SECOND EDITION

STRATEGIC ALLIANCE MANAGEMENT

Brian Tjemkes, Pepijn Vos and Koen Burgers

ROUTLEDGE

STRATEGIC ALLIANCE MANAGEMENT

Strategic alliances – partnerships between separate organizations to share resources collaboratively toward mutually beneficial goals – are an important management instrument, but one that is difficult for firms to manage. Among many desirable outcomes, alliances can reduce costs, provide access to new technology, and improve research and development endeavours. This renewed and re-worked text connects theory to practice to help understand this important business practice.

Strategic Alliance Management presents an academically grounded alliance development framework, detailing eight stages of alliance development with consideration for specific management challenges. For each stage, readers are presented with state-of-the-art theoretical insights, evidence-based managerial guidelines and a business case illustration. Additional chapters detail on contemporary alliance management challenges, including co-opetition and business ecosystems. Other chapters highlight the role of alliance professionals, alliance capabilities and paradoxical issues in alliance relationships.

This second edition retains a blend of academic knowledge and practical examples, while updating case examples and adding five new chapters on emerging alliance topics. This book remains vital reading for business students and professionals interested in strategic management.

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CONTENTS

FIGURES

TABLES

BOXES

PREFACE

Strategic alliances have become cornerstones for the competitive strategy of many firms and (non-profit) organizations, enabling them to achieve objectives that otherwise would be difficult to realize. Unsurprisingly, the increase in alliance activity over the last few decades has occurred in parallel to enormous growth in academic and managerial attention in the subject. Paradoxically, however, firms' increased focus on and use of alliances is paralleled by moderate-to-high alliance failure rates over the same period. With a few exceptions, firms appear unable to manage their alliances successfully.

This book attempts to synthesize academic insights with managerial experience via a 'guided tour' of various aspects of strategic alliance management. Building on an academically grounded alliance development framework, the book elaborates on unique decision-making situations tied to alliance development stages. In recognition of the fact that distinct alliance objectives, alliance partners and alliance environments constitute unique management challenges, the book also elaborates on these specific conditions. Furthermore, the ability to create successful alliances, which reflects learning about alliance management and leveraging alliance knowledge inside the company, is an alliance competence. To provide understanding about such competences, the book looks in detail at alliance professionals, alliance teams and alliance capabilities, which all contribute to successful strategic alliance management. The conclusion builds on these insights by discussing three alliance paradoxes that are inherently tied to strategic alliances. The intended result is a more comprehensive book than has previously been available, which acknowledges that decision-making constitutes a critical success condition.

With regard to this second edition, several amendments to the first edition have been made. First, the second edition contains five new chapters detailing emerging alliance topics. Specifically, the alliance development framework has been extended with a chapter on alliance launch: the process of execution of the alliance once it has been formalized by the partners. In addition, two chapters have been added to the part of the book focusing on alliance context, one chapter detailing alliances between competitors and one on business ecosystems. In an attempt to provide more insight on how firms manage alliances, chapters on alliance professionals and alliance teams have been incorporated. Second, in addition to new chapters, the academic literature has been updated, new examples have been added, and relatively older cases have been replaced by more recent ones. Third, in a new appendix, an overview of managerial decision-making steps (i.e. a checklist) is presented.

The book is written with an even-handed appreciation for theory and practice. Readers possessing management knowledge, combined with the book's logic, concept and implications, will be able to absorb the information. Readers are assumed to have a basic understanding of strategic management and organizations, obtained either through study or experience. Therefore, students participating in advanced courses in graduate and MBA programmes in business schools will find this book useful, as will professionals seeking a deeper understanding of the subject.

In preparing this book (first and second edition), the authors have received considerable assistance from colleagues who provided detailed feedback on our treatment of the academic literature, alliance experts who reviewed our decision-making steps, and executives who provided us with relevant examples. We specifically acknowledge the companies and alliance managers that have provided insights, examples and feedback on the case material. Thanks are due to Steven Twait (AstraZeneca), Hans de Roos (KLM), Frits Zegeling (Grolsch), Rose Verdurmen (TNT), Jaap Lombaers (Holst Centre), Michiel Jansen, Tako Keja and Alfred Vrieling (NAM), Berry Vetjens, Nathalie van Schie, and Erik Ham (TNO), Ron van Vianen and Peter van Duijn (Hoogendoorn), Ivan Vogels (eVision), Enri Leufkens (CapGemini), Michael Kaschke (Reckitt Benckiser), Anoop Nathwani (Consortio Consulting), Henk Raven (Habraken Rutten Advocaten), Justin Philippens (The3), and Bruce Dönszelmann (KLM).

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Brian Tjemkes, Amsterdam
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Koen Burgers, Baarn

1

STRATEGIC ALLIANCE MANAGEMENT

In the early industrial age, firms created value by transforming raw materials into finished products. The economy was based primarily on tangible resources – inventory, land, factories, equipment – and a firm could formulate and execute its business strategy by operating autonomously and interacting with its environment through market transactions. But times have changed. In the current information age, businesses must create and deploy intangible resources, including employee skills, information technologies and corporate culture, to encourage innovation and improve their competitive strength. Value does not reside in any individual intangible resource, however. Rather, it arises from the entire set of resources and the strategy that links them. Valuable resources cannot be considered separately from the organizations in which they are embedded. In turn, to develop and maintain competitive advantages, many firms turn increasingly to alliances; instead of just acquiring resources, they enjoy the benefits of combining their own resources with the assets of others.

Alliances thus have become cornerstones of the competitive strategy of many firms, enabling them to achieve objectives that otherwise would be difficult to realize.[1] For example, alliances provide firms with an opportunity to increase their innovative capacity, improve their market response, achieve efficiency and share investment risks with partner firms. Yet this increased focus on and use of alliances by firms is paralleled by empirical research that indicates moderate to high alliance failure rates. Extant academic and professional literature indicates that to reap the benefits from alliances, firms must overcome internal and external adversities by efficiently and effectively managing their alliances. Even as alliance literature offers a vast amount of theoretical and practical insights though, it lacks any systematic framework for decision making. Such a framework would be of great benefit to (novice) alliance professionals by enabling them to manage their alliances systematically and aim toward success.

Accordingly, the objective of this book is to connect existing theoretical and practical insights and thereby present a much needed, coherent and academically grounded development framework of strategic alliance management. The framework focuses on unique decision-making situations tied to the management of alliances as they progress from formation to termination. Our unique alliance development framework is also grounded in theoretical perspectives (i.e. know-what), supported by practice-oriented decision-making guidelines (i.e. know-how), and illustrated by real-life alliance cases. It also incorporates both generic and specific decision-making situations tied to unique alliance contexts. Before we proceed to introduce our Alliance Development Framework though, we establish a foundation for this book in this opening chapter. To this end, we first outline our book's scope and provide a clear definition of an alliance. In the following two sections, we elaborate on why firms increasingly use alliances as instruments to develop and sustain a competitive advantage, as well as the causes for alliance failure. In the final section, after explaining the need for a book on strategic alliance management, we present the structure of the book.

The meaning of an alliance

An alliance is a voluntary, long-term, contractual relationship between two or more autonomous and independent organizations (i.e. firms), designed to achieve mutual and individual objectives by sharing and/or creating resources (Ariño *et al.* 2001, p. 110; Gulati 1995b). This definition encompasses inter-organizational relationships, such as joint ventures, purchase partnerships, research and development partnerships, co-makerships, co-creation efforts, multi-partner alliances, public–private partnerships and consortia, but it excludes arrangements such as simple market transactions, mergers and acquisitions. In Table 1.1, we list examples of alliances consistent with our definition.

Four important implications derive from this definition. First, an alliance is an instrument that firms use to achieve their objectives, ultimately to develop and sustain their competitive advantage (Ireland *et al.* 2002). Therefore, alliance management constitutes a strategic activity within firms. Second, the definition indicates that an alliance consists of two or more firms, which remain independent organizational entities but connect voluntarily through an alliance contract. Although alliances thus offer firms flexibility in achieving their objectives, they also represent relatively unstable organizational arrangements, because there is an absence of hierarchical governance (Litwak and Hylton 1962). Third, as critical resources get exchanged, firms engaged in alliances grow increasingly dependent on each other to realize their joint and individual objectives. This situation implies that firms must manage their alliances proactively to resolve any tension between cooperative forces focused on value creation and competitive forces oriented towards value appropriation (Dyer *et al.* 2008). Fourth, our definition implies that alliances are transitional entities, because firms can dissolve them at any convenient time. The threat of premature termination requires systematic management attention to resolve any emerging adversities.

Compared with other organizational entities such as stand-alone organizations, alliances thus represent unique arrangements with specific management challenges (Albers et al. 2016). For example, interdependent parties in alliances must develop joint business propositions, share control and management, accept overlapping roles and responsibilities, engage in adaptation through mutual cooperation, install internal and proactive monitoring mechanisms and develop long-term incentive systems. However, parallel to cooperation, competition between the partners exists because partners simultaneously compete with one another to attain individual objectives, occasionally at the expense of their counterparts. In other words, if alliances are relatively unstable and complex entities though, the question emerges: why do firms engage in alliance activity?

