.5.   Findings

Our findings are presented in two stages. First, we describe in what sense collaborative experience is fragmented throughout organizations, observing that it is generally confined to distinct organizational units, pertains to different alliance portfolios and is held by various key individuals. Second, we show how such fragmentation reduces the accessibility of collaborative experience across the organization, impedes the potential to develop firm level alliance capability, and reduces the applicability of collaborative experience to future alliances. As our findings show, intraorganizational arrangements cause firms to maintain alliance capability at lower levels of the organization and hinder the development of alliance management capability at organizational level.

3.5.1. *Fragmentation of experience across alliance portfolios*

A first finding emerging from our analysis indicates that the construct of collaborative experience can be characterized along multiple dimensions. Our data shows that firms tend to distinguish between various kinds of alliances and that they often deal with these alliances differently. This is reflected in a remark made by a hospital alliance manager:

> *The management of strategic supplier relationships is very different from that of the management of other alliances. And the management of alliances with other hospitals is again different from managing R&D alliances. It is a different setup with different goals, a different context and different interests. (X03)*

Organizations distinguish different types of alliances and often group these into distinct 'alliance portfolios'. Hospitals, for instance, have portfolios of horizontal relationships with other (possibly competing) hospitals, portfolios of R&D alliances with research institutes, and buyer-supplier partnership portfolios. These portfolios tend to co-exist within organizations, as the following interview excerpt shows:

> *We [at the procurement department] do not know about our organization's other alliances and our alliance managers are even less likely to know about the strategic supplier alliances that we manage in our department. Of course there are some similarities in the management of these alliances, but their origin and nature is different. (X11)*

Our interviewees further suggest that alliances that are similar in many respects may nonetheless differ regarding other important attributes. While scholars or outsiders may place such alliances in the same category, the experience, skills and capabilities

needed to manage these relationships may vary considerably:

> *Real partnerships, for example in product development, are managed by the same department. Still, you see that some collaborative agreements are dealt with differently. It makes a difference if you collaborate with a competitor or a logistics service provider, for instance, in terms of how much information you want to share. (X60)*

> *As far as I know, we maintain partnerships with customers, suppliers and competitors. Within that categorization, we distinguish fields of collaboration, for example marketing, development or supply chain optimization. These distinct types of collaboration are managed differently and I only know how it works in my area. (X54)*

Alliances and alliance portfolios appear to entail considerable idiosyncrasies, requiring different organizational and managerial skills (see Appendix C for more illustrations).

While firms distinguish various alliance portfolios,[4] the experience gained from managing these relationships often stays confined to a specific portfolio.[5] As we later argue, experience with specific alliance portfolios may limit the ability of firms to apply the benefits of collaborative experience to future alliances of another kind.

3.5.2. *Fragmentation of experience across organizational units*

Analysis of our data further reveals that organizations not only manage different types of collaborative relationships at the same time, but also that these alliances tend to be managed by different organizational units, such as procurement offices, marketing units, and alliance departments. For example, one of the procurement managers in our study explains that different departments in his organization deal with different types of alliances[6]:

> *For some companies we are customer, supplier and alliance partner, all at the same time. The nature and emphasis of the alliance influence which department manages the relationship. Strategic supplier relationships are most often managed in my procurement department, but sometimes the alliance department is responsible. (X09)*

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[4] Different portfolios of alliances are, for example, a portfolio of R&D alliances, a strategic supplier relationship portfolio and a portfolio consisting of partnerships with competitors.
[5] Distinct alliance portfolios may be managed within one department or within different departments; whether or not firms distinguish various portfolios can be unrelated to the structural arrangements (e.g. departmentalization) for the management of these relationships.
[6] Procurement managers were asked to consider and reflect on their organizations' strategic supplier relationships (supplier alliances) and not on their relationships with other (more standard) suppliers.

Another interviewee also raised this point, and suggests that different organizational units are often unaware of one another's collaborative activities:

> *So my fellow alliance manager wanted to discuss a particular supplier's prices. I then asked him what the spin-off for the procurement department would be. [He] stated that, as a single organization, we deal with our external contacts in a very fragmented way. If we win something at one of the supplier's office windows, we lose something at another window of the same supplier. (X01)*

Appendix C contains similar statements by other interviewees supporting the idea that collaborative experience is fragmented across multiple organizational units that appear to operate independently from one another, only harnessing the experience associated with their own alliances. This derives, among other things, from specialization and the differentiated nature of the collaborative experience described previously. If alliances are managed in separate organizational units, the way collaborative experience may be translated into firm level alliance capability is affected, in particular if no knowledge sharing takes place between these units.

3.5.3. *Fragmentation of experience across individual managers*

Our empirical analysis also shows that in addition to procedures, metrics and databases, collaborative experience is frequently kept by key individuals, who themselves assimilate, process and store lessons learned from prior alliances. In many cases, experience is not shared with others, nor institutionalized, as the following comment by a hospital procurement manager shows.

> *You don't have a relationship with a company, a company cannot communicate; you have a relationship with a person. The information and knowledge that you gain there mainly stays in that [dyadic] relationship. If our hospital started another alliance with the same company, it would be best to meet with [the colleague who is] the new contact person, but the actual experience is really mine. (X20)*

In such cases, collaborative experience is mainly beneficial to future instances of collaboration when the same individuals are involved or when explicit and tacit information is shared with successors. This is not always the case, partly because organizations do not recognize and value this experience, or because changes in the nature of an alliance require other managers to step in:

> *When the relationship develops, the complexity of the relationship management increases. Often the person responsible for that relationship changes because we need*

someone with more competencies and capabilities to manage the relationship. (X02)

As we have shown hitherto, collaborative experience may vary across different dimensions and it may remain confined to specific individuals, organizational units or alliance portfolios (see Appendix C for more examples). We will now turn to how such fragmentation of collaborative experience may reduce learning from previous collaboration and impede the development of alliance capability at firm level.

3.5.4. *Experience fragmentation hindering learning*

Our data confirms claims made by other scholars that organizations learn from previous alliances with external partners, as a procurement manager and an alliance manager in our study suggest:

> *With new external relationships, we draw as much as possible from our experience because we have learned from the past. The alliances with our suppliers become more and more effective. (X22)*

> *In our department, we are good at what we do because we have done it before. We know how to deal with our research partners, and we often go beyond established contracts. Applying lessons learned results in higher performance, because it is easier to predict what works and what doesn't with different partners. (X01)*

These managers endorse findings from existing literature; the more a firm engages in alliances, the more likely it is that the organization learns to manage such relationships (see Appendix D for more illustrations). We also observed, however, that managers primarily refer to the alliances that they themselves have managed in the past. Our interviewees make far less reference to collaborative activities managed by other departments or to alliance portfolios with which they are less familiar.

Similarly, we observed that the fragmentation of collaborative experience across organizational units, alliance portfolios and key individuals often restricts learning from previous collaboration at firm level. This is illustrated by the following quote:

> *It is possible that we [i.e. the procurement department] already know quite a lot about a future alliance partner; our department may have inside information about that organization. We know how they work [...]. But we do not really share this type of information [with other departments]. (X19)*

In this example, the procurement manager explains that his department learns about its suppliers without sharing relevant information with other departments. In such cases, the organization does not benefit from previous partner-specific experience. An

interviewee from another organization involved in a project team managing multiple alliances observes that alliance managers do not communicate with others about alliances for which they are responsible:

> *I am involved in partnerships with logistic service providers, but also in collaborative agreements with competitors, where we jointly discuss and implement optimizations regarding our supply chain. The people with the final responsibility for these partnerships work in separate departments. So if you ask me whether or not we learn from previous collaboration, I would say yes, but only locally. That is, in the department where the specific alliances are managed. (X60)*

Appendix E provides more quotes illustrating how the fragmentation of collaborative experience across units and people affects the positive relationship between collaborative experience and learning, reducing its impact on future situations.

3.5.5. *Fragmentation of experience impeding capability development*

Analysis of our interviews further confirms findings from existing literature about collaborative experience having a positive influence on the development of alliance capability:

> *Five years ago we were preparing a strategic alliance, but we cancelled the collaboration during the setup process for several reasons. Fortunately, we then documented all the steps in the process, including reports, formats and other documents. Recently we began a new alliance where we could apply all the lessons learned from five years ago, because the alliance setup was very similar [...]. We also learned not to rush into a next phase of the alliance process without properly closing the previous one. People need time to let the goals of a certain alliance sink in, and you have to make sure to embed it step by step. (X30)*

This manager explains that by documenting collaborative experiences from the past, his organization left them in a better position to set up, structure and manage future alliances. Another interviewee attempted to achieve similar results by establishing an alliance database:

> *We have a structured alliance database. If you type [the name of a partner], all the documents related to that collaborative relationship pop up. That means the contract, but also the evaluation sessions and the minutes, etc. We expect everyone that works or will work with that partner to consult the database to check what happened in the past, whether it was successful and why. (X39)*

Appendix E further illustrates the positive effects that collaborative experience may

have on the development of alliance capability. In addition to these merits, however, we also observed that the fragmentation of collaborative experience may restrict the development of an organization-wide alliance capability. One interviewee mentioned, for instance, that evaluations of collaborative activities may differ across departments and that standardization may not necessarily occur and may even be undesirable:

> *Most of our departments do not communicate about the collaboration they have, and the know-how gained is thus not shared or used in the future as such. Moreover, the different departments assess their alliances in different ways. And if you [as a alliance manager] want to know something about one specific aspect... that is, if you have contact with the other department, it might turn out that they have not documented the specific information that you are looking for. We have not regulated or standardized this organization-wide. (X50)*

A representative from another organization commented that collaborative capabilities represented in the form of meticulously written Service Level Agreements (SLAs), which were developed, applied and refined within some departments, may still not be used in other departments:

> *We definitely learned not to be too informal in our alliances. We therefore work with SLA's for all our contracts. [...] SLA use was initiated in the purchasing department, but my own department now uses them as well [...]. Unfortunately, and to be honest I do not really know why, we seem to be the only departments applying this. (X31)*

These examples suggest that fragmentation of collaborative experience across organizations may restrict the development of organization-wide alliance capability (see Appendix E for more quotes). Departments may simply do things their own way, either because different types of alliances call for unique approaches to relationship management, or because fragmentation leads to ignorance and neglect, and coordination of collaborative experience requires considerable effort and investment. In fact, in many cases, collaborative experience is not stored, processed and applied at the level of the firm, but at the level of distinct organizational units, alliance portfolios and individuals, reducing its accessibility to others within the firm and its applicability to new alliances. It appears that organizations and their constituents sometimes (purposefully) restrict coordination between these localized sources of experience, and that they therefore do not maintain alliance capability at the level of the firm (i.e. centralized), but at lower levels of the organization (i.e. decentralized). Appendix F presents an overview of the situation per organization in our study, describing the level

of fragmentation and the presence or absence of mechanisms and activities for coordination. Table 8 summarizes the information presented in Appendix F by counting organizations per industry per situation (low, medium or high fragmentation).

Table 8: Fragmentation per industry

	Health care	FMCG	Consultancy	Electronics	Total
	(number of organizations)				
Low fragmentation	4	2	1	0	**7**
Medium fragmentation	5	2	2	2	**11**
High fragmentation	7	2	3	0	**12**
Total	**16**	**6**	**6**	**2**	**30**

Fragmentation at unit and/or portfolio level occurred in 23 of the 30 organizations (see Appendix F). These organizations were considered to have 'high fragmentation' if no knowledge sharing took place between individuals (fragmentation at individual level), which applied to 12 organizations. 11 organizations were labeled as having medium fragmentation because, even though fragmentation occurred at unit and/or portfolio level, individuals did exchange alliance management knowledge. Fragmentation is considered to be low in 7 organizations, where coordination between units and/or portfolios and individuals took place. From the 7 organizations with low fragmentation, 2 organizations have an alliance department. The other 5 facilitate coordination through inter-unit and/or inter-portfolio meetings, or work in interdisciplinary teams to facilitate the management of alliances at organizational level. Thus, the 7 organization with low fragmentation all have an alliance function where alliance activities are coordinated. Alliance managers from the 12 organizations on the other side of the extreme deal with high intraorganizational fragmentation and all indicated that alliance management knowledge is not shared and much information stays in people's heads.

3.6. Discussion

In line with literature on organizational learning (e.g. Herriott, Levinthal, & March, 1985; Levitt & March, 1988) and as reported in subparagraph 3.5.4, we find that firms do learn how to manage alliances from experience with previous collaborative initiatives. The core findings of this study suggest, however, that collaborative

experience, gained while managing alliances, originates at different loci in the organization. Such fragmentation may impede learning from collaborative experience at the organizational level and it may restrict the development of organization-wide capability that allows firms to deal with future alliances. More specifically, our data shows that the presence of different alliances and alliance portfolios, as well as the fragmentation of collaborative experience across departments and key individuals, impede the development of organization-wide learning, hamper the development of alliance capability, and curb the applicability of collaborative experience to future alliances.

While fragmentation may hinder capability development at firm level, we do not argue this to be a bad thing in all situations. As explained in the findings, it may be desirable if departments, for example, use a specific approach for their unique set of alliances. This is further addressed below where we explain why fragmentation may occur. Table 9 exemplifies the different fragmentation levels.

3.6.1. *Explanations for fragmentation*

By investigating where alliance management experience resides in the firm and how alliance managers go about learning from experience, we have shown that alliance management know-how may not translate into organization-wide alliance capability.

Table 9: Fragmentation across units, portfolios and individuals

	Organizational units	Portfolios	Key individuals
Level of fragmentation	Department, division or other organizational unit (e.g. R&D, marketing, procurement)	Subset/group of comparable/ similar alliances (portfolios)	Key individuals (e.g. alliance managers, account managers, department managers)
Example of fragmentation	The procurement department manages alliances with suppliers, whereas the R&D department manages all R&D alliances	One department manages its marketing alliances and R&D alliances in different ways, due to differences in the underlying nature of these relationships	One person manages an alliance, and two years later (or even at the same time), another person manages a similar alliance (possibly even with the same partner)

	Organizational units	**Portfolios**	**Key individuals**
Source	Structural arrangements and/or effort and costs associated with coordination prevent contact between units regarding alliance management	Different portfolios of alliances require alternative structural and managerial approaches	Knowledge-sharing motives and structure are absent; turnover of people; differences in people's capabilities
Fragmentation is expected to increase if...	More organizational units engage in alliance management	Diversity of alliances and differences amongst portfolios increases	The number of individuals that are responsible for alliances increases

The question remains as to *why* this may happen. We situate our outcomes in wider organizational literature and offer three possible explanations as to why collaborative experience often remains with the sources at which it originates, causing firms to not (fully) capitalize on their alliance experience: (1) Specialization and the effort associated with coordination complicate contact between units concerning alliance management; (2) Different types and portfolios of alliances demand distinct substantive/domain knowledge and require alternative structural and managerial approaches and; (3) Individuals lack the motives, time/opportunities and/or structure to share knowledge or contribute to organization-wide learning initiatives and capability development. Below we elaborate on these possible explanations before going deeper into the issue of coordination.

Specialization and coordination difficulties

First, our observations confirm, for the case of alliance management, the occurrence of fragmented learning, defined by Kim (1993) as a situation where one unit or person learns, but the organization as a whole does not (Berthoin Antal et al., 2001). Although several studies use organizational learning to illustrate that collaborative experience translates into know-how (Argote & Miron-Spektor, 2011), which can be used in future collaborations (Child, 2001; Simonin, 1997), much less attention has been paid to how and where this happens in organizations. Our observation that collaborative experience often stays within the confines of organizational units appears to be caused by demands for specialization and the ensuing efforts needed to coordinate collaborative know-how

across departments. Our respondents indicated, for instance, that different departments are involved in alliance management; R&D units manage R&D alliances, while procurement departments are in charge of a firm's strategic supplier alliances (see also Bamford, Gomes-Casseres, & Robinson, 2003, p. 336). These organizational units are responsible and accountable for different alliances, which connotes with the notion of specialization that dramatic productivity improvements can be achieved by economizing on bounded rationality and engaging in learning by doing (Ethiraj, Levinthal, & Roy, 2008; Jacobides & Winter, 2005; Reitzig & Puranam, 2009).

However, while specialization may improve the performance of individual units or departments, it also tends to complicate inter-unit coordination (Haas, 2010; Kretschmer & Puranam, 2008). In short, although 'separating tasks into clearly delineated divisions improves individual task performance,' the activities of separate divisions may also need to be coordinated 'to leverage shared corporate resources' (Huckman & Zinner, 2008, p. 191). As Kretschmer and Puranam (2008) argue, while specialization may make inter-unit collaboration more valuable, it may also make it more difficult. Our findings indicate that this holds for sharing specific collaborative experience as well. If organizations want to build firm level alliance capability from experience that resides within separate units or departments, and originates from alliances managed by different individuals, then coordination becomes imperative.

Alliances requiring specific approaches

Second, we have explained that organizations generally manage different types and various portfolios of alliances. Our data shows that learning how to manage alliances may not only be restricted because the relationships are managed by one person or unit, but also because the nature of the alliances under their responsibility is quite specific. Fragmented learning may therefore also occur within the confines of a specific subset of alliances, irrespective of the individual or unit level. Hence, collaborative experience will only be shared locally,[7] since the substantive knowledge and the most appropriate structural and managerial approaches for each type of alliance (portfolio) tend to be different, making them less applicable to other types of relationships. Anand and Khanna (2000) already observed that managing one kind of alliance can be quite

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[7] 'Locally' does not refer to one department or one person and a separate level of fragmentation (next to unit and individual level) is therefore justified. Distinct alliance portfolios may be managed within one department or within different departments[5].

different from managing another. Similarly, Maurer and Ebers (2006) argue that alliances comprise a range of distinct and disconnected external partners and that some partners lack the capacity and competence to effectively relate to partners outside their own community. Correspondingly, our findings indicate that buyer-supplier alliances, R&D agreements with research institutes, marketing covenants, and horizontal alliances with competitors, for example, involve entirely different types of engagement and activities. Each of these alliances tends to build on different kinds of experience and know-how. In most buyer-supplier relationships, for example, firm representatives need to know how to continuously (re)negotiate with a partner and strike integrative deals, whereas for R&D agreements, it is very important that partners are aware of the opportunities and constraints of each others' technologies. Further, outcomes tend to be much more uncertain in such alliances, resulting in different structural and managerial approaches. In contrast to buyer-supplier relationships, for example, which often involve detailed contracts with clear behavioral and outcome specifications, structural arrangements for R&D alliances generally focus on the specification of residual rights and are much more likely to involve a form of equity exchange. Similarly, both relationships involve different kinds of people (purchasers/account managers versus scientists/PhD's), time horizons (short versus long term), tasks and activities (negotiation versus investigation), and risks and uncertainties (behavioral versus technological uncertainty). This requires the people and departments involved in each of these alliances to deploy different managerial approaches (ter Wiel & Vlaar, 2011), limiting the degree to which collaborative experience can be applied in future alliances and restricting organization-wide learning and capability development.

Individual sharing of collaborative experience
Third, we observe that the responsibility for managing collaborative relationships is frequently divided between several alliance managers. In many cases, for example, a senior scientist coordinates activities with research partners, while the head of the same firm's purchasing department manages the alliances with its suppliers, and the board of directors monitors the firm's horizontal partnerships. This connotes with findings from Maurer and Ebers (2006) who observed that each management team member has their own responsibilities regarding different alliances. It also conforms to earlier work by Hoang and Rothaermel (2010), who give an example of a pharmaceutical company, Eli Lily, in which each alliance is managed by a three-person

team, indicating that collaborative experience can reside with different individuals, even if they work within the same department. In such cases, the tacit knowledge accumulated by the person responsible for a specific alliance is only valuable to the rest of the organization if that same person is involved in similar future activities, if the knowledge is shared with others, or if it is translated into organization-wide alliance management capability.

However, key individuals in collaborative relationships frequently lack the motives, ability, time, opportunities and structure to share knowledge or contribute to the development of organization-wide alliance management capability. Although some of the interviewees in our study recognize that it would be beneficial to share their experiences and develop firm level alliance capability, their motives for doing so tend to be limited. This could be because they are not aware of the alliances managed by their colleagues or because alliance management is just one of their many responsibilities and generally involves a lot of work, distracting managers from their other day-to-day tasks. In addition, managers that do well may wish to preserve the 'secrets of their success,' while those that do poorly are unlikely to allow others to 'learn from their mistakes' by offering a true account of their failures. Alliance managers may also be incapable of sharing collaborative experience. It may not be easy to assess which aspect of their experience would be of interest to other individuals in the firm for instance, sometimes reinforced by lack of opportunity and an explicit knowledge-sharing structure. In many cases, alliance managers are based in different departments, buildings or even countries. In addition, formal and informal contacts with other employees generally involve the negotiation of interdependencies (Haas, 2010; Kretschmer & Puranam, 2008) rather than knowledge sharing amongst otherwise loosely connected individuals and departments. If these interdependencies are unrecognized or unclear, intense contact between alliance managers is less likely. These problems related to knowledge sharing are further exacerbated when key individuals change positions and when organizations exhibit high management personnel turnover.

Coordination

Zooming into the above mentioned difficulties, we notice that the issue of coordination of alliance management know-how has frequently come to the fore in previous research on alliances. In their article on the role of collaborative experience, alliance capability and performance, Heimeriks and Duysters (2007) noted that organizational barriers,

such as department structures, influence knowledge transfer. These structures may limit 'the ability to transfer information across intraorganizational barriers' and require coordination (p. 45). Coordination is the alignment of actions (Camerer & Knez, 1996), and coordination problems may arise from, amongst other things, a lack of understanding by individuals about how they are interdependent with others (Gulati, Lawrence, & Puranam, 2005). For organizations to build firm level alliance capability, individuals responsible for alliance management must understand that sharing experience may be crucial. Alliance managers may not be interdependent regarding other potential responsibilities, but it would be a waste not to make use of alliance management best practices of their own organization. Through efficient, possibly centralized, coordination between separate units, firms can enable and encourage knowledge sharing on distinct alliances and portfolios amongst key individuals. Facilitating and encouraging knowledge sharing between individuals (alliance managers) *within* units and/or portfolios could be a first step for higher management to reduce the level of fragmentation. In 18 of the 30 organizations in our study, knowledge sharing about alliance management did occur between individuals. In order to achieve firm level learning, inter-unit and inter-portfolio coordination would be a necessary next step. Many scholars have suggested a dedicated alliance function as part of the solution to address coordination difficulties. They claim that such formal alliance structures help to oversee the entire organization (Sampson, 2005; Schilke & Goerzen, 2010). Our research shows, however, that alliance structures, which may include single alliance specialists or entire alliance units (Schilke & Goerzen, 2010), do not guarantee firm level coordination. Particularly when it comes to sharing know-how across different portfolios of relationships, a dedicated alliance function does not necessarily overcome existing barriers.

Nonetheless, it makes little sense to share knowledge that is completely idiosyncratic to particular alliances. Rothaermel and Deeds (2006) already suggested that different alliance types (upstream, horizontal and downstream) place differential demands on alliance management capability. Correspondingly, our findings indicate that developing firm level alliance capability (as described by Schilke & Goerzen, 2010; Schreiner et al., 2009) may not be the best option, since the routines for coordinating activities and resources with partner organizations can differ substantially across distinct types of alliances. This applies, for instance, to routines involving partner selection and knowledge transfer amongst partners, since different kinds of alliances

may require distinct assessment criteria and knowledge-sharing mechanisms. Hence, fragmentation of collaborative experience, resulting from managerial differentiation, is less likely to have a negative impact on learning as long as organizations do not inappropriately impose the integration of local know-how throughout the entire organization.

3.6.2. *Theoretical implications*

We extend existing theory on organizational learning by looking at learning in the alliance management context, investigating how firms learn to collaborate. In line with existing literature, we find that alliance managers do learn how to manage alliances over time, but also observe that within organizations fragmented learning occurs. In the alliance context we see that this does not only happen at individual and unit level but also at the level of specific subsets of relationships (alliance portfolios). This fragmented learning impedes learning at the organizational level and hinders the development of alliance capability, the ability of firms to manage alliances.

The question of why alliances fail has fascinated scholars for years and has become even more pertinent with the recent proliferation of collaborative activities in most firms. Our study sheds new light on this issue, showing that the usual benefits attributed to collaborative experience may be limited due to *intra*organizational arrangements, and that they may translate into local learning rather than organization-wide alliance management capability[8]. That is, firms may adopt a local, decentralized approach to capitalize on collaborative experience that is fragmented and pertains to different types of alliances, with widely varying characteristics. We have illustrated why firms may struggle to build firm level alliance capability and refined suggested outcomes from previous studies regarding the positive effects of alliance experience. We have also explained what firms can do to overcome challenges to translate alliance management know-how into organization wide alliance capability, explicating that the alliance function is not the ultimate solution and suggesting that firms' alliance experience and even capability do not necessarily reside within a dedicated alliance

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[8] Limited development of alliance capability at the organizational level does not have to affect alliance success negatively, especially if alliance complexity and the firm's alliance configuration fit the development of capabilities at lower levels (more details in chapter 5). We do not want to pass judgment on a general ideal outcome of capability development, but aim to show the nuances in such development at firm level while shedding a different light on existing literature about firm level capability.

function. Our arguments show that recent theoretical and empirical studies on the translation of collaborative experience in 'collaborative learning' (Arikan & McGahan, 2010; Kale & Singh, 2007; Lavie & Miller, 2008; Mayer & Argyres, 2004; Pangarkar, 2009; Schreiner et al., 2009) and the development of 'alliance capability' (Heimeriks & Duysters, 2007; Kale et al., 2002; Lambe et al., 2002; Schilke & Goerzen, 2010; Simonin, 1997) need to be regarded in the light of several boundary conditions. In particular, we find that adopting organization-wide experience and building firm level alliance capability may be more difficult when firms preside over different types of alliances and more diverse alliance portfolios, when collaborative experience resides in a larger number of distinct organizational units, and when it is tied to key individuals that are unwilling or incapable of sharing this experience. Additionally, previous studies often measure firms' collaborative experience by counting the alliances firms have been involved in (e.g. Anand & Khanna, 2000; Dussauge et al., 2000; Heimeriks & Duysters, 2007; Kale & Singh, 2007; Sampson, 2005; Zollo et al., 2002), disregarding whether or not these relationships are aggregated internally (i.e. accumulated to firm level alliance experience). Since our findings hold for a rather diverse sample of firms in terms of size, industry and types of alliances, this observation may have significant implications for the interpretation of earlier research outcomes. More specifically, although our results confirm findings from previous studies regarding the desirability of organization-wide learning processes and capability development, they simultaneously emphasize that fragmentation may hinder firm level knowledge sharing, learning and capability development regarding the management of alliances. Hence, we argue that counting the number of alliances of firms to establish their alliance experience appears equivocal.

