

# LEAN IT PARTNERING

HOW PARTNERS CREATE VALUE BY DEVELOPING A LEAN CULTURE FOR IT SUPPLY AND MANAGEMENT



Han van der Zee  
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How partners create value by  
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Han van der Zee, Vincent Blijleven, Yiwei Gong



# Colophon

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# Preface

Lean, as a philosophy, has been around for quite some time. There is not much discussion about the question whether Lean thinking and acting provides organizations with a way to achieve superior performance by focusing on customer value, innovation and productivity. In general, Lean allows organizations to specify value from a customer perspective, enable customers to pull the value from a supply chain, and optimize all value-creating activities in the supply chain while eliminating activities that do not, thereby achieving perfection in all steps of end-to-end processes. In sum, Lean provides an effective and efficient way to do more with less, while achieving higher levels of productivity, quality, customer satisfaction and, as a result, competitive advantage.

As a consequence, Lean has received considerable attention from many practitioners around the globe and an increasing number of academic researchers over the years. Many successes have been published and there is an impressive amount of books, papers, lectures and educational material available. However, although Lean thinking and the application of Lean principles might be popular and common practice, the majority of publications and lessons learned are related to manufacturing environments. Companies and organizations that are active in service sectors have only recently embraced Lean. Moreover, little is known about the application of Lean in the domain of Information Technology (IT) services, also known as Lean IT.

Interestingly enough, over the past few years, many large users of IT have outsourced or co-sourced their IT supply and management services to professional IT service providers. Many IT sourcing relationships have become strategic in terms of intent and importance. For these IT relationships, the challenge to become Lean has also become increasingly imperative and complex as well, as the scope of Lean shifts from an internal application of Lean to an inter-organizational partnership context. Partners need to work hard together and collaborate intensively in becoming Lean; success does not come easy.

## Research motives

Although we notice Lean IT has become a strategic item on the agendas of suppliers and users of IT services, the amount of documented, analyzed and evaluated successful examples of applying Lean in IT partnerships is scarce. Companies therefore have no reference material available to guide them on implementing Lean on an IT partnership level.

The perceived importance of strategic sourcing of IT and the application of the Lean philosophy in partnerships on the one hand, versus the lack of real, practical experiences on the other hand, is what might be called 'the Lean IT partnering paradox'. It is the major goal of this book to explore this paradox and to offer insights that may provide ways to bridge it. This book addresses the deficiency in literature by presenting six thoroughly examined and analyzed cases of Lean in IT partnerships.

First and foremost, this book contains the results of the Nyenrode Lean Institute research project, ‘Lean IT partnering’, which was conducted from May 2013 to February 2014. The project was inspired by some notable findings of previous case studies on IT sourcing carried out by the Nolan Norton Institute, more than a decade ago: ‘Outsourcing of IT in the Netherlands’ (1997), ‘Strategic Sourcing and Partnerships’ (1999), ‘Competing for Partners’ (2000) and ‘Bridging the paradox – Creating IT partnerships in the financial sector’ (2001). These projects showed that back then, strategic client-supplier relationships were developed in many sectors and industries, and many players experimented with other forms of cooperation than just regular client-supplier relationships, such as strategic alliances and networks.

After more than ten years of learning, strategic IT sourcing is still high on the strategic agenda of many organizations. Meanwhile, relatively new management approaches, such as the Lean philosophy, have entered the services sector, and hence, the IT services sector. As mentioned before, however, there seem to be barriers that impede the actual take-off of substantial innovative applications of Lean in IT partnerships on a large scale. To chart these barriers and gain a better understanding of the success factors of applying Lean in IT partnerships, we launched the research project, ‘Lean IT partnering’.