TABLE 1.1 Examples of alliances

Company	*Description*
DSM	DSM establishes a number of partnerships for its Pharma and Bulk Chemicals activities in order to streamline and simplify its core portfolio in Nutrition and Performance Materials. In 2011, DSM established a 50/50 joint venture with Sinochem to develop, produce and sell pharmaceutical ingredients and finished dosages. In 2014, together with JLL Partners, DSM formed Pantheon to add scale, develop new value chain capabilities and technologies, as well as to expand its end-to-end service offerings to the pharmaceutical industry. In 2015, DSM formed ChemicaInvest, a new joint venture (35% equity) with CVC Capital Partners. ChemicaInvest is a global leader in the production and supply of caprolactam and the leading European supplier of acrylonitrile and composite resins.
IBM	IBM forges a number of global partnerships to achieve economies of scale and scope, enhance its innovative capability, and support its global footprint and market leadership. In 2014, IBM and Twitter forged a global partnership, integrating Twitter data with IBM analytics services, to enrich cloud services for clients across business, to deliver a set of enterprise applications to help improve business decisions across industries and professions, and to enrich consulting services for clients across business. In 2015, IBM and Box announced a global partnership that would combine the best-in-class technologies and resources of both companies to create simple and secure solutions based on Box's industry-leading cloud content collaboration platform with IBM Analytics, Content Management and Social solutions, IBM Security technologies and the global footprint of the IBM Cloud. In 2016, IBM and Teva expanded their existing global e-Health alliance with a focus on two key healthcare challenges: the discovery of new treatment options and improving chronic disease management. Both projects will run on the IBM Watson Health Cloud.
Walmart	Walmart has revolutionized the way retail companies manage relationships and partnerships within the supply chain. Walmart shares its vast trove of real-time sales data with the firms that stock its shelves and even goes so far as to create large teams to work with partners to streamline costs. In addition, Walmart forges partnerships to effectuate a positive change with regards to risks and social issues in consumer goods supply chains. Walmart is a founding member of the Alliance for Bangladesh Worker Safety, a group of brands and retailers seeking to drive safer working conditions for the men and women in the ready-made garment industry. In 2014, Walmart joined the Fair Food programme through a partnership with the Coalition of Immokalee Workers (CIW) and Florida tomato suppliers. The Global Social Compliance Programme (GSCP) is a business-driven programme created to promote the continuous improvement of working and environment conditions in global supply chains. Walmart is one of five leading companies that helped to create GSCP.

Sources: DSM (2016); IBM (2016); Walmart (2016)

Alliance activity

Alliances are critical weapons in firms' competitive arsenals, and in recent decades, alliance activity has increased substantially (Duysters *et al.* 2012; Gomes *et al.* 2016). According to Kang and Sakai (2001), the number of alliances in 1999 was six times higher than a decade before. Duysters *et al.* (1999) report a similar exponential increase in strategic technology alliances during the period 1970–1996, and Anand and Khanna (2000) count, during 1990–1993, more than 9,000 alliances just in the US manufacturing sector. On the basis of their research, Dyer *et al.* (2001) conclude that in 2001, the top 500 global businesses averaged 60 major alliances each. De Man (2005) reports the number of alliances by high-tech companies during the period 1998–2002: IBM (168), Cisco (56), Eli Lilly (40) and Philips–EU (61). Furthermore, the impact of alliances appears to be growing steadily. As Harbison and Pekar (1998) find, the percentage of the annual revenue of the 1,000 largest US companies earned from alliances grew from less than 2 per cent in 1980 to 19 per cent by 1996 and was expected to reach 35 per cent by 2002. With respect to predictions for the future, survey research indicates that managers consider alliances primary vehicles for growth (Schifrin 2001). Banks, for example, are becoming more open to the idea of partnering with startups to push their growth strategy forward. Between 2013 and 2014, a 200 per cent jump in the value of US fintech (partnership) deals was observed (Accenture 2016). Results from the Global CEO Survey indicates that 49 per cent of the participating CEOs will forge an alliance/joint venture agreement in 2016, compared to 51 per cent in 2015, and 44 per cent in 2014 (PWC 2016). These illustrations imply that firms cannot create value on a stand-alone basis; the way business is conducted today is based on partnerships (for more alliance examples see Turiera and Cros 2013).

The rationales for engaging in alliances shift with economic and industry developments (Doz and Hamel 1998). During the 1970s for example, firms focused on product performance (i.e. efficiency and quality) and engaged in alliances to obtain access to technology and new domestic and international markets, as well as to realize market stability. During the 1980s, the focus shifted to obtaining flexible market positions, as continuing globalization, increasing competition and more demanding customers required firms to become flexible. Their alliances provided flexibility, deployed to build industry stature, consolidate industry positions and gain economies of scale and scope. Then during the 1990s and 2000s, firms switched their attention to learning and capability development for innovation; they began using alliances to ensure a constant stream of prospects for advancing technology, proactively maximize value, optimize their total cost for product or customer segments and gain an ability to respond to changing internal and external conditions. More recent upsurges in alliance activity appear triggered by a focus on corporate social responsibility: alliances help firms comply with institutional and market demands for sustainability. Regardless of the rationale, though, the strategic value of alliances is apparent, especially in a contemporary context of rapidly growing and changing markets, global competition, network organizations and dynamic, complex, expensive technologies.

Today alliances represent strategic instruments that offer various advantages (see Table 1.2). Firms enter alliances to access valuable and complementary resources they do not already possess (Das and Teng 2000b), including capital, technology and specialized knowledge. To expand product volume and achieve economies of scale, firms also establish partnerships. Furthermore, they might engage in alliances to reduce operational and strategic risks,

TABLE 1.2 Advantages and disadvantages of alliances

Advantages	*Disadvantages*
– Access to resources: firms form alliances to gain access to capital, specialized skills, market and technological knowledge, or production facilities, which can help them focus on core competences. – Economies of scale: high fixed costs require firms to collaborate to expand production volume. – Risk and cost sharing: alliances enable firms to share the risk and cost of particular investments. – Access to a (foreign) market: partnering with another firm is often the only way to obtain access to a (foreign) market. – Learning: alliances offer firms an opportunity to learn from their partners; for example lean manufacturing, product development, management know-how or technology capabilities. – Speed to market: firms with complementary skills collaborate to increase speed to market and capture first-mover advantages. – Reputation: firms form alliances to increase their reputation and legitimization. Lobbying activities and collective pressure prompt governments to adopt policies that favour specific industries. – Neutralizing or blocking competitors: firms can gain competencies and market power to neutralize or block the moves of a competitor (e.g. entry barriers). – Assessing acquisition partner: alliances offer a way to know a potential acquisition candidate better and decrease information asymmetry. – Flexibility: alliances provide more flexibility than hierarchies and markets and are subject to less regulation than mergers and acquisitions.	– Loss of proprietary information: proprietary information can be lost to a partner who is a competitor or eventually will become one. – Management complexities: because alliances require the combined effort of multiple firms, they entail coordination complexities, often resulting in conflicts, frustrations and costly delays. – Financial and organizational risks: the opportunistic behaviour of partners can undermine the value creation logic of an alliance. Inter-organizational routines also may make it difficult for a firm to act independently. – Risk of becoming dependent: a power imbalance arises if one partner becomes overly dependent on the other. This situation increases the risk of opportunism, exploitation, and (hostile) acquisitions. – Loss of decision autonomy: joint planning and decision making may result in a loss of decision-making autonomy and control. – Loss of flexibility: establishing an alliance with one partner may prevent partnerships with other potential firms. – Antitrust implications: the benefits of alliances disappear if they are challenged on antitrust grounds. Some countries have strict regulations that prohibit certain business relationships. – Learning barriers: although alliances provide access to knowledge, learning barriers may make it difficult to integrate and exploit new knowledge. – Long-term viability: despite predetermined objectives and end dates, internal and external contingencies often cause premature termination.

Source: Adapted from Barringer and Harrison (2000).

accelerate internal growth or increase speed to market. Alliances also can function as learning vehicles, providing a means to obtain, exchange and harvest knowledge (Lubatkin *et al.* 2001). They can even shift external dependencies to the firm's advantage by blocking competitors or inducing group-to-group competition (Gimeno 2004). If an alliance offers legitimacy and reputation effects (Stuart 2000), it can reinforce the firm's corporate social responsibility policies and lobbying activities (London *et al.* 2006). Finally, alliances offer a way to assess potential acquisition partners, in that shared experiences reduce the costs related to integration. Thus alliances provide more flexibility than hierarchies or markets and are subject to less regulation than mergers and acquisitions.

However, alliance activity creates several disadvantages. For example, firms may lose proprietary information to a competitor, which weakens their competitive advantage (Kale *et al.* 2000); the managerial complexities due to reciprocal and interdependent relationships may create substantial coordination costs that jeopardize joint value creation (Gulati and Singh 1998); their voluntarily collaboration increases the risk of opportunistic conduct, which undermines value appropriation efforts (Wathne and Heide 2000); firms can become locked into a relationship, reducing their bargaining power; and the loss of decision autonomy could inhibit the firm's ability to steer the alliance toward its own objectives (Glaister *et al.* 2003), just as the loss of organizational flexibility may restrain its ability to pursue alternative, potentially more valuable arrangements. Furthermore, laws and regulations often inhibit an alliance's potential (Oxley 1999), and inter-firm learning may be difficult due to learning barriers that limit a firm's absorptive capacity (Hamel 1991). Finally, unforeseen internal and external contingencies constitute a threat to long-term stability (Das and Teng 2000a).

Alliance failure

Paradoxically, even as firms increase their focus on and use of alliances, their failure rates seem to keep climbing (Hoang and Rothaermel 2005; Pekar and Allio 1994). Researchers report failure rates as high as 70 per cent (Harrigan 1988), though in other settings, Franko (1971) and Killing (1983) find 24 and 30 per cent premature alliance dissolutions, respectively. Porter (1987) considers 33 randomly chosen US firms, a sample that produced a dissolution rate of 50.3 per cent during 1950–1986. Kok and Wildeman (1997) and Dacin *et al.* (1997) calculate approximately 60 per cent failure rates for alliances, whereas Park and Ungson (1997) find a dissolution rate of 43 per cent during 1979–1995 among a US–Japanese sample. De Man (2005) reports an average failure rate of 52 per cent for a sample of 140 European and US firms. Based on a repetitive study among alliance professionsals (i.e. 2002, 2007, 2009, 2011), Duysters (2012) and colleagues conclude that the alliance failure rates remain stable at approximately 50 per cent. These reports in combination confirm that even if firms consider alliances attractive methods to achieve their objectives, they are subject to widespread failure and premature dissolution.