3.6.3. *Limitations and future research*

Despite its merits, this study also has some limitations providing opportunities for future research. First, our findings derive from a single study covering a limited number of firms and industries with 44 out of the 84 interviews in the health care sector. Future research could address generalizability and seek to ascertain whether our findings hold true for a larger sample of firms in different sectors, and for other types of organizations. The health care industry may not be a leading industry concerning alliance management maturity and further researchers may find slightly different outcomes in other industries. This would, however, not undermine our findings or the ensuing arguments brought forward in this chapter. While our observations will hold, it

may be the extent to which for instance fragmentation is salient that will differ. It would also be interesting to ascertain the influence of variation in firm size in future studies, as one might expect larger organizations to have more resources available to develop organization-wide learning mechanisms and alliance capability, while at the same time, it may be more difficult and ineffective for such firms to exchange information and experience across different departments, functions and locations (Maurer & Ebers, 2006). More quantitatively oriented research could focus on developing measures to distinguish the level of fragmentation.

Second, our results hint at several methodological challenges when it comes to investigating collaborative experience and its influence on the outcomes of alliances. We agree with Mayer and Teece (2008) that scholars conducting research on collaborative relationships need to define the type of relationship they are considering more carefully in order to 'open the black box' that could explain how collaborative experience and overall collaborative success are related (Kale & Singh, 2007). Our findings suggest that distinct collaborative experiences may be associated with different structural properties (Morgeson & Hofmann, 1999) – i.e. they originate within different units and with distinct individuals in an organization – and they exhibit different functionalities, depending on the nature of the relationships from which the experiences are gained and to which they are applied. This implies, amongst other things, that next to measuring collaborative experience at the organizational level (e.g. using count measures), scholars should also assess variation in collaborative experience at lower levels of the organization (e.g. at the level of alliance portfolios, organizational units or departments, and individual managers of collaborative relationships). This is even more important if one considers that organizational representatives are frequently unaware of what is happening at other sites in the organization (Huber, 1991; Huber & Lewis, 2010), due to the tendency towards fragmentation and the problems associated with coordination that we described earlier. If we only look at phenomena related to learning from alliance experience and developing alliance capability at firm level, the black box of the antecedents to alliance success will remain unopened.

Finally, scholars have noted that 'researchers have paid little attention to how the composition of partners in alliance portfolios affects firm performance' (Lavie & Miller, 2008, p. 637-638), besides a few notable exceptions consisting of recent studies that examine the diversity of partners' relationships, resources, lines of business and identities (Baum, Calabrese, & Silverman, 2000; Goerzen & Beamish, 2005; Jiang, Tao, &

Santoro, 2010). Jiang et al. (2010, p. 4), for instance, observe that alliance portfolio diversity varies on three dimensions (functional diversity, governance diversity and partner diversity). Our results suggest, however, that scholars should not only explore diversity *within* each of these portfolios, but also diversity *between* them. After all, greater diversity within a specific portfolio may expose firm representatives to more learning opportunities, whereas greater variation across portfolios may complicate coordination and limit the potential for firm level learning and the development of organization-wide alliance management capability.

Summarizing, we warn against overly optimistic expectations regarding the normative ideal of a learning organization (Berends & Lammers, 2010), but also offer new insights into facilitating the application of alliance experience. By acknowledging and dealing with possible interruptions whilst learning from previous alliances, firms would advance the development of alliance capability.

Chapter 4

From collaborative experience to capability: How managers enhance the availability and applicability of alliance management know-how

High alliance failure rates – even of experienced firms – suggest that organizations find it difficult to capitalize on lessons learned in the past. In this study we attempt to unravel how firms and managers use collaborative experience. Building on extant theory and the analysis of 81 interviews with alliance managers, we find that firms try to enhance the availability of collaborative experience and its applicability to future alliances by: (i) forming relationships that correspond with a firm's alliance portfolio specific experience; (ii) selecting partners with complementary collaborative know-how; and (iii) complementing internal experience with external expertise. Subsequently, local capabilities to deal with these alliances are developed, that may only translate into alliance capability at firm level through institutionalization. Our results contribute to extant literature by taking an organizational learning perspective to investigate how firms try to improve their alliance management. More specifically, we expose the process between experience and capability, illustrating how managers attempt to reap more benefits from previous lessons learned.

4.1. Introduction

Alliances have become an important strategic tool for organizations to further aims such as product development and market position improvement (Gulati, 1995; Schilke & Goerzen, 2010), because they may reduce costs and risks, and provide access to technological expertise and new markets (Ding, Dekker, & Groot, 2010). It is therefore not surprising that researchers have delved into the formation, governance and management of alliances in order to gain a better understanding of why some alliances[9] succeed and others fail (e.g. Anand & Khanna, 2000; Deeds & Hill, 1996; Gulati, 1998; Kale et al., 2002; Lavie, 2007; Simonin, 1997; Zollo et al., 2002). Prior studies suggest that collaborative experience acts as one of the key antecedents of alliance performance (e.g. Child & Yan, 2003; Deeds & Hill, 1996; Hoang & Rothaermel, 2005). Yet, extant literature tells us that organizations manage different kinds of alliances (e.g. Anand & Khanna, 2000; Das & Teng, 1996) and that the ensuing different types of collaborative experience may have distinct performance effects (e.g. Sampson, 2005; Zollo et al., 2002). Other studies suggest that even firms with considerable collaborative experience find it difficult to reap benefits from lessons learned in the past (e.g. Reuer & Zollo, 2005). In this regard, Schreiner, Kale and Corsten (2009) explain that firms can enhance their alliance capability by cultivating collaborative experience and/or by undertaking deliberate actions aimed at establishing structural mechanisms or organization processes through which collaborative experience is assimilated and applied (Kale et al., 2002). Knowing that collaborative experience is an important resource and that learning occurs, it seems pertinent to find out how organizations can propel their contribution to the development of alliance capability. Hence, the central question here is: How do firms enhance the availability and application of collaborative experience in order to develop alliance capability?

Based on results of our analysis of 81 interviews with alliance managers from 28 different organizations we address this question, extending existing arguments on the benefits of collaborative experience. We advance that managers try to establish a fit between collaborative experience they have previously gained and the alliances to which their know-how can later be applied. This occurs due to experience specific for

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[9] Alliances can take a variety of forms, including joint ventures, supplier relationships, joint marketing efforts and collaborative research and development (Das & Teng, 1996). They are broadly defined as collaborative arrangements between independent organizations involving exchange, sharing or co development of products, technologies or services to achieve mutual objectives (Gulati, 1998; Kale, Dyer & Singh, 2002; Lavie & Miller, 2008).

subsets of alliances that may not be suitable to apply to other alliance management situations. We label this experience as 'portfolio-specific alliance experience'. Subsequently, we postulate that firms and alliance managers use three tactics to enhance the availability and applicability of collaborative experience to new relationships. (i) By forming relationships that correspond with a firm's alliance portfolio specific experience; (ii) by selecting partners with complementary collaborative know-how; and (iii) by supplementing internal experience with external expertise. Our findings amount in three propositions through which we extend and enrich existing research on the availability and applicability of alliance experience.

Our results contribute to existing literature on alliances and organizational learning literature by refining the organizational process between possessing alliance experience and obtaining firm level capability. First, connecting to alliance literature, we show that the relationship between collaborative experience and alliance capability is less straightforward than generally presumed. We introduce 'protocapability' as a new concept to address a local alliance management capability and explain that only through institutionalizing local capabilities may translate into alliance capability at firm level. Correspondingly, our findings suggest to not regard the terms 'collaborative experience' and 'alliance portfolio' as firm level concepts, and to regard collaborative experience as a multi-facetted resource. We argue that firms generally do not manage a single alliance portfolio, but a number of distinct alliance portfolios, varying in terms of content or substance of relationships, as well as for example the type of partners. We thereby address concerns raised by other scholars about the complexity of levels of analysis in research on alliances (Schilke & Goerzen, 2010, p. 22), offering new insights regarding the coherence between firm's interorganizational relationships. Second, we contribute to existing literature on organizational learning by showing how firms and their managers try to improve the availability and applicability of their collaborative experience to use in future instances. As we explain in this chapter, several studies on alliances have used organizational learning to interpret their findings (e.g. Mody, 1993), but much fewer (e.g. Mayer & Argyres, 2004, in the context of contracts) have zoomed in on the 'how' of this learning. Whilst the consequences of activities preceding individual and organizational learning have been highlighted in existing literature, we explicate what firms and managers may actually do to further complement their experience and compensate for a possible lack of it.

We start with an overview of existing literature on alliance experience, its various dimensions and its relationship with alliance capability. Subsequently, we describe the method through which we gathered and analyzed our data. We continue by laying out the main results of our study, illustrated by quotes from 81 interviews with key informants from 28 organizations, capturing their essence in three propositions. In the discussion paragraph we reflect on our findings, placing them in the wider context of alliance management research and literature on organizational learning.

4.2. Relevant theory

Organizations learn from experience, which derives from the belief that the more organizations engage in certain activities, the better they become in managing these activities (Argote & Miron-Spektor, 2011; Harbison & Pekar, 1998; Sampson, 2005). The same seems to apply to learning from collaborative experience, since research proved alliance experience to be one of the most important factors contributing to alliance success (Anand & Khanna, 2000; Child & Yan, 2003; Deeds & Hill, 1996; Hoang & Rothaermel, 2005).

4.2.1. *Alliance experience*

Firms learn by repeatedly dealing with alliances[10], gaining alliance or collaborative experience (Simonin, 1997) and accumulating alliance management know-how (Kale & Singh, 2007). Possessing alliance management know-how results in higher alliance performance (Sampson, 2005). As an illustration, for their sample of 1450 young US firms, Arikan and McGahan (2010, p. 15) found that a one unit increase in alliance experience increases the odds of a subsequent alliance deal by nine times. Several other studies have subdivided the holistic concept of alliance experience to gain a better understanding of the construct and to provide a more nuanced stand towards the effects of collaborative experience. These are discussed in the next subparagraph.

4.2.2. *Alliance experience dimensions*

Previous studies have identified different dimensions of alliances to further explore the

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[10] Gulati et al. (2009, p. 1216) distinguish two types of learning: (a) learning from alliances (Hamel, 1991; Khanna, Gulati & Nohria 1998), and (b) learning how to manage alliances (Anand & Khanna, 2000; Kale & Singh, 2007). Like Gulati et al. (2009), we focus on the second type of learning.

relationship between alliance experience and various outcomes related to alliance performance. Anand & Khanna (2000), for instance, analyzed 1976 alliances, establishing different learning effects for R&D, marketing and production alliances. Their findings indicate that these effects tend to be stronger for R&D joint ventures and relationships entailing ambiguous activities (instead of clear-cut tasks) than other types of relationships. Likewise, Pangarkar (2009) investigated how much firms benefit from collaborative experience, focusing on differences amongst distinct phases of alliance development. He observed that firms' experience with alliance termination is much more conducive to performance than their experience with alliance formation. Alternatively, Hoang and Rothaermel (2010) indicate that firms' experience with exploitation alliances and their experience with exploration alliances may have fundamentally different consequences. In their study amongst 43 pharmaceutical firms they find that only the combination of internal exploration with external exploitation is beneficial for R&D project performance, whilst the opposite combination in fact reduces performance, suggesting that firms' internal exploration competencies lay the necessary foundations to leverage external experience. Barkema, Shenkar, Vermeulen and Bell (1997), in turn, focus on another dimension of alliance experience. They investigated how the locations of partner firms (in the same or in different countries) affect the duration of collaborative relationships. They did not find a positive relationship between prior experience and partnerships' longevity for international joint ventures, suggesting that international joint ventures both involve learning to cooperate as well as learning how to operate across national boundaries. Domestic joint ventures, however, allow firms to learn about partnering without having to simultaneously handle the vagaries of foreign affairs.

Thus, previous studies exemplify that different dimensions of alliances can be distinguished for which different relationships between collaborative experience and alliance outcomes have been found. These dimensions dictate a theoretical categorization of alliances resulting in different subsets of interorganizational relationships. Whether these theoretical categorizations also occur in practice, for example to improve the management of an alliance subset, and how organizations deal with experience gained on these dimensions does not become clear. Moreover, based on the diversity of alliances and alliance partners a misfit may arise, both within and across these subsets of alliances, concerning available experience from previous alliances and needed experience for future ones. Consequently, there is lack of clarity regarding the

relationship between alliance experience and alliance capability and how managers are able to apply their alliance management know-how to new alliances. In order to explore how firms deal with their collaborative experience, we zoom into the availability and applicability of previous lessons learned for future interorganizational relationships.

4.3.   Data collection and analysis

Our research aims to expose how firms enhance the availability and applicability of collaborative experience in order to improve the performance of future alliances and the development of alliance capability. To this end, we have opted for a qualitative research design, relying on interviews with key informants. By doing so, we attend to suggestions made in previous studies (e.g. Gulati, 1998; Hamel, 1991; Kale & Singh, 2007) that the concept of alliance experience should be clarified through in-depth interviews, because these are especially appropriate to shed light on the nature of experience accumulated in alliances (Gulati et al., 2009). Moreover, our research objective guided us to inquire those persons that are most knowledgeable about alliances: those who actually deal with and manage firms' strategic interorganizational relationships. Finally, interview data provides the richness needed to unravel the holistic concept of collaborative experience with a wide angle, avoiding the risk of omitting key elements beforehand, offering insight into complex social processes that quantitative data cannot easily reveal (Eisenhardt & Graebner, 2007). Our findings reveal the multi-facetted and fragmented nature of alliance experience, confirming the value associated with taking a qualitative approach. In this paragraph, we explain how we went from the initial research question through data collection and analysis to our results and conclusions in order to validate our conceptualizations (see Ariño and Ring, 2010, and chapter 4 of the book by Yin, 2003 on construct validity).

We interviewed 81 managers responsible for one or more strategic interorganizational relationship(s). Our interviewees all assumed the role of alliance manager, but most of them had a range of other responsibilities as well, for example as a member of the board of directors or head of a department (details are listed in Appendix G). We started our inquiry with alliance managers that were identified through websites and connections within our own informal network. Adopting the 'snowballing technique', we asked these managers to suggest other relevant interviewees within their firm. As part of a wider study we visited in total 30 different organizations throughout the Netherlands. Because we only had 3 interviews available

in 2 companies that together would have formed a fourth industry (electronics), these companies were left out of the data analysis in order to be able to detect industry specific results (that were not found eventually). As such, the interviews from 28 organizations in three different industries are included in this research: health care, fast moving consumer goods and consultancy. This resulted in considerable variety in our data sources in terms of a mix of profit and non-profit organizations, products and services firms, and national and internationally orientated organizations, which forms a good basis for analytical generalization. For confidentiality reasons, we guaranteed participating respondents and organizations anonymity, only presenting job titles, industry backgrounds and organization sizes here.

We conducted semi-structured interviews, using the protocol presented in Appendix H. All the interviews began with questions about the role of the interviewee and his or her responsibilities in the organization. We then proceeded with questions about the management of collaborative relationships, collaborative experience and learning. Based on the results of the first round of coding and content mapping (Lewis & Ritchie, 2003), minor modifications were made to the interview protocol, allowing us to go into greater depth on issues of interest for this study. For reliability purposes, we recorded all interviews and transcribed them ad verbatim (Eisenhardt & Bourgeois, 1988; Gibbert, Ruigrok, & Wicki, 2008), apart from three instances in which the interviewees did not give permission due to the strategic and sensitive nature of the information they were about to provide concerning their alliance partners. In these cases, extensive notes were taken.

The orientation to data collection and analysis was exploratory, aimed at generating insights into the means and processes through which alliance managers and their firms attempt to augment the availability and applicability of collaborative experience to new relationships. Data collection and analysis proceeded iteratively, granting us sufficient flexibility in data collection, allowing new themes to emerge and enabling us to examine these more deeply when relevant. Inductive qualitative techniques were used to analyze the data (Eisenhardt, 1989; Strauss & Corbin, 1990), informed by our focus on the use of alliance experience while remaining alert to emerging ideas. In order to ensure internal validity we relied on the identified causal relationship (Gibbert et al., 2008) between alliance experience and capability, throughout the collection and analysis of our data. Explanation building was key in our analysis and we started with multiple readings of the interview transcripts.

Subsequently all interviews were coded in Atlas.ti based on an initially brief code list that was supplemented with codes that emerged during the coding process. Codes such as 'alliance experience', 'alliance type' and 'external expertise' were used. After a first round of coding, we generated lists of quotes per code to discover patterns in our data before we supplemented our list with codes such as 'subsets of alliances', 'experience applicability' and 'alliance dimensions'. The new, more complete, list of codes was used for a second round of coding and again we generated output from Atlas.ti by printing lists of quotes per code. The patterns were discussed amongst the researchers and the accompanying quotes were placed back in the context of the interviewee to validate the outcomes. The results presented in this chapter are based on all transcripts, illustrated by a selected number of quotes.

4.4. Findings

Following Hamel (1991), we present our results in line with propositions emerging from the analysis of our qualitative data. The new concept of portfolio-specific alliance experience is explained first to usher in the propositions, all illustrated by quotes in the body text and in the appendices (following Pratt, 2008).

4.4.1. *Portfolio-specific alliance experience*

Our data indicates that some lessons learned are idiosyncratic to particular relationship portfolios and that the accompanying alliance management know-how consequently does not transcend easily beyond these portfolios. Corresponding with previous studies (e.g. Anand & Khanna, 2000; Pangarkar, 2009), we observe that collaborative experience can be dissected alongside various dimensions. We further note that organizations cluster distinct sets of idiosyncratic alliances and assign responsibilities to different managers. A strategy director explains:

> *We distinguish different sets of similar alliances and make such a set the responsibility of a suitable alliance manager. [...] Sometimes someone becomes responsible for an alliance because he has worked with the same partner before and sometimes, well, just because the particularities [of the relationships] are comparable. (X07)*

From our data we learn that firms categorize their alliances alongside distinct dimensions. In line with this, they make different alliance managers responsible for different types of relationships, because these involve particular partner selection criteria, management approaches, contracts, stakeholders, et cetera. The dimensions by

which organizations in our dataset divide their alliances can be summarized as: i) alliance form (e.g. the underlying type of contract), ii) alliance focus (e.g. R&D versus marketing), iii) alliance phase (e.g. startup phase versus management phase), and iv) strategic importance (e.g. a classification in bronze, silver and gold). Cross-sections of these dimensions are also possible, for example when within a cluster of R&D alliances the most strategic ones are dealt with separately. Quotes illustrating the dimensions found in our data can be found in Appendix I.

Variations in types of alliances and accompanying collaborative experience imply the unsuitability of some (parts of) experience to the management of future relationships, which calls us to introduce the concept of portfolio-specific alliance experience. We define portfolio-specific alliance experience as the lessons learned from managing alliances that are to such an extent specific and particular to a subset of alliances, belonging to one portfolio[11], that they cannot be applied to the management of other alliances[12].

4.4.2. *Homogeneous alliances*

As discussed, previous studies have provided us with different theoretical dimensions to distinguish alliances, and research has revealed variations in the effects of alliance experience. Our empirical data shows that organizations group alliances in subsets and thereby consider their alliances along different dimensions. The dimensions we derived from our data are: form, focus, phase and importance of the alliance (see Appendix I). We have also explained that not all alliance management know-how is applicable to future instances of collaboration. A director explains:

> *[...] and those contracts differ per relationship, of course. In one alliance you dot all the i's, even though a certain amount of trust always plays a role, and in another*

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[11] Previous studies have often used the term 'alliance portfolio' to refer to the complete set of alliances that a firm is involved in: a firm's set of direct ties (e.g. Das & Teng, 2000 and Ozcan & Eisenhardt 2009). Here, however, with portfolio we denote a subset of the firm's alliances with similar characteristics. Consequently, and because alliance portfolio research is mainly concerned with the coherence between all partners of a firm (e.g. Lavie, 2007), we do not address the wide body of literature concerning alliance portfolios here.

[12] The portfolio-specific alliance experience concept is closely related to, but goes further than, technology specific alliance experience, which Zollo et al. (2002) define as the accumulation of expertise from previous alliances completed in similar technical domains. Portfolio-specific alliance experience relates to all experience that is particular to a subset of alliances whereby the criteria (or: dimensions) that are used to decide whether an alliance belongs to a certain subset of relationships may differ per firm.

relationship you leave more room for interpretation. You really cannot use one standard contract for all your partnerships. (X32)

This quote illustrates there are differences that organizations need to take into account while managing different types of interorganizational relationships. Firms tend to do so by grouping alliances along different dimensions, thereby separating one subset of alliances from other subsets. Based on the observations that firms tend to group homogenous relationships to increase the benefits they derive from collaborative experience, we expect alliance management know-how to be more applicable to those relationships that are, along one or more dimensions, similar to previous ones. Alliance capability would increase if organizations manage more similar collaborative relationships and management of homogeneous alliances would be easier because applicable experience is available (more quotes are provided in Appendix J). We therefore suggest the following:

> *Proposition 1:* Alliance management know-how gained in previous relationships is more applicable to the management of new relationships and increases alliance capability, if past and future relationships exhibit stronger similarities in terms of form, focus, phase and importance. Organizations are more likely to initiate alliances that match with their experience on these dimensions in order to increase their alliance capability.

The tendency to form new alliances that are similar to previous relationships may be regarded as a tactic to find and apply collaborative experience, enhancing the applicability of (more) experience to future alliances. We refer to this tactic as a 'matching tactic'. In addition, forming new alliances that are similar to previous ones may also strengthen existing capability (i.e. by doing more of the same). Looking for complementary partners to find experience to fill a firm's own knowledge gaps may be another matching tactic.

4.4.3. *Complementary partners*

On account of obvious reasons such as strategic interests, firms may initiate relationships with completely different properties than their previous or current alliances. In such cases, organizations may benefit from collaborating with partners that do have experience along the respective dimensions to successfully manage the focal relationship. In this respect, one of our interviewees from the FMCG industry said the following:

If we have the choice, we rather select a partner that has an old hand at it. […] Recently we formed an alliance to develop a new product without exactly knowing what the result would be. I can assure you it is hard to come to decent agreements then. Our new partner had been involved in a similar collaboration before and came up with very nice suggestions to set up the partnership. (X68)

This quote and those provided in Appendix J illustrate that organizations prefer to work with partners possessing collaborative experience which firms themselves lack. This leads us to formulate our second proposition.

Proposition 2: When organizations exercise new collaborative initiatives that do not match their own collaborative experience regarding form, focus, phase and importance, they are more likely to select partners that possess alliance management know-how on the dimensions on which they exhibit deficiencies (i.e. they select partners with complementary experience), in order to increase their alliance capability.

Proposition 2 suggests that alliance managers try to match the experience of (potential) partners with their own alliance management know-how to improve their firm's ability to manage alliances (alliance capability). Looking for complementary partners may be the second 'matching tactic' used to find and apply collaborative experience. 'External expertise' is another.

4.4.4. *External expertise*

Besides the possibility of partnering with experienced others, organizations may also decide to hire external expertise to fill gaps in their own collaborative experience. A manager explains:

We hired an independent expert to manage this partnership, because we have learned that it works much better than doing it ourselves. I don't know why people from our organization cannot do it. […] The external expert is able to let go of the content and focus on the actual collaboration. […] Especially regarding the first stages of the relationship, we expected to run into trouble, for example by omitting certain crucial aspects. (X24)

Derived from the observation that firms consult experts outside of the boundaries of their own organization and that they tend to do so specifically to fill their own knowledge gap, we formulate our third proposition.

Proposition 3: When organizations exercise new collaborative initiatives that do not

match their own collaborative experience regarding form, focus, phase and importance, they are more likely to supplement their internal experience with particular external expertise on the dimensions on which they exhibit deficiencies, in order to increase their alliance capability.

Using external expertise in order to increase a firm's ability to manage its alliances may be the third 'matching tactic' that firms use to find and apply collaborative experience. More quotes can be found in Appendix J. Through the three tactics described above, increased alliance capability may be expected which will, in conformity with extant literature, result in higher alliance performance.

4.5.   Discussion

We have found that organizations use similarities amongst relationships, pertaining to several dimensions, such as form, focus, phase and importance of alliances, and that firms tend to form relationships similar to the ones they managed before. Further, the data shows that if firms do not possess required alliance management know-how, they may establish relationships with partners that are experienced or through hiring external expertise, specifically on those dimensions where firms themselves lack particular know-how. We refer to that search for applicable collaborative experience as 'matching tactics' aimed at enhancing the availability and applicability of collaborative experience, to achieve a better fit between previous lessons learned and the know-how required in new relationships. We define experience as being alliance portfolio specific experience if it is not directly applicable to alliances outside a, logically grouped, subset of alliances.

Besides commonalities that organizations use to improve their alliance management, it seems that dissimilarities also play a role. Organizations may be able to use specific alliance management know-how in future instances even if the situation in which the experience was gained is dissimilar. They could do so by adapting existing experience and by possibly adding their own insights unrelated to the management of previous relationships. In the findings paragraph we explained that firms tend to group similar alliances and that these subsets of alliances are subsequently managed by one person or within one department. Accordingly, the collaborative experience resulting from one subset of alliances is somehow shielded from and harder to apply to other subsets of alliances. It therefore depends on individual alliance managers whether or not they are able to adapt it to new situations. One of the interviewed managers

explained, for example, that he could use external information (through the media) about the negative consequences of a merger in the management of his partnerships. He was able to reshape and use the experience even though it concerned a dissimilar interorganizational relationship, with different focus and importance. Such activities, that involve reshaping and piecing together distinct experiences or specific elements thereof to increase their applicability to future relationships, are different from the matching tactics presented earlier. Collaborative experience, that may seem inapplicable to new relationships in first instance, may turn out to be relevant after due consideration and adaptation to a new situation. Whereas the matching tactics focus on similarities between relationships, these 'adapting tactics' are in fact primarily concerned with how organizations learn from diverse and in many ways dissimilar collaborative experiences so as to improve the management of future relationships. Alliance managers could combine their own experiences with seemingly unrelated insights shared by the media and in discussions with colleagues in other departments or firms, enriching their ideas on how to manage future relationships.

Even though no prior research has extracted the activities of adapting and supplementing existing experience regarding alliance management, such activities have been described in other settings. In the context of product design and learning from developments in other industries, Hargadon & Sutton (1997, p. 738) explain that designers exploit their access to a broad range of technological solutions 'by making analogies between current design problems and the past solutions they have seen'. This process of mapping from a source context of prior experience to the current context is what constitutes analogical reasoning (Gick & Holyoak, 1980). Facing a new challenge, such as a different type of alliance or partner, managers can think back to some similar situation they have faced or heard about, and apply the lessons from that previous experience (Gavetti, Levinthal, & Rivkin, 2005; Muehlfeld, Rao Sahib, & Van Witteloostuijn, 2012). Similarly, Csaszar and Siggelkow (2010) state that copying or transferring ideas and practices from other organizations is a mechanism widely used by firms to improve their performance, since imitation is a key means of organizational learning (Argote, 1999).

If alliance managers want to use experiences from others and even from outside the firm, a prerequisite for them is to be aware of and be knowledgeable about such alliance activity outside their daily environment. Argote and Miron-Spektor (2011) explain that the most important characteristic of experience is whether it is gained

directly in the focal organizational unit or indirectly from other units. Skilled alliance managers need to be lateral thinkers, using experience from their direct and indirect environment. It is relevant to mention that complementary partners (see 4.4.3) may form a risk concerning their superior alliance management knowledge. Such partners have the opportunity, and opportunistic motives, to exploit the alliance.