### **Research approach**

A core team of researchers from Nyenrode Business Universiteit and professionals from our research partners and sponsors Achmea, Atos, Accenture and Sogeti conducted the research. This team conducted the case study interviews and was thus able to draw upon a rich source of real-life examples. The same team collected information on Lean IT partnering by thoroughly examining and analyzing six cases of IT partnering. The team members contributed their views, opinions, perceptions, insights and beliefs on the subject to the results of the case studies. The result was a wealth of material that formed the point of departure for this book. A steering committee, which consisted of executives representing the Nyenrode Lean Institute research partners and sponsors Achmea, Atos, Accenture and Sogeti, backed the research process. Their contributions and aid in identifying cases, their input to the discussions and their critical comments on the research results have been invaluable during the whole research process and while crafting the research deliverables.

### **Structure of the book**

The question of how to apply Lean in complex and strategic IT sourcing relationships remained our guiding principle when we structured the material on which this book is based. Of course, the answer to this question differs according to the type of partnership at hand, for what objectives a partnership is crafted, and for what activities and results the partnership is initiated – the partnership content. For executives, the question ‘Why create IT partnerships?’ must often be answered before the question ‘How can we make them Lean?’ can even be asked. For IT service suppliers, the key question is often why and how the services they offer must be adapted if they are to become Lean IT partners.

How is this book structured? Chapters 1 and 2 discuss the basic principles of this study, the current state of play in strategic sourcing and the application of Lean IT. Chapter 1 provides some necessary background information on the demand and supply sides of IT services, and the different types of IT partnerships. Chapter 2 elaborates upon the Lean IT principles that are of interest. The subsequent chapters focus on the cases (Chapter 3), the analysis of the case study results (Chapter 4) and the explanation of derived success factors of applying Lean in IT partnerships (Chapter 5). Finally, Chapter 6 wraps up the recommendations that follow from our research on the subject.

### **Acknowledgements**

We would like to express our gratitude to all those who participated in the Lean IT partnering research project. This study would not have been possible without the contributions, ideas, personal commitment and funding provided by the Nyenrode Lean Institute research partners Achmea, Atos, Accenture and Sogeti. We would like to express our thanks to their experts who were willing to be part of the research team and their executives who were essential for us to share their opinions and experiences with us, and to steer the team in the right direction. The list of names is too long to mention them all here – they are listed in Appendix D.

Moreover, we would like to express our gratitude and appreciations to all the interviewed representatives of the cases studied, at Achmea, Atos, Accenture, Sogeti, KPN, Avanade, HEINEKEN, HP, the Dutch Ministry of Economic Affairs / DICTU and SAP. Without their openness, helpful cooperation, insights and sharing of their experiences, our study would obviously not have been successful. Nonetheless, it goes without saying that the authors of this book accept full responsibility for their interpretation of the cases.

On behalf of the research team,

Han van der Zee

Nyenrode Business Universiteit

Nyenrode Lean Institute Research Lead, Cluster Lean Transformation with and in IT

# Preface to Second Edition

In this second edition of *Lean IT Partnering*, several changes have been made to further improve and refine its content.

The following changes have been made:

- The text of Chapter 3 (Case Study Results) has been revised:
  - Clarified per IT partnership who initiated the partnership;
  - Clarified per IT partnership who was the main orchestrator of the partnership;
  - Clarified per IT partnership who was the main driving force behind Lean implementation.
- The text of Appendix C (Case Demographics) has been revised: a short introduction to the case demographics survey has been added to inform the reader about why the case study demographics survey had to be conducted and how it was done.
- References have been collected as one single overview in Appendix E.

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# 1 Introduction

Lean thinking has been around for decades. It has garnered unabated attention from both practitioners and researchers, and seems to have gained even more popularity since the recent financial crisis. The latter forces organizations to increase their competitive advantage by doing more work with less. Lean thinking provides organizations with a way to achieve that by focusing on value. In general, Lean allows organizations to specify value, identify all value-creating activities while eliminating activities that do not, align these activities to achieve flow, let customers pull the value, and achieve perfection (Womack & Jones, 1996; Womack, Jones & Roos, 2007). In sum, Lean provides a way to do more with less: requiring less time and resources while achieving higher levels of quality and customer satisfaction.