A plethora of factors contribute to or inhibit the achievement of superior performance (Hoffmann and Schlosser 2001; Nemeth and Nippa 2013; Robson *et al.* 2002). For example, the success or failure of alliances might be attributed to environmental contingencies (Koza and Lewin 1998), the cultural distance between partners (Barkema *et al.* 1996), broad or narrow alliance scopes (Khanna 1998), the alliance contract (Hagedoorn and Hesen 2007), the governance form adopted (Sampson 2004a), emerging alliance instability (Das and Teng 2000a), management control (Yan and Gray 1994), the quality of the working relationship (Ariño *et al.* 2001) or learning processes (Lane *et al.* 2001). We postulate that whereas premature dissolution results from mismanagement and ad hoc decision making, alliance success stems from the adoption of a systematic approach to alliance management.

Specifically, we address three key reasons that encompass this plethora of potential deal breakers. First, failure stems from a lack of understanding of the potential pitfalls and hazards that pertain to the different alliance development stages. Alliances typically develop through a sequence of stages, and during each, partner firms direct their attention to specific design and management decisions. For example, during the alliance strategy formulation stage, decisions should focus on developing a business proposition and selecting an appropriate governance mode (i.e. make, buy or ally). But during the alliance management stage, decisions instead must focus on the day-to-day operations. Second, failure can be attributed to an unawareness of the unique challenges imposed on them by different alliance objectives,

BOX 1.1 ALLIANCE SEGMENTATION

Alliance segmentation entails an approach to distinguish between different types of alliance relationships. Segmentation is academically relevant to clarify the object of the study and organize theory and empirical evidence systematically. In this book for example we use various alliance segmentation approaches, among which alliance development (e.g. design versus management), alliance objectives (e.g. learning versus co-branding), partner characteristics (e.g. cross-sector versus competition) and governance forms (e.g. equity versus non-equity). Whereas the academic segmentations outlined in this book are critical to alliance professionals as it helps them to organize and focus their attention, in practice other segmenations do exist. For example, alliance leadership may organize a set of alliance relationships based on the extent to which a partner holds promise for the future and the extent to which this partner is strategically important to the firm. Consequently, four alliance types are distinguished. First, a corporate alliance is strategically important and holds a key to future success. These relationships require extant managerial attention as often multiple ties exist with a (rival) partner, including supplier, learning and customer relationships. In addition to exploiting existing and joint resource combinations, innovation is often part of the long-term agenda. Second, a business alliance entails a single-tie relationship, exhibiting low strategic importance and low potential for future synergies. Such a relationship extends beyond a mere transactional exchange, and alliance management is relatively straightforward with a focus on monitoring relationship progress and attaining objectives. Third, relationship alliances hold great promise for the future, as for example joint research and development efforts may lead to marketable innovations. However, the present strategic value is low, thus alliance management should primarily focus attention on unlocking the relationship's potential. Fourth, strategic alliances are of critical importance to the firm, as for example a partner may provide access to a unique distribution channel or supply a critical component. Even if future synergies are unlikely, relationship continuation is imperative. Depending on the nature and objectives of the firm other pragmatic segmentation approaches, for example based on the extent of integration, the extent of learning, or the extent of equity, may be more suited and managerially effective.

diverging partner firm characteristics and unique alliance contexts. For example, whereas learning alliances require firms to focus on knowledge sharing and protection mechanisms, co-branding alliances necessitate that they direct their attention towards reputation management. Third, alliance failure is more likely when firms neglect the institutionalization of their alliance know-how and know-what – which we refer to as alliance capabilities. For example, firms that possess strong alliance capabilities, implying that they have invested in an alliance function, databases and checklists, tend to outperform firms without these capabilities.

To reap the benefits from alliances, firms must deal systematically with these three issues, which will enable them to achieve, efficiently and effectively, a good design and management approach to their alliance relationships. Observing the high failure rates in practice, it seems, however, that firms are not sufficiently prepared. Therefore we need an academically grounded framework that offers a coherent understanding of the unique nature of strategic alliance management.

An academically grounded alliance development framework

Before and during alliance development, managers confront varied, unique decision-making situations. Each situation requires that firms conceptualize it in terms of problem, solutions and implementation. That is, firms must tackle any situation by defining the problem, developing a set of solutions, selecting one solution, and then implementing it efficiently and effectively. To this end, they need to be aware of decision-making rationales, that is, the underlying principles, guidelines and theories that may inform their decision. Academic research is rife with theories that attempt to explain these decision-making rationales; we draw on theories from alliance literature to discuss the decision-making content, the alternatives, and the theoretical rationales for these various alternatives. In addition, decision makers in firms must understand the necessary steps for arriving at an appropriate solution, which we refer to as decision-making steps. Management literature is informative in this context. By combining these varied concepts and research streams, we propose an academically grounded framework for strategic alliance management that consists of three main parts: (1) alliance development stages, (2) alliance context and (3) alliance competences.

Alliance development stages

The foundation details the development stages through which alliances progress. Building on prior alliance development literature (D'Aunno and Zuckerman 1987; Das and Teng 2002; Dyer *et al.* 2001; Kanter 1994), we distinguish eight stages: (1) alliance strategy formulation, (2) alliance partner selection, (3) alliance negotiation, (4) alliance design, (5) alliance launch, (6) alliance management, (7) alliance evaluation and (8) alliance termination (see Figure 1.1). Each development stage depicts a specific decision-making situation that requires unique know-what and know-how (see Box 1.1 for other segmentation approaches). An alliance transforms and proceeds to the next stage only after it has achieved the objectives of the preceding stage. Thus, each development stage is characterized by specific issues and requires specific decision-making rationales and steps.

Alliances are, however, purposeful entities that can learn and adapt to changing circumstances indicating that alliance development also entails a repetitive sequence of goal formulation, implementation and modification, based on lessons learned or changed intentions

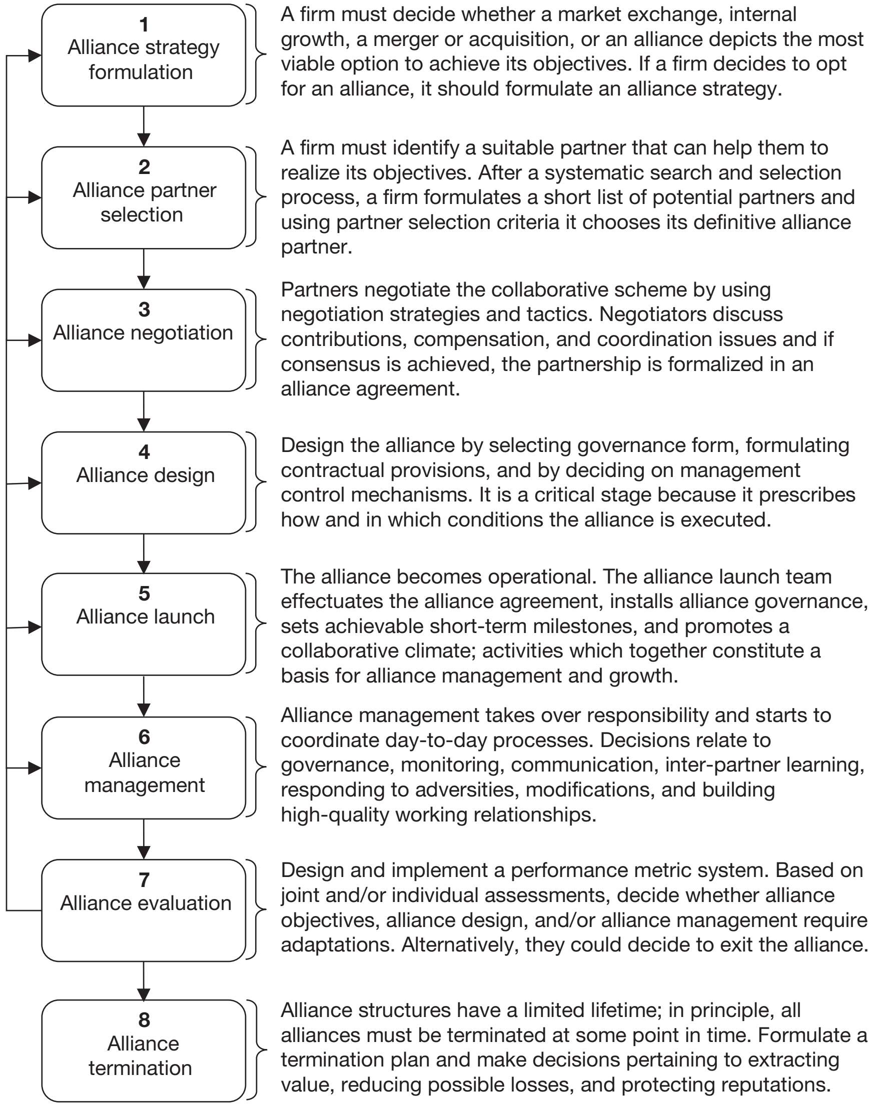

FIGURE 1.1 Alliance development stages

among the partner firms (Ariño and de la Torre 1998). The alliance development framework incorporates a cyclical approach, such that the eight stages remain interlinked through learning and adaptation. All decisions made in one stage have effects on subsequent stages, and alliance development can follow an iterative development path, such that stages may be revisited if needed. Alliance failure often results when organizations skip one or more stages and/or managers fail to complete their decision-making tasks for each development stage. Management thus plays a critical role (i.e. decision making) in successful alliances, as organizations must be actively managed and guided through various stages to increase chances for success.