Where other studies mainly focus on similarities and overlap in experience (e.g. Gulati et al., 2009; Haleblian & Finkelstein, 1999; Luo & Deng, 2009), here we have hinted at other activities through which varied and dissimilar experiences are used (adapted). In addition to our findings, these activities may offer an important explanation for how managers actually learn and get better at dealing with alliances, even if they have not found themselves in a similar situation before. Our data does not offer enough insight into these adapting tactics as yet, but future research could use our suggestions to scrutinize them. More suggestions for future research can be found after the next two subparagraphs in which we explain how our findings contribute to both literature on alliance management and on organizational learning.

4.5.1. *Alliance management*

Using and applying alliance experience, through the three 'matching tactics' described above, strengthens alliance management know-how, resulting in a capability to deal with future alliances. Because this capability is still a local resource, pertaining to one or more individuals or an organizational unit, we now introduce the concept of *protocapability*. Alliance protocapability is the ability of one or more individuals in an organization to manage alliances. Since alliance protocapabilities of a firm are limited to the ability of departments or (groups of) people to manage (a portfolio of) alliances, they do not reflect the ability of a firm as a whole. Schreiner, Kale and Corsten (2009) stress that success at the organizational level is achieved by dynamically adapting and fine-tuning the relationship process in favorable ways and that these activities are largely carried out by individuals involved in the day-to-day management of alliances. Our findings fit in their 'lower-order capabilities perspective' (Schreiner et al., 2009, pp. 1412-1413) relevant in effective alliance management, that concerns the operational practices of alliance managers. In order to create a firm wide alliance capability (as defined by, amongst others, Schilke & Goerzen, 2010; and Schreiner et al., 2009) other action is needed.

The ability of an organizational unit to deal with alliances does not automatically mean the organization as a whole has that capability, especially in those situations where multiple departments manage a firm's alliances. The local capability does have potential to become a firm wide capability, but in order to translate alliance protocapability into this organization wide alliance capability, *institutionalization* is needed. Kale and Singh (2009, p. 54) argue that their alliance learning process (Kale & Singh, 2007) is 'directed toward building and institutionalizing a firm's alliance capability through articulating, codifying, sharing, and internalizing alliance management know-how'. We have observed that, if managers do share and internalize (articulated) alliance experience and (codified) know-how they may only do so amongst a limited group of people or within one organizational unit. By arguing that collaborative experience may only result in a protocapability to deal with future alliances (i.e. it remains localized), we refine the alliance learning process. We reason that only the institutionalization of protocapabilities may result in firm wide alliance capability. Institutionalizing can occur through, for instance, a dedicated alliance function where collaborative experience is shared and leveraged (Dyer et al., 2001; Rothaermel & Deeds, 2006).

Not all organizations that deploy alliances as an important part of their strategy have such a function. From the 28 organizations in our sample, 7 have an alliance function, overseeing all alliance activity (2 of which have set up an alliance department). 9 of the 21 other firms also coordinate their different alliance activities by, for instance, regular meetings with the managers responsible. These observations illustrate the importance of recognizing localized protocapability and nuance previous studies on the positive relationship between *a firm's* collaborative experience, its alliance capability and subsequent performance.

The fact that many firms from our sample do not share alliance experience and management know-how across organizational units and alliance portfolios may for a large part be explained by the dissimilarities between the alliances managed within those units or portfolios. The know-how that is created may as such still be a resource held by individuals or a relatively small group of individuals (protocapability) rather than a firm wide asset, showing that the learning process between possessing collaborative experience and know-how and subsequently developing alliance capability is less straightforward than generally presumed.

4.5.2. *Organizational learning*

It is important to stress that we, unlike many others (e.g. Alvarez & Barney, 2001; Barringer & Harrison, 2000; Cohen & Levinthal, 1990; Liu et al., 2010), do not look at learning *from* alliances; we focus on learning about the management of alliances. Inkpen and Tsang (2007) distinguish four learning types in the alliance context: learning about alliance management (Kale & Singh, 2007), learning about an alliance partner (Gulati et al., 2009), learning with an alliance partner (Mody, 1993) and learning from an alliance partner (Letterie, Hagedoorn, van Kranenburg, & Palm, 2008; Mowery et al., 1996). While our study focuses on the first type of learning (about alliance management), our data has shown that organizations apply the fourth type of learning (learning from a partner) to enhance the first. This connects to the notion that learning from your own experience is not the only type of learning that occurs in individuals and organizations. Miner, Bassoff and Moorman (2001) explain that research elucidates, besides learning from experience, many other types of learning processes, such as learning from others, trial-and-error learning and knowledge sharing. Our data shows that these types of learning all occur when individuals and organizations try to improve their alliance management. By initiating similar alliances firms add to experiential learning; they will be able to repeat what they have done before. By selecting complementary partners and hiring external expertise firms supplement their own experience and this may result in a vicarious learning strategy (Baum, Li, & Usher, 2000; Levinthal & March, 1993) where they learn from observing others. By drawing contextualized inferences through adapting experience both vicarious and inferential learning takes place (Lumineau, Frechet, & Puthod, 2011; Miner & Mezias, 1996). Our research adds to the learning activities confirmed in existing literature by illustrating *how* the different types of learning may take place. Our data has shown that firms and managers use their own experience, but may also take on experience from independent experts and partners.

4.5.3. *Future research and limitations*

Questions remain as to which alliance management know-how managers exactly need to perform better. It would be interesting to find out which parts of existing know-how are useful in future instances and which parts are volatile and may be equally well brushed aside. It might not be easy to get to the bottom of this, because alliance managers may not look actively for such input, but instead work with the know-how that happens to be available based on their own experience and expertise or what has

come to them via others. In literature this is referred to as 'bricolage': making do with what is at hand (Levi-Strauss, 1967; Miner et al., 2001). Another complicating factor for future research, and this issue has also been raised by Schilke and Goerzen (2010), is that firms have different loci of where alliance management experience lies. Consequently, as much as individual alliance managers try to increase the availability and applicability of alliance experience, this may not result in higher alliance performance at firm level. Building on this issue, we have supplemented theory on capability development by introducing the local protocapability that needs to be institutionalized to be translated into a firm's alliance capability. Our research shows that alliance experience resides in different subsets or portfolios of alliances that do not necessarily interact, hampering the sharing and internalization (Kale & Singh, 2007) of alliance management know-how outside these portfolios. If interaction does take place it is, of course, up to the alliance managers, and their abilities, to make use of the available experience from other situations. From literature on learning from managing acquisitions we know that managerial activities need to be customized to the specific situation at hand (Barkema & Schijven, 2008). It is difficult to disentangle "causal relationships between the decisions or actions taken and the performance outcomes obtained" (Zollo & Winter, 2002, p. 348), making it hard for future researchers to identify the exact effects of collaborative experience on the development of capability and the enhancement of alliance performance.

Notwithstanding the aforementioned complexities in trying to delve deeper into *how* alliance managers and their organizations develop greater alliance capability and increase alliance performance, our empirical findings serve as a first step towards an enhanced understanding of the means by which they capitalize on collaborative experience. Our findings indicate that research should not just focus on collaborative experience or alliance capability, but also on the activities through which collaborative experience is being converted into alliance capability and alliance performance. Accordingly, future researchers could explore the refined processes from collaborative experience to protocapability, partly through using the three tactics described, and from protocapability to alliance capability, through institutionalization. 'Organizational learning is not simply the sum of each member's learning' (Fiol & Lyles, 1985, p. 804) and it would be interesting to see which measures firms may take to strengthen learning processes. We did not explicitly ask our interviewees to reflect on or distinguish between experience with successful and unsuccessful alliances or the way

they could use know-how of possible different value in future instances. A next step would be to measure under which conditions a protocapability will result in an institutionalized alliance capability. We would like to emphasize here that a dedicated alliance function does not always create a solution. Oftentimes, managers that are involved in the execution of alliance management have other roles and responsibilities, which means they need to make an extra effort to articulate, codify and subsequently share their experience and know-how with the rest of the organization. These managers often do not work in an alliance department and their individual protocapability may be less valuable to the organization as a whole.

Like any study intended to delve deeper into processes that have only just begun to be unraveled, limitations apply. First, as already mentioned, we have not connected the possible positive outcomes of more capability and higher performance to the processes that take place between possessing collaborative experience, developing alliance protocapability and building firm wide alliance capability. Measuring the extent to which a firm possesses alliance capability would be more appropriate in a quantitative study and may reveal which processes are more effective (i.e. result in higher alliance performance). A second limitation of the study is that we have not compared the way alliance managers use their previous lessons learned with the different situations of their firms, such as structure (centralized alliance activities, informal sharing of know-how, etc.) and maturity regarding their alliance experience. This comparison may offer interesting insights in organizational configurations that contribute to greater alliance performance. In organizations where informal sharing of alliance management know-how is facilitated, for example, alliance managers may make more use of their colleagues' experience. A third limitation is that our observations are only indicative, not conclusive, and need to be tested more formally. And because our analysis rests on interviews in only three industries, more extensive studies in other settings are required to test the generalizability of our arguments. Nonetheless, we think that the outcomes of our exploratory study, by which we refine the availability and applicability of collaborative experience, provide a useful theoretical contribution. This research can be the starting point for future studies that explore the underlying processes and roles of individual alliance managers in improving the ability of firms to manage future alliances.

Chapter 5

(Dis)organized collaboration:
Making different alliance management
configurations work

Existing literature about intraorganizational arrangements for effective alliance management has focused on the absence or presence of a dedicated alliance function. This central point to oversee and coordinate interorganizational collaborative initiatives is claimed to enhance firms' alliance capability through its potential to capture and disseminate alliance management experience. Little research has been undertaken, however, about how firms deploy their alliance function and how firms without such a function learn from alliance management. Based on the analysis of six organizations, exploring and refining the dimensions of different alliance management configurations, this chapter sheds new light on previous studies that are founded on the importance and necessity of creating a dedicated alliance function. Conditions are presented under which different alliance management configurations work. The chapter contributes to extant literature by arguing that i) firms have other options than setting up a dedicated alliance function when trying to build alliance capability, ii) a dedicated alliance function does not have to result in sustainable alliance management resources, and iii) firms with similar accumulated experience can develop dissimilar alliance capabilities.

5.1. Introduction

Alliances are interorganizational arrangements between at least two independent organizations that pool their resources to create an outcome that none of the organizations would easily attain alone (Schreiner et al., 2009) and are no longer an unusual occurrence in organizations but have become a daily part of business (Bamford & Ernst, 2002; Schilke & Goerzen, 2010). Firms enjoy significant competitive advantage over their rivals if they achieve greater overall alliance success (Dyer & Singh, 1998; Gulati, 1999). In order to generate the maximum value resulting from partnerships, firms need to actively manage their alliances and further increase their ability to do so, that is develop alliance capability. Schilke and Goerzen (2010, p. 23) conclude their article on alliance management capability by stating that alliance managers should be 'provided with support through specialized alliance structures, such as dedicated alliance personnel or alliance departments' and that knowledge on alliance management needs to be codified in databases and manuals. Their argument is supported by earlier work on the positive effects of capturing alliance experience, developing alliance resources and building alliance capability for future alliance success (Heimeriks & Duysters, 2007; Rothaermel & Deeds, 2006; Sampson, 2005).

Alliance management literature mainly discusses the positive contribution of a dedicated alliance function: a position (person) or unit (group of people or department) in the firm where all alliance-related activity is overseen and coordinated (Kale et al., 2002; Kale & Singh, 2007). Studies investigating the role of the alliance function also include firms without dedicated alliance functions in their samples and show obliquely that such firms, albeit to a lesser extent, are able to manage their alliances successfully. Therefore, we know that different alliance management configurations exist, but which possibilities are there concerning intraorganizational arrangements for alliance management? And under which conditions do configurations work? So far, extant literature has not provided answers to these questions that are addressed in the current chapter. Scholars have merely assumed that the ultimate goal for each allying firm is to create a focal point in the organization where alliance management experience and know-how is captured and translated into tangible alliance resources. In this chapter, lacking a theoretical foundation of alliance management configurations, inductive comparative case studies are used to distinguish different types of alliance management configurations and to examine under which conditions the chosen configuration helps the firm to create value through alliances.

The rich contextual details of the available qualitative data allow me to look beyond just the possible presence of a dedicated alliance function, contributing to existing alliance literature in three areas. First, by deriving conditions under which the various alliance management structures identified from the data actually work, I clarify that having a dedicated alliance function is not the ultimate and most suitable solution for every firm that is trying to enhance its alliance success. The data illustrates that variation exists in firms' alliance management configurations. This encourages both future researchers and practitioners to consider alternatives to the dedicated alliance function when investigating effects of alliance experience on alliance performance or deciding on suitable alliance management structures. Alliance performance may be dependent on the fit between firms' interorganizational activities and their alliance management configuration. Second, I explain that the presence of a dedicated alliance function may overshoot capturing, interpreting and moreover codifying alliance management know-how into usable tools, templates and metrics (Sarkar et al., 2009). When alliance managers work in close proximity to each other, extensive documentation of know-how and translation into usable resources appears laborious to them, since know-how is more easily shared in informal gatherings. As a result, the shared organizational repository of alliance management knowledge (Zollo et al., 2002; Zollo & Winter, 2002) in firms with a dedicated alliance function may consist of a group of people working closely together but in no way guarantees knowledge retention when those experts leave. This argument nuances earlier work where the presence of a dedicated alliance function is often combined under the same heading with codified alliance management know-how. Third, I clarify that, as already hinted at by Sarkar, Aulakh and Madhok (2009) in the context of alliance portfolios, "firms with similar accumulated experience can develop nonsimilar capabilities" (p. 584). My data shows that depending on the alliance management configuration of the firm, different types of alliance capability may be built. If a firm does not have a dedicated alliance function the capability will be more local, confined within departments or groups of managers. Further, firms with an alliance function may develop different capability depending on the extent to which alliance management know-how is put into written documents and subsequently codified in usable alliance resources.

5.2. Method

The research questions guided me to conduct an exploratory case study with a theory elaboration approach (Graebner, 2009) in order to be able to build on existing findings and to generate new insights at the same time. When doing case studies, theoretical sampling is appropriate to explore new areas by choosing those avenues of sampling that result in the greatest theoretical return (Eisenhardt, 1989; Eisenhardt & Graebner, 2007; Glaser & Strauss, 1967; Strauss & Corbin, 1998). The goal of theoretical sampling is to choose cases which are likely to replicate or extend the emergent theory (Eisenhardt, 1989) and to maximize opportunities to compare situations to determine how a category varies in terms of its properties and dimensions (Eisenhardt & Graebner, 2007; Strauss & Corbin, 1998). More information about the six cases, that were selected based on the dimensions described below, can be found in Appendix K.

5.2.1. *Data*

The arguments presented in this chapter grew out of a research endeavor exploring learning and capability development in organizations with different alliance management structures. From theory on organizational structure, I used two dimensions, centralized versus decentralized decision making and formal versus informal organization, that provided guidance to distinguish different arrangements regarding alliance management in firms. In a centralized structure, decisions with whom to ally and how to collaborate are concentrated, for example at the level of the board of directors or in a dedicated alliance department (Fredrickson, 1986; Pugh, Hickson, Hinings, & Turner, 1969). In a decentralized setting, decisions with whom to ally and how to collaborate are diffused throughout the firm (decisions are taken by individual alliance managers or in several departments). Regarding the second dimension, formal organization entails clear rules, regulations, responsibilities, accountabilities, job descriptions, tasks and reporting lines in the alliance organization (Aiken & Hage, 1966; Gulati & Puranam, 2009; Scott & Davis, 2006). Informal organization refers to the emergent interactions between individuals (in this case alliance managers). There is a close link between formal and informal organization because 'formal organization affects informal organization via its effects on who interacts with whom' (Gulati & Puranam, 2009, p. 427).

Based on these dimensions, I was able to formulate questions to be included in the interview protocol to scrutinize alliance management activities in different firms. It

was challenging to purposefully choose those companies that would maximize variation in the sample, because only after one or two interviews it would become clear what the actual situation (here: alliance management configuration) in these firms was. After the interviews were conducted, the dimensions on which to classify the different alliance management configurations needed refinement, as will be further explained in the research findings. I found that four or five interviews per firm resulted in data saturation (Eisenhardt, 1989; Glaser & Strauss, 1967), because no new relevant data seemed to emerge. Details of the interviewees can be found in Appendix L. The data was collected and analyzed with the help of three junior researchers as the use of more investigators builds confidence in the results and enhances the likelihood of surprising findings (Eisenhardt, 1989). As explained above, the semi-structured interview protocol was based on concepts derived from existing literature (Strauss & Corbin, 1998, p. 205), but did not include terms such as 'centralization' or 'formalization'. By using a semi structured format (see Appendix M for the interview protocol), interviewees could elaborate on emerging issues and to answer in terms of what was important to them. The result is a dataset of 26 fully transcribed interviews with alliance managers from six different firms. These managers have the responsibility for and/or manage one or more strategic alliances of their organization. When applicable, respondents were asked to show documents to illustrate answers about their firm using codified resources for alliance management purposes. These internal archival documents were used to cross-check the information gathered during the interviews and included checklists, standard contracts and reports, evaluation formats and alliance plans.

5.2.2. *Analysis*

Aiming to understand the different possible alliance management configurations in organizations, we first focused on disentangling the structural characteristics of the six firms concerning the management of their alliances. In order to do so, the author and a junior researcher independently wrote case summaries based on the transcripts and available supporting documents per firm (Eisenhardt, 1989), highlighting firm characteristics in bullet points, illustrated by interviewees' quotes. The summaries served two purposes: within-case and cross-case analyses (Davis & Eisenhardt, 2011). Even though different interviewees had different ways to describe the firm's situation, within-case analyses enabled generalization of each firm's characteristics. After concluding the within-case analysis, cross-case analysis progressed. The case

summaries were compared and discussed, serving as the basis for further analysis, going back and forth between patterns emerging, the data and existing theory. Further into the analysis, while the level of abstraction increased, I kept going back to the interview transcripts to ensure new ideas would fit the rich and detailed data (Davis & Eisenhardt, 2011; Glaser & Strauss, 1967). The limit of this research method is that it may inhibit generalizability (Eisenhardt, 1989). The value of the research design, however, lies in the opportunity to provide new insights through rich detail (Larson, 1992) in order to explore new avenues for further research and testing. I now turn to the findings that emerged from the data.

5.3. Findings

First, I describe the theoretical ambiguity of the term 'alliance function' and subsequently document which alliance management configurations can be distinguished from the data. I then explain which dimensions accompany these configurations and under which conditions they may work for firms. Finally I show that the alliance capability of a firm differs with various alliance management configurations.

5.3.1. *Alliance function*

In prior studies, the alliance function has been defined as a focal point for learning and leveraging both explicit and tacit lessons from prior and ongoing alliances (Kale et al., 2002). This could be in the form of a person, a department or any other form of a competency center (Sarkar et al., 2009). Such a function is instituted 'with the intent of strategically coordinating alliance activity and capturing/disseminating alliance-related knowledge' (Kale et al., 2002, p. 748). Simplistically, alliance function has been measured (as a dichotomous variable) by asking respondents whether a firm has a dedicated program for overseeing the firm's alliances or not (Kale et al., 2002; Sarkar et al., 2009). Even though this definition seems to go hand in hand with articulation and codification of alliance management experience, it does not say anything about the activities of the function. It only speaks about overseeing alliances by at least one person who is informed about all strategic external relationships of the organization. The overarching 'alliance program' could just as well be assigned to the board of directors, overseeing all alliance activities in the firm but in no form involved in day-to-day collaborative activities. To understand how organizations manage their alliances

and how they learn from experience, my data shows that the distinction between having a dedicated alliance function or not needs more refinement.

5.3.2. *Alliance management configurations*

Based on the analysis of six organizations, I found that more nuance can be added when describing the organization of alliance activities. A firm may have one person or more people assigned as alliance manager(s), possibly overseeing all alliance activities of the firm, without having a separate unit or department where these managers work. These managers (supplier alliance manager, marketing alliance manager etc.) may work in their own department (e.g. R&D or procurement department) in the position of alliance manager. It is also possible that managers do not assume the position but only the role of alliance manager (as one of their tasks next to their other responsibilities), for example if the head of the R&D department is responsible for all R&D alliances. Following Kale et al. (2002), I view an alliance function as a unit (which could be a team of people, a person or a department) assigned with the responsibility to not only coordinate all alliance activities but also to capture and facilitate sharing of alliance management knowledge, that is to act as support for alliance-related activities across the firm (Sarkar et al., 2009). Practically, this means that a firm with a dedicated alliance function has at least one person (e.g. an alliance director) who oversees all interorganizational relationships. It is worth mentioning that such a person does not have to be involved in managing any of the operating alliances (Bamford & Ernst, 2003) and that this definition of the alliance function does not say anything about the way alliance management knowledge is captured or documented and shared between managers. By the same token, an alliance function does not necessarily imply the presence an alliance department.

I have observed the following three variations of intraorganizational arrangements regarding alliance management in the sample: i) The firm has an alliance function in the form of an alliance department where alliance managers find their work base. ii) The firm has an alliance function (a person or small team) without having a specialized alliance department; the alliance managers work in their own departments. iii) The firm does not have an alliance function and people in separate departments manage the firm's alliances without concentrated support for the alliance-related activities they undertake. Further, there are three possibilities for variations ii and iii regarding alliance managers. Firms can either employ (full time) alliance managers,

have managers take on the responsibility to manage alliances as one of their roles, or a mix of those two (where some managers have positions as alliance managers and others fulfill a role as part of their other responsibilities). After having attempted to categorize the practical variations explained above, I continued my analysis by distinguishing which differences between the variations matter when studying the how and why of learning from alliance management.

### 5.3.3. *Configuration dimensions*

First, even though (as explained above) more variations exist, the management situation of variations ii and iii seem quite similar; alliance managers operate in their own departments instead of in an overall alliance department. A clear contrast, between firms that have an alliance function and firms that do not, remains. Firms with an alliance function have made a design choice to enhance their alliance performance by overseeing all alliance activities at one focal point. Moreover, in my definition of an alliance function, they want to leverage their alliance management knowledge[13] in one place (variations i and ii) whilst other firms are unable or choose not to do so (variation iii). Second, having spoken to the alliance managers functioning in firms of variations ii and iii, I observe that a clearer distinction seems to lie in whether or not these managers capture their knowledge in written documents to subsequently share these within the firm. Even if all alliance managers work in one department, this does not necessarily imply that their knowledge is articulated in writing and, similarly, shared. Concurrently, alliance managers that work across the organization in their own department can be enforced to put their alliance management knowledge in writing. Hence, I can classify all possible alliance situations along the two orthogonal dimensions described above: having an alliance function versus not having one and firms where written articulation[14] of knowledge takes place versus firms where this is not the case. These more suitable, empirically derived, dimensions replace the theoretical ones that I used

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[13] By repeatedly dealing with alliances, managers gain collaborative experience. The individual capability ensuing from this experience, may be regarded as individual know-how concerning alliance management. Throughout this paper I use the term alliance management knowledge to refer to alliance management experience and ensuing alliance management know-how of these individuals.

[14] To avoid confusion I do not use the term 'codification' here. In other studies (e.g. Kale & Singh, 2007) codification refers to the translation of articulated knowledge into alliance resources such as manuals and checklists. Articulation, that comes before codification, can be verbal or written.

to design the interview protocol. The sample firms are plotted In Figure 2, illustrating the dimensions of alliance management configuration.

Figure 2: Alliance management configurations
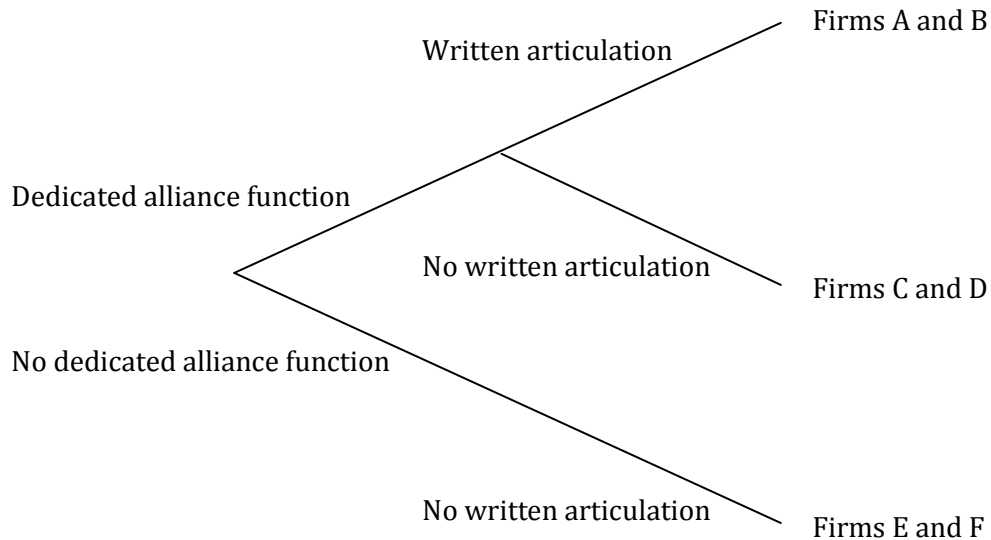
I have not observed the situation where no alliance function is present and alliance management knowledge is put into written documents. Even though that situation seems unlikely (managers would not be incentivized to put their knowledge to paper if they know it will not be used), I do not argue that such a configuration is impossible. Assuming that a configuration works for a firm, as a next step, I have analyzed under which conditions the different configurations work when firms try to develop alliance capability. That is, I analyzed under which conditions they benefit from previous lessons learned and increase their ability to manage current and future alliances.

5.3.4. *Conditions*

From the data three conditions emerged that characterize or enable the fit between the firms and their alliance management configuration. Below, these conditions are explained. A more comprehensive narrative, complemented by illustrative quotes, can be found in Appendix N.

Proximity matters

Firms with one central point where all alliance activity is overseen and coordinated do not automatically rely on written articulation of alliance management knowledge. In two cases (firms C and D) articulation only occurs in spoken words and knowledge is shared verbally between alliance managers. In such cases, alliance managers have to work closely together if they want to learn from each other's previous lessons learned. Consequently, firms C and D have set up alliance departments where these managers work. This implies that proximity of one alliance manager to the other matters, facilitating person-to-person knowledge exchange, since the amount of interaction between people in organizations is influenced by distance (Okhuysen & Bechky, 2009). Like Sarkar et al. (2009) put it, formalization of the alliance function may reduce the value of free-flowing informal knowledge flows. Even though the presence of a dedicated alliance function may imply otherwise, in cases C and D (where alliance managers work at the same department) there is plenty of opportunity for informal knowledge flows. The proximity of these alliance managers is key in making this work. In a situation where alliance managers do not work in the same department, interpersonal knowledge sharing would have to be facilitated by the alliance function, reducing the number of contact moments drastically.