Lean thinking is a common practice in manufacturing environments and recently gained increasing popularity among practitioners who are interested in extending Lean principles to the domain of Information Technology (e.g. Poppendieck & Poppendieck, 2003; Bell, 2005). However, directly translating Lean principles from manufacturing to IT products and services poses significant challenges (Bell & Orzen, 2010). These challenges become even more complex when shifting the scope of Lean from an internal application of Lean to an inter-organizational partnership context. Part of these challenges is that, although we notice Lean IT has become a strategic item on the agendas of companies and their clients, the amount of documented, analyzed and evaluated successful examples of applying Lean in IT partnerships is scarce. Companies therefore have no reference material available to guide them on implementing Lean on a partnership level. This book addresses this deficiency by presenting six thoroughly examined and analyzed cases of Lean in IT partnerships. While conducting the case studies, we placed emphasis on distilling success factors and blockers with regard to implementing and sustaining Lean in IT partnerships.

Before we proceed with the results of the case studies conducted, we first outline the differences between traditional and Lean leadership, and the differences between applying Lean in manufacturing, general services and IT services environments to make a clear distinction between these worlds. Furthermore, we will shortly discuss the benefits and challenges of applying Lean on a partnership level, why organizations decide to engage in IT partnerships and which types of IT partnerships exist, and provide typical examples of challenges that organizations have to deal with when shifting the scope from an internal application of Lean to a partnership level.

## 1.1 Traditional Versus Lean Leadership

The role of leadership is vital in transforming an ordinary partnership into a Lean partnership. Practicing Lean, regardless whether applied internally or on a partnership level, is far more than simply applying a few tools and techniques. Any organization that wants to become Lean needs leaders who have a sound understanding of Lean. Real Lean leaders realize that

the main focus of Lean is on eliminating waste while increasing value for customers, which eventually leads to better financial performance and increased competitiveness. To do so, Lean leaders must act uniquely and innovatively by moving a step ahead of the traditional leadership roles. In this book, when speaking of traditional and Lean leadership, we refer to the management styles of which some of their most prominent characteristics are listed in Table 1.1.

Table 1.1 Differences between traditional and Lean leadership

Traditional leadership	Lean leadership
Leader	Direction setter
Hierarchy	Responsibility
Get the product out (push)	Let customers drive the business (flow and pull)
Realize local optimizations	Strive for overall system optimization
Hide problems	Make problems visible
Focus on short-term financial results	Long-term orientation and philosophy
Analyze charts and graphs	Go to the workplace (gemba)
Information controller	Information conduit
Vertical management	Horizontal management

## 1.2 Lean in Manufacturing, General Services and IT Services

Regardless of the environment in which people operate, decisions related to their work will always have to be taken. However, the subject on which people make decisions in an IT environment greatly differs from a manufacturing environment. In manufacturing, people can generally see a given unit move through the value chain, along with its constraints. In an IT environment, akin to a general services setting, however, the unit that moves through the value chain is often digital and intangible. This tends to make processes invisible, thereby making the unit more prone to human-related inefficiencies and errors. Furthermore, implementing Lean principles in an IT environment is a continuous and long-term process. It may require years before Lean is ingrained in the DNA of an organization and before any results are visible (Womack & Jones, 2003; Bell & Orzen, 2010).

In general, service processes have their own unique aspects that set them apart from manufacturing processes (Six Sigma Qualtec, 2012). Several examples of such aspects are:

- *Greater involvement of customers* in the production process. Customers often supply information to the process, or may even be part of the process itself.
- *Difficulties in achieving standardization* due to services being focused on people, as opposed to manufacturing being focused on machines. Machines can be programmed and have a limited set of capabilities, whereas humans often display flexible and sometimes even unexpected behavior.
- *Difficulties in maintaining a consistent level of quality*. The quality of a service is determined by means of subjective judgment based on the experience of the customer, often due to its intangible nature. This makes it arduous – if not impossible – to standardize service

processes. Machines, on the other hand, can be configured to conduct a repetitive activity, of which the quality of the deliverables can be measured according to a defined set of specifications.