Chapters 2 to 9 present the foundation of our alliance development framework and details, for each development stage, the content and steps associated with decision-making situations. Before engaging in an alliance, a firm must conduct a strategic analysis to determine the appropriate governance mode (Chapter 2). A firm then conducts a partner analysis to select an appropriate partner (Chapter 3). Building on these two pre-design stages, the firm starts alliance negotiations (Chapter 4), with the result that the outcomes of the negotiations are formalized in an alliance design (Chapter 5), which provides the foundation for alliance launch (Chapter 6) and alliance management (Chapter 7). As the alliance develops, performance assessments are required to monitor the relationship's progress (Chapter 8) and the firm must manage the alliance dissolution too (Chapter 9).

Alliance context

Because each alliance is surrounded by unique circumstances, we augment our framework by elaborating on unique decision-making situations originating in an alliance's context. Distinct alliance objectives, alliances with different types of partners and specific alliance environments are likely to require idiosyncratic know-what and know-how, so we must offer more detail in our framework. We first focus on alliance objectives and their management challenges, as distinct alliance objectives impose constraints on decision-making within each alliance development stage. We give detail on supplier alliances (Chapter 10), learning alliances (Chapter 11) and co-branding alliances (Chapter 12). In addition, the impact of partner characteristics on decision-making is discussed, as diverging philosophies, orientations and backgrounds between partners constitute a potential barrier to effective decision making. We detail international alliances (Chapter 13), asymmetrical alliances (Chapter 14), cross-sector alliances (Chapter 15), coopetition alliances (Chapter 16) and multi-partner alliances (Chapter 17). Furthermore the alliance environment is critical, as conditions outside the alliance tend to obstruct or accelerate alliance-decision making. Therefore, specific attention is given to alliance portfolios (Chapter 18), alliance networks (Chapter 19), business ecosystems (Chapter 20), and alliance co-evolution (Chapter 21). Other alliance objectives, partner characteristics and alliance environments may affect strategic alliance management as well, but we suggest that taken together these chapters present a coherent overview covering a wide-range of topics. All chapters are replete with illustrative case descriptions.

Alliance competence

The ability to create successful alliances, which reflects learning about alliance management and then leveraging alliance knowledge within the company, constitutes an alliance capability. To build alliance capabilities, organizations must not only learn and manage alliances but also exploit their own alliance competences appropriately. Firms that capitalize on their prior experience with alliances likely develop and deploy their alliance capabilities, and, therefore tend to outperform firms without alliance experience or capabilities. Another critical element of a firm's alliance competence pertains to the selection, training and management of people involved in alliance relationships; thus we detail the role and competences of alliance professionals (Chapter 22) and explicate how partner representatives may work together in alliance teams (Chapter 23), before we define alliance capabilities, detail why they are important, and describe decision making in terms of building and deploying alliance capabilities (Chapter 24).

Whereas the preceding chapters offer knowledge about strategic alliance management, we acknowledge that high-performing alliances require more than pre-set solutions. In Chapter 25, we postulate that, in addition to academic knowledge, a manager's experience, expertise and creativity are critical to resolve three paradoxes inherently tied to alliance relationships. That is, alliance managers need to deal with three pairs of contending forces: cooperative versus competitive, economic versus social and deliberate versus emergent. We provide an understanding of how managers can resolve these alliance paradoxes. We conclude the book with themes likely to become salient to the future of strategic alliance management. Taken together, an advanced introduction to the science and art of strategic alliances, this book takes readers on a guided tour of strategic alliance management, as we depict in Figure 1.2.

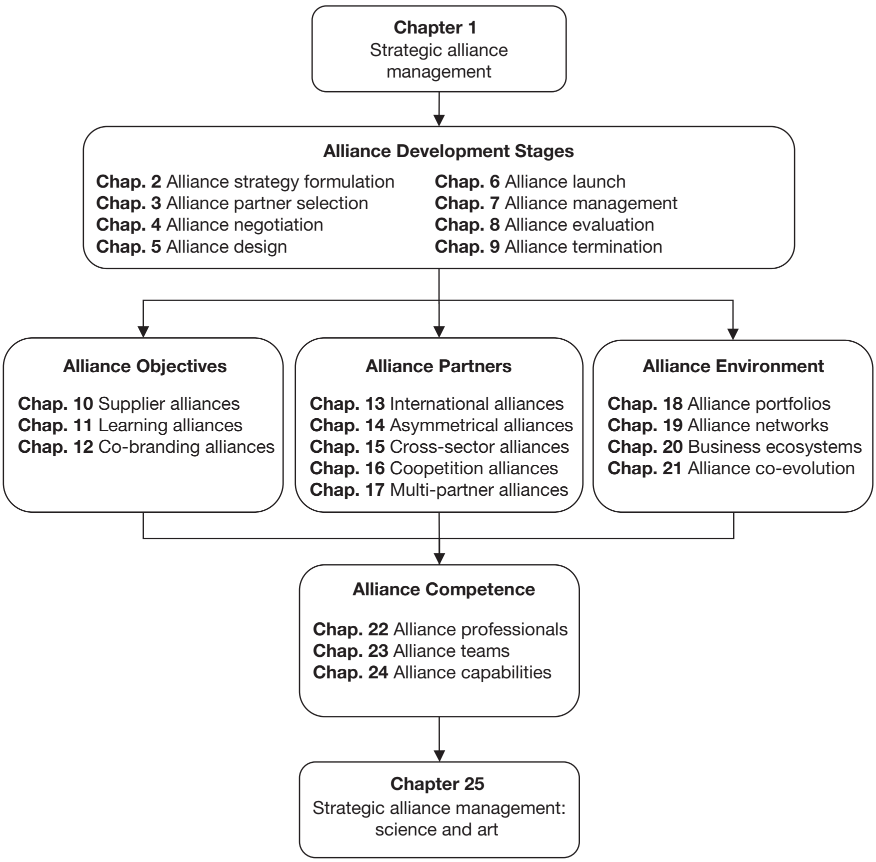

FIGURE 1.2 Structure of the book

2

ALLIANCE STRATEGY FORMULATION

During the alliance strategy formulation stage, a firm decides which governance mode is appropriate for realizing its objectives, that is, how it will organize the procurement of its desired resources. We distinguish three prototypical types: 'make', such that firms gather resources internally through inter-unit exchanges or through mergers and acquisitions; 'buy', which means firms procure resources through discrete market transactions organized by simple contracts; and 'ally', which refers to alliance arrangements organized through complex contracts with external parties to procure resources. This chapter is divided as follows. To inform their decisions about alliance strategy formulation, managers must understand the difference between alternative governance modes (first section) and comprehend the rationales underpinning each of them (second section). When a firm adopts the ally governance mode, it also must formulate an alliance strategy to detail the requirements that the alliance should meet. We therefore wind up this chapter with three sections describing a set of decision-making steps, a summary for alliance strategy formulation and a case illustration.

Three prototypical governance modes

In the context of governance modes, a firm's boundary pertains to its demarcation from its external environment, though these boundaries are constantly subject to change as firms rearrange their portfolios of activities to achieve their objectives. Such restructuring occurs through three types of prototypical governance modes that define exchanges and that we compare in Table 2.1: make, buy, and ally[1] (Gulati and Nickerson 2008).

The 'make' governance mode indicates that firms seek to realize their objectives through internal procurement (Gulati and Nickerson 2008). For example, in inter-unit exchanges, firms autonomously invest in and develop their existing resources and capabilities to market their products and services. Prior to their internal procurement though, some firms internalize previously external resources by engaging in mergers and acquisitions. In such a transaction, two firms agree to integrate their operations because they possess resources that, when combined, create synergies. Through internal procurement, organizations obtain property rights and thus a competitive advantage, because they can develop products and services out of sight of competitors. In this case, they also might attain control over their margins and markets. However, the 'make' decision imposes hazards on the firm, in that it might increase the level of bureaucracy because the firm has full control over an activity (Williamson 1991). It also reduces flexibility; building or integrating new resources requires substantial investments, which may be difficult to recoup if the firm fails.

The 'buy' governance mode instead implies that firms procure resources through discrete market transactions, organized in the form of a simple contract. Market transactions are well suited to exchanging commodities, because 'supply and demand' governs the exchange. The exchange is organized by price (Powell 1990), so the level of organizational and financial integration between the transacting firms is low. Because markets process information efficiently, buyers gain good access to different types of relevant information, including prices, alternative suppliers and quality. However, market transactions also involve potential hazards. The main disadvantage of the 'buy' governance mode therefore pertains to the opposing objectives of the transacting organizations: the buying firm aims to lower costs, whereas the selling organization hopes to increase revenues. The conflict may induce opportunistic behaviour and increase transaction costs. Furthermore, markets may fail in response to the uncertainty surrounding the supply of resources; information asymmetries between buyers and suppliers may result in higher prices; and suppliers may use their market power to increase their margins.

Finally, the third governance mode, 'ally', suggests that firms establish alliances with external parties to obtain access to desired resources. Alliances provide a viable alternative when internal and external conditions lead the firm to desire some degree of control over the resources but not to internalize them. For example, when markets fail, firms may use an alliance to obtain access to external resources. Alliances offer several advantages: an alliance governance mode enables a firm to access complementary resources, without obtaining proprietary rights. It provides the firm with speed and flexibility in obtaining access and exploiting desired resources. Furthermore, through collaborations, firms can share investments, which may reduce risk. However, sharing resources may also impose the risk of creating increased competition. Furthermore, it may be difficult to integrate learning into the firm, and the long-term viability of an alliance is questionable. When partners have reaped the benefits from the relationship, they are then likely to terminate it.