Complexity matters

Firms A and B also have an alliance function, but whilst in firm A alliance managers work closely together in an alliance department (which simplifies face-to-face meetings), the alliance managers of firm B are employed in different departments across the organization. Yet, top management of organization B enforces written articulation of alliance management knowledge. The interviewees explained that capturing knowledge about the large number of partners, working ways and best practices in written form helps them to keep a clear overview of the complex matters they are dealing with. Even though the alliance management activities are spread throughout the firm, based on the similarity of various alliances it is believed that documentation of knowledge improves current and future working ways. Similar to the situation in firm B, the interviewees from firm A clarified that because of the challenges associated with the high number of partners and the complexity that comes with the wide scope of their alliances, they are facilitated and compelled to document their knowledge. In accordance with Bamford and Ernst (2003) who argue that an alliance

department should be set up when the portfolio of a firm contains more than 30 alliances representing 20-plus percent or more of corporate value, the above implies that complexity regarding number of partners and/or alliance content fits enforcement of written articulation and central coordination of alliance activity.

Dissimilarity matters

Further, the data shows that firms that do have several alliances but have not institutionalized an alliance function in the form of a person or department overseeing and coordinating alliance activity (firms E and F from my sample) do not articulate alliance management knowledge in written documents. Interviewees from these firms clearly indicate that they see less need to share their experience and know-how because of the dissimilarity of the alliances they manage compared to other alliances in the organization. Responsibilities and activities in firms E and F regarding alliance management activities are delegated to separate business units. Verbal knowledge sharing may happen, but only occurs ad hoc when opportunities arise because alliance managers meet (informally). The conditions described above are summarized in Table 10 and supporting quotes can be found in Appendix N.

Not only does the data show different configurations and conditions that characterize or enable the fit between the firms and their alliance management configuration, I also see differences in the type of alliance capability that is built within the different firms.

5.3.5. *Alliance capability*

As a result of the intraorganizational arrangements concerning alliance management, firms seem to develop different types of alliance capability. Firms without dedicated alliance function can improve their ability to manage alliances just as well as firms with such a function. However, because the alliance management knowledge is not accumulated and shared at one central point, the capability remains local. With local I refer to a capability that resides within a separate business unit as opposed to a central unit where the whole firm can benefit from it. Furthermore, the interviewees of all firms emphasized that knowledge they get from colleagues through face-to-face contact is considered much more valuable than learning from documents, whilst interviewees from firms A and B claimed that the former cannot go without the latter.

Table 10: Conditions under which firms may build alliance capability

Alliance management configuration	*Written articulation of alliance management knowledge*	*No written articulation of alliance management knowledge[15]*
Firm has an alliance function	Complexity matters: Overseeing and coordinating all alliance activities at one central point and enforcing articulation makes more sense when alliances are complex and/or firms have to deal with a high number of partners.	Proximity matters: Learning from experience, when no written articulation occurs, takes place through (ad hoc) verbal knowledge exchange which requires proximity of alliance managers. Either in the same department or in facilitated meetings. Firm level capability
Firm does not have an alliance function		Dissimilarity matters: Sharing of alliance management know-how has relatively little value if alliances are very dissimilar. Overseeing and coordinating all alliance activities and enforcing written articulation may have little effect on alliance capability at the organizational level. Local capability

Tacit knowledge about ways the partner's representatives work or about sensitive issues that cannot be captured in documents is considered of crucial importance to improving future alliance management. In what follows I frame the outcomes of the data in the wider context of alliance management and discuss the impact of the findings on previous and future research.

5.4. Discussion

As explained above, alliance management configurations can be categorized by distinguishing between the presence or absence of an alliance function and whether or not written articulation of alliance management knowledge takes place. Further, whether these configurations are suitable for a firm, depends on the complexity of their alliances, the proximity of their alliance managers or the dissimilarity between the

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[15] Although alliance managers may not document any, or very limited, alliance management knowledge for the sake of future knowledge sharing with colleagues, they may of course produce alliance documents for individual use.

individual alliances. The findings presented in this chapter lead up to three main contributions to existing literature.

The first contribution relates to the variety of possible alliance management configurations, that has not yet been addressed in existing literature. Bamford and Ernst (2003, p. 321) state that 'firms with the best internal alliance infrastructures are more likely to be standing among the winners' and part of this infrastructure is the alliance management configuration. Setting up a dedicated alliance function is not the only option that firms have when it comes to designing their internal alliance structure. In fact, firms may choose dispersed decentralized responsibility for alliance management without a central point to coordinate alliances and capture alliance experience. Previous studies (e.g. Kale et al., 2001; Kale et al., 2002; Sarkar et al., 2009; Schilke & Goerzen, 2010) have emphasized the importance and necessity of an alliance function when addressing the issue of having valuable alliance capability, whilst in practice some firms follow highly structured processes and others relatively informal methods, and both approaches seem to work (Bamford et al., 2003). Consequently, both future researchers and practitioners are encouraged to consider alternatives to setting up a dedicated alliance function when investigating effects of alliance experience and deciding on the appropriate alliance management structure respectively. Whether or not managers need to document their alliance management knowledge is another design choice that needs to be made. Similar to how articulation may help participants in interorganizational relationships to cope with problems of misunderstanding (Vlaar, Van den Bosch, & Volberda, 2006) at the dyadic level (between organizations), it can also be beneficial for alliance managers at unit or firm level (within the organization). What for one firm may the optimal fit between their alliance activities and the chosen configuration, resulting in higher alliance performance, may be completely unsuitable for the other firm.

Second, my research shows that having a central point to oversee all alliance activity may work, but this approach does not necessarily result in written articulation and codification of alliance management knowledge. Agreeing that 'the alliance management structure needs to be tailored for each company' (Harbison & Pekar, 1998, p. 134) whilst implying that all those structures should result in a central depository of knowledge with extensive codification to create a center of alliance excellence (Bamford & Ernst, 2003; Harbison & Pekar, 1998) does not seem logical. My data shows that firms with a dedicated alliance function may act as a central point of alliance management

knowledge without written articulation and extensive codification. In two of the six cases in this research, firms do have a focal point where all alliances are overseen and coordinated, but limited (or no) knowledge is stored in documents or databases. Having a dedicated alliance function, often in the form of a separate alliance department, apparently does not ensure extensive written articulation and codification of alliance management knowledge. This questions the sustainability of the alliance capability that is built, which in such cases mainly exists of the personal expertise of a group of people. Companies such as Corning have newer alliance managers work with more experienced ones in a mentoring program, 'helping to ensure that values and corporate behaviors are passed on from generation to generation' (Bamford et al., 2003, p. 193). If changes in management occur, the new alliance managers are given enough time to get used to their responsibilities and to meet all people involved in the alliance. This means that the answer to the question posed above lies in the ability of the firm to share and subsequently retain knowledge amongst a group of people of which the composition may change. Translation of alliance management knowledge into usable alliance resources (in the literature referred to as codification (Kale & Singh, 2007)) may be more complicated if no documentation is available. Reasons for enforcing written articulation and codification comes from the need to reduce the ambiguity surrounding complex activities by facilitating the identification of the cause and effect relationships determining their performance outcomes (Heimeriks, Schijven, & Gates, 2012; Zollo et al., 2002), but articulation and codification should be functional and feasible at all times. The sustainability of alliance capability of firms without an alliance function and firms with an alliance function but without emphasis on written articulation can be called into question.

A third contribution concerns the type of capability ensuing from the chosen alliance management configuration. Organizational capabilities are defined as 'invisible assets' and are said to develop cumulatively as organizations learn to perform routines over time (Argyres, 1996; Nelson & Winter, 1982). Argyres (1996) explains that because some of this learning is costly to transfer to other organizations, it tends to be firm specific. Alliance capability is an organizational capability and the data in this research shows that beyond being firm specific the capability may be departmental or group specific. In such cases we can speak of a local alliance capability that develops in firms without dedicated alliance function, where alliance experience is accumulated and leveraged at different loci of the organization. Inextricably linked to firms' different

alliance management configurations are different alliance capabilities that ensue from the chosen intraorganizational arrangements. Firms without an alliance function develop local capabilities that may differ per department or group of people whilst firms with an alliance function develop capability at the firm level in their centralized alliance function (assuming of course that adequate coordination mechanisms are in place to institutionalize the capability). This has both practical and theoretical implications. On the more practical side, whether firms have such local or more centralized alliance capability influences the way managers learn from their firm's alliance experience. Knowledge about a new partner may not be available at departmental level, for instance, even though the firm has worked with the same partner before. This has consequences for the focal firm when, simply because they are unknown to the responsible manager, best practices cannot be used. Also, mistakes from the past may be repeated. More theoretically, the type of alliance capability under discussion also matters, particularly for researchers who try to measure capability or disentangle the elements of capability. The type of capability under research has consequences for the study's level of analysis. Additionally, the type of capability that firms with a dedicated alliance function develop will depend on whether or not written articulation is enforced. If this is the case, a tangible central depository of knowledge is available for all members of the organization to consult. If not, the organizational level alliance capability will consist of knowledge amongst a group of alliance managers that work closely together.

Previous studies have often looked at alliance experience and alliance capability at the firm level (e.g. Heimeriks & Duysters, 2007; Reuer & Zollo, 2005; Schreiner et al., 2009). My data shows, however, that alliance experience and capability may reside at local levels rather than at the firm level. A research focus on the relationship between experience and alliance performance at firm level may only partly capture the effects of the firm's collaborative experience. Viewing experience effects at departmental level, where respondents have more detailed information about previous alliances and alliance performance, and if necessary aggregating results to the organizational level would be more comprehensive. Several researchers have tried to avoid issues inherent to measuring alliance effects at firm level by considering only one type of interorganizational relationships, for example R&D alliances (e.g. Hoang & Rothaermel, 2005; Li, Eden, Hitt, & Ireland, 2008; Sampson, 2005, 2007). By doing so, they study a part of the organization and do not have to take into account that the firm may have

other types of relationships of which gained experience can also influence future alliance performance. My results suggests that alliance researchers should be clear about their unit of analysis and whether they are able to measure effects that concern alliance experience of the whole firm. Also, I question whether it is safe to assume that alliance capability is a firm level resource.

Further, future research into the sustainability of alliance capability is useful, also in connection with the alliance management configuration of a firm. Existing research mainly focuses on the firm's current level of alliance capability (e.g. Draulans et al., 2003; Schilke & Goerzen, 2010) as opposed to how it develops over time. It would be interesting to investigate to what extent firms are able to maintain capability. Sampson has (2005) already found that only recent experience has a positive impact on collaborative returns and attributed this to the depreciation of knowledge over time. It would be interesting to link the possible temporariness of alliance management know-how to different alliance management configurations. In firms without extensive written articulation for example, alliance manager turnover may be a critical issue. Also, codification of knowledge into alliance resources may be more difficult (or time consuming) if alliance managers do not have to trust their knowledge to paper and databases (written articulation). And written articulation may also work against a firm if documents and full databases are hardly ever consulted.

Finally, now the role of alliance management configuration has been explored, the concepts introduced in this qualitative study could be researched more quantitatively. An avenue for further research could be to quantify the relationship between alliance experience and performance with a possible moderating effect of alliance management configuration. Additionally, when studying the aforementioned sustainability of alliance capability this may also be done with quantitative methods, because the sustainability may be influenced by whether the chosen alliance management configuration fits a firm's alliance management activities. Prior studies (e.g. Zhang et al., 2007) have looked at the structure of alliance management, but have only focused on one type of activities (e.g. R&D). Future quantitative research could inform us about alliance experience and capability of the firm by studying the proxies and effects of local and centralized capability when it comes to all alliances that firms manage.

Chapter 6

Conclusions and discussion

This thesis contributes to the understanding of how firms and managers try to benefit from previous lessons learned about alliance management and how their experience may (or may not) translate into alliance capability of the firm. In this chapter I summarize the main research findings, first per sub research question and then per theme as identified in the first chapter. Thereafter, a figure is presented which summarizes the main research concepts and relations between them. Further, the theoretical and practical research implications are discussed. I conclude with the study's limitations and directions for future research.

6.1. Main research findings

The findings of the individual papers have been discussed in the previous four chapters. In this paragraph I first explain the research questions of the individual papers. Then, I organize the findings around the three earlier identified themes to show how they are connected, and to put the research implications presented thereafter in context.

6.1.1. *Research question per chapter*

As mentioned in paragraph 1.3, an explorative approach was taken to conduct the research. Consequently, and as explained in the individual papers, the findings presented in chapters 2 to 5 did not all directly follow from a specific research question. Rather, some findings were encountered during the research process, steering the storylines of the individual chapters in a different direction than previously anticipated.

Table 11: Research question per chapter

Chapter	Research question	Brief answer
2	How can different interorganizational relationships be categorized and what are the implications for the management of these relationships?	We can categorize interorganizational relationships based on the intensity of cooperation and the type of interdependency. The type of relationship determines suitable management tactics and is different in for example a relational and horizontal partnership compared to a transactional and vertical connection. Due to different management tactics, applying collaborative experience with one type of relationship to a future, different type of, relationship may even be detrimental.
3	Where does alliance management experience reside within firms and how do managers go about learning from experience?	We identified three different loci where alliance management experience resides within the firm: at individual, unit and portfolio level. This so called fragmentation of collaborative experience impedes the development of alliance capability and learning about alliance management at the organizational level, because coordination difficulties arise when trying to share alliance management know-how at and across these different levels.
4	How do firms enhance the availability and applicability of collaborative experience in order to develop alliance capability?	Managers try to enhance the availability and applicability of collaborative experience to future alliances by forming relationships that correspond with a firm's alliance portfolio specific experience, selecting partners with complementary collaborative know-how, and complementing internal experience with external expertise. By doing so, they build a local alliance capability (protocapability) that may only translate into firm level alliance capability through institutionalization.
5	Which options do firms have concerning intraorganizational alliance management arrangements and under which conditions do these configurations work?	Alliance management configurations can be categorized by distinguishing between the presence or absence of an alliance function and whether or not written articulation of alliance management knowledge takes place. Whether these configurations are suitable for a firm, depends on the complexity of their alliances, the proximity of their alliance managers or the dissimilarity between the individual alliances.

Nevertheless, chapters 2 to 5 revolve around a question that is central for the findings and contributions described in the respective chapter. These questions underlie the main research question (see subparagraph 1.2.1.). In Table 11 the research question per study is presented together with a brief answer.

6.1.2. *Theme A: Diversity*

In order to illustrate the connectedness of the individual papers, three themes were introduced in chapter 1 that cut across the papers. The first theme, diversity, addresses the differences that exist between and within relevant concepts in the alliance context. In chapter 2 different types of interorganizational relationships are discussed and categorized, explaining the complexities surrounding the applicability of different types of collaborative experience to future instances. Customization of relationship management tactics are needed depending on the nature of the collaboration. That nature of collaboration may vary with the degree of interdependency and the cooperation intensity between partner organizations. Chapter 4 extends the insights from chapter 2, explaining that firms may manage their relationships in different ways and tend to do so by grouping them along different dimensions, separating one subset of relationships from the other. Identified dimensions pertain to form, focus, phase and importance of the alliance. The diversity introduced in chapter 5 is of a different sort and refers to the differences in alliance management configurations (or: structure) and ensuing alliance management capabilities. The main research findings of the four chapters are summarized in Table 12. Together they reveal variety between the elements constituting the concepts of interorganizational collaboration, collaborative experience and alliance management configuration. As such, this research illustrates there is not just one type of alliance, it is not that all collaborative experience is the same, and multiple alliance configurations are to be considered when organizing alliance management activities within the firm. Studies that are not explicit about the relationships they analyze, that consider all experience to be unconditionally applicable to future instances or that do not acknowledge that firms have other options besides a formalized dedicated alliance function may be indicative of shortcomings.

6.1.3. *Theme B: Organizational structure*

The second theme, organizational structure, refers to intraorganizational arrangements of the firm concerning the design and setup of their alliance management activities. Chapter 3 illustrates how intraorganizational arrangements concerning alliance management influence if and how firms benefit from collaborative experience at the firm level, recognizing the fragmentation of alliance management activity within organizations. While chapter 3 focuses more on coordination issues and touches upon accompanying organizational structure, chapter 5 further builds on the notion of different possible intraorganizational arrangements regarding alliance management. Setting up a dedicated alliance function turns out not to be the only option firms have when structuring their alliance management activities. Having such a function also does not automatically result in documents and databases with articulated alliance management knowledge. Further, depending on the chosen configurations, firms may develop either local or centralized alliance capability. Additionally, conditions under which different alliance management configurations help firms to develop that capability apply. Again, the main findings are summarized in Table 12. Together the findings explicate that the structure or setup of alliance management activities within the firm (alliance management configuration) influences where experience resides, how managers share their know-how and what type of alliance capability is the outcome of alliance management learning. The consequences that intraorganizational arrangements regarding alliance management (second theme) have for challenges associated with firm level learning link to the third theme of this thesis.

6.1.4. *Theme C: Barriers to learning*

In chapters 2, 3, and 4 barriers to organizational learning are identified which dictate the third research theme. Firms may fail to learn from previous alliance management due to different types of relationships, different loci where experience resides and the (in)applicability of alliance experience. As discussed in chapter 2, different types of experience may not be beneficial to future interorganizational relationships because they require different management tactics. Whether alliance managers can apply collaborative experience from one situation to the other depends on the type of relationships they, and their peers, were and are dealing with. As indicated in chapter 3, fragmentation of experience regarding alliance management hinders organizational

Table 12: Overview of main findings per research theme

Theme A: Diversity	Theme B: Organizational structure	Theme C: Barriers to learning
• Different types of relationships bring about different types of collaborative experience. (Chapter 2)	• Fragmentation of collaborative experience occurs at three levels in the organization: unit, individual and portfolio. This entails that alliance management knowledge resides dispersed throughout the organization and may not be shared across the organization. (Chapter 3)	• Different types of collaborative experience may not be beneficial to future relationships due to different required management tactics. It depends on the type of (past and future) relationships whether firms and managers can apply their experience from one situation to the other. (Chapter 2)
• Relationship management needs customization based on the nature of collaboration that varies with the degree of interdependency and cooperation intensity between partners. (Chapter 2)	• Having a dedicated alliance function is not the only option that firms have when it comes to designing their internal alliance management structure. (Chapter 5)	• Without coordination, the fragmentation of alliance management knowledge impedes organizational learning at firm level. (Chapter 3)
• Similarities between different types of interorganizational relationships may pertain to form, focus, phase and importance. (Chapter 4)	• A dedicated alliance function does not automatically imply written articulation and or extensive codification of alliance management knowledge. (Chapter 5)	• Alliance experience is portfolio specific if it is not directly applicable to alliances outside a, logically grouped, subset of alliances. (Chapter 4)
• Firms can have different intraorganizational alliance management configurations and these may result in different alliance capabilities. (Chapter 5)	• Alliance complexity, manager proximity and alliance dissimilarity matter when firms try to develop alliance capability within the limitations of their alliance management configuration. Depending on the configuration, different capability may be developed. (Chapter 5)	• Firms try to learn about alliance management by establishing relationships with partners that are experienced, or through hiring external expertise, specifically on those dimensions where firms themselves lack experience. (Chapter 4)

learning at firm level, that is if no coordination between these different loci of experience occurs. One of the three loci, the portfolio level, is further elaborated upon in chapter 4, explaining that alliance experience may not directly be applicable to alliances outside a, logically grouped, subset of alliances. In chapter 4 it is also argued that a firm tries to learn more about alliance management by establishing relationships with partners and by hiring external experts that have experience the focal firm itself may lack.

Together the findings regarding learning barriers (listed in Table 12) exemplify the complex and nuanced reality of the relationship between alliance experience and the capability of the firm to deal with its alliances. The current thesis sheds new light on that relationship which in existing studies has been considered quite straightforward, as noted in the previous chapters. In short, the barriers illustrate the challenges associated with intraorganizational learning regarding alliance management and at the same time indicate opportunities for firms to improve their alliance capability development (by overcoming the barriers).

6.2. Research overview

By looking at how organizations develop alliance capability and improve their alliance management from an organizational learning perspective, this thesis has unraveled concepts and processes that have not been researched before. Figure 3 depicts the overview of all those concepts, and relationships between them. I briefly explain the figure before addressing the main research question and going into the main theoretical and practical implications that cut across the individual chapters.

6.2.1. *Concepts and relationships between them*

'Learning about alliance management' is the main topic of the thesis (see upper block in Figure 3) reflected in the main research question, and 'how' questions related to this topic have informed the individual chapters. Starting with type of interdependency between collaborating partners (horizontal or vertical) and the extent of cooperation intensity (on the spectrum between transactional and vertical) I have been able to identify differences in management tactics intermediated by different types of interorganizational relationships (left side of Figure 3). As a result of different types of interorganizational relationships, organizations gain different types of collaborative experience and this experience appears to exist fragmented throughout the

organization, at individual, unit and portfolio levels. Similarly, organizations tend to group subsets of similar alliances and alliance portfolio specific experience may be present. As a consequence of experience residing at different loci in the organization, protocapabilities (or local alliance management capabilities) may be developed that will not translate into an organizational capability unless, through coordination, institutionalization takes place.

Whether protocapabilities or organizational capability (right side of Figure 3) are/is developed, may depend on the chosen alliance management configuration, hence the arrows going left and right. This configuration is characterized by whether or not an alliance function is present and to what extent the firm articulates (documents) alliance management knowledge. Various types and the fragmented nature of collaborative experience, as well as the type of capability and the chosen alliance management configuration may create barriers to learning about alliance management at the organizational level, depicted by the four dashed arrows, but also create opportunities for improvement. Lastly, the second block from the top in Figure 3 illustrates the phases of gaining collaborative experience, local learning (before coordination and institutionalization) and subsequently organizational learning (when and if alliance management knowledge is translated into a firm level resource as opposed to a local capability). This is further explained in 6.3.3.

6.2.2. *Answering the main research question*

The main research question, that informed the sub questions (see Table 11), of this thesis was: 'How do organizations learn from collaborative experience in order to build alliance capability and improve alliance management?' In line with the findings summarized in paragraph 6.1 and Figure 3, the following answer applies.

The diversity of types of interorganizational relationships and ensuing collaborative experience dictate a local type of learning (on individual, unit or portfolio level) that results in a protocapability of (a group of) managers to deal with a subset of relationships. If firms want to develop firm level alliance capability and improve their alliance management, they need to coordinate between the subsets of alliance management know-how present in the firm. An adequate alliance management configuration (i.e. structure of alliance management activities) may facilitate the

Figure 3: Research overview

Learning about alliance management

| Gaining collaborative experience | Local learning | Organizational learning |

Organizational alliance management **capability**

Coordination and **institutionalization**

Alliance management **configurations**
- Written articulation?
- Alliance function?

Alliance management **protocapability** (local ability)

Portfolio specific alliance experience

Collaborative experience resides at **different levels**

Unit · Portfolio · Individual

Different **types** of collaborative **experience**

Different **types** of interorganizational **relationships**
- Interdependency?
- Cooperation intensity?

Barriers to learning → Opportunities to enhance capability development

development of an alliance management capability at firm level. Hence, the challenges associated with the diversity, the coordination of protocapabilities and the chosen alliance management configuration may form barriers to learning about alliance management at organizational level. By the same token, these challenges offer opportunities for firms to enhance the development of alliance management capability.

The results of the individual chapters underlying the main research question have both theoretical and practical implications. These are presented in the next paragraph.

6.3.   Theoretical implications

In Table 13 the contributions of chapters 2 to 5 are summarized. For further explanation of the contributions I refer to those chapters. In addition to the contributions per chapter, in this paragraph I explore four implications of my research that cut across the individual chapters and are of course linked to the main findings presented earlier.

6.3.1. *Complexity of constructs*

My research shows that alliance experience and capability are more complex constructs than generally presented in existing literature. This complexity is illustrated by the first thesis theme. Additionally, I have explained what makes them so complex. In line with what Inkpen and Tsang (2007, p. 484) put forward in the context of learning about different alliance forms that have "unique organizational and strategic attributes", I argue that different types of interorganizational relationships cannot be tarred with the same brush. Whilst scholars have recognized that the term 'alliance' may refer to a range of relationship forms, such as joint ventures, supplier relationships, licensing agreements, collaborative R&D, coproduction agreements, technology sharing and shared marketing (e.g. Das & Teng, 1996; Jiang et al., 2010; Lavie & Miller, 2008) and others have distinguished theoretical differences between experience types (e.g. Hoang & Rothaermel, 2005; Zollo et al., 2002), these two have not been connected. Further, the studies that have considered various types of experience, revolve around the effects on *inter*organizational learning, such as the ability to absorb partners' knowledge (e.g. Rothaermel & Deeds, 2006), as opposed to *intra*organizational learning. The current

Table 13: Summary of main contributions per chapter

Chapter	Title	Main contributions
Chapter 2	When firms do not benefit from collaborative experience: Differences in the intensity and nature of interorganizational relationships	Chapter 2 qualifies the positive effect of experience with interfirm collaboration on future relationships and contributes to existing studies by a) presenting a classification of different types of interorganizational relationships; b) nuancing the concept of collaborative experience; and c) creating a better understanding of the usefulness of different kinds of collaborative experience.
Chapter 3	Fragmentation of knowledge as impediment to organizational learning: The case of alliances	Chapter 3 identifies levels at which collaborative experience resides, with implications for existing measurements of alliance experience and capability and contributes to a) alliance management literature by arguing that the positive relationship between alliance experience and capability may be interrupted by intraorganizational arrangements of alliance management activities and b) organizational learning theory by adding a dimension to fragmented learning and arguing that both tendencies towards fragmentation of collaborative experience and demands for coordination need to be taken into account when exploring the net effects of experience.
Chapter 4	From collaborative experience to capability: How managers enhance the availability and applicability of alliance management know-how	Chapter 4 refines the organizational process between possessing alliance experience and obtaining firm level capability. The chapter contributes to alliance literature by a) introducing a local capability concept to illustrate the less straightforward relationship between collaborative experience and capability; b) arguing that firms generally do not manage a single alliance portfolio, but a number of distinct alliance portfolios, suggesting to not regard collaborative experience and alliance portfolio as firm level concepts. It contributes to organizational learning theory by illustrating how firms and their managers try to improve the availability and applicability of collaborative experience.
Chapter 5	(Dis)organized collaboration: Making different alliance management configurations work	Chapter 5 refines different alliance management configurations by discussing characteristics and conditions and adds to existing alliance literature by a) clarifying that having a dedicated alliance function is not the best solution for every firm that tries to enhance its alliance success; b) explaining that the presence of an alliance function does not have to result in captured and codified alliance management know-how; and c) showing that firms may develop different alliance capability depending on their alliance management configuration.

thesis highlights the consequences of the complexity of alliance concepts for intraorganizational activities concerning learning *about* alliance management. As such, I have illustrated the diversity of interorganizational relationships, as well as the management thereof and the ensuing alliance experience (see subparagraphs 3.5.1 and 4.4.1). Also, the diversity of alliance capability is highlighted by distinguishing between local and firm level capability, explaining that a firm level capability does not have to resemble traditional pictures of a highly formalized depository of alliance management knowledge, but can just as well consist of an experienced group of alliance managers that know how to coordinate their activities and collaborate to improve their work.