- *Little visibility and overview* of what is currently happening. In a manufacturing process, a unit can be seen as it moves through a value chain, and shows directly what the status of the unit is and where the constraints in the process are located. In service processes, the unit that moves through a value chain is often information that can be digital, paper-based or even verbal.
- *Lacking insight in inventory.* Input for different stages in manufacturing processes are often stored at a specific location and can easily be seen, calculated and measured. In service processes, input such as information is invisible, which leads to lacking insight in inventory.

In addition to these unique aspects that set service processes apart from manufacturing processes, the definition of waste in both domains also differ. Although eliminating

Table 1.2 Examples of types of waste in manufacturing, general services and IT services environments

type of waste	manufacturing	general services	it services
Transportation	Unnecessary transportation due to inefficient factory lay-out, inefficient use of material handling equipment	Unnecessary electronic data exchange, paperwork to be re-entered in another incompatible system	Physical audits of software and hardware, physical visits to resolve hardware and software issues
Inventory	Excess of raw materials, excess of finished goods waiting to be sold	More storage (both physical and digital) than required, files waiting to be processed	Redundant hardware, multiple redundant repositories
Motion	Poor lay-out of machinery throughout factory, poor personal workplace organization	Central filing, looking for data and information	Continuously resolving similar bugs and errors
Waiting	Machine downtime, machines standing idle, waiting for delivery of new batch	Slow approval procedures, waiting for customer input	System downtime, slow and outdated hardware, slow response time of applications, manual procedures
Over-production	Unstable demand, unreliable processes, large batch sizes	Sending out or processing items that are still subject to change, sending unnecessary information	Delivery of unnecessary, non-value adding software
Over-processing	Unnecessarily strict tolerances, excessive processing beyond customer needs	Cloning electronic data into multiple information systems, redundant copies	Reporting unintelligible technical metrics to salesmen and marketers, over-processing of data
Defects	Missing screws, damaged parts, defective on arrivals	Erroneous data entries, invoice errors, knowledge drains	Bugs, errors, unauthorized access, mismatches in data structure
Talent	Inadequate training to properly utilize machines	Underutilization of skills and potential	Insufficient training on how to use specific hardware or software

waste – the goal of Lean – may seem like a simple and clear task, not knowing what kind of waste to look for significantly reduces the potential of Lean. To ensure common ground, Table 1.2 provides typical examples of the traditional eight types of waste and examples thereof in manufacturing, general services, and IT services environments.

### 1.3 Why Engage in IT Partnerships?

Rapid technological innovation and globalization have enabled companies to transcend their physical and organizational boundaries to carry out activities together with suppliers, partners and customers. An important outcome of this shift is that companies no longer work in an isolated manner. Instead, companies initiate partnerships in various forms to achieve strategic flexibility and to enhance their competitive advantage (Quélin & Duhamel, 2003; Click & Duening, 2004). Initiating partnerships, however, is not an easy task. It requires suppliers and their clients to develop strategic leadership, focus and develop core competencies, exploit effective distribution channels, realize efficient manufacturing and production processes, attract and stimulate human capital, and develop and implement new organizational forms to streamline the way in which the partnership operates (Van der Zee & Strikwerda, 2000).