The three governance modes offer alternative strategic options for building and sustaining a competitive advantage. However, it is also important to note the plethora of intermediate governance forms on the make–buy continuum (Powell 1990). For example, alliances constitute a hybrid governance mode between hierarchy and market exchanges, whereas joint ventures (i.e. where two firms establish a new organizational entity) tend to verge on hierarchical governance. In contrast, licence agreements are more closely associated with market exchange. Despite these varied intermediate forms, the logic for choosing a governance mode can rely mainly on the three prototypical types.

Governance mode rationales

Numerous theoretical perspectives permeate alliance literature, providing rationales for cooperative strategies and governance mode decisions. Contingent on a theory's assumptions and related key constructs, each theory provides alternative explanations. For reasons of parsimony (see Box 2.1 for other perspectives), we focus here on seven theoretical perspectives

TABLE 2.1 Prototypical governance modes: make, buy, and ally

	Make		*Buy*	*Ally*
Form	Internal growth	Merger and acquisition	Market	Alliance
Description	Activities and resources developed internally	Activities and resources internalized through a transaction in which two firms agree to merge	Activities and resources procured through a market transaction	Access to activities and resources obtained through collaboration with external firm(s)
Coordination	Hierarchy	Hierarchy	Price	Relational (supplemented with hierarchical and price)
Characteristics	– No or limited interdependencies with external organizations – Full control over resources	– Relatively few interdependencies with external organizations after integration – Full control over resources	– Low interdependencies with external organizations – Full control over all resources	– High interdependencies with external organizations – Partial control over all resources
Advantages	– Proprietary rights and ownership – Protecting and building competences – Adaptation to internal and external demands	– Quick access to similar markets – Authority over activity – Tax benefits – Small impact on industry capacity – Building competences	– Quick access to commodities – Efficient information processing – High powered incentives	– Quick access to complementary resources – Speed and flexibility – Shared investments and risks
Downside	– Slow and costly development – Uncertainty – Limited growth and expansion	– Required finances – Complex negotiation and integration challenges – Bureaucracy – Loss of flexibility and high risk – High failure costs	– High transaction costs due to market failure – High uncertainty – Inseparability of resources – Information asymmetries – Subject to market power	– Shared returns – Lack of control – Questionable long-term viability – Difficult to integrate learning – Need for performance monitoring

Sources: Gulati and Nickerson (2008); Powell (1990); Williamson (1991).

that tend to dominate alliance literature: (1) transaction cost economics, (2) resource-based view, (3) resource dependence perspective, (4) strategic management theory, (5) social network theory, (6) organizational learning perspective and (7) institutional theory.

Transaction cost economics (TCE)

TCE offers a coherent framework for exploring choices of governance modes (Williamson 1975; Williamson 1991). It stresses efficiency and cost minimization rationales for cooperation and advances insights by recognizing the role of partners' motives, the nature of the investments and the specific character of the transactions. It states that transaction costs should be minimized when a governance mode matches the transaction exchange conditions. These costs of running the economic system include both ex-ante and ex-post costs (Williamson 1985). The ex-ante costs relate mainly to drafting, negotiating and safeguarding a contractual agreement; whereas the ex-post costs entail the time and resources invested in repairing misalignments and bonding. In this sense, transaction costs differ from production costs, which are generated from the primary functions of the organization, that is, producing goods and services.

Two assumptions and three exchange conditions constitute the core of TCE logic. The first assumption involves opportunism, or behaviour that is self-interested and deceptive. The logic thus holds that managers are inclined to break, whether implicitly and explicitly, the rules that govern a transaction. A second assumption refers to bounded rationality. That is, despite the firm's efforts to deal with complexity and unpredictability, managers have only limited ability to plan for the future and predict various contingencies that may arise. The potential for opportunistic behaviour and the constraints of bounded rationality pose severe problems for governing transactions, because they drive transaction costs higher and require firms to protect themselves against exploitation. Accordingly, TCE predicts that distinct transactions with variations in frequency, asset specificity and uncertainty demand alternative governance modes to be organized efficiently. Frequency refers to the number of exchanges that constitute the transaction. Asset specificity occurs when investments specifically support an exchange relationship, such that if the relationship were to be terminated, the value of these assets would be largely lost. Finally, uncertainty implies that the consequences of a situation are unpredictable.

If market transactions dominate, exchanges are likely to be straightforward and non-repetitive and require few transaction-specific investments. In such conditions, the market itself, backed by contract law, can provide effective safeguards. However, if transactions produce uncertain outcomes, recur frequently and require substantial investments (i.e. asset specificity), they can be organized more efficiently through hierarchical governance. The transaction costs for market exchanges are greater than those of long-term relational exchanges, so increased transaction costs should prompt a shift from external to internal governance. A vulnerable firm that lacks information its exchange partners already have may benefit similarly from internalizing transactions or activities. However, if a transaction involves mixed asset specificity and recurs, an alliance, a form of hybrid governance, is likely to be the appropriate governance mode. Such hybrid governance modes demand mutual dependence, mutual commitments to resource contributions and accepted compensation mechanisms. Although alliances thus offer advantages, including the avoidance of uncertainty caused by market failure, their uneasy control position implies an inherent instability.

Critics of TCE also refer to limitations of the TCE to explain governance mode decisions, however (see e.g. David and Han 2004; de Wulf and Odekerken-Schroder 2001; Ghoshal and Moran 1996; Weitz and Jap 1995). First, studies that draw on different conceptualizations of asset specificity and uncertainty produce some mixed results. Masten *et al.* (1991) find that vertical integration in the shipbuilding industry became more likely in the presence of relationship-specific human capital, but Joskow's (1985) research suggests that physical and site specificity increase the length of contracts among coal suppliers. Moreover, TCE fails to recognize the potential value of transaction-specific investments (Madhok and Tallman 1998), even if the value creation potential of an alliance outweighs the costs associated with coordination and protection. In contrast with TCE-based predictions, Russo (1992) indicates that uncertainty relates negatively to backward integration, even as Poppo and Zenger (2002) argue that when uncertainty interacts with asset specificity and relational norms, the likelihood of relational exchanges increases. Clearly more empirical testing is called for. Second, TCE may place too much emphasis on opportunistic behaviour (Ghoshal and Moran 1996), neglecting the role of relational governance (Heide and John 1992) and emphasizing hierarchical control as a protection against opportunism, even if trust reduces transaction costs and makes alliances more suitable governance modes. Third, only limited evidence really shows that governance modes aligned with exchange conditions outperform misaligned governance modes (David and Han 2004), such as when Sampson (2004a) reveals that governance modes designed to match the predictions of TCE experience improved innovation performance compared with misaligned governance modes.

BOX 2.1 SOME OTHER THEORETICAL PERSPECTIVES

Extending beyond more established theoretical perspectives, such as transaction cost economics, resource-based view and institutional theory, other theoretical perspectives have been introduced to the alliance field. Real options represent a firm's investment in assets, which allow the firm to respond to future events in a contingent fashion. Initial work by Kogut (1991) – advocating that the establishment of a joint venture (JV) depicts a real option decision – laid the foundation of a series of studies drawing on real options theory (see Reuer and Tong 2005). These studies investigated topics such as the initiation of equity arrangements as option purchases, valuations of JV terminations, risk implications of JV investments and conditions under which real options are used in JVs. More recent, one ramification of real options theory extends to alliance management and details on the extent to which (real)options can be identified and exploited (Berard and Perez 2014). Real options theory thus explicates how alliance decisions could be viewed as a way to attain risk reduction in the present by having a right but not the obligation to undertake future investments and to capitalize on emerging opportunities. Agency theory is concerned with the governance mechanisms that organize the relationship between principals (e.g. shareholders) and agents (e.g. board), as these parties inherently have conflicting interests and access to different sets of information. According to agency theory a tension exists between principals having a need to impose control and agents acting within their own interest, a tension which can be resolved, for example, by contracts. Within an alliance setting, agency theory is used to explain joint venture investment decisions and empirical evidence suggest that the presence agency hazards affect firms' decisions to opt for equity-based arrangements (Reuer and Ragozinno 2005). It also stipulates that effective alliance decision making and relationships result from imposing monitoring and incentive systems that align alliance managers' interests (i.e. agents) with owners' interests (i.e. principals). Regulatory focus theory (RFT) states that decision-maker behaviour is induced by dispositional and situational regulatory focus. One's dispositional focus can be focused on avoiding negative outcomes (prevention focus) or gaining positive outcomes (promotion focus). Situational regulatory focus is defined by the situation in which an action takes place, which can also represent a setting in which people are framed to work towards a gain (promotion focus) or to avoid a loss (prevention focus). Within an alliance setting RFT has been primarily used to provide insight in alliance contracting (e.g. Weber and Mayer 2011). Different contractual clauses can have different psychological impacts on the parties and how they perceive their alliance arrangement. For example, promotion- and prevention-framed contracts interpreted by managers with promotion and prevention dispositions induce different emotions, behaviours and expectations; even if economic incentives are equivalent. In turn these discrepancies may lead to different relationship repair approaches and exchange outcomes (Kumar, 2016). Signalling theory is useful for describing behaviour when two parties have access to different sets of information (Connelly *et al.* 2011). The core logic of theory stipulates that one party, the sender, must choose whether and how to communicate (or signal) that information, and the other party, the receiver, must choose how to interpret the signal. Within an alliance setting, signalling theory has been used in different ways including investors' responses to alliance announcements, executive board's prestige, entrepreneurs seeking endorsement of alliance relationships and international alliances as signals of organizational legitimacy. Whereas prior alliance studies primarily focused on alliance formation, signalling theory may also provide valuable insights in post-formation and termination inter-partner dynamics.