The diversity and complexity of relationships, experience and capability call for more clarity in future studies about what types of relationships are included in the sample, why may be assumed that the experience gained while managing those relationships is crossways applicable and who has the alliance capability that increases a firm's alliance performance; all issues that have been mostly overlooked so far.

6.3.2. *Levels of analysis*

Connecting to the second and third theme of this thesis, I argue that a more nuanced view is needed on what may have been regarded as or assumed to be firm level resources. From the interviews it has become clear that it is hard to find one person in an organization that knows everything about his/her firm's alliances. If researchers ask alliance managers to complete a survey, it is not very likely that this person will be able to share exactly how many alliances the firm had or has, what kind of knowledge is shared throughout the firm or draw general conclusions about the level of routines present (as done by for example Reuer & Zollo, 2005; Schilke & Goerzen, 2010; Sivadas & Dwyer, 2000). Several alliance managers are responsible for various alliances with a possibly very diverse context and content. A manager of a large R&D alliance may not be knowledgeable about marketing partners or strategic supplier relationships. Similarly, in cases where one manager oversees all firm's alliances it would be impossible for that person to know the details of all projects. Moreover, and as shown in the previous chapters, with limited coordination alliance experience remains at local levels of the organization.

Consequently, it is not automatically clear who possesses alliance capability: the alliance manager, a group of managers or the organization as a whole. In short, my observations have consequences for the, generally used, firm level of analysis when

researching alliance experience, capability and performance, and future studies need to carefully select the appropriate level of analysis. After all, how can you speak of a firm's alliance capability whilst sampling only one type of relationship? In their study about performance of R&D alliances for example, Hoang and Rothaermel (2010) base alliance experience on all alliances firms have had and do not limit the experience variables to their sample of collaborative R&D projects. As such, they look at performance from R&D alliances, but include all other alliances as prior experience, not knowing whether or not this experience can actually be used, where it is gained or if it is shared across the firm. Similarly, Zollo et al. (2002) investigate effects of partner-specific, technology-specific and general collaborative experience to alliance performance. Their sample, however, consists of (mainly R&D) alliances between biotech and pharmaceutical firms, resulting in limited variety within the subsets of experience (partner, technology, general) that they distinguish.

This thesis argues that if researchers want to address alliance capability at firm level, their sample should reflect all alliances of a firm and not just a subset. The nuances of the discussed concepts may ask for more qualitative work in order to further disentangle ongoing (learning) processes.

6.3.3. *Learning in the alliance management context*

Linking to the third theme of this thesis, I contribute to existing literature by examining organizational learning (Bingham & Haleblian, 2012; Dodgson, 1993; Huber, 1991; Levitt & March, 1988) in the context of alliance management. Learning is the process whereby knowledge is created through the transformation of experience (Kim, 1993). In the thesis I have zoomed in on that process of experiential learning (Kolb, 1984) between possessing collaborative experience and developing alliance capability. When exploring learning processes, three dimensions are relevant (Knight, 2000). The first dimension is about the learning process; how learning is achieved (Kale & Singh, 2007). The second concerns who (or what) is doing the learning: an individual, a group or a firm (Crossan, 1995). The third dimension concerns what is being learned (Dodgson, 1993). This thesis extends existing organizational learning literature by looking at these three dimensions for the case of alliances.

First, by investigating the 'how' of learning about alliance management, the accompanying qualitative in-depth approach has revealed nuances and details that quantitative studies would not have done. Beyond findings from extant alliance

literature showing *that* firms get better at managing alliances over time (e.g. Anand & Khanna, 2000; Gulati et al., 2009; Hoang & Rothaermel, 2005; Pangarkar, 2009), I have studied *how* they learn to collaborate with their partners. The answers to the 'how' question have revealed important barriers to learning such as the fragmentation of alliance management knowledge and choices regarding alliance management structure. These barriers illustrate the challenges associated with intraorganizational learning in the alliance context, that previous studies have hinted at (e.g. Kale et al., 2001; Lei, Slocum Jr, & Pitts, 1997; Lumineau et al., 2011), but did not investigate. Intraorganizational learning and corresponding knowledge sharing is very important in the context of interorganizational relationships (Argote & Miron-Spektor, 2011). Holmqvist (2003, p. 97) explains that learning is seen as 'a relatively permanent change in organizational knowledge that is produced by experience' (Cyert & March, 1963). Management of interorganizational relationships, however, comprises complex and unstructured tasks and as such the effects of experience on learning are more elusive (Muehlfeld et al., 2012).

Second, this thesis argues that experience with managing alliances often does not result in a relatively permanent change, which in this case would be a higher level of alliance capability. More specifically, oftentimes only local learning, as opposed to organizational learning, takes place. With local learning I refer to learning by a group of people, an organizational unit or an individual (Kim, 1993; Levinthal & March, 1993), connecting to the second dimension of who is doing the learning. Existing literature about learning how to manage alliances has often focused on the development of alliance capability of the firm as a whole. In his article on individual and organizational learning, Cohen (1991) explains that the foundation of organizational capabilities are the skills of individual members of the firm (Stinchcombe, 1990). From this thesis it has become clear that individuals' know-how may be shared, but not necessarily on the highest level (of the firm). Due to departmentalization (Levinthal & March, 1993) and portfolio specific characteristics (see 6.3.4) learning may only take place on a localized (departmental or portfolio) level, as elaborated upon in chapter 3. If only local learning occurs, where alliance management experience develops into alliance management know-how, but stays confined in for example a department or a portfolio, capability at the organizational level will not be developed (see also Figure 3).

Third, and related to the third dimension mentioned above, it has become clear that the diversity of what is being learned influences capability development. Due to

diversity in experience and ensuing capability for specific subsets of alliances, firm level capability may, instead of being a coherent resource, consist of separate sets of capabilities. This is further explained below.

6.3.4. *Alliance portfolio capability*

In this thesis alliance portfolios are described as subsets of, logically grouped, alliances (for example based on content such as R&D or on type of partners, for instance suppliers) whilst extant literature has referred to alliance portfolios as firms' complete set of direct ties (Das & Teng, 2000; Ozcan & Eisenhardt, 2009). Accordingly, scholars have defined alliance portfolio capability as the ability of firms to manage their alliances as a whole (Sarkar et al., 2009). That capability is not about the success of one alliance, but about reaching strategic goals with the total bundle of alliances, 'placing the structure and strategic orientation of the whole alliance portfolio at the center of interest' (Hoffmann, 2007, p. 828). The choice to, throughout this thesis, use the term 'portfolio' to denote a smaller subset of alliances, was made based on findings concerning the high diversity amongst alliances and the way organizations assign management responsibilities of subsets of similar alliances to their alliance staff. This diversity also has implications for future research on alliance portfolio capability.

Jiang et al. (2010) addressed alliance portfolio diversity to illustrate to what extent differences in partners' industry, organizational, and national background provide more learning benefits for the focal firm. They find that a more diverse portfolio results in increased managerial complexity with higher coordination costs, and conclude that high diversity hampers knowledge accumulation from these alliances through a lack of systematic learning. That is, firms may struggle to deal with unfamiliar or under practiced situations regarding alliance management. Because Jiang et al. (2010) take a firm level perspective they have not analyzed how firms deal with this diversity. In the same context of a firm's alliance portfolio, Heimeriks et al. (2007) emphasize the difficulties of learning about alliance management within the firm. The current thesis connects the diversity within firms' complete set of alliances to difficulties of learning. Chapters 3 and 4 explicate that diversity of alliances may serve as a guiding principle when assigning responsibilities to alliance managers. For example, marketing alliances, versus collaborative agreements focused on R&D or production, may be managed by one person. In another organization, joint ventures, versus more informal or contract based alliances, may be one manager's responsibility.

Accordingly, and in line with observations from Hoffmann (2005) about alliance portfolio strategies being set at unit levels, these alliance managers may work in separate departments, which would result in limited interaction between them. As such, this thesis offers explanations as to why the holistic potential benefits of firms' alliances may be undermined by the diversity of the relationships within the alliance portfolio. To advance alliance portfolio management performance, firms should not regard relationships as stand-alone but look at the impact that one alliance may have on other alliances in the portfolio (Parise & Casher, 2003). The identification of that impact may be more complicated when diversity between relationships is high, due to both the intraorganizational arrangements that are made for effective alliance management and the limited overlap between (highly diverse) alliances in the portfolio. In order to avoid confusion between subsets of alliances and firms' complete sets of alliances, I suggest to refer to the subsets (different groups of similar alliances within one firm) as alliance portfolios, as I do throughout this thesis, and to the full set of alliances as the alliance network (Goerzen, 2005) of an organization.

Further, related to firms managing several subsets of alliances, capabilities may be developed that are specific to a subset of alliances as opposed to applicable to all interorganizational relationships. The concept of portfolio-specific alliance experience is introduced in paragraph 4.4. The direction of the relationship between applying different management approaches to distinct subsets of alliances and developing alliance management capability that is only valid for a specific subset is unclear. On the one hand I could argue that firms tend to group their alliances in subsets which may result in a protocapability (see 4.5.1) of the alliance manager(s) responsible for this subset. On the other hand it seems plausible to state that developed alliance capability remains specific to a subset of alliances because of the distinct characteristics that these subsets have. Nonetheless, in both scenarios, the existence of alliance management capability specific for different alliance subsets has consequences for capability development at firm level. This thesis illustrates that firms may have protocapabilities within the firm that may translate into alliance capability of the firm. However, if portfolio-specific alliance experience (here: subset-specific alliance experience) translates into subset-specific capability and if diversity among subsets is high, it may be impossible (and also undesirable) to merge these capabilities. Firms' alliance capabilities are embedded in organizations as repetitive activities of firms to deploy their resources in alliances (Heimeriks & Duysters, 2007; Helfat & Peteraf, 2003; Nelson

& Winter, 1982), but such repetition may not be effective with distinct variety between subsets. This means that firms may possess separate sets of subset-specific alliance capability that form separate, not integrated, building blocks of firms' alliance capability and alliance portfolio capability. In turn, the presence of separate sets of alliance capability has consequences for a suitable alliance management configuration of the firm (see chapter 5). Setting up a dedicated alliance function when alliance management capabilities (of different subsets) are distinct, does not seem to make sense. Firms may be better off by having these distinct alliance subsets managed within different departments where alliance managers can benefit from knowledge with respect to content, products or services of alliances (see 6.4.3). When researching alliance portfolio capability, future studies could take the composition of the alliance portfolio into account in order to avoid making assumptions about the transferability of know-how from one alliance subset to the other and to give more insight into the interplay of the (possibly very diverse) types of alliances in the portfolio.

6.4.   Practical implications

Excellent alliance management contributes to firms' competitive advantage (Dyer & Singh, 1998; Ireland et al., 2002) but little is known about how to become superior at it. Two things are prevalent. One, it is certain that alliance management is a complicated organizational activity with all its complexities and uncertainties surrounding managing projects across organizational boundaries (Rothaermel & Deeds, 2006). But two, firms and their managers get better at dealing with alliances as they gain collaborative experience (Simonin, 1997) and accumulate alliance management know-how (Kale & Singh, 2007). My research shows, however, that gaining know-how is not enough to improve future alliance performance. Firms have to make the right decisions about capturing and maintaining this know-how, and, most importantly, about sharing it *within* the organization. If the firm's R&D manager has worked with a partner organization for a few years, for example, the person responsible for marketing alliances may have very limited knowledge about that same partner if there is no intrafirm communication. From the previous chapters in this thesis I distinguish three key issues that I have formulated as recommendations for firms and their (alliance) managers. These are discussed below.

6.4.1. *Assigning alliances to the right person*

My research shows the diversity of different types of relationships that firms may have with their partners. For instance, firms may have collaborative agreements with suppliers, jointly develop products with alliance partners and share knowledge on technology with competitors. The tasks of the responsible alliance manager differ per type of relationship, depending on for example the content and importance of the collaboration. Chapters two and four of the thesis suggest to match the expertise and experience of the alliance manager with the job at hand. When assigning a manager to an alliance, firms have to choose the person who has the experience and skills needed for the type of relationship at issue, because 'matching the right person with the right alliance may well be critical for alliance success' (de Man & Roijakkers, 2009, p. 92).

While this thesis concentrates on alliance management, other interorganizational relationships, with a less relational character like explained in chapter 2, may also be important for firms. I have argued that different types of interorganizational relationships require different management tactics and I have explained that one type of relationship could develop into another type. Even though is not always desirable to have a relationship develop from a more transactional type to a more intensive collaboration that asks for a relational oriented approach (Santema, 2011), firms may choose to intensify their relationship with for example a supplier. When assigning relationship management responsibilities at the startup of a new interorganizational collaboration, not only the type of relationship at the startup but also the potential development of that relationship should be taken into account. For ongoing relationships, top management has to continuously evaluate the performance of the alliance and question whether the alliance manager for that particular collaboration is still the right person for the job.

It is also relevant to mention that the 'inwards' looking role of alliance managers, about learning from experience and sharing know-how with peers (extensively discussed in this thesis), is of course only part of the responsibilities alliance managers have. Their 'outwards' role, where they are key figures in alliances representing their organization, constitutes the core of their alliance management work. As such, alliance managers have to deal with relational risks (because self-interested partners are expected to behave opportunistically), control dilemmas (making and executing the right control decisions) and trust issues (creating shared vision and mutual trust may keep alliances together) (de Man & Roijakkers, 2009; Groot & Merchant, 2000; Vlaar,

Van den Bosch, & Volberda, 2007). The extent to which they are able to cope with such challenges, determines their individual alliance capability that may translate into a capability at firm level to deal with alliances.

6.4.2. *Sharing alliance management know-how*

Notwithstanding the observation that different types of interorganizational relationships bring forth different types of collaborative experience, I recommend firms to take into consideration the potential gains of sharing experiences that cut across different disciplines. Chapter three explains that alliance experience often resides locally, such as within specific subsets of interorganizational relationships or within departments, as opposed to throughout the organization. Even if experience is gained while managing R&D relationships it does not mean this experience cannot be valuable for other types of relationships; characteristics of the relationships (such as the phase it is in, contract peculiarities, planning issues and reporting challenges) or even the partner can be the same. I recommend firms to bring their alliance managers together to discuss how they can learn from each other. In such communities of practice within the firm, members can 'voluntarily create and share both implicit and explicit knowledge' (Jeon, Kim, & Koh, 2011, p. 252). Not only to improve alliance management in the short term, but also to make alliance management know-how less volatile in the long run. If know-how is not shared, managers cannot benefit from their peers. This is hardly a novel statement in general, but in the world of alliance managers apparently far less obvious. It should be relatively easy to record some basic knowledge, but moreover to bring alliance managers, also if they only partly fulfill that role and/or work in separate departments, together in meetings and facilitate them to share their alliance management knowledge.

6.4.3. *Choosing an adequate alliance management configuration*

As can be read in chapters three and five, structure or setup of alliance activities within the organization (alliance management configuration) plays an important role when firms try to improve the management of their external relationships. In the current thesis, I have referred to these arrangements as the alliance management configuration of the firm. Firms should choose how to organize their alliance management activities and determine which configuration best fits the firm and the type of alliances that need to be managed. In case of great similarity between these alliances for example, a firm

may be better off with having all alliance activity within one department where managers work closely together. When a firm manages highly divergent alliances, it may make more sense to have alliance managers in different departments to enable them to be close to the core activities of their alliances (e.g. R&D, marketing or sales). Whichever configuration is chosen, coordinating interaction between the people responsible for different alliances is key, although this does not need to happen at a centralized level (in an alliance department). Facilitating knowledge sharing (see 6.4.2) can be done at multiple local levels (in units or teams) of the firm. Although the structure of the organization is less important than the ability to build a network across it (Berthoin Antal et al., 2001), the chosen configuration should enable interaction between those alliance managers that may benefit from each other's experience.. Again, this does not necessarily imply the need for a dedicated alliance department, especially when there is limited overlap concerning the alliance activities that are undertaken.

6.5.   Limitations and future research directions

Existing studies of relationships between concepts in the alliance context, such as collaborative experience and capability are as likely to obfuscate as they are to clarify what is happening in firms when it comes to learning from alliance management. As much as my research has tried to supplement these studies by disentangling concepts and clarifying *the how* of intrafirm learning in the alliance management context, limitations are inevitable. More detailed explanations are provided in the previous chapters, where the four papers are presented separately. Here, I discuss limitations that cut across the separate chapters, and link them to opportunities for future research.

First, the qualitative approach does not cater for 'to what extent' questions and cannot provide answers to questions about the level of alliance performance. Consequently, in the different chapters some assumptions had to be made. Chapter 3 for example postulates that sharing of alliance management know-how is desirable and chapter 5 assumes that the present alliance management configuration works in each of the six cases. Extensions of research presented in chapters 3 and 5 of this thesis could use a larger sample and quantify alliance capability or performance of organizations to investigate the role of fragmentation of alliance management configuration, taking into account the appropriate level of analysis.

Second, I have tried to be as complete and extensive as possible, especially whilst describing the process of data analysis, but comments from critics about reproducibility

and objectivity are unavoidable. The large number of interviews balances concerns regarding generalizability, but issues regarding industry specific results and alliance management maturity arise. Even though data was collected from multiple industries and no industry specific results were found within the datasets, the data is too limited to draw fixed and final conclusions about the absence of industry specific effects. It is important to realize that there is high variety amongst firms regarding alliance management maturity, and this variety could be related to the industry these firms are in. Some organizations only have a few alliances, whilst for other firms collaboration with partners is key in order to survive. This variety makes it difficult to draw detailed conclusions without quantifiable data. Consequently, also linked to the previous limitation, I encourage future researchers to use mixed methods, and combine qualitative (how and why) and quantitative research questions (what and to what extent), to explain relationships between alliance concepts.

Third, my research has shown that the relationship between alliance experience and alliance capability is not as straightforward as may have been assumed before. The results, however, do not describe the detailed processes of alliance management know-how flow and actions of managers to capture and share their experience. Through observations, taking a process approach, future researchers could further disentangle what happens to alliance management experience, and which elements of the experience could be useful in future situations. These richer descriptions of intrafirm alliance management processes connect to chapter 2 and 4 of the thesis and may also provide more recommendations for practitioners.

Fourth, as much as I have tried to be clear on the concepts under study, I realize that my definitions of alliances, alliance portfolios and management configurations are slightly different from how they have been used in some other studies. However, related to my suggestion for more insight into ongoing alliance management processes, the observed diversity and complexity whilst defining alliance concepts call for more clarity about how research samples are constituted. What kind of alliances are (and are not) included in the study? What is meant with alliance capability? Why do the authors analyze their data at firm level? How can scholars speak of a firm's alliance capability whilst sampling only one type of relationships? I do not mean to advocate using only qualitative approaches at a very micro level in future research, but I do suggest more clarity about the topics under study.

In conclusion, this thesis has provided insight into how firms and their alliance managers try to learn about interorganizational relationship management. By repeatedly dealing with alliances, organizations gain collaborative experience which may increase the ability to manage future relationships. Although learning about relationship management is not easy to do, firms cannot ignore the precious alliance management know-how that is available within the organization. If firms are able to benefit from the diversity of existing relationships, cope with the fragmentation of collaborative experience, coordinate between existing protocapabilities in the organization and adequately organize their alliance management configuration, their ability to manage different kinds of interorganizational relationships may rise to a great height.

References

Achrol, R. 1997. Changes in the theory of interorganizational relations in marketing: Toward a network paradigm. *Journal of the Academy of Marketing Science*, 25(1): 56-71.

Aiken, M. & Hage, J. 1966. Organizational Alienation: A Comparative Analysis. *American Sociological Review*, 31(4): 497-507.

Alter, C. & Hage, J. 1993. *Organizations Working Together*. Newbury Park, CA: Sage.

Alvarez, S. & Barney, J. 2001. How entrepreneurial firms can benefit from alliances with large partners. *Academy of Management Executive*, 15(1): 10.

Anand, B.N. & Khanna, T. 2000. Do Firms Learn to Create Value? The Case of Alliances. *Strategic Management Journal*, 21(3): 295-315.

Argote, L. 1999. *Organizational Learning: Creating, Retaining & Transferring Knowledge* Boston: Kluwer Academic.

Argote, L. & Miron-Spektor, E. 2011. Organizational Learning: From Experience to Knowledge. *Organization Science*, 22(5): 1123-1137.

Argyres, N. 1996. Evidence on the Role of Firm Capabilities in Vertical Integration Decisions. *Strategic Management Journal*, 17(2): 129-150.

Arikan, A.M. & McGahan, A.M. 2010. The development of capabilities in new firms. *Strategic Management Journal*, 31(1): 1-18.

Ariño, A. & De la Torre, J. 1998. Learning from Failure: Towards an Evolutionary Model of Collaborative Ventures. *Organization Science*, 9(3): 306-325.

Ariño, A. 2001. To Do or Not to Do? Noncooperative Behavior by Commission and Omission in Interfirm Ventures. *Group & Organization Management*, 26(1): 4-23.

Ariño, A. & Ring, P.S. 2010. The role of fairness in alliance formation. *Strategic Management Journal*, 31(10): 1054-1087.

Bamford, J.D. & Ernst, D. 2002. Managing an alliance portfolio. *McKinsey Quarterly*(3): 28-39.

Bamford, J.D. & Ernst, D. 2003. Growth of Alliance Capabilities. In J. Bamford & B. Gomes-Casseres & M.S. Robinson (Eds.), *Mastering Alliance Strategy*. San Francisco, CA: Jossey-Bass.

Bamford, J.D., Gomes-Casseres, B., & Robinson, M.S. 2003. *Mastering Alliance Strategy*. San Francisco, CA: Jossey-Bass.

Barkema, H.G., Shenkar, O., Vermeulen, F., & Bell, J.H.J. 1997. Working Abroad, Working with Others: How Firms Learn to Operate International Joint Ventures. *Academy of Management Journal*, 40(2): 426-442.

Barkema, H.G. & Schijven, M. 2008. How Do Firms Learn to Make Acquisitions? A Review of Past Research and an Agenda for the Future. *Journal of Management*, 34(3): 594-634.

Barringer, B.R. & Harrison, J.S. 2000. Walking a Tightrope: Creating Value Through Interorganizational Relationships. *Journal of Management*, 26(3): 367-403.

Baum, J.A.C., Calabrese, T., & Silverman, B.S. 2000. Don't Go It Alone: Alliance Network Composition and Startups' Performance in Canadian Biotechnology. *Strategic Management Journal*, 21(3): 267-294.

Baum, J.A.C., Li, S.X., & Usher, J.M. 2000. Making the Next Move: How Experiential and Vicarious Learning Shape the Locations of Chains' Acquisitions. *Administrative Science Quarterly*, 45(4): 766-801.

Berends, H. & Lammers, I. 2010. Explaining Discontinuity in Organizational Learning: A Process Analysis. *Organization Studies*, 31(8): 1045-1068.

Berthoin Antal, A., Lenhardt, U., & Rosenbrock, R. 2001. Barriers to Organizational Learning. In M. Dierkes & A. Berthoin Antal & J. Child & I. Nonaka (Eds.), *Handbook of Organizational Learning & Knowledge*: 865-885. New York: Oxford University Press.

Bingham, C.B. & Haleblian, J. 2012. How firms learn heuristics: Uncovering missing components of organizational learning. *Strategic Entrepreneurship Journal*, 6(2): 152-177.

Bucklin, L.P. & Sengupta, S. 1993. Organizating Successful Co-Marketing Alliances. *Journal of Marketing*, 57(April): 32-46.

Camerer, C. & Knez, M. 1996. Coordination, Organizational Boundaries and Fads in Business Practices. *Industrial and Corporate Change*, 5(1): 89-112.

Child, J. 2001. Learning Through Strategic Alliances. In M. Dierkes & A. Berthoin Antal & J. Child & I. Nonaka (Eds.), *Handbook of Organizational Learning & Knowledge*. New York: Oxford University Press.

Child, J. & Yan, Y. 2003. Predicting the Performance of International Joint Ventures: An Investigation in China. *Journal of Management Studies*, 40(2): 283-320.

Cohen, M.D. 1991. Individual Learning and Organizational Routine: Emerging Connections. *Organization Science*, 2(1): 135-139.

Cohen, W.M. & Levinthal, D.A. 1990. Absorptive Capacity: A New Perspective on Learning and Innovation. *Administrative Science Quarterly*, 35(1): 128-152.

Creswell, J.W. 2009. *Research design: Qualitative, quantitative, and mixed methods approaches*. Thousand Oaks, CA: Sage Publications.

Crossan, M.M.L.H.W.W.R.E.D.L. 1995. Organizational learning: Dimensions for a theory. *International Journal of Organizational Analysis*, 3(4): 337-360.

Csaszar, F.A. & Siggelkow, N. 2010. How Much to Copy? Determinants of Effective Imitation Breadth. *Organization Science*, 21(3): 661-676.

Cui, Y. & Jiao, H. 2011. Dynamic capabilities, strategic stakeholder alliances and sustainable competitive advantage: evidence from China. *Corporate Governance*, 11(4): 386-398.

Cyert, R.M. & March, G. 1963. *A Behavioral Theory of the Firm*: Prentice-Hall Inc.

Das, T.K. & Teng, B.S. 1996. Risk Types and Inter-Firm Alliance Structures. *Journal of Management Studies*, 33: 827-843.

Das, T.K. & Teng, B.S. 2000. Instabilities of Strategic Alliances: An Internal Tensions Perspective. *Organization Science*, 11(1): 77-101.

Davis, J.P. & Eisenhardt, K.M. 2011. Rotating Leadership and Collaborative Innovation: Recombination Processes in Symbiotic Relationships. *Administrative Science Quarterly*, 56(2): 159-201.

de Man, A.P. & Roijakkers, N. 2009. Alliance Governance: Balancing Control and Trust in Dealing with Risk. *Long Range Planning*, 42(1): 75-95.

Deeds, D.L. & Hill, C.W.L. 1996. Strategic alliances and the rate of new product development: An empirical study of entrepreneurial biotechnology firms. *Journal of Business Venturing*, 11(1): 41-55.

Ding, R., Dekker, H.C., & Groot, T.L.C.M. 2010. An exploration of the use of interfirm cooperation and the financial manager's governance roles: Evidence from Dutch firms. *Journal of Accounting & Organizational Change*, 6(1): 9-26.

Dodgson, M. 1993. Organizational Learning: A Review of Some Literatures. *Organization Studies*, 14(3): 375-394.

Doz, Y.L. 1996. The evolution of cooperation in strategic alliances: Initial conditions or learning processes? *Strategic Management Journal*, 17(S1): 55-83.

Draulans, J., De Man, A.P., & Volberda, H.W. 2003. Building alliance capability: Management techniques for superior alliance performance. *Long Range Planning*, 36(2): 151-166.

Dussauge, P., Garrette, B., & Mitchell, W. 2000. Learning from Competing Partners: Outcomes and Durations of Scale and Link Alliances in Europe, North America and Asia. *Strategic Management Journal*, 21(2): 99-126.

Dwyer, F.R., Schurr, P.H., & Oh, S. 1987. Developing Buyer-Seller Relationships. *Journal of Marketing*, 51(2): 11-27.

Dyer, J.H. & Singh, H. 1998. The relational view: Cooperative strategy and sources of interorganizational competitive advantage. *Academy of Management Review*: 660-679.