When speaking of IT partnerships, a distinction is often made between business process outsourcing (BPO) and information technology outsourcing. BPO refers to a contractual agreement made with a third-party supplier, where the supplier takes on the responsibility to own, execute and manage one or more complete IT-intensive business processes (Halvey & Melby, 2007). IT outsourcing, as opposed to BPO outsourcing, is narrower in scope and generally revolves around outsourcing the development, operations and maintenance of IT. When speaking of IT outsourcing, we use the definition provided by Kern, who defines IT outsourcing as: *“a decision taken by an organization to contract-out or sell the organization’s IT assets, people and/or activities to a third party vendor, who in exchange provides and manages assets and services for monetary returns over an agreed time period”* (Kern, 1997). The first type of IT outsourcing concerns an application that is developed and maintained by a third party to, for instance, automate a business need that is not part of an existing system, or to replace an existing system or module. The second type of IT outsourcing concerns taking responsibility for the day-to-day operations of a newly developed or existing application or system, ranging from delivering IT-infrastructure components (e.g. WANs, desktop services) to third-party maintenance. In general, maintenance in both types of IT outsourcing refers to repairing, testing, updating or upgrading and making small modifications to an application or system, including conducting preventative maintenance. Figure 1.1 combines the distinction between BPO and IT outsourcing, including the distinction between IT application development and maintenance, and IT infrastructure delivery and IT operations management within IT outsourcing (Geurts & Van der Zee, 2001).

Companies may have multiple motives and arguments for and against engaging in an IT partnership with a supplier, regardless whether it concerns processes, services or systems.

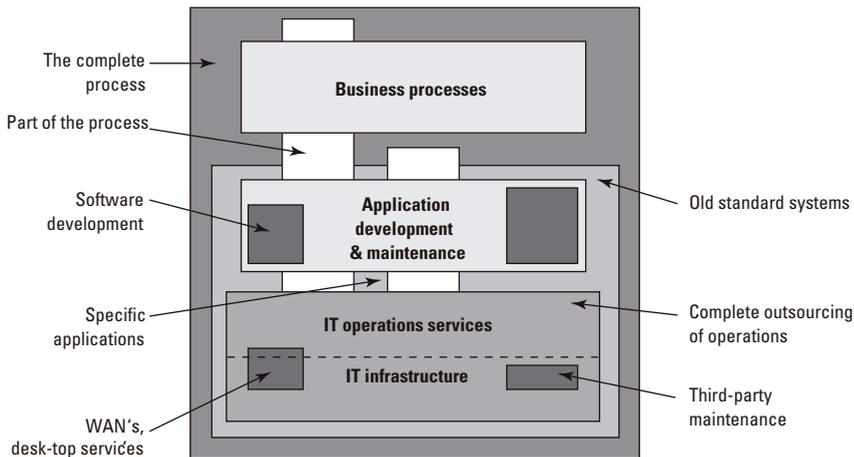


Figure 1.1 Content distinction in IT outsourcing (Geurts & Van der Zee, 2001)

Considering a partnership may last for years and is likely to come with many implications, taking the decision to engage in partnerships is often a careful and critical process. Van der Zee (1997) created a list of the most common motives and arguments related to decisions about IT partnering that are organized into five distinct categories. Each partnership is typically initiated based on one or multiple of the following motives:

### 1 Strategic motives

- Core business – IT is seen as a peripheral service and is therefore outsourced to third parties as a non-core activity.
- Cooperation – developing new products or services based on IT for which specific expertise and/or capital is required.
- Innovation – gaining greater innovative capabilities through access to expertise.
- Market protection – erecting barriers to prevent (potential) competitors from entering the market by securing exclusive contracts with suppliers.

### 2 Economic motives

- Costs – decreasing costs through economies of scale and process rationalization.
- Cost control – gaining a clearer picture of the costs and disclosing hidden costs.
- Financing – using outsourcing as a way to bring in cash, generating financial latitude from the capital injection produced by a sale-and-lease-back construction.
- Risks – avoiding major unforeseen IT expenditure by transferring the risk of rapid technology obsolescence.

### 3 Operational motives

- Quality – meeting increasing quality requirements at the levels of service required by the demand side from the internal IT service department.
- Flexibility and capacity – anticipating changes in demand for IT services by having scalable IT capacity.

- Transition – outsourcing the management and exploitation of legacy systems to free up resources for migration to new hardware or software platforms.
- Staffing – solving problems associated with scarcity and rising costs of skilled IT staff.