Sources: Berard and Perez (2014); Connelly *et al.* (2011); Kogut (1991); Kumar (2016); Reuer and Ragozzino (2005); Reuer and Tong (2005); Wang (2015); Weber and Mayer (2011).

Resource-based view (RBV)

A firm can maximize its value by pooling and exploiting its valuable resources. According to the RBV, firms attempt to find an optimal resource boundary that ensures the value of their resources is realized best, compared with other resource combinations (Barney 1991). A competitive advantage results when the firm can implement a value-creating strategy (Hitt *et al.* 2000) that is not being implemented simultaneously by its (potential) competitors. Specifically, a competitive advantage requires the firm to possess valuable, scarce, not imitable and non-substitutable resources. Such characteristics also imply that the resources are difficult to move across firm boundaries, such that they constitute barriers to external procurement.

Thus market exchanges are not pivotal in the RBV; resources subject to such transactions tend instead to be available, mobile and imitable, and their acquisition does not increase the firm's competitive advantage. If all desirable resources were available for acquisition through market exchange at fair prices, it would be unwise for firms to get involved in alliances, which usually entail high governance costs and some sacrifice of organizational control. Therefore, the RBV seems particularly appropriate for examining alliances or mergers and acquisitions; firms engage in boundary-spanning activities to access and obtain resources that they do not own but need in order to strengthen their competitive position.

In turn the RBV defines both merger and acquisitions and alliances as strategies for gaining access to other firms' resources, for the purpose of bringing them together and attaining otherwise unavailable value (Das and Teng 2000b). When a firm does not possess the entire bundle of resources and capabilities it needs, markets cannot bundle the required resources or alternatives to attaining those resources are too costly, then it engages in mergers and acquisitions, or alliances. Mergers and acquisitions and alliances work towards the same overall objective, namely, obtaining resources, but the RBV suggests that two conditions particularly favour alliances. First, an alliance constitutes a more viable alternative when not all the resources owned by the target are valuable to the firm. Second, disposing of redundant or less valuable resources induces a cost, because such resources may be tied to the desired resources. Alliances enable the focal firm to obtain only its desired resources, while bypassing undesired ones.

Furthermore, unlike mergers and acquisitions, alliances enable firms to protect their own valuable resources. For example, if a firm wants to exploit certain resources but lacks the competences to do so, alliances help them retain those resources and capitalize on their value, only temporarily giving up control. The firm retains its access to its valuable resources and can exploit them for future internal development. Alliances thus form when the realized value of resources contributed to the alliance is greater than their value when realized through internal uses or relinquishment. This scenario is especially likely for resources characterized by imperfect mobility; resources which are inimitable and non-substitutable.

Of course, with respect to governance mode decisions, there are also criticisms of the RBV. First, even though prior RBV research offers a plethora of resources (e.g. reputation, culture, brands, organizational routines) that might contribute to a firm's competitive advantage, systematic empirical testing of their impact on governance decisions is relatively scarce (see for exceptions Gu and Lu 2014; Villalonga and McGahan 2005). Second, the RBV primarily focuses on the possession of resources, not the costs of resource deployment, even though using resources, whether autonomously or collaboratively, imposes coordination and value appropriation costs. Although a complete RBV theory related to governance decisions is thus lacking (Das and Teng 2000b), we note that it contributes valuable insights to value creation within alliances. For a coherent RBV, further substantial conceptual and empirical research is required.

Resource dependence perspective (RDP)

The RDP is rooted in an open system framework: firms are embedded sets of relationships, which render them dependent on their external environment (Pfeffer and Salancik 1978). According to Aldrich and Pfeffer (1976), firms cannot generate all the resources or functions they need to maintain themselves, so they must enter into transactions and relations with external actors that can supply those required resources. A firm's ability to control external resources determines its survival and provides power over external parties. Power originates through resource scarcity, which reflects three sources. First, the importance of an external resource – or the extent to which the firm needs the resource to survive – reduces a firm's relative power. In particular, intangible resources such as patents, trademarks, market or technological know-how, and human competences tend to be pivotal, whereas tangible resources, such as commodities, can be effectively obtained through market exchanges. Second, a firm's discretion over the resource allocation and use (e.g. ownership rights, access) increases its relative power. Third, the extent to which desired resources can be substituted by alternative resources decreases the firm's relative power. With this focus on desired resources, the RDP contributes insights into why firms engage in mergers and acquisitions and alliances.

At the heart of the RDP rests the notion that two firms prefer to avoid becoming dependent on each other's resources (Blankenburg Holm *et al.* 1999). To reduce uncertainty and increase its relative power, a firm may seek to become autonomous by managing its external relationships with a two-fold strategy to acquire control over (1) critical resources to decrease dependence on other firms and (2) resources that increase the dependence of other firms on it. Mergers and acquisitions and alliances can help execute this dual strategy. When firms ally to obtain access to critical resources, their long-term relationship probably enables them to exercise some degree of external control, though mergers and acquisitions should be preferable when the firm needs more control over its partner (Finkelstein 1997). Alliances provide a firm with more flexibility and options to scale investments up or down; mergers and acquisitions offer more control over joint resources (Yin and Shanley 2008). With flexible arrangements, firms can take advantage of changed circumstances, but they lose the capability to exploit opportunities. Commitment and control over resources offer other benefits, but again at a cost: the potential loss of investment and foregone opportunities. Thus, though resource scarcity may encourage competition between firms, it also may stimulate cooperation, producing mergers and acquisitions that aim to increase command over external resources or alliances based on mutual support rather than domination.

We also note two main limitations of the RDP. First, despite the intuitive understanding it offers of rationales for distinct governance modes, strong empirical evidence about the distinct conditions that favour specific governance modes remains lacking (Fink *et al.* 2006). For example, internalizing resources through mergers and acquisitions could increase independence, but it may also impose high costs, because acquiring capabilities tends to be expensive, and integrating capabilities takes time and effort. Similarly, obtaining resources through market exchange increases a firm's dependence on its external environment, yet the costs are relatively low. Second, the RDP tends to neglect the importance of prior relationships, even though social connectedness may affect alliance formation decisions (Gulati 1995b). An account that focuses only on interdependence cannot explain how firms learn about new alliances and overcome the threats of partnerships. The RDP implicitly assumes that all information is freely available and equally accessible and thus that firms have equal opportunities to ally. Despite these critiques, the RDP provides a clear indication that a firm's survival depends on its ability to command external resources. A firm is effective when it resolves the trade-off between flexibility (i.e. market exchange and alliance) and commitment (i.e. internalization), while also satisfying the demands of partners in its environment on which it relies most, and which contribute most to its existence.

Strategic management theory (SMT)

To maximize their competitive strength, firms may adopt distinct governance modes, though their underlying motives tend to converge. Therefore, the SMT imagines the governance mode decision as a trade-off among distinct strategic motives, even if the strategic motives identified by SMT literature tend to be similar across modes. For example, Walter and Barney (1990) provide a list of strategic drivers for mergers and acquisitions, and Glaister and Buckley (1996) issue a similar list of strategic (and learning) motives that drive alliance formation. For parsimony, we focus on key strategic motives for alliances.

In this setting, the SMT cites the need for prospective partners to achieve synergies across their business strategies, such that an alliance can contribute to the realization of their strategic objectives. Reasons to establish partnerships are vast: short-term efficiency, resource access, market position, geographical expansion, risk reduction, competitive blockades, economies of scale, speed to market, minimized transaction costs, shared investments and so on. To organize these reasons, Barringer and Harrison (2000) divide the strategic motives to form alliances into four internally focused categories:

1 Increase market power. By erecting entry barriers or forming clusters with other firms, alliances enable firms to adopt monopoly-like behaviour and increase their market power.
2 Increase political power. Individual firms team up to influence governing bodies more effectively, whether nationally or internationally.
3 Increase efficiency. Being able to tap into others' resources and share the load can result in significant reductions of costs and economies of scale. Such partnerships often focus on production, though they also might include marketing or even pre-competitive research.
4 Differentiation. Partnerships within and across sectors in pursuit of new customers and innovation enable firms to differentiate offers from those of competitors.

Faulkner (1995) also recognizes external strategic motives. For example, globalization and regionalization increase international turbulence and uncertainty, such that firms confront the need for vast (financial) resources to deal with technological changes and shorter product life cycles.

Burgeoning literature on strategic management thus offers many relevant insights, including analyses of the reasons for establishing alliances, alliance objectives and areas of potential conflict. Despite this focus on strategic motives, few studies provide clear-cut insights into governance mode decisions. Whereas the breadth of SMT constitutes one of its greatest strengths, it also represents its greatest weakness: motivations arising from nearly all other perspectives can be incorporated into the SMT, and its underlying logic could be applied to any governance mode. For example, realizing economics of scale implies forward/backward integration through mergers and acquisitions and alliances, as also explained by TCE. Increasing political power reflects an institutional stream of thought, and obtaining and accessing resources relates to the RBV. Thus though the SMT provides theoretical and managerial insights in the strategic rationales that underlie alliance formation, its primary contribution is its pragmatism.

Social network theory (SNT)

The social context that surrounds prior alliances influences alliance formation decisions (Gulati 1995b). Thus SNT views firms not as stand-alone entities but rather according to their location within the network of inter-organizational relationships that determine their success and survival. Although SNT has not developed sufficiently to inform governance mode decisions, it asserts that a firm's social network facilitates new alliances by providing valuable information about the location of critical resources and the partner's reliability. Repeated collaborations might provide information that helps firms learn about new opportunities and enhance their trust in current and potential partners, though indirect relationships through common partners also function as important referral mechanisms. Recognizing the ambiguities and uncertainty associated with alliances, access to valuable information thus might lower search costs and alleviate risks of opportunism, which can make firms more likely to enter alliances.