Dyer, J.H., Kale, P., & Singh, H. 2001. How to make strategic alliances work. *MIT Sloan Management Review*, 42(4): 37-43.

Eisenhardt, K.M. & Bourgeois, L.J. 1988. Politics of Strategic Decision Making in High-Velocity Environments: Toward a Midrange Theory. *Academy of Management Journal*, 31(4): 737-770.

Eisenhardt, K.M. 1989. Building Theories from Case Study Research. *The Academy of Management Review*, 14(4): 532-550.

Eisenhardt, K.M. & Graebner, M.E. 2007. Theory Building from Cases: Opportunities and Challenges. *Academy of Management Journal*, 50(1): 25-32.

Ethiraj, S.K., Levinthal, D., & Roy, R.R. 2008. The Dual Role of Modularity: Innovation and Imitation. *Management Science*, 54(5): 939-955.

Fiol, C.M. & Lyles, M.A. 1985. Organizational Learning. *The Academy of Management Review*, 10(4): 803-813.

Fredrickson, J.W. 1986. The Strategic Decision Process and Organizational Structure. *The Academy of Management Review*, 11(2): 280-297.

Gavetti, G., Levinthal, D.A., & Rivkin, J.W. 2005. Strategy making in novel and complex worlds: the power of analogy. *Strategic Management Journal*, 26(8): 691-712.

Geringer, J.M. & Hebert, L. 1991. Measuring Performance of International Joint Ventures. *Journal of International Business Studies*, 22(2): 249-263.

Gibbert, M., Ruigrok, W., & Wicki, B. 2008. What passes as a rigorous case study? *Strategic Management Journal*, 29(13): 1465-1474.

Gick, M.L. & Holyoak, K.J. 1980. Analogical problem solving. *Cognitive Psychology*, 12: 306-355.

Glaser, B. & Strauss, A. 1967. *The discovery of grounded theory: Strategies of qualitative research*. London: Wiedenfeld and Nicholson.

Goerzen, A. 2005. Managing alliance networks: Emerging practices of multinational corporations. *Academy of Management Executive*, 19(2): 94-107.

Goerzen, A. & Beamish, P.W. 2005. The effect of alliance network diversity on multinational enterprise performance. *Strategic Management Journal*, 26(4): 333-354.

Golden-Biddle, K. & Locke, K. 1997. *Composing qualitative research*: Thousand Oaks, CA: Sage.

Graebner, M.E. 2009. Caveat Venditor: Trust Asymmetries in Acquisitions of Entrepreneurial Firms. *The Academy of Management Journal*, 52(3): 435-472.

Grandori, A. & Soda, G. 1995. Inter-firm Networks: Antecedents, Mechanisms and Forms. *Organization Studies*, 16(2): 183-214.

Groot, T.L.C.M. & Merchant, K.A. 2000. Control of international joint ventures. *Accounting, Organizations and Society*, 25(6): 579-607.

Gulati, R. 1995. Does Familiarity Breed Trust? The Implications of Repeated Ties for Contractual Choice in Alliances. *Academy of Management Journal*, 38(1): 85-112.

Gulati, R. 1998. Alliances and networks. *Strategic Management Journal*, 19(4): 293-317.

Gulati, R. 1999. Network location and learning: the influence of network resources and firm capabilities on alliance formation. *Strategic Management Journal*, 20(5): 397-420.

Gulati, R., Lawrence, P.R., & Puranam, P. 2005. Adaptation in vertical relationships: beyond incentive conflict. *Strategic Management Journal*, 26(5): 415-440.

Gulati, R., Lavie, D., & Singh, H. 2009. The nature of partnering experience and the gains from alliances. *Strategic Management Journal*, 30(11): 1213-1233.

Gulati, R. & Puranam, P. 2009. Renewal Through Reorganization: The Value of Inconsistencies Between Formal and Informal Organization. *Organization Science*, 20(2): 422-440.

Haas, M.R. 2010. The Double-Edged Swords of Autonomy and External Knowledge: Analyzing Team Effectiveness in a Multinational Organization *Academy of Management Journal*, 53(5).

Haleblian, J. & Finkelstein, S. 1999. The Influence of Organizational Acquisition Experience on Acquisition Performance: A Behavioral Learning Perspective. *Administrative Science Quarterly*, 44(1): 29-56.

Hamel, G. 1991. Competition for Competence and Inter-Partner Learning Within International Strategic Alliances. *Strategic Management Journal*, 12: 83-103.

Harbison, J.R. & Pekar, P. 1998. *Smart Alliances: A Guide to Repeatable Success*. San Francisco, CA: Jossey-Bass Publishers.

Hargadon, A. & Sutton, R.I. 1997. Technology Brokering and Innovation in a Product Development Firm. *Administrative Science Quarterly*, 42(4): 716-749.

Heimeriks, K.H. & Duysters, G. 2007. Alliance Capability as a Mediator Between Experience and Alliance Performance: An Empirical Investigation into the Alliance Capability Development Process. *Journal of Management Studies*, 44(1): 25-49.

Heimeriks, K.H., Duysters, G., & Vanhaverbeke, W. 2007. Learning mechanisms and differential performance in alliance portfolios. *Strategic Organization*, 5(4): 373-408.

Heimeriks, K.H., Schijven, M., & Gates, S. 2012. Manifestations of Higher-Order Routines: The Underlying Mechanisms of Deliberate Learning in the Context of Post-Acquisition Integration. *Academy of Management Journal*, 55(3).

Helfat, C.E. & Peteraf, M.A. 2003. The dynamic resource-based view: capability lifecycles. *Strategic Management Journal*, 24(10): 997-1010.

Hennart, J.F. 1988. A Transaction Costs Theory of Equity Joint Ventures. *Strategic Management Journal*, 9(4): 361-374.

Herriott, S.R., Levinthal, D., & March, J.G. 1985. Learning from Experience in Organizations. *The American Economic Review*, 75(2): 298-302.

Hoang, H. & Rothaermel, F.T. 2005. The Effect of General and Partner-Specific Alliance Experience on Joint R&D Project Performance. *Academy of Management Journal*, 48(2): 332-345.

Hoang, H. & Rothaermel, F.T. 2010. Leveraging Internal and External Experience; Exploration, Exploitation, and R&D Project Performance. *Strategic Management Journal*, 31(7): 734-758.

Hoffmann, W.H. 2005. How to Manage a Portfolio of Alliances. *Long Range Planning*, 38(2): 121-143.

Hoffmann, W.H. 2007. Strategies for managing a portfolio of alliances. *Strategic Management Journal*, 28(8): 827-856.

Holmqvist, M. 2003. A Dynamic Model of Intra-and Interorganizational Learning. *Organization Studies*, 24(1): 95-123.

Huber, G.P. 1991. Organizational Learning: The Contributing Processes and the Literatures. *Organization Science*, 2(1): 88-115.

Huber, G.P. & Lewis, K. 2010. Cross-Understanding: Implications for Group Cognition and Performance. *Academy of Management Review*, 35(1): 6-26.

Huckman, R.S. & Zinner, D.E. 2008. Does Focus Improve Operational Performance? Lessons from the Management of Clinical Trials. *Strategic Management Journal*, 29: 173-193.

Inkpen, A.C. & Tsang, E.W.K. 2007. Learning and Strategic Alliances. *The Academy of Management Annals*, 1(1): 479-511.

Ireland, R.D., Hitt, M.A., & Vaidyanath, D. 2002. Alliance Management as a Source of Competitive Advantage. *Journal of Management*, 28(3): 413-446.

Jacobides, M.G. & Winter, S.G. 2005. The co-evolution of capabilities and transaction costs: explaining the institutional structure of production. *Strategic Management Journal*, 26(5): 395-414.

Janowicz-Panjaitan, M. & Noorderhaven, N.G. 2009. Trust, Calculation, and Interorganizational Learning of Tacit Knowledge: An Organizational Roles Perspective. *Organization Studies*, 30(10): 1021-1044.

Jeon, S., Kim, G., & Koh, J. 2011. An integrative model for knowledge sharing in communities-of-practice. *Journal of Knowledge Management*, 15(2): 251-269.

Jiang, R.J., Tao, Q.T., & Santoro, M.D. 2010. Alliance portfolio diversity and firm performance. *Strategic Management Journal*, 3(10): 1136-1144.

Kale, P., Dyer, J., & Singh, H. 2001. Value creation and success in strategic alliances:: alliancing skills and the role of alliance structure and systems. *European Management Journal*, 19(5): 463-471.

Kale, P., Dyer, J.H., & Singh, H. 2002. Alliance capability, stock market response, and long-term alliance success: the role of the alliance function. *Strategic Management Journal*, 23(8): 747-767.

Kale, P. & Singh, H. 2007. Building firm capabilities through learning: the role of the alliance learning process in alliance capability and firm-level alliance success. *Strategic Management Journal*, 28(10): 981-1000.

Kale, P. & Singh, H. 2009. Managing Strategic Alliances: What Do We Know Now, and Where Do We Go From Here? *Academy of Management Perspectives*, 23(3): 45-62.

Kale, P., Singh, H., & Bell, J. 2009. Relating Well: Building Capabilities for Sustaining Alliance Networks. In P.K.a.Y. Wind (Ed.), *The network challenge: Strategies for managing the new interlinked enterprise*. London: Pearson Press.

Khanna, T. 1998. The Scope of Alliances. *Organization Science*, 9(3): 340-355.

Khanna, T., Gulati, R., & Nohria, N. 1998. The Dynamics of Learning Alliances: Competition, Cooperation, and Relative Scope. *Strategic Management Journal*, 19(3): 193-210.

Kim, D.H. 1993. The Link between Individual and Organizational Learning. *Sloan Management Review*, 35(1): 37-50.

Knight, L.A. 2000. Learning to collaborate: a study of individual and organizational learning, and interorganizational relationships. *Journal of Strategic Marketing*, 8(2): 121-138.

Knudsen, L.G. & Nielsen, B.B. 2010. Collaborative capability in RD alliances: exploring the link between organisational- and individual-level factors. *International Journal of Knowledge Management Studies*, 4(2): 152-175.

Kogut, B. 1991. Joint Ventures and the Option to Expand and Acquire. *Management Science*, 37(1): 19-33.

Kolb, D.A. 1984. *Experiential learning: experience as the source of learning and development*. Englewoord Cliffs, NJ: Prentice Hall.

Kotabe, M. & Swan, K.S. 1995. The Role of Strategic Alliances in High-Technology New Product Development. *Strategic Management Journal*, 16(8): 621-636.

Koza, M. & Lewin, A. 2000. Managing partnerships and strategic alliances: raising the odds of success. *European Management Journal*, 18(2): 146-151.

Kretschmer, T. & Puranam, P. 2008. Integration Through Incentives Within Differentiated Organizations. *Organization Science*, 19(6): 860-875.

Kumar, K. & Van Dissel, H.G. 1996. Sustainable Collaboration: Managing Conflict and Cooperation in Interorganizational Systems. *MIS Quarterly*, 20(3): 279-300.

Kumar, R. & Andersen, P.H. 2000. Inter firm diversity and the management of meaning in international strategic alliances. *International Business Review*, 9(2): 237-252.

Lambe, C.J., Spekman, R.E., & Hunt, S.D. 2002. Alliance competence, resources, and alliance success: Conceptualization, measurement, and initial test. *Academy of Marketing Science*, 30(2): 141-158.

Larson, A. 1992. Network Dyads in Entrepreneurial Settings: A Study of the Governance of Exchange Relationships. *Administrative Science Quarterly*, 37(1): 76-104.

Lavie, D. 2007. Alliance portfolios and firm performance: A study of value creation and appropriation in the U.S. software industry. *Strategic Management Journal*, 28(12): 1187-1212.

Lavie, D. & Miller, S.R. 2008. Alliance Portfolio Internationalization and Firm Performance. *Organization Science*, 19(4): 623-646.

Lei, D., Slocum Jr, J.W., & Pitts, R.A. 1997. Building cooperative advantage: Managing strategic alliances to promote organizational learning. *Journal of World Business*, 32(3): 203-223.

Letterie, W., Hagedoorn, J., van Kranenburg, H., & Palm, F. 2008. Information gathering through alliances. *Journal of Economic Behavior & Organization*, 66(2): 176-194.

Levi-Strauss, C. 1967. *The Savage Mind*. Chicago: University of Chicago Press.

Levinthal, D.A. & March, J.G. 1993. The Myopia of Learning. *Strategic Management Journal*, 14: 95-112.

Levitt, B. & March, J.G. 1988. Organizational Learning. *Annual Review of Sociology*, 14: 319-340.

Lewis, J. & Ritchie, J. 2003. *Qualitative research practice: a guide for social science students and researchers*: Sage Publications Ltd.

Li, D., Eden, L., Hitt, M., & Ireland, R. 2008. Friends, Acquaintances, or Strangers? Partner Selection in R&D Alliances. *Academy of Management Journal*, 51(2): 315-334.

Liu, C.L., Ghauri, P.N., & Sinkovics, R.R. 2010. Understanding the impact of relational capital and organizational learning on alliance outcomes. *Journal of World Business*, 45(3): 237-249.

Lui, S.S. 2009. The Roles of Competence Trust, Formal Contract, and Time Horizon in Interorganizational Learning. *Organization Studies*, 30(4): 333-353.

Lumineau, F., Frechet, M., & Puthod, D. 2011. An organizational learning perspective on the contracting process. *Strategic Organization*, 9(1): 8-32.

Lunnan, R. & Haugland, S.A. 2008. Predicting and measuring alliance performance: a multidimensional analysis. *Strategic Management Journal*, 29(5): 545-556.

Luo, X. & Deng, L. 2009. Do Birds of a Feather Flock Higher? The Effects of Partner Similarity on Innovation in Strategic Alliances in Knowledge-Intensive Industries. *Journal of Management Studies*, 46(September).

Macneil, I.R. 1978. Contracts: Adjustment of Long-Term Economic Relations under Classical, Neoclassical, and Relational Contract Law. *Northwestern University Law Review*, 72(6): 854-902.

Maurer, I. & Ebers, M. 2006. Dynamics of Social Capital and Their Performance Implications: Lessons from Biotechnology Start-ups. *Administrative Science Quarterly*, 51: 262-292.

Mayer, K.J. & Argyres, N.S. 2004. Learning to Contract: Evidence from the Personal Computer Industry. *Organization Science*, 15(4): 394-410.

Mayer, K.J. & Teece, D.J. 2008. Unpacking strategic alliances: The structure and purpose of alliance versus supplier relationships. *Journal of Economic Behavior & Organization*, 66(1): 106-127.

Mesquita, L.F. & Lazzarini, S.G. 2008. Horizontal and Vertical Relationships in Developing Economies: Implications for SMEs' Access to Global Markets. *Academy of Management Journal*, 51(2): 359-380.

Miner, A.S. & Mezias, S.J. 1996. Ugly Duckling No More: Pasts and Futures of Organizational Learning Research. *Organization Science*, 7(1): 88-99.

Miner, A.S., Bassoff, P., & Moorman, C. 2001. Organizational Improvisation and Learning: A Field Study. *Administrative Science Quarterly*, 46(2): 304-337.

Mitsuhashi, H. 2003. Effects of the Social Origins of Alliances on Alliance Performance. *Organization Studies*, 24(2): 321-339.

Mody, A. 1993. Learning through alliances. *Journal of Economic Behavior & Organization*, 20(2): 151-170.

Morgeson, F.P. & Hofmann, D.A. 1999. The Structure and Function of Collective Constructs: Implications for Multilevel Research and Theory Development. *Academy of Management Review*, 24(2): 249-265.

Mowery, D.C., Oxley, J.E., & Silverman, B.S. 1996. Strategic Alliances and Interfirm Knowledge Transfer. *Strategic Management Journal*, 17: 77-91.

Muehlfeld, K., Rao Sahib, P., & Van Witteloostuijn, A. 2012. A contextual theory of organizational learning from failures and successes: A study of acquisition completion in the global newspaper industry, 1981–2008. *Strategic Management Journal*, 33(8): 938-964.

Nelson, R.R. & Winter, S.G. 1982. *An Evolutionary Theory of Economic Change*. Cambridge, MA: Belknap Press.

Okhuysen, G.A. & Bechky, B.A. 2009. Coordination in Organizations: An Integrative Perspective. *The Academy of Management Annals*, 3(1): 463-502.

Oliver, C. 1990. Determinants of Interorganizational Relationships: Integration and Future Directions. *Academy of Management Review*, 15(2): 241-265.

Ozcan, P. & Eisenhardt, K.M. 2009. Origin of Alliance Portfolios: Entrepreneurs, Network Strategies, and Firm Performance. *Academy of Management Journal*, 2: 246-279.

Pangarkar, N. 2009. Do Firms Learn from Alliance Terminations? An Empirical Examination. *Journal of Management Studies*, 46(6): 982-1004.

Parise, S. & Casher, A. 2003. Alliance portfolios: Designing and managing your network of business-partner relationships. *Academy of Management Executive*, 17(4): 25-39.

Parkhe, A. 1991. Interfirm Diversity, Organizational Learning, and Longevity in Global Strategic Alliances. *Journal of International Business Studies*, 22(4): 579-601.

Pratt, M.G. 2008. Fitting Oval Pegs Into Round Holes: Tensions in Evaluating and Publishing Qualitative Research in Top-Tier North American Journals. *Organizational Research Methods*, 11(3): 481-509.

Pugh, D.S., Hickson, D.J., Hinings, C.R., & Turner, C. 1969. The Context of Organization Structures. *Administrative Science Quarterly*, 14(1): 91-114.

Reitzig, M. & Puranam, P. 2009. Value Appropriation as an Organizational Capability; The Case of IP Protection through Patents. *Strategic Management Journal*, 30: 765-789.

Reuer, J.J. & Leiblein, M.J. 2000. Downside Risk Implications of Multinationality and International Joint Ventures. *The Academy of Management Journal*, 43(2): 203-214.

Reuer, J.J. & Zollo, M. 2005. Termination outcomes of research alliances. *Research Policy*, 34(1): 101-115.

Rindfleisch, A. 2000. Organizational Trust and Interfirm Cooperation: An Examination of Horizontal Versus Vertical Alliances. *Marketing Letters*, 11(1): 81-95.

Ritchie, J. & Spencer, L. 2002. Qualitative Data Analysis for Applied Policy Research. In A.M. Huberman, Miles, M.B. (Ed.), *The Qualitative Researcher's Companion*: 305-329: Thousand Oaks.

Rothaermel, F.T. & Deeds, D.L. 2006. Alliance type, alliance experience and alliance management capability in high-technology ventures. *Journal of Business Venturing*, 21(4): 429-460.

Sampson, R. 2005. Experience effects and collaborative returns in R&D alliances. *Strategic Management Journal*, 26(11): 1009-1031.

Sampson, R. 2007. R&D Alliances and Firm Performance: The Impact of Technological Diversity and Alliance Organization on Innovation. *Academy of Management Journal*, 50(2): 364-386.

Santema, S.C. 2011. *A conceptual model for interactions between suppliers and buyers: from uni faced to multi faced B2B sales organizations*. Paper presented at the Journal of Business Market Management Conference, Tampere, Finland.

Sarkar, M.B., Aulakh, P.S., & Madhok, A. 2009. Process Capabilities and Value Generation in Alliance Portfolios. *Organization Science*, 20(3): 583-600.

Saxton, T. 1997. The Effects of Partner and Relationship Characteristics on Alliance Outcomes. *The Academy of Management Journal*, 40(2): 443-461.

Schilke, O. & Goerzen, A. 2010. Alliance Management Capability: An Investigation of the Construct and Its Measurement. *Journal of Management*, 36(5): 1192-1219.

Schreiner, M., Kale, P., & Corsten, D. 2009. What really is alliance management capability and how does it impact alliance outcomes and success? *Strategic Management Journal*, 30(13): 1395-1419.

Scott, W.R. & Davis, G.F. 2006. *Organizations and Organizing: Rational, Natural and Open Systems Perspectives* New Jersey: Prentice Hall.

Simonin, B.L. 1997. The Importance of Collaborative Know-How: An Empirical Test of the Learning Organization. *Academy of Management Journal*, 40(5): 1150-1174.

Simonin, B.L. 2004. An Empirical Investigation of the Process of Knowledge Transfer in International Strategic Alliances. *Journal of International Business Studies*, 35(5): 407-427.

Sivadas, E. & Dwyer, F.R. 2000. An Examination of Organizational Factors Influencing New Product Success in Internal and Alliance-Based Processes. *Journal of Marketing*, 64(1): 31-49.

Smith, K.G., Carroll, S.J., & Ashford, S.J. 1995. Intra- and Interorganizational Cooperation: Toward a Research Agenda. *Academy of Management Journal*, 38(1): 7-23.

Stinchcombe, A.L. 1990. *Information and Organizations*. Berkeley: University of California Press.

Strauss, A. & Corbin, J.M. 1990. *Basics of qualitative research: Grounded theory procedures and techniques*. Thousand Oaks, CA, US: Sage Publications, Inc.

Strauss, A. & Corbin, J. 1998. *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory* (2nd Edition ed.). Thousand Oaks, California 91320: Sage Publications.

ter Wiel, A.A. & Vlaar, P.W.L. 2011. When firms do not benefit from collaborative experience: differences in the intensity and nature of interorganizational relationships. In K. McCarthy & M. Fiolet & W. Dolfsma (Eds.), *The Nature Of The New Firm: Beyond the Boundaries of Organizations and Institutions*: Edward Elgar.

Thompson, J.D. 1967. *Organizations in Action; Social Science Bases of Administrative Theory*: McGraw-Hill Book Company.

Tsai, W. 2002. Social Structure of 'Coopetition' within a Multiunit Organization: Coordination, Competition, and Intraorganizational Knowledge Sharing. *Organization Science*, 13(2): 179-190.

Vlaar, P.W.L., Van den Bosch, F.A.J., & Volberda, H.W. 2006. Coping with Problems of Understanding in Interorganizational Relationships: Using Formalization as a Means to Make Sense. *Organization Studies*, 27(11): 1617-1638.

Vlaar, P.W.L., Van den Bosch, F.A.J., & Volberda, H.W. 2007. On the Evolution of Trust, Distrust, and Formal Coordination and Control in Interorganizational Relationships. *Group & Organization Management*, 32(4): 407-428.

Walter, J., Lechner, C., & Kellermanns, F.W. 2008. Disentangling Alliance Management Processes: Decision Making, Politicality, and Alliance Performance. *Journal of Management Studies*, 45(3): 530-560.

Yin, R.K. 2003. *Case Study Research* (3 ed.): Sage Publications.

Zhang, J., Baden-Fuller, C., & Mangematin, V. 2007. Technological knowledge base, R&D organization structure and alliance formation: Evidence from the biopharmaceutical industry. *Research Policy*, 36(4): 515-528.

Zollo, M., Reuer, J.J., & Singh, H. 2002. Interorganizational Routines and Performance in Strategic Alliances. *Organization Science*, 13(6): 701-713.

Zollo, M. & Winter, S.G. 2002. Deliberate Learning and the Evolution of Dynamic Capabilities. *Organization Science*, 13(3): 339-351.

Appendices

Appendix A: Details interviewees, chapter 3

No	Organization	Organization size, # employees	Interviewee positions and references (M = male, F = female)
01	General Hospital	± 1 000	X06: Board of Directors (M), X22: Head of Procurement Department (M)
02	General Hospital	± 1 400	X02: Manager external relations (M), X23: Head of Procurement Department (M)
03	General Hospital	± 1 550	X05: Board of Directors (M), X19: Head of Procurement Department (M)
04	Fast Moving Consumer Goods	± 100	X67: Purchasing Manager (F), X68: Trade Marketer (M)
05	Governmental institution	± 15 000	X42: Policy Maker (F), X47: Policy Officer (M), X35: Region Manager (M), X43: Region Manager (F), X49: Region Manager (M)
06	Consultancy Firm	± 150	X70: Project Leader (M), X73: Office Coordinator (F), X74: Affiliate Controller (M)
07	Fast Moving Consumer Goods	± 150 000	X64: Product Development Manager (M)
08	University Hospital	± 9 500	X15: Head of Procurement Department (M)
09	General Hospital	± 2 200	X21: Procurement Manager (F)
10	General Hospital	± 2 000	X16: Head of Procurement Department (M)
11	Mental Health Care	± 2 200	X24: Chairperson Council (F), X25: Financial Director (M), X28: Council secretary (M), X31: Division Director (M), X32: Chairperson Board (F), X34: Head Staff department (F), X36: Lawyer (F), X39: Board Secretary (F), X46: Policy Officer (M), X50: Division Director (M)
12	Consultancy Firm	± 2 500	X69: Senior Manager (M), X72: Mobility Manager (M), X78: Marketing Communications Manager (M), X79: Partner (M), X81: Procurement Manager (M)
13	General Hospital	± 3 000	X20: Head of Procurement & Logistics (M)
14	General Hospital	± 3 600	X18: Procurement Manager (F)
15	Fast Moving Consumer Goods	± 40 000	X58: Category Development Manager (F), X59: Commercial Manager (M), X60: Logistics Manager (M), X61: Director Strategy and Foodservice (M)
16	Consultancy Firm	± 400	X76: Partner (M), X82: Alliance Manager (F), X83: Technical Application Manager (M)
17	Consultancy Firm	± 450	X71: Board Member (M), X84: Managing Director

			Procurement (M)
18	Fast Moving Consumer Goods	± 5 000	X62: Manager Communications/CSR (F), X63: Brand Manager (F)
19	University Hospital	± 5 100	X13: Head of Procurement Department (M)
20	University Hospital	± 5 500	X04: Manager Strategy, Policy & Projects (F), X14: Head of Procurement & Logistics (M)
21	Consultancy Firm	± 50	X77: Partner (M), X80: Office Manager (F)
22	Fast Moving Consumer Goods	± 50 000	X53: Customer Relationship and Supply Chain Manager (M), X54: Purchasing Manager (M), X55: Account Manager (M), X56: Materials Manager (M), X57: Marketing Manager (M), X66: Contract Manager (M)
23	Fast Moving Consumer Goods	± 500	X65: Category Development Manager (F)
24	University Hospital	± 6 900	X07: Strategy Director (F), X11: Head of Procurement Department (M), X30: Chairperson Council (F), X37: Board Member (M), X38: Program Manager (F), X40: Council Secretary (M), X44: Head Staff Department (F), X45: Policy Officer (F), X48: Board member (M), X51: Strategy Manager (F)
25	Consultancy Firm	± 6 500	X75: Senior Marketing Consultant (M)
26	University Hospital	± 7 100	X01: Director Research Institute (M), X03: Director Alliances (M), X12: Procurement Manager (M)
27	Youth Care Institution	± 800	X26: Head Staff Department (F), X27: Care Mediator (M), X29: Chairperson Council (F), X33: Region Manager (F), X41: Chairman Board (M), X52: Head of Department (M)
28	University Hospital	± 9 000	X17: Head of Procurement Department (M)
29	Electronics company	± 5 500	X09: Strategic Outsourcing Manager (M), X10: Chief Purchasing Officer (M)
30	Electronics company	± 18 000	X08: Director Procurement (M)

Appendix B: Interview protocol, chapter 3

1. What is your position and what are your roles and responsibilities in this organization? How do these relate to alliance management?
2. How many alliances do you, your department and your organization manage?
3. How does your organization measure the performance of its alliances?
4. Which capabilities are important for managing these relationships?
5. What experience with previous collaborations can help you to manage future relationships?
6. How is an alliance with, for example, a supplier similar to and different from working with other types of partners?
7. How do you and the organization learn from previous alliances?
8. How is information and knowledge on managing collaborative relationships embedded and institutionalized within the organization?
9. What kind of information and knowledge about alliances is worth sharing within the organization and what kind is not?
10. How much experience do you yourself, your department, and your organization have with managing alliances?
11. To what extent are the organization's alliances managed in the same place (i.e. unit, department) and by the same people?
12. What would happen if all alliances were (not) managed in the same department?