#### 4 Emotional motives

- Bandwagon – copying others.
- Trust – solving problems relating to a lack of trust in IT management with functional management.
- Insecurity – reducing uncertainty about the added value of the organization's own internal IT department.

#### 5 Political motives

- Power – forming new relationships with suppliers to change the existing balance of power.

## 1.4 Types of IT Partnerships

IT outsourcing relationships can be categorized according to the nature of the relationship. The first category concerns the classical outsourcing of commodity-type activities that are very well defined and specified. Outsourcing relationships in this category are established from a short-term perspective and are primarily motivated by the search for short-term cost reduction. In this book, we use the term *'supplier'* to describe outsourcing relationships in this category.

The second type of outsourcing is generally long-term strategic sourcing or a strategic alliance. We categorize this type of outsourcing as a *'partner'* relationship. A partner relationship differs from a supplier relationship in that it acknowledges the complexity of the relationship. By complexity, we mean that a partner relationship is generally established for a longer time span and involves close interaction between actors of both the supplier and the client. In a partner relationship, the primary focus of the client has shifted from cost reduction to achieving strategic flexibility, reliability, quality and responsiveness.

The next level of cooperation between organizations is called *'network'*, or ecosystems. Networked organizations are characterized by an organic structure that enables the quick build-up and dismantling of inter-organizational relationships. In a network structure, each participating organization contributes some of their core competencies to the total system of competencies within the network. All actors should have insight into where and how value is created and what contribution they can make based on their own competencies.

Different types of outsourcing require significantly different amounts of effort concerning decision-making, contracting, coordination and communication. Such a difference is reflected by, for instance, the number of stakeholders influenced by the outsourcing decision, the transition involving the shift of more complex interfaces between organizations, and the relationship under more detailed *'service-level agreements'* (SLAs) entailing more complex

operations in terms of control and performance reporting (Quélin & Duhamel, 2003). We use a ranking from 0 to 10 to conceptually indicate the complexity difference of the three types of outsourcing (see Figure 1.2). A formal explanation of each type of partnership is provided in the figure below.

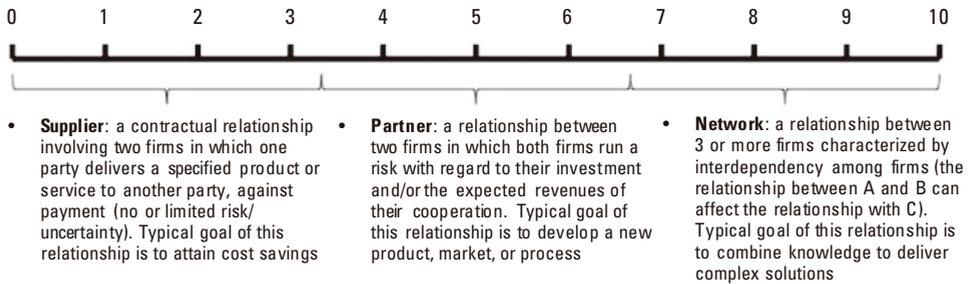


Figure 1.2 Three types of IT partnerships and their complexity

## 1.5 Benefits of Applying Lean in Partnerships

Applying Lean is often associated with numerous benefits that are either tangible or intangible in nature. Tangible benefits can be quantified and measured, whereas intangible benefits cannot. An overview of examples of tangible and intangible benefits of applying Lean in partnerships is provided in Table 1.3.

Table 1.3 Examples of tangible and intangible benefits of applying Lean in partnerships

tangible benefits	intangible benefits
Reduced lead time to deliver goods or services to the customer	Improved teamwork
Higher quality levels of goods and services delivered	Improved morale
Reduced costs by eliminating waste on an end-to-end basis	Higher levels of customer satisfaction
Higher revenue by utilizing freed-up capacity	Insight into all interconnected processes between all parties involved

## 1.6 Challenges of Applying Lean in Partnerships

Successfully applying Lean also poses great challenges. When two or multiple parties engage in a partnership and decide to apply Lean thinking on a partnership level, the level of complexity tends to surge. The primary reason is that successful partnerships require effective communication and coordination among all parties involved (Mohr & Spekman, 1994). A plethora of questions come to mind when connecting Lean and partnerships.