In the social network, potential partners become aware of one another's existence, as well as their needs, capabilities and alliance requirements. Social networks also provide information about partners' reliability. For example, a partner that behaves opportunistically imposes greater risk on any firm that enters into an alliance with it, but a rich social network contains clues about past behaviours, so the firm can incorporate the partner's network reputation into its alliance formation decision. Although SNT thus offers a novel view on alliance formation, we find again that the empirical evidence is virtually absent, in this case with regard to how distinct social network resources prompt distinct governance mode decisions. For example, are firms with central positions in an inter-firm network, which gives them access to high-quality information (i.e. superior network resources), more inclined to establish hierarchical governance modes, compared with firms with more peripheral network positions? Yet SNT offers a relevant explanation for the emergence of alliances: social networks (of prior alliances) function as conduits for valuable information and thus play an important role in shaping future alliance formation.

Organizational learning perspective (OLP)

Firms might enter into partnerships primarily to learn new skills or acquire tacit knowledge (Hamel 1991). According to the OLP, firms form alliances because the superior knowledge they can gain will enhance their competitive position. Firms that place a high priority on the acquisition of intangible knowledge (e.g. technological know-how) are likely to consider alliances important instruments, because in alliances, learning occurs on both macro and micro levels (Knight 2002). At the macro level, alliances provide a means for firms to share and acquire knowledge, which may improve their competitiveness and profitability. At the micro level of analysis, interpersonal links offer members of the firms an opportunity to share and learn skills from one another. That is, alliances might add value to firms by providing (1) the possibility for firm innovation and enhancement and (2) employees with the chance to exchange professional practices that can show them how to perform their tasks better.

In terms of governance mode preferences though, OLP insights are less conclusive. In general, hierarchical governance modes appear more appropriate for learning rather than market exchanges, because learning requires long-term and frequent interactions. However, alliances constitute a particularly effective means for knowledge exchange, particularly if that knowledge cannot be obtained easily in the market (Mowery *et al.* 1996) or internally developed. An alliance is preferable if the desired knowledge is tacit and difficult to evaluate; internal learning may prevent novel insights. Thus a firm that wants to learn a particular skill stands a better chance of doing so if it forms an alliance with an expert firm and can absorb external knowledge (Deeds and Hill 1996). Yet OLP neglects the costs and risks of learning through alliances. In particular, knowledge transfers demand substantial investments in training, education, relationship building and organizational adaptations (Lane and Lubatkin 1998). The risks pertain primarily to the unwanted transfer of proprietary knowledge, because firms in a learning alliance may compete for valuable knowledge (Hamel 1991). Thus, the gains from learning alliances must be balanced against the pains of the dilution of firm-specific resources, the deterioration of integrative capabilities and the high demands on management attention.

Institutional theory (IT)

With an open system perspective, IT states that firms are strongly influenced by their external environments (Scott 2003). Influenced by economic factors, such as industry regulations, rival behaviour, and socially constructed norms and beliefs, firms organize their boundary-spanning activities to mimic other firms. That is, firms pursue activities that increase their legitimacy and cause them to appear in agreement with the prevailing rules, requirements and norms in their business environments (Dimaggio and Powell 1983), as these rules establish bases for production, exchange and distribution. With this logic, IT can answer how and why firms adopt distinct governance modes, such as alliances for example. In particular, this school of thought states that alliances aim for legitimacy and social approval, rather than effectiveness or efficiency. Legitimacy in the alliance process helps ensure that the initiative receives a certain level of acceptance; without it, the initiative is unlikely to persist. Such legitimacy can be enhanced by governance mode decisions, because partnering with well-known, reputed partners improves the focal firm's reputation or congruence with prevailing norms. Common alliance practices thus emerge as collaborating becomes a more widely accepted and desirable phenomenon, and firms copy rivals in their use of this strategy (Teng 2005).

When social behaviour becomes accepted, it turns into an institution, and institutions give industry members a clearly laid route to success and lead to a bandwagon effect (Venkatraman *et al.* 1994). Pangarkar and Klein (1998) suggest that bandwagon pressures, which they capture as the proportion of firms in a peer group that undertake alliances and their average number of alliances, influence both the probability and number of alliances a firm undertakes. Such bandwagon pressures also imply a lack of clarity in the firm's cost–benefit calculations. Confronted with bandwagon pressure, firms are likely to adopt the alliance behaviours modelled by their peers indiscriminately to ensure legitimacy, without considering the actual outcomes of their alliance partnerships. Alternatively, this pressure might induce firms to hire managers with similar industry backgrounds and experiences, who are familiar with industry practices.

Beyond bandwagon pressures, firms may engage in status-driven imitations of their peers, especially the alliance behaviour performed by large and prestigious firms. Partnering with an organization that promotes socially desirable objectives may enhance a firm's reputation more widely; high-profile charitable organizations thus can benefit from such a legitimacy strategy. This view of strategic alliances implies a process of mimetic isomorphism: firms follow established rules and norms and copy, consciously or not, the strategies of their successful peers. The resulting legitimacy and reputation can open doors to other relationships that help the firm gain access to additional critical resources.

The IT thus offers a narrow, behaviourally oriented explanation of alliance formation (Barringer and Harrison, 2000). It cannot determine why particular governance modes exist or why firms engage in boundary-spanning activities that deviate from the status quo. Furthermore, if every firm adopts similar governance modes, there is little opportunity for sustainable competitive advantage. In the biotechnology field for example, alliance-based competition has become prevalent, such that firms may experience difficulty in differentiating themselves through alliances. However, IT advances literature with its assertion that firms form alliances to respond to bandwagon pressure and obtain social approval and legitimacy, rather than to realize economic outcomes.

Overview

This concise overview of theoretical perspectives on governance mode decisions reveals the varied and numerous insights have been produced, ranging from economic to behavioural motives (see Table 2.2). Among the economic explanations, TCE focuses on cost minimization, whereas the RBV emphasizes value creation. At the other end of the spectrum, IT offers a behavioural explanation: firms' behaviour is guided by their legitimacy motives. The OLP also adopts a behavioural explanation but also suggests economic undertones with its proposal that inter-firm learning enables firms to reduce costs and improve profitability. The RDP, SMT and SNT fall in the middle of this spectrum. The RDP originates in organizational theory but adopts economic explanations to explain why firms engage in alliances, namely, to gain control over scarce resources. In contrast, the SMT is primarily economically based, but recent studies have incorporated behavioural motives, such as inter-firm learning. Finally, the SNT emphasizes behavioural explanations but also incorporates economic arguments to explain the influence of network resources on alliance formation.

Academics and managers can certainly benefit from considering each theoretical perspective, but by blending them, they also might obtain a more useful understanding of governance mode decisions. For example, if we combine TCE with OLP explanations, we might predict that inter-firm learning will reduce transaction costs (Nooteboom 2004). A blend of OLP with SNT, as exemplified by Powell *et al.* (1996), indicates that industries with widely dispersed sources of expertise require learning in networks rather than in individual firms. Augmenting TCE with the RBV suggests that cost minimization and value maximization together drive governance mode decisions (Zajac and Olsen 1993). The SNT may be especially open to combinations with other perspectives, such as TCE and RDP, because then it can illustrate how firms create and manage alliances as strategic responses to competitive uncertainties. The IT school of thought also accords with Gulati's (1995b) findings that alliances form within partner firms' social networks; for example, the strength of a firm's reputation and closeness in the network of past alliances are strong predictors of alliance formation, and the likelihood of alliance formation also relates positively to the complementarity of the partners' capabilities, status similarity and social capital arising from direct and indirect collaborative experiences. Finally, SMT provides a more holistic perspective and potentially could incorporate elements from the other perspectives. Building on this observation, we outline some managerial implications in the next section.

TABLE 2.2 Theoretical perspectives: alliance formation

	Transaction cost economics	*Resource-based view*	*Resource dependence perspective*	*Strategic management theory*	*Social network theory*	*Organizational learning perspective*	*Institutional theory*
Description	Firms organize their boundary-spanning activities to minimize transaction costs	Firms organize their boundary-spanning activities to maximize value creation	Firms engage in resource exchanges with external parties to reduce uncertainty and obtain control	Firms forge alliances to achieve synergies between business strategies	Inter-firm networks constitute conduits of information, shaping alliance decisions	Firms engage in inter-firm learning to improve their (core) competences	Firms organize their boundary-spanning activities to conform with prevailing norms imposed by their environment
Alliance formation logic	Alliances reduce uncertainty caused by market failure and reduce costs associated with hierarchy	Alliances create value when procurement of resources is difficult through market or internal development	Alliances enable firms to minimize dependence on external parties or maximize control over scarce resources	Alliances enable firms to build and sustain a competitive advantage	Firms use network resources, such as reputation and referral, to inform alliance formation	Alliances function as learning vehicles to access, obtain and exploit (intangible) knowledge	Firms form alliances to obtain legitimization by mimicking competitors' alliance behaviour
Limitations	Neglects social context and value creation motives	Neglects costs and investments of resource deployment	Neglects social context in which exchanges are embedded	Encompasses a variety of strategic motives, tied to other perspectives	Neglects other prototypical types of governance modes	Neglects costs and investments required to enable inter-firm learning	Neglects alternative motives, including economic and strategic

Alliance strategy formulation: decision-making steps

During alliance strategy formulation, firms must decide which governance mode fits their objectives and situation. However, governance mode decisions are complex, because firms confront a plethora of reasons, occasionally opposing, that provide support for a specific governance mode. To organize decision making, we suggest that alliance strategy formulation overall comprises five sequential decision-making steps (see Figure 2.1). If, after careful analysis, a firm prefers an 'ally' governance mode, it must then explicate its alliance strategy and prepare for partner selection.