Representative 'proof' quotes per category

Fragmentation across organizational units

We have a few partnerships with suppliers and also in collaboration with other hospitals. Our department manages these alliances as well as the purchasing relationships that we are involved in [...]. We are not involved in the R&D alliances of our hospital; these are dealt with at a higher level and in a different department. We don't communicate with them. (X12)

Our alliance partners have different types of contacts in our organization. Distinct departments and different people are involved. In an extreme situation, we [the alliance managers] meet one another at the partner organization, not knowing about the joint connection. (X07)

We have a lot of different collaborative agreements. You can't really speak of collaboration at organizational level. Our divisions work with different external partners and have organized it at that level as well. (X37)

Fragmentation across alliance portfolios

Well, one type of relationship is different from the other. The experience that we have with our R&D alliances is not necessarily useful for other collaborative relationships. Collaborating with other hospitals, especially neighboring ones - our direct competitors - is much more pulling and pushing, than collaborating with for example research institutes. The way you work with competitive alliance partners, is different. We would be more careful with sharing certain information for instance. If you were to deal with all partners the same way, it might work out unfavorably. (X01)

In the ideal situation [when transferring information about partners] you go through all written information [with colleagues] and discuss the do's and don'ts and the nuances. And also it's not wise to put everything on paper. I don't write everything down either. Of course, the most important stuff, yes, but not really about the personal relationships, I mean about the contact person him or herself. But it's important that your colleague gives you that information if it's available. (X04)

Managing a strategic supplier relationship is quite different from managing a collaborative relationship with another hospital. [...] I think that is the case because of the origin of the relationship. It requires adaptation from both sides if you have gone through some rough negotiations with a supplier before and eventually form a partnership. You have to be able to let go of your old habits and form new positions. That is similar to the difference between

collaborating with a supplier or an associate hospital. Other things are involved. For example the extent to which an alliance contract needs to be sound. (X03)

Of course there are differences in managing different types of alliances. I manage alliances with advertising and design agencies for example. I treat my partners differently because in my experience some partners are not interested in the details and just want to stick to the project outlines, especially the advertising agencies; I really cannot ask them to sit down and evaluate our alliance, but we discuss nonstop with the design agencies. (X56)

Fragmentation across individual managers

The alliance managers for our research projects are very much focused on their own reality; they do not oversee any other kind of collaboration, such as the collaborative relationships with other hospitals [...]. We don't document whether or not we like collaborating with a certain partner. I cannot tell you if we're satisfied with a partner if I have not been involved in managing the alliance myself. (X01)

If managers or staff members are involved in certain collaborations and they've done it before, I am sure they take their experience with them and use it in a new agreement. There is no incorporated mechanism or the like, however, that helps our organization learn from previous collaboration. Learning happens spontaneously and informally, and it is hindered by a high turnover rate. (X41)

Although most information stays in people's heads, we document some knowledge about our partnerships, but it's up to the next person to actually consult that information. (X08)

There are a number of strategic alliances that are set up by the Board of Directors. There's also collaboration that is initiated on the work floor in case certain issues arise there first. We manage these relationships in three different ways: the first category is the responsibility of the Board of Directors and 'bottom-up'-initiated collaboration is managed by the directors of the different divisions and the staff department. (X40)

Appendix D: Positive effects of collaborative experience, chapter 3

Representative 'proof' quotes per category

Positive effect of collaborative experience on learning

I notice that the more we collaborate, the better we get at doing it. (X19)

At one point you know how to deal with a certain collaborative relationship; no system or training can top that. The more alliances our project leaders [alliance managers] manage, the better they get at alliance management. (X07)

We've learned to do so because we failed a few times in the past, and these doom-scenarios are raked up every once in a while. In such cases, we established formal collaborative agreements that didn't get off the ground because we didn't formulate the actual final objectives. (X27)

Look, we have all kinds of collaborative relationships with external parties, but in the end it's all the same. You have to agree on certain issues, comply with these agreements and be on top of the alliance. We particularly learn from negative stories about other alliances of the organization. If we hear such stories, we consult our colleagues on the details so that we avoid making the same mistakes. Often though, it turns out to be something small that escalated and not so much management as actually doing something wrong. (X31)

Positive effect of collaborative experience on alliance capability development

We learn from our mistakes. We say to ourselves 'where did this go wrong?' Thus, we try to avoid pitfalls from the past. [...]. We appointed someone to monitor all our contracts. That database... We regularly evaluate our collaboration and adjust it annually. Is there still a match between contracts and reality? Are there reasons for adjustment? At least twice a year, we have a so-called overall management meeting with all our partners. (X32)

It would be much better if we assessed all our collaborative relationships on a structural basis and according to certain standards. This would help us to learn from the past. Now we kind of evaluate our external relationships overall, but stay superficial. It would be good to know how the partnership worked exactly, and what we get out of it for next time. (X41)

Our Board divided the organization's external relationships among its members. All collaborations are intensively managed by one person, but the overlapping issues are discussed in joint meetings. In that way, knowledge converges, because there's always some sort of overlap. Maybe not regarding content, but definitely regarding style and collaborative tactics, etc. (X42)

Appendix E: Influence of fragmentation, chapter 3

Representative 'proof' quotes per category

Fragmentation hinders learning

We do have knowledge about formal collaboration, but we have a lot of discontinuity in our management. This stops us from embroidering on what we did in the past. (X24)

Well, I'm responsible for some client partners and some supplier partners; it might not be very logical, but it just developed that way. I do see differences in these relationships, for example, regarding the dependency in the alliance. Besides that, different people from [our organization] are involved and now that I think about it, I'm the only link between these specific alliances. Actually, that's quite bad; maybe we should put these people together once to see if they can learn from one another. (X59)

There are some very experienced managers in our organization and they really know who to collaborate with and who to avoid, and why and how. These people are sometimes asked for advice, but not structurally, and it isn't regulated in our organization. And if such an experienced person is not involved or not around, we often see that our managers encounter similar problems. That unfortunately shows that we're not really learning from previous alliances. You asked if we use the knowledge available. I'm afraid not. (X29)

Fragmentation impedes alliance capability development

In an ideal world, all alliances would be managed in one department. This would provide a better chance of complete information exchange [about partners] and it would be easier for us to learn from what went well and what went wrong in the past. (X03)

Knowledge is often not used in different partnerships. The institutional memory and learning ability is quite low. There are reports of formal collaboration and there must be a database somewhere. When employees have been involved in certain alliances before, of course they use their own knowledge and experience. But I don't think that we assess our collaboration on a regular basis, for example. Actually that's one of the biggest problems. When you evaluate why things work or don't work, you can learn from it and use this knowledge for future collaboration. But I have to admit that it rarely happens. (X41)

Collaboration is assessed on a regular basis, internally as well as externally. This happens in the different departments that are responsible for the collaboration. It's often managed from above, but collaboration is often not evaluated organization-wide. It just happens in the different departments. (X27)

Representative 'proof' quotes per category

I know that our directors have meetings in which they talk about their collaboration. So, in that sense things are shared, but it doesn't happen on a regular basis. Knowledge is often embedded in specific individuals. The same people are often responsible for collaboration, so in that sense the knowledge of previous collaboration processes is used. However, collaboration is not evaluated on a regular basis. The knowledge stays embedded in specific people within the organization. (X28)

Appendix F: Fragmentation and coordination per organization, chapter 3

The table below illustrates if fragmentation occurs and at which levels,, and whether or not coordination takes place to overcome this fragmentation. Per organization the situation is briefly described based on the information provided during the interviews. The following applies:

●   fragmentation at this level and no coordination facilitated

○   fragmentation could have occurred, but since coordination takes place across these units, portfolios or individuals, it does not necessarily restrict firm level learning

-   not applicable because alliances are not classified as such (i.e. managed per unit or portfolio), thus fragmentation does not apply

No	Industry	Size, # employees	Unit	Port-folio	Indivi-dual	Actual fragmentation	Explanation
1	Health care	± 1 000	○	○	○	Low	Coordination between units and portfolios is facilitated and takes place. All strategic relations are monitored by Board of Directors.
2	Health care	± 1 400	○	○	○	Low	One director for all strategic external relations where all information comes together.
3	Health care	± 1 550	-	●	○	Medium	Focus on portfolios of different types of alliances. Within portfolios, individuals share know-how. Board of Directors is knowledgeable, but no knowledge sharing across portfolios.
4	FMCG	± 100	-	○	○	Low	Knowledge is generally shared, because regular meetings are facilitated.
5	Health care	± 15 000	-	●	●	High	Complete fragmentation; very individually oriented. Alliances divided per portfolio, no coordination between these 'specializations'.
6	Consultancy	± 150	●	-	●	High	Alliances are managed per unit. Much information lost when employees leave.

No	Industry	Size, # employees	Unit	Portfolio	Individual	Actual fragmentation	Explanation
7	FMCG	± 150 000	-	-	○	Low	Alliances managed in kind of matrix structure, with multidisciplinary teams, unit and portfolio transcendent
8	Health Care	± 9 500	●	●	●	High	Fragmentation across all levels, no coordination
9	Health Care	± 2 200	●	●	●	High	No coordination, no registration, info stays in people's heads. Units overlap with portfolios.
10	Health Care	± 2 000	●	-	○	Medium	Departments responsible for their own alliances. Only Board of Directors informed of actions, but no real coordination. Info within departments is shared between individuals.
11	Health Care	± 2 200	●	●	○	Medium	Alliances are managed per department and sometimes grouped in portfolios. People within these 'groups' communicate and share experiences.
12	Consultancy	± 2 500	●	-	○	Medium	Units are their own 'shops' but knowledge is shared within.
13	Health Care	± 3 000	●	●	●	High	Management of alliances underdeveloped. Trying to change, but no knowledge sharing at present. Fragmentation occurs at all levels.
14	Health Care	± 3 600	●	●	○	Medium	Fragmentation in units and in portfolios, coordination within units and portfolios takes place.
15	FMCG	± 40 000	●	●	○	Medium	Almost no coordination about IOR between units and strong focus on portfolio. There is knowledge sharing within groups of people working on specific type of alliances.
16	Consultancy	± 400	●	●	●	High	Within units, individuals have their own alliance portfolios.
17	Consultancy	± 450	●	-	○	Medium	Units are seen as very separate groups, no coordination across them, but strong knowledge sharing within.
18	FMCG	± 5 000	●	-	●	High	Units do not know about each other's contacts, info stays in people's heads. No clear distinction per portfolio but per unit.

No	Industry	Size, # employees	Unit	Port-folio	Indivi-dual	Actual fragmentation	Explanation
19	Health Care	± 5 100	●	●	●	High	Board of Directors is informed but does not coordinate and most people keep real know-how to themselves within the units and portfolios.
20	Health Care	± 5 500	○	○	○	Low	Coordination is facilitated across all levels.
21	Consultancy	± 50	○	-	○	Low	Regular meetings are organized to transfer know-how.
22	FMCG	± 50 000	○	●	○	Medium	Alliance management is unit transcendent Strong focus on portfolio, between portfolios no coordination Within portfolio there is coordination
23	FMCG	± 500	-	●	●	High	Individuals have their own responsibilities in managing external relations, no coordination to share know-how.
24	Health Care	± 6 900	-	●	○	Medium	Board of Directors coordinates, but members responsible for different alliance portfolios.
25	Consultancy	± 6 500	●	-	●	High	Very individually based, no coordination facilitated or undertaken.
26	Health Care	± 7 100	○	○	○	Low	Alliance department where know-how comes together
27	Health Care	± 800	●	●	●	High	Alliances individually driven, no coordination facilitated or taking place.
28	Health Care	± 9 000	●	-	●	High	No distinction in portfolios, alliances managed per unit, no coordination
29	Electronics	± 5 500	●	●	○	Medium	There is coordination within units and portfolios, but not across these levels.
30	Electronics	± 18 000	●	-	○	Medium	Initial contact person stays involved in the alliance. Information systems available. Conscious choice to manage relationships within specialized units.

Appendix G: Details interviewees, chapter 4

No	Organization	Organization size, # employees	Interviewee Positions and References (M = male, F = female)
01	General Hospital	± 1 000	X06: Board of Directors (M), X22: Head of Procurement Department (M)
02	General Hospital	± 1 400	X02: Manager external relations (M), X23: Head of Procurement Department (M)
03	General Hospital	± 1 550	X05: Board of Directors (M), X19: Head of Procurement Department (M)
04	Fast Moving Consumer Goods	± 100	X67: Purchasing Manager (F), X68: Trade Marketer (M)
05	Governmental institution	± 15 000	X42: Policy Maker (F), X47: Policy Officer (M), X35: Region Manager (M), X43: Region Manager (F), X49: Region Manager (M)
06	Consultancy Firm	± 150	X70: Project Leader (M), X73: Office Coordinator (F), X74: Affiliate Controller (M)
07	Fast Moving Consumer Goods	± 150 000	X64: Product Development Manager (M)
08	University Hospital	± 9 500	X15: Head of Procurement Department (M)
09	General Hospital	± 2 200	X21: Procurement Manager (F)
10	General Hospital	± 2 000	X16: Head of Procurement Department (M)
11	Mental Health Care	± 2 200	X24: Chairperson Council (F), X25: Financial Director (M), X28: Council secretary (M), X31: Division Director (M), X32: Chairperson Board (F), X34: Head Staff department (F), X36: Lawyer (F), X39: Board Secretary (F), X46: Policy Officer (M), X50: Division Director (M)
12	Consultancy Firm	± 2 500	X69: Senior Manager (M), X72: Mobility Manager (M), X78: Marketing Communications Manager (M), X79: Partner (M), X81: Procurement Manager (M)
13	General Hospital	± 3 000	X20: Head of Procurement & Logistics (M)
14	General Hospital	± 3 600	X18: Procurement Manager (F)
15	Fast Moving Consumer Goods	± 40 000	X58: Category Development Manager (F), X59: Commercial Manager (M), X60: Logistics Manager (M), X61: Director Strategy and Foodservice (M)
16	Consultancy Firm	± 400	X76: Partner (M), X82: Alliance Manager (F), X83: Technical Application Manager (M)
17	Consultancy	± 450	X71: Board Member (M), X84: Managing Director

No	Organization	Organization size, # employees	Interviewee Positions and References (M = male, F = female)
	Firm		Procurement (M)
18	Fast Moving Consumer Goods	± 5 000	X62: Manager Communications/CSR (F), X63: Brand Manager (F)
19	University Hospital	± 5 100	X13: Head of Procurement Department (M)
20	University Hospital	± 5 500	X04: Manager Strategy, Policy & Projects (F), X14: Head of Procurement & Logistics (M)
21	Consultancy Firm	± 50	X77: Partner (M), X80: Office Manager (F)
22	Fast Moving Consumer Goods	± 50 000	X53: Customer Relationship and Supply Chain Manager (M), X54: Purchasing Manager (M), X55: Account Manager (M), X56: Materials Manager (M), X57: Marketing Manager (M), X66: Contract Manager (M)
23	Fast Moving Consumer Goods	± 500	X65: Category Development Manager (F)
24	University Hospital	± 6 900	X07: Strategy Director (F), X11: Head of Procurement Department (M), X30: Chairperson Council (F), X37: Board Member (M), X38: Program Manager (F), X40: Council Secretary (M), X44: Head Staff Department (F), X45: Policy Officer (F), X48: Board member (M), X51: Strategy Manager (F)
25	Consultancy Firm	± 6 500	X75: Senior Marketing Consultant (M)
26	University Hospital	± 7 100	X01: Director Research Institute (M), X03: Director Alliances (M), X12: Procurement Manager (M)
27	Youth Care Institution	± 800	X26: Head Staff Department (F), X27: Care Mediator (M), X29: Chairperson Council (F), X33: Region Manager (F), X41: Chairman Board (M), X52: Head of Department (M)
28	University Hospital	± 9 000	X17: Head of Procurement Department (M)

Appendix H: Interview protocol, chapter 4

1. What is your position and what are your roles and responsibilities in this organization? How do these relate to alliance management?
2. How many alliances do you, your department and your organization manage?
3. How does your organization measure the performance of its alliances?
4. Which capabilities are important for managing these relationships?
5. What experience with previous collaborations can help you to manage future relationships?
6. How is an alliance with, for example, a supplier similar to and different from working with other types of partners?
7. How do you and the organization learn from previous alliances?
8. How is information and knowledge on managing collaborative relationships embedded and institutionalized within the organization?
9. What kind of information and knowledge about alliances is worth sharing within the organization and what kind is not?
10. How much experience do you yourself, your department, and your organization have with managing alliances

Appendix I: Alliance dimensions, chapter 4

Proof quotes for alliance dimensions

Form

Anyways, I am mainly concerned with that logistical alliance and that is definitely a different ball game than the other partnerships. I can imagine that a research alliance proceeds in a different way. We are, for example, really focused on cost savings for all parties involved and for that you really need to be aware of the logistical twists and turns. (X60)

For our major projects, well, I mean the projects in which, besides us, more than two strategic partners are involved we assign all coordination tasks to one person. This one could even be on the payroll of the project. [...] It really pays off to do this, especially because it would take too much time from one of our so to speak regular relationship managers to do it. (X01)

At the moment we have three joint ventures and many more other alliance contracts. The joint ventures are usually more complicated and one of our alliance managers specializes in dealing with those particularities, although I have to add we used external legal advisors to draw up the contracts. (X26)

Focus

If we do a lot of new things in a collaboration that requires more effort, yes. I really try to be on top of things in that case. Some partnerships have been going on for such a long time or have such a standard goal, it is more about maintenance than active guidance. (X19)

For our strategic suppliers we work with commodity managers. Our managers are responsible for a certain commodity of products or services and they are then also responsible for the associated suppliers. (X14)

We look at the type of partners we work with. Roughly we have 4 types, namely other hospitals, care institutions & nursing homes, general practitioners, and strategic suppliers. There might be some others, but these are the most important. [...] The people from our side who are responsible for these relationships focus mainly on one category of partners. (X05)

Besides the R&D alliances that I manage I have a colleague that deals with all important marketing collaborative initiatives and then there is another person who is responsible for all relationships with institutions concerning our social responsibility. (X62)

Proof quotes for alliance dimensions

Phase

Even though I am responsible for the relationship itself, I was not involved in the formation of it. The board of directors did the whole preliminary process. […] Of course other aspects are involved in that phase. They consider for example whether or not this partnership may harm other existing partners and those kinds of things. Luckily I do not have to bother with that during execution. (X52)

We disconnect the preformation phase from the rest of the process. Other colleagues are involved, and unfortunately it also happens that the person responsible for the alliance was not involved in the first phase at all. […] I have only seen the first step in a new alliance from the sideline but it looks like a complicated exercise with exploring each other's intentions and all. (X79)

In one of our alliances we reached such a situation of disagreement that we had to terminate the contract early. My boss then asked me to step out of it and handed the coordination and communication over to our legal department. (X82)

Importance

We created a star model. Hospitals with five stars are organizations we potentially would like to merge with or that could take over part of the care we provide now. The four star hospitals are those with which we collaborate intensively in all core areas of patient care, education and research. Three stars refer to collaboration in two of those areas and one star is just an interorganizational relationship. (X04)

Previously we categorized our external relationships based on the products we were dealing with in the partnership, but now we have a distinction based on importance of the partner to our firm and the potential for value creation. That makes much more sense, just because you treat partners that are more important to your organization differently from the ones that are less strategic. (X55)

Only a few strategic partners are really important to us and I am involved in only those. All the other relationships are nice but capacity from top management is limited. […] It might change over time by the way, sometimes relevance for our organization shifts. (X71)

Appendix J: Applicability practices, chapter 4

Proof quotes for 'applicability practices'

Homogeneous alliances

I know it might sound lazy, but we used exactly the same format for a new alliance recently, just because we had worked with such a setup and contract and so on. [...] It is only later that I realized that the contract for example is way too detailed and that it was giving the responsible manager a headache. (X65)

At one point we were just forming new relationships with whichever organization wanted to be affiliated with us, just because we were good at initiating these kinds of collaborations… but then you see proliferation occurring, and proper management was lacking really. (X14)

Complementary partners

We are a relatively small organization and it was the first time we actually partnered with another organization that could become extremely important to us. Logically, we wanted to work with a firm that had experience with real strategic partnerships. [...] I think we saved a lot on legal advice for the contracts. (X77)

We had a choice between two strategic suppliers when we started this R&D project. They were both interested but did not want to work with each other. [...] We eventually selected the one that had done the most comparable projects before because we expected them to bring more to the table (X19).

External expertise

We have hired a firm to help us formalize our contracts and another company to maintain the database in which we store the information about all our partners. And yes, we also hire consultants, but only for certain aspects that we cannot do ourselves. (X39)

[...] we then realized we were going way over our heads because such a partnership would have a great impact on how customers would perceive us and we needed help in this sort of marketing aspect of it all. A communication expert just advised us on what to communicate explicitly and what not, both to the public and to our employees. (X48)

Appendix K: Case details, chapter 5

Firm	Description
A	Firm A is a large airline company that operates worldwide. The organization employs around 32,000 people and maintains a high number of alliances with strategic partners. Firm A has a high level of formalization; informal processes are subordinate to formal processes. Documentation of knowledge is enforced. Execution of management tasks takes place in a dedicated alliance department. This department oversees, coordinates and carries out all alliance activities of the firm.
B	Firm B is active in the tourism industry and is one of Europe's biggest players on the market of accommodation rentals, like holiday homes, holiday parks and hotels. The organization currently employs around 200 people and has offices in the Netherlands (home base), Germany, Austria, France and Spain. Firm B shows high levels of formalization that are combined with informal processes. All authority and responsibility regarding the management of alliances resides within a team of managers and documentation of knowledge by different alliance managers that work throughout the organization is enforced.
C	Firm C is the Dutch branch of a multinational technology and consulting corporation that provides information technology solutions to the business market. The organization employs about 5,000 people in the Netherlands only. Decisions about how to collaborate are taken by the business line, driven/facilitated by the alliance department. Reporting lines are clear but there are limited rules for reporting and no formal rules for evaluation. Interaction between alliance managers is mainly verbal, regularly facilitated by the alliance function and oftentimes ad hoc.

Firm	Description
D	Firm D is an international corporation active in facility services, human resources services and health care. The organization employs about 46,000 people. Even though decisions with whom and how to collaborate are taken by the 'alliance operations' section there are no clear rules on reporting mechanisms and task interpretation differs from person to person. There is no enforcement of knowledge documentation and no alliance database.
E	Firm E is one of the largest suppliers of financial services in the Netherlands, with various brands in the Dutch market. The company offers a wide range of financial products and they serve both the B2B and the B2C market with for example health insurances and pension funds. Firm E employs about 17,000 people. The alliance management organization is completely informal and responsibilities are dispersed throughout the organization.
F	Firm F is a transport company and has divided its activities in two groups, public transport and exploitation. Public transport involves al the associated activities, in the Netherlands as well as abroad. Exploitation involves all activities regarding the exploitation of stores (chains), train- and bus stations, real estate and project development. The organization employs about 29,500 people. It is a large organization that maintains and controls alliances at lower levels throughout the organization in different business units. The organization relies on sporadic emergent interaction between alliance managers.

Appendix L: Details interviewees, chapter 5

Firm	Reference	Position	M/F
Firm A	A1	Director Alliances	M
	A2	Director E-commerce	M
	A3	Program Manager	M
	A4	Vice President Services Program	M
	A5	Director Information Management	M
Firm B	B1	CEO	M
	B2	Product Manager	M
	B3	E-commerce Manager	M
	B4	Director Operations	F
Firm C	C1	Cluster Unit Executive	M
	C2	Alliance Executive	M
	C3	Alliance Executive	M
	C4	Channel Manager	M
Firm D	D1	Director Alliance Operations	M
	D2	Senior Project Manager	F
	D3	Finance Director	M
	D4	Alliance Manager	M
Firm E	E1	Care Development Manager	F
	E2	Innovation Manager	M
	E3	President Board of Directors	M
	E4	Director Europe	M
Firm F	F1	Head of Business Development Department	M
	F2	Manager Partner Alliances	F
	F3	Program Manager European Strategy	M
	F4	Alliance Manager	M
	F5	Alliance Manager	F

Appendix M: Interview protocol, chapter 5

General

1. What is your position in the firm and what does this entail?
2. For which alliances are you responsible (how many and what kind)?

Configuration

3. Where in the organization is decided with whom, when and how to ally and collaborate? (Who signs the contracts and who decides?)
4. What is the division of responsibilities concerning the management of alliances?
5. To whom do you report regarding the outcomes of the alliances that you are held responsible for? To what extent is prescribed how and how often you have to report?
6. How are you in contact with colleagues that are concerned with alliance management? Is this prescribed?
7. Does your firm have a dedicated alliance function (group of people or department) and what does it look like?

Learning and developing alliance capability

8. How do you make sure that you learn from old and existing alliances to keep doing what went well and to prevent making the same mistakes in the future?
9. Which information is shared with colleagues and how? Also: what is too specific and possibly not necessary to share?
10. Which information about alliance management is recorded and how? Also: what is not captured?
11. How do you make use of previous lessons learned?
12. How do you make use of meetings, standard processes, protocols, formats, databases, evaluations, training, external parties etc. to enhance learning from experience?
13. How does the presence or absence of these tools and processes affect the learning.