Relevant questions are:

- How do our partner and we know and stay informed about what the end-customer cares about most that allows us to focus on creating value?
- How do we gain insight into all interconnected processes between all parties involved that together constitute the entire value stream?
- How do we coordinate and align effort by all the people involved in the partnership to ensure the goals of the partnership are known to all and well understood?
- How do we cultivate a Lean partnering culture that stimulates proactive behavior of people in the partnership?
- How can we create an atmosphere in the partnership where every employee feels respected and involved?
- How do we avoid complacency between parties involved that leads to unawareness of improvements?

In this book, we address challenges of applying Lean on an IT partnership level such as the ones mentioned above. This is done by means of discussing and analyzing multiple case studies. The way in which the case studies were conducted, including the research model used, is described in the next section.

## 1.7 The Research Model

In addressing the challenges concerning the application of Lean principles within partnerships, we have studied six IT-partnership cases in the Netherlands. For every case study, we separately interviewed one or multiple people on the strategic, tactical or operational level of both sides of the partnership in a semi-structured way. Six interviews per case study were conducted in total, with every interview touching upon different aspects of the partnership, depending on the organizational level on which the interviewees were acting. The entire interview protocol consists of 67 questions and can be found in Appendix B. In addition, before the actual interviews took place, representatives of both organizations were asked to fill out a short demographics survey containing questions related to the partnering context, strategy and content. This case study demographics survey can be found in Appendix C. In short, the *partnering context* consists of the size of the contract in terms of the revenue of the partnership, the history of cooperation between both parties for every case studied, as well as the motivations behind the initiation of the partnership from both the perspective of the supply side and the demand side. The *partnering strategy* refers to the explicit method or plan that states how the goals (i.e. the desired outcome) of the partnership will be achieved. A partnering strategy typically includes a partner selection process, and states how the partnership is monitored and coordinated to ensure alignment with the overall business strategy and context. The *partnering content* revolves around the nature of the IT processes and projects carried out within the partnership by the supply side that add value to the demand side.

Throughout this research project, we used the Lean enterprise principles pyramid created by Bell and Orzen (2010) (Figure 1.3). This Lean enterprise principles pyramid proved its usefulness and value in covering all relevant aspects of Lean IT principles discussed during the interviews. The Lean principles pyramid by Bell and Orzen (2010) bears great resemblance to the Shingo Principles of Operational Excellence model (The Shingo Prize for Operational Excellence, 2012). However, the Lean enterprise principles pyramid, as opposed to the Shingo principles model, was designed and intended to be applied in an IT environment, hence our decision to opt for this model. We briefly describe each layer of the pyramid below. The pyramid will be covered in greater detail in Chapter 2.

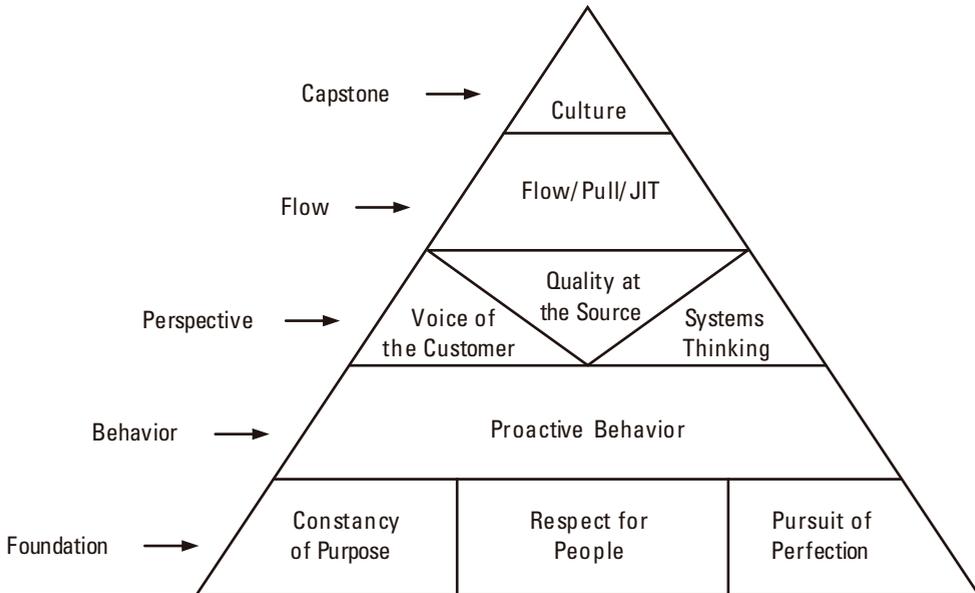


Figure 1.3 Lean Enterprise Principles Pyramid (Bell & Orzen, 2010)

### Foundation (Strategic)

Organizations require a solid foundation of Lean, of which three elements support a strong social structure for a Lean enterprise. Constancy of purpose concerns leadership having to maintain clarity on important long-term objectives to set a direction that is required to influence behavior. Respect for people is about involving all people with different backgrounds, insights, skills and experiences that make a distinct contribution to reach goals. Pursuit of perfection, in turn, addresses the continuous effort to shift from reactive firefighting to proactive problem solving.

### Behavior (Operational)

Behavior is about letting people take initiative and assume personal responsibility for the value added to the customer, the quality of work and the work environment. People should do this every day, systematically, preventatively, in a disciplined manner, and with pride of craftsmanship.

### **Perspective (Tactical)**

Perspective is about awareness, with three essential perspectives embraced by the Lean enterprise. The voice of the customer concerns everyone knowing what the customer wants (value) and needs, which means people begin with the end result in mind and focus on the right things. Quality at the source refers to ensuring things are done right the first time and every time, without sending imperfect work to the next operation or customer. Finally, systems thinking focuses on viewing the interconnected processes that make up the entire value stream.

### **Flow (Tactical)**

Flow is about keeping the number of interruptions of progression of materials, services, products and information to an absolute minimum. Interruptions, delays, rework, work-in-progress, congestion, confusion, overstock and shortage all need to be eliminated.

### **Capstone (Strategic)**

The capstone of any Lean enterprise is culture, which represents an organization's shared beliefs and values. This is manifested as attitude and behavior: supporting a Lean IT culture of continuous improvement that enables people to proactively seek out and solve problems that results in superior performance.

## **1.8 The Cases**

The elements of the Lean IT enterprise principles model by Bell & Orzen (2010), as described in the preceding section, have been researched in six actual cases (see Appendix A for the research method). All six cases are based in the Netherlands, although in some cases international offices were involved. We will briefly introduce them here. Detailed descriptions of the six cases will be presented in Chapter 3.

- The first case revolves around the outsourcing relationship between the largest insurance company in the Netherlands, Achmea, and IT supplier Atos. This relationship concentrates on the provision of an IT infrastructure that should always be available, reliable and scalable.
- The second case describes the outsourcing relationship between HEINEKEN and HP concerning management of the workplace environment, including on-site support, service desk, LAN management, server management, and active directory management.
- The third case is about the development relationship between Achmea and the consultancy company Avanade, which has a development team in Bratislava, Slovakia.
- The fourth case is about the co-development relationship between Achmea and Europe's largest software company SAP, located in Germany. This relationship concentrates on the maintenance and co-development of several of Achmea's strategic insurance systems.
- The fifth case concerns the application development relationship between the Dutch Ministry of Economic Affairs and IT consultancy company Sogeti. This relationship concentrates on the development of a mobile inspection application developed by Sogeti.

- The sixth case describes the outsourcing relationship between the largest telecommunications company in the Netherlands, KPN, and consultancy company Accenture