Step 1: Formulate business strategy

A firm first must decide on its strategy, derived from its mission and its vision. The strategy describes how the firm aims to achieve its long-term objectives. To realize those objectives, the firm chooses some primary activities, new and/or existing ones, and identifies resources needed to execute these activities. In turn, a firm must determine the extent to which it is able to execute these activities satisfactorily. Such an overview should grant insights into the objective(s), required tasks and feasibility to perform the activity. Once a firm has a complete overview, it may enter the next step.

Step 2: Develop a governance mode selection framework

To evaluate and decide on an appropriate governance mode for a specific activity, selected from the overview, it should be clear which decision criteria apply and how they affect the

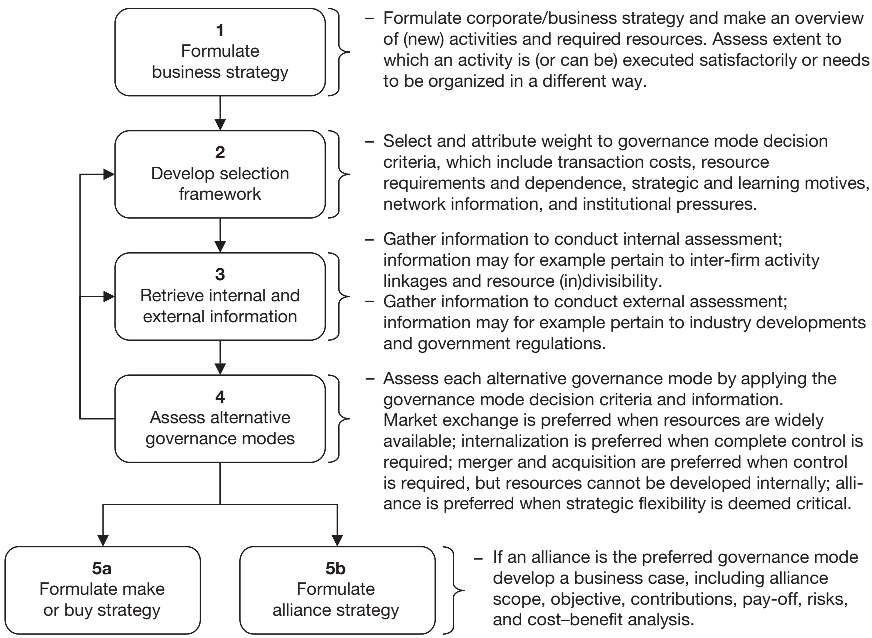

FIGURE 2.1 Decision-making steps: Alliance strategy formulation

governance mode decision. In particular, decision criteria might be organized according to the theoretical perspectives presented in this chapter. Thus the analysis might include:

1. Transaction-based motives, such as the frequency of the activity, uncertainty surrounding the activity and degree of asset specificity; an alliance is preferred when a transaction is recurring, surrounded by moderate uncertainty, and requires mixed alliance-specific investments.
2. Resource-based motives, including the nature of existing and desired resources, divisibility of resources and their availability; an alliance is preferred when an external party possesses valuable and scarce resources (i.e. blocking market exchange), but the desired resources are part of a larger and indivisible resource endowment (i.e. blocking a merger).
3. Dependence-based motives, such as the degree to which existing and desired resources are critical to the activity and freely available; an alliance is preferred when a firm seeks flexible control over external resources.
4. Strategic motives, such as market power, market entry, blocking competitors and international expansion: an alliance is preferred when it enables a firm to realize strategic objectives.
5. Network criteria or information about a potential partner's credibility and reliability and referrals; an alliance (partner) is preferred when a firm receives supportive information via its alliance network.
6. Organizational learning criteria, including the extent to which fast access to knowledge is required, the extent to which knowledge must be recombined and the extent of speed required in generating new knowledge; an alliance is preferred when speed, flexibility and knowledge recombination are imperative.
7. Institutional-based motives, incorporating criteria such as legitimacy, reputation and status; an alliance is preferred when external pressure imposes partnering as common practice.

To complement the selection framework, firms should assign each criterion a relative weight. For example, a firm might decide that obtaining legitimacy outweighs economic benefits; commanding external control over scarce resources outweighs prior established reputations; or acquiring valuable market know-how outweighs improving market position. The choice of governance mode should rely on a cost–benefit analysis of the trade-offs among distinct decision criteria.

Step 3: Retrieve internal and external information

To apply their selection framework, firms should conduct internal and external assessments to obtain the necessary information. The internal analysis involves gathering detailed information within the firm about the nature of the activity, the required resources, inter-firm activity linkages, organizational culture, and systems and procedures. An external analysis should feature information about, for example, industry developments and regulations, competitor strategies and actions, and governmental policies. Building on such information, the firm can evaluate and decide on the governance mode that is most appropriate for any selected activity.

Step 4: Assess alternative governance modes

Against the backdrop of the selection framework, supportive guidelines and gathered information about the internal and external contexts, firms must recognize that each governance mode entails its own unique advantages and disadvantages (see Table 2.1) as they decide on the most appropriate governance mode for any specific activity. In short, a market exchange is preferable when the required resources are relatively easily available, but do not necessarily enhance a firm's competitive advantage. Internal procurement or mergers and acquisitions are ideal if unified ownership and control rights permit more thorough exploitation of combined organizational resources, even if such exploitations demand higher investments (e.g. physical, human, intangible resources) and increased governance costs. Alliances, which cannot exploit joint assets as intensively as mergers and acquisitions but which offer more flexibility, are preferable if continuing cooperation is beneficial and centralized control could harm value creation. A firm might conclude this step with the following questions:

- Does the chosen governance mode generate strategic value or competitive power?
- Does it impose a risk of losing competitive strength to rivals?
- Does the mode disrupt an activity's interrelatedness with other firm's activities?

If the answers to these critical questions are unsatisfactory, a firm may need to reconsider its decision and re-engage in Steps 2 and 3. However, if a firm, on the basis of extensive analysis, decides that an 'ally' governance mode is its best option, the next step is to explicate its alliance strategy.

Step 5: Formulate alliance strategy

The final step formalizes the alliance strategy. The firm should decide which external source(s) of resources it wants to deploy in support of the selected activity to attain its objectives. An alliance strategy summarizes these decisions, often formalized in the form of a business case that describes the scope of activities taken into account, the objective of the alliance, the nature of the partnership and a cost–benefit analysis. A clear business case is critical to approach and select potential partners and serves as input for alliance negotiation and design.

Summary

In this chapter, we have provided overviews of the dominant theoretical perspectives that attempt to explain governance mode decisions. Transaction costs, resource synergies, dependence, informational advantages, strategic motives, inter-firm learning and institutional pressures all impact the choice between 'make', 'buy' and 'ally'. We argue that in order to arrive at a governance mode decision, executives should consider all motives. To this end, we suggest a five-step procedure for firms to help them make governance mode decisions and achieve a well-formulated alliance strategy. Much of the logic described herein, however, also applies to alliance-oriented governance form decisions. That is, the governance mode decision of a firm, which itself might be influenced by transaction costs, resource alignment and institutional pressures, for example, influences the firm's structural preference in terms of non-equity versus equity-based alliance agreements. We go into detail on structural preferences in Chapter 4, but a combined analysis of governance mode and structural preference may be beneficial.

CASE: ASTRAZENECA–ELI LILLY AND COMPANY

The volume of transactions seen within the pharmaceutical industry over recent years is illustrative of the fact that collaboration is no longer a nice-to-have, but a necessary part of developing the next generation of innovative medicines. There are significant benefits to collaboration, bringing together different strengths and expertise for the benefit of patients. It also plays a role in delivering necessary efficiencies and accelerating development.

AstraZeneca[2] is a global, science-led biopharmaceutical company that focuses on the discovery, development and commercialization of prescription medicines, primarily for the treatment of diseases in three therapy areas: respiratory and autoimmunity, cardiovascular and metabolic diseases, and oncology. The company is also active in inflammation, infection and neuroscience through numerous collaborations. AstraZeneca operates in over 100 countries and its innovative medicines are used by millions of patients worldwide. AstraZeneca's strategic focus in this area is concentrated on strengthening its portfolio and pipeline in its three main therapy areas, and focusing its investment to support these areas. For example, in December 2015 the company announced the acquisition of a majority equity stake in Acerta Pharma, providing access to a potential best-in-class irreversible small molecule oral BTK inhibitor, which is expected to transform the treatment landscape for B-cell malignancies, potentially offering a more effective treatment option for blood cancer patients. In addition to strategic acquisitions to enhance AstraZeneca's portfolio and pipeline in its main therapy areas, the company also undertakes 'externalization' activity. This is a core component of its strategy and has an important role to play in sharpening the company's focus. This approach falls broadly into two categories that create value from assets in the pipeline and portfolio, as well as creating recurring revenue streams.

1 Strategic collaborations aimed at maximizing the potential of pipeline assets, by accessing therapy area expertise that falls outside the company's main areas of focus. For example, in July 2016, AstraZeneca entered into a development and commercialization agreement with LEO Pharma for one of its investigational biologic treatments, tralokinumab, in skin diseases.
2 Agreements that aim to extend the commercial reach of established medicines through a partner's dedicated focus. These enable the company to retain an interest and share of the value in disease areas outside its three main therapy areas, while redirecting its own sales and marketing resources to priority medicines.

AstraZeneca's partnership with Eli Lilly and Company ('Lilly') on the development of AZD3293, an investigational treatment for Alzheimer's disease, is another example of how the company accesses external scientific expertise to advance important pipeline assets that sit outside its main areas of focus; in this case, neuroscience. In September 2014, AstraZeneca and Lilly formed an alliance to develop and commercialize AZD3293. This alliance brings together the