Appendix N: Supporting quotes, chapter 5

Proximity

As explained in subparagraph 5.3.4, proximity matters for firms that have an alliance function but do not document their alliance management knowledge. The director of alliance operations at Firm D formulated it as follows:

> *We have a small team of alliance managers and we talk to each other every day and as such we do not really have any formalized or standardized contact moments. Once per month, we do take one day, including the evening, to discuss one or two key issues, to be able to go more in-depth while taking some distance from day-to-day activities. We do not have fixed meetings to discuss progress or something, but because we work closely together this is really not necessary. If we would have such meetings we would come to the conclusion that we have seen each other six times that week already and there would be nothing to discuss. (D1)*

The proximity of the managers responsible for alliances enables face-to-face knowledge exchange. The financial director from Firm D, responsible for several alliances, underscored his colleague's opinion:

> *We are an informal club, as you may have noticed by our office which is basically a big living room. This means we talk to each other every day, at least on the phone. We also see each other in office very regularly and as such we catch up regarding our activities and experiences. (D3)*

Not all alliance activities of firm D are organized in this department though. Several people responsible for interorganizational relationships work elsewhere in the organization. Still, in Firm D alliance management knowledge is not documented, but this does not mean no codification (i.e. translation into usable resources) occurs. The same manager added:

> *Our joint ventures have controllers who gather around three times a year to exchange best practices. For example about the planning and control cycle, the governance structure, setup of stakeholder meetings etcetera. In those meetings we agree on the formal planning and control process and we try design procedures that we share with and explain to each other. (D3)*

The alliance function that oversees all the alliances of Firm D facilitates these meetings between the people involved in alliances that do not work in the same department. The director further explained:

We do try to maintain a best practices set of contracts. If something goes wrong though or if things were agreed upon but did not go well, we all know about it because we interact regularly and work closely together. This also means that you continuously hear things that you can use yourself. [...] Yes, I could put things in writing, but time constraints are really holding me back. It is only the financial documents that are sent to everyone, but if something new happens or is urgent, we just chat. (D3)

The situation of Firm C is similar to the one of Firm D. An alliance executive stated:

Lots of things are not documented. You have to make sure to pick up on things yourself and use your own experience. [...] You have to find each other to share experiences. One person will do that more than the other. (C2)

Working closely together does not necessarily mean they have their offices next to each other. Meetings can also be facilitated by the alliance function and managers are brought together to communicate. In Firm C the alliance managers are often en route to visit or even work at their partners' location. In order to ensure knowledge sharing by not only relying on encounters between colleagues in the office, they organize conference calls to further strengthen proximity (although not physical at the times of these calls):

Our alliance partners may all have a same problem with [our firm], and we, alliance managers, understand each other when we talk about those issues during the conference calls. (C3)

Verbal communication definitely prevails in firms C and D, but this is only feasible if the people responsible for alliances actually get the chance to discuss (physically or on the phone) urgent issues. In firms where alliance managers do not work closely together and at the same time do not put any of their knowledge in writing, knowledge sharing will be very limited because it will depend solely on ad hoc encounters. Relying on verbal knowledge sharing also entails risks, as a director explained:

We have seen that it may be possible to, to some extent, digitalize the knowledge that you need, but more than that it is about skills that people have and the feelings they have with [managing partnerships]. You can only cover the associated risks by ensuring proper handovers and by making sure that people do not leave the company and take their knowledge and skills with them. (D1)

These risks are further elaborated upon in paragraph 5.4.

Complexity

Managers of firms that have chosen to set up an alliance function and also document alliance management knowledge, indicate that complexity of their interorganizational relationships has guided them to work in such a configuration. One of the directors of Firm A explained it as follows:

> *We are continuously monitoring our alliance partners. We do it continuously because we work with so many partners that it is not feasible to have a separate steering group for each and every one of them. That is just not manageable. Every other week, on Friday, we discuss all activities in one day. All subprojects get two sheets to report their progress, that list for example the results from last week, current issues, next steps, how satisfied we are, deliverables, methods and often a financial update. (A2)*

He feels that it is necessary to document this knowledge in order to be able to oversee all activities and updates of the many alliance partners they are dealing with. He also said:

> *We document everything that is possible to document. All information is captured in our systems: contracts, but also details of the process that were agreed upon. (A2)*

The situation in Firm B is similar. The CEO commented:

> *We have a large number of alliances with distribution partners, networks and e-tailors. Evaluating these relationships is a continuous exercise, made possible by our information management system with a very detailed and transparent report structure. (B1)*

According to the interviewees the large number of partners makes it more necessary to document knowledge. A product managers states:

> *For all external relationships we have forms that need to be filled out. Our partners also have access to that information. [...] Knowledge sharing between our departments and offices is very important. If we do not know about each other's actions towards partners, problems may arise. (B2)*

The CEO adds:

> *Our offices have different roles towards our partners. To avoid miscommunication, we have to keep each other informed to anticipate on future developments in the relationships. (B1)*

In addition to complexities regarding the content of a large alliance or the number of partners to work with, managing an alliance portfolio can also cause complications:

Relationships between competing partners may be disturbed by alliances we have with them. Authorities have to ensure that customers are not disadvantaged. Lots of protocols and processes are available to avoid us from doing the wrong things. (A2)

On top of their firms' own protocols on how to deal with alliance partners, managers may have to follow national regulations concerning customer protection. In this case, Firm A cannot just ally with any firm, because non-competition clauses may be at stake. In such situations, documentation (if only for legal purposes) becomes imperative.

Dissimilarity

The interviewed managers of the firms without written articulation of alliance management knowledge, kept emphasizing that they see no point in putting their knowledge to paper. An alliance manager from D stated:

I cannot really generalize about how you manage a joint venture. They are all so different, concerning size and concerning history. There is no protocol underlying any management activities. If you would be able to draft one, it just would not be usable. The outline, for example the contract details, are fixed. But after the front door, as we call it, the joint ventures are too different. Each one requires a different approach. (D4)

His colleague confirms:

We do not try to document [knowledge about alliance activities], because you will always see that each activity, whether it concerns our partners from the public sector or health care or with private partners, is very different. It will not pay off to try to capture this in systems. It is important that you know where to get your knowledge. (D1)

Because Firm D does have an alliance function, the alliance activities within the firm do get coordinated. As a result of the dissimilarity of alliances however, alliance activities are spread throughout the firm. A head of department of Firm F told a similar story about the dissimilarity of his firm's external relationships:

We do not have established processes or routines. Especially because all relationships are different. Maybe if you are the bigger party in collaborations you could standardize more, but we are usually the smaller one and have to adjust. [...] Also the intensity of the collaborations and the shared activities are always different. (F1)

As is the case in Firm D, Firm F's alliance activities are carried out throughout the organization:

The management of our alliances is carried out by different organizational units. [...] We do not have a central depository of knowledge or something. What the business units do is their own decision. This is mostly information of individuals that they pass on to their successors. (F3)

Even though hardly any knowledge is documented, it does not mean no learning about alliance management takes place. It does mean that this learning happens on a local level and as such local capabilities, as opposed to a centralized organizational capability, develop:

Our alliances have different structures and are difficult to compare. If we speak of learning from our experience, I would say this mainly happens informally. We do not put things in writing. (F5)

No two alliances are exactly the same of course, but the data shows that in firms with no alliance function and no articulation of knowledge the differences between alliances seem to be bigger or more prevalent.

Nederlandse samenvatting

Deze Nederlandse samenvatting geeft een beknopte weergave van de inhoud van mijn proefschrift dat is getiteld: 'Leren samenwerken: Een kwalitatieve studie naar interorganisatorisch relatiemanagement'. Het proefschrift begint met een inleiding die wordt gevolgd door vier hoofdstukken met daarin elk een op zich staand artikel, zie ook Figuur 1 op bladzijde 18. Aan de eerste drie artikelen heeft Paul Vlaar bijgedragen en aan het tweede artikel heeft ook Tom Elfring meegewerkt[16]. Na de vier artikelen volgt het laatste hoofdstuk waarin ik alle hoofdbevindingen samenvat en bespreek, en suggesties doe voor mogelijk toekomstig onderzoek.

Hoofdstuk 1: Inleiding

Dit proefschrift gaat over hoe organisaties leren van de ervaring die ze opdoen door samen te werken met andere organisaties. Belangrijke concepten die aan de orde komen, zijn: allianties, alliantiemanagement-ervaring, alliantiemanagement-bekwaamheid en leren over alliantiemanagement op organisatieniveau.

Allianties zijn interorganisatorische relaties tussen tenminste twee onafhankelijke organisaties waarbij, over een lange termijn, wordt samengewerkt door waardevolle middelen (waaronder kennis) te delen om wederkerige doelen te bereiken. Door samen te werken met partners doen organisaties ervaring op met alliantiemanagement. Deze alliantiemanagement-ervaring leidt volgens bestaande literatuur tot een zekere alliantiemanagement-bekwaamheid van de organisatie, een indicatie van hoe goed die organisatie is in het managen van haar allianties. Dit hangt af van het vermogen van de

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[16] Hoofdstukken 2, 3 en 4 zijn derhalve in de eerste persoon meervoud geschreven en hoofdstukken 1, 5 en 6 in de eerste persoon enkelvoud.

organisatie om ervaring met alliantiemanagement te verkrijgen, intern te delen en vervolgens toe te passen. Daarbij speelt leren een belangrijke rol. De literatuur onderscheidt verschillende typen leren in de alliantiecontext en in dit proefschrift staat leren over hoe allianties het best gemanaged kunnen worden centraal. Allianties kunnen het bedrijfsresultaat verhogen, maar het is niet makkelijk om ze goed te managen. Dit heeft te maken met de complexiteit en onzekerheden die komen kijken bij het managen van projecten die organisatiegrenzen overschrijden. Om te profiteren van de voordelen van allianties is adequaat management echter een voorwaarde. Dit maakt dat het belangrijk is om te weten wat zich afspeelt binnen organisaties wanneer deze proberen hun alliantiemanagement te verbeteren naarmate meer ervaring wordt opgedaan. De centrale onderzoeksvraag van dit proefschrift luidt derhalve:

Hoe leren organisaties van alliantiemanagement-ervaring opdat ze hun alliantie-management verbeteren en hun alliantiemanagement-bekwaamheid ontwikkelen?

Bestaande studies hebben reeds onderzocht in welke mate alliantiemanagement-ervaring de ontwikkeling van alliantiemanagement-bekwaamheid beïnvloedt. Wat deze studies niet onderzoeken, is *hoe* ervaring wordt gebruikt door organisaties en hun managers. Dit leidt tot vragen als: waar bestaat de ervaring uit, waar bevindt het zich in de organisatie, wat doen managers met hun ervaring en wat kunnen organisaties doen om het leren van alliantiemanagement te faciliteren? Door de concepten van alliantiemanagement-ervaring en -bekwaamheid te ontrafelen middels een kwalitatieve studie worden in dit proefschrift deze vragen beantwoord.

Er zijn drie redenen waarom voor een kwalitatieve studie is gekozen. Ten eerste bleek uit een paar exploratieve interviews aan het begin van het onderzoek dat informatie over allianties van de organisatie als geheel niet voldoende bekend was bij een persoon. Tegelijkertijd bleek dat allianties zich lastig over een kam laten scheren, wat nader onderzoek naar de precieze kenmerken nodig maakte. Ten tweede wordt door het doen van een kwalitatieve studie gehoor gegeven aan oproepen van gerenommeerde onderzoekers om de aard van alliantiemanagement-ervaring te exploreren door middel van diepte-interviews. Ten derde past een kwalitatieve aanpak bij de centrale onderzoeksvraag zoals hierboven geformuleerd. In de discussiesectie

worden de theoretische en praktische implicaties van het onderzoek besproken, maar eerst volgt hieronder een samenvatting van de vier artikelen (hoofdstukken 2 t/m 5).

Hoofdstuk 2: Typen interorganisatorische relaties

Om te kunnen overleven in een dynamische context, een omgeving die continu onderhevig is aan verandering, kiezen organisaties er steeds vaker voor om buiten de grenzen van hun eigen bedrijfsvoering te kijken en hun krachten te bundelen met andere bedrijven. Zo werken ze samen met leveranciers, klanten en concurrenten, en doen ze dat in allerhande typen samenwerkingsvormen zoals joint ventures of onder meer informele voorwaarden. Uit eerdere studies blijkt dat organisaties steeds beter worden in het managen van dergelijke samenwerkingsverbanden omdat ze leren van opgedane ervaring.

In de eerste studie (hoofdstuk 2 van dit proefschrift), leggen we uit dat ervaring die wordt opgedaan met het managen van het ene type samenwerking verschilt van de managementervaring die wordt verkregen met het andere type. We beargumenteren dat het soort ervaring afhangt van de mate van intensiteit van samenwerken en het type afhankelijkheid tussen de twee partners. Bij intensiteit onderscheiden we twee extremen, namelijk transactionele (lage intensiteit) en relationele (hoge intensiteit) connecties. Bij type afhankelijkheid onderscheiden we horizontale en verticale relaties. Aan de hand van quotes van managers die verantwoordelijk zijn voor verschillende typen relaties illustreren we de nuances die komen kijken bij het adequaat managen van interorganisatorische relaties. De inkoopmanager die verantwoordelijk is voor strategische leveranciersrelaties gaat bijvoorbeeld op een andere manier om met deze relaties dan de manager verantwoordelijk voor de partners waarmee gezamenlijk een product wordt ontwikkeld. Daarmee maken we duidelijk dat de ervaring die wordt opgedaan met verschillende samenwerkingsvormen niet altijd bruikbaar is voor toekomstige overeenkomsten. Bepaalde lessen die zijn geleerd over samenwerken kunnen zelfs schadelijk zijn voor nieuwe relaties als ze zomaar worden toegepast. Met onze bevindingen, voor wat betreft verschillende typen relaties die resulteren in verschillende typen ervaring, nuanceren we bevindingen uit eerdere studies over de geschiktheid en toepasbaarheid van alle samenwerkingservaring. Tenslotte pleiten we ervoor dat organisaties die op zoek gaan naar mogelijkheden tot samenwerking met externe bedrijven, rekening moeten houden met de uiteenlopende vaardigheden die vereist zijn voor het management van relaties met verschillende partners.

De eerste studie is gepubliceerd als boekhoofdstuk en heeft derhalve een afwijkende opbouw in vergelijking met de andere drie studies.

Hoofdstuk 3: Fragmentatie van kennis over samenwerken

Zoals hierboven uitgelegd, bepleiten bestaande studies dat organisaties gaandeweg leren hoe ze het beste hun allianties kunnen managen. Met het opdoen van meer ervaring vergroten ze dus hun 'alliantiemanagement-bekwaamheid'. Echter, gezien het achterblijvende succes van allianties lijken organisaties het moeilijk te vinden om de vluchten te plukken van deze ervaring. Op basis van 84 interviews met alliantiemanagers onderzoekt de tweede studie (hoofdstuk 3 van dit proefschrift) waarom het voor organisaties lastiger is om te leren van ervaring met samenwerken dan bestaande studies ons hebben doen geloven. Daarbij kijken we naar waar ervaring zich bevindt in organisaties en hoe organisaties hiervan al dan niet leren.

De interviewdata laten zien dat het gebeurt dat ervaring met samenwerken niet wordt vertaald in grotere alliantiemanagement-bekwaamheid vanwege de zogenaamde fragmentatie van opgedane ervaring. Daarmee bedoelen we dat de kennis die is verkregen met het managen van allianties dusdanig verspreid aanwezig is in de organisatie dat deze vaak niet aanwendbaar is in nieuwe situaties. De kennis blijft 'steken' bij individuen, binnen alliantie portfolio's (clusters van gelijksoortige allianties) en binnen organisatie-eenheden. Deze fragmentatie hindert de toegankelijkheid van samenwerkingservaring voor andere mensen binnen de organisatie en de toepasbaarheid in nieuwe situaties. Dit verklaart dat, zonder gerichte coördinatiemechanismen, ervaring niet automatisch een positieve invloed heeft op toekomstig alliantiemanagement.

Onze resultaten schijnen nieuw licht op bestaande literatuur over de ontwikkeling van de bekwaamheid van organisaties om allianties te managen, en dragen bij aan het begrip van leren op organisatieniveau in de context van alliantiemanagement. Daarnaast verklaren we onder welke condities organisaties niet profiteren van waardevolle kennis die zij bezitten. De contributie van de studie is tweeledig. Ten eerste breiden we bestaande theorie uit door te laten zien wat gebeurt met samenwerkingservaring als organisaties proberen om hun alliantiemanagement te verbeteren. We beargumenteren dat het ontwikkelen van bekwaamheid op het gebied van samenwerking kan worden gehinderd door de interne alliantiemanagementstructuur. Dit heeft implicaties voor (het niveau van) de

meetbaarheid van ervaring met en bekwaamheid van het managen van allianties. Ten tweede vullen we bestaande studies aan die kijken naar leren op organisatieniveau. Zonder uitspraken te doen over gewenste coördinatieniveaus beargumenteren we dat onderzoekers, wanneer de effecten van ervaring worden onderzocht, rekening moeten houden met de geobserveerde fragmentatie en de benodigde coördinatie.

Hoofdstuk 4: Beschikbaarheid en toepasbaarheid van kennis over alliantiemanagement
De derde studie (hoofdstuk 4 van dit proefschrift) onderzoekt hoe managers in nieuwe situaties gebruik maken van de ervaring die zij eerder hebben opgedaan. Op basis van bestaande theorie en de analyse van 81 interviews met alliantiemanagers lichten we toe dat managers meer ervaring proberen te verkrijgen en deze beter toepasbaar proberen te maken op nieuwe situaties. De verkregen data laten zien dat organisaties hun bekwaamheid om allianties te managen vergroten door i) het soort relaties aan te gaan waarmee ze al ervaring hebben, ii) partnerorganisaties te selecteren die complementaire alliantiemanagement-kennis hebben, en iii) interne kennis aan te vullen met externe expertise. Door het toepassen van deze tactieken ontstaat een bekwaamheid binnen de organisatie om allianties te managen, maar alleen op een lokaal niveau, namelijk dat van het individu of een kleine groep van individuen. Om het vervolgens bekwaamheid op organisatieniveau te laten worden, zijn gerichte activiteiten nodig die de kennis institutionaliseren.

De resultaten van deze studie vullen bestaande literatuur aan door het proces tussen het hebben van ervaring met allianties en de bekwaamheid om daarmee om te gaan aan te scherpen. De contributies raken twee gebieden van literatuur. De eerste is het gebied van alliantiemanagement. We zien dat het hiervoor genoemde proces minder rechtlijnig is dan eerder werd aangenomen. De lokale bekwaamheid om allianties te managen die ontstaat bij (een groep van) managers, wordt pas op organisatieniveau van belang na institutionalisering. Zodoende kunnen ervaring met alliantiemanagement en alliantiemanagement-bekwaamheid ook lastig aangemerkt worden als concepten op organisatieniveau. We zeggen dat een (groep van) alliantiemanager(s) eerst een voorlopige, individuele, bekwaamheid ontwikkeld voor het management van allianties. Het tweede gebied betreft theorie over leren op organisatieniveau die we toepassen op onze bevindingen. We beschouwen de beschikbaarheid en toepasbaarheid van alliantiemanagement-ervaring en hoe organisaties deze proberen te vergroten.

Zodoende laten we zien wat organisaties en alliantiemanagers feitelijk doen om hun ervaring verder aan te vullen en/of te compenseren voor een eventueel gebrek eraan.

Hoofdstuk 5: Configuraties van alliantiemanagement

Bestaande literatuur over hoe bedrijven vorm hebben gegeven aan hun alliantiemanagement heeft zich met name geconcentreerd op de aan- of afwezigheid van een zogenaamde alliantiefunctie. Dit centrale punt waar alle activiteit aangaande alliantiemanagement wordt overzien en gecoördineerd, moet de bekwaamheid van organisaties om hun allianties te managen, vergroten. In een dergelijke functie wordt immers samenwerkingservaring vastgelegd en binnen de organisatie verspreid. Tot op heden is weinig onderzoek gedaan naar hoe organisaties gebruik maken van een dergelijke functie en hoe bedrijven zonder alliantiefunctie leren van het management van oude allianties.

Gebaseerd op de analyse van zes organisaties, biedt de vierde studie (hoofdstuk 5 van dit proefschrift) nieuw inzicht in eerdere studies die uitgingen van de relevantie en noodzaak van een speciale alliantiefunctie. Ik onderscheid drie verschillende alliantiemanagement-configuraties binnen de zes onderzochte bedrijven, gegroepeerd naar de aan- of afwezigheid van een centrale alliantiefunctie en het wel of niet schriftelijk articuleren (documenteren) van kennis over alliantiemanagement. Vervolgens wordt duidelijk onder welke condities de verschillende configuraties het best tot hun recht komen.

De studie heeft drie contributies. Ten eerste, door condities af te leiden waaronder de verschillende configuraties van alliantiemanagement werken, leg ik uit dat het opzetten van een alliantiefunctie niet de enige mogelijkheid is die bedrijven hebben om hun alliantiemanagement te verbeteren. De bijbehorende data illustreren de variaties die bestaan tussen bedrijven met verschillende configuraties van alliantiemanagement. Ten tweede leg ik uit dat de keuze voor het inrichten van een alliantiefunctie mogelijk voorbij schiet aan het doel van die functie om meer ervaring vast te leggen en deze te vertalen in bruikbare instrumenten voor beter alliantiemanagement (zoals checklists en handleidingen). Als alliantiemanagers namelijk nauw met elkaar samenwerken in dezelfde afdeling (wat vaak het geval is wanneer een alliantiefunctie is ingericht) zien zij minder snel het nut in van het documenteren van hun kennis. Ze kunnen dit immers makkelijk in informele settings met elkaar delen. Ten derde beargumenteer ik dat bedrijven met gelijke

alliantiemanagement-ervaring op verschillende niveaus alliantiemanagement-bekwaamheid ontwikkelen. Bedrijven zonder alliantiefunctie hebben over het algemeen meer lokale alliantiemanagement-bekwaamheid, die verspreid over de organisatie bij verschillende (groepen van) mensen bestaat, dan bedrijven met een alliantiefunctie.

Hoofdstuk 6: Discussie

In hoofdstuk 6 van het proefschrift worden de hoofdbevindingen van het onderzoek nogmaals gepresenteerd, geaggregeerd en gegroepeerd aan de hand van drie thema's (zie Tabel 12). Hier beperk ik me tot een korte beschrijving van de theoretische en praktische implicaties van het onderzoek.

De theoretische implicaties van het onderzoek gepresenteerd in dit proefschrift kunnen worden samengevat in vier hoofdpunten. Ten eerste laat het onderzoek zien dat alliantiemanagement-ervaring en -bekwaamheid meer ingewikkelde constructen zijn dan tot nu toe werd verondersteld. De grote diversiteit die bestaat aan allianties leidt tot een verscheidenheid aan alliantiemanagement-ervaring. Daarnaast hebben organisaties meer mogelijkheden dan het inrichten van een alliantiefunctie aangaande het organiseren van hun alliantiemanagement-activiteiten. Waar bestaande studies weinig aandacht hadden voor de effecten van deze diversiteit op leren over alliantiemanagement binnen de organisatie, wordt nu duidelijk welke consequenties de diversiteit binnen de hoofdconstructen heeft. In toekomstig onderzoek zal op basis van deze nieuwe inzichten meer duidelijkheid nodig zijn over de concepten onder studie en de aannames, bijvoorbeeld over de toepasbaarheid van ervaring, die daarbij worden gemaakt. Ten tweede hebben mijn resultaten gevolgen voor het analyseniveau van toekomstig onderzoek op alliantiegebied. Waar ervaring met en bekwaamheid in alliantiemanagement in andere studies constructen op organisatieniveau waren, beargumenteer ik dat meer nuance nodig is. Het is niet meteen duidelijk wie of wat alliantiemanagement-bekwaamheid bezit: een alliantiemanager, een groep van managers of de organisatie als geheel. Zonder (of met beperkte) coördinatie wordt alliantiemanagement-ervaring niet gedeeld in een organisatie en bestaat er dus ook niet zoiets als de bekwaamheid van een hele organisatie die wordt gevoed door leren van ervaring. Ten derde heb ik dit alliantieonderzoek verbonden aan literatuur over leren van de organisatie. Door te onderzoeken hoe organisaties steeds beter worden in het managen van allianties gaat het onderzoek verder dan slechts vaststellen dat dat gebeurt. Daarbij zijn drie dimensies van leren relevant, namelijk hoe leren wordt

bereikt, wie of wat leert, en wat wordt geleerd. Dit proefschrift diept deze drie dimensies uit en beschrijft dat er barrières zijn om te leren over alliantiemanagement, dat vaak lokaal wordt geleerd (op lagere niveaus in de organisatie) en dat wat wordt geleerd meer in subsets van bekwaamheid resulteert dan in een bekwaamheid van de organisatie. Gerelateerd aan dit laatste punt heeft, ten vierde, het onderzoek implicaties voor alliantieportfolio-bekwaamheid. Dit betreft de bekwaamheid van de organisatie om om te gaan met alle allianties als geheel (aangezien deze ook elkaar beïnvloeden). Het holistische potentieel van het alliantieportfolio van een organisatie kan ondermijnd worden door de diversiteit van de verschillende subgroepen van allianties daarbinnen. Zo kunnen deze kleinere clusters van gelijksoortige allianties separate bekwaamheid met zich meebrengen wat weer invloed heeft op de keuze voor een geschikte alliantiemanagement-configuratie.

De praktische implicaties van het onderzoek zijn drieledig. Ten eerste bepleit ik dat de juiste personen moeten worden toegewezen aan de juiste allianties. Daarmee sluit ik aan bij de bevinding dat allianties sterk van elkaar verschillen en uiteenlopende kwaliteiten nodig zijn om de relaties juist te managen. Ten tweede is het verstandig voor bedrijven om in overweging te nemen in hoeverre alliantiemanagement-ervaring waardevol kan zijn om te delen binnen de hele organisatie. Vervolgens kan het delen van deze ervaring gefaciliteerd worden door alliantiemanagers bij elkaar te brengen. Ten derde zouden bedrijven de alliantiemanagement-configuratie moeten kiezen die het best past bij hun bedrijfsvoering en het soort allianties dat wordt gemanaged. Wanneer bijvoorbeeld (clusters van) allianties sterk van elkaar verschillen heeft het minder zin om te investeren in een alliantieafdeling.

Concluderend geeft dit proefschrift antwoord op de vraag hoe organisaties leren van alliantiemanagement-ervaring zodat ze hun alliantiemanagement-bekwaamheid kunnen ontwikkelen en hun alliantiemanagement kunnen verbeteren. De diversiteit van typen interorganisatorische relaties en de daaruit voortkomende ervaring resulteren in een lokale vorm van leren (op individueel, unit of portfolio niveau) dat leidt tot een lokale bekwaamheid van (een groep van) managers om (een cluster van) allianties te kunnen managen. Als organisaties alliantiemanagement-bekwaamheid op organisatieniveau willen ontwikkelen, is coördinatie nodig tussen de lokale bekwaamheid die aanwezig is. Een adequate alliantiemanagement-configuratie kan hierbij helpen.

Als organisaties de moeilijkheden die komen kijken bij leren op organisatieniveau, met name als gevolg van de diversiteit van typen interorganisatorische relaties en de benodigde coördinatie, kunnen overwinnen, liggen betere prestaties op het gebied van alliantiemanagement in het verschiet.

Acknowledgements

'A good Ph.D. is a finished Ph.D.' Over the past few years I have heard people, including several professors, use this as a soothing expression to pin down concerns about when the end product of doctoral research is of sufficient quality. Since professors actually decide when a thesis is good enough, some sort of tautological reasoning obstructs the sight of an envisaged finish line. For me such was the case during the final stages of my Ph.D. research, until I realized that it is even more important to reach the point where I can be pleased with the end result and, moreover, that I feel ready to move on to a next professional challenge. That said, I am pleased to have reached the finish line and I have a few people to thank for helping me get there.

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Highly applicable to the topic of my thesis, but moreover to doctoral research and even to life in general, I would like to conclude by saying that 'experience is something you do not get until just after you need it'.

Astrid ter Wiel
Amsterdam, September 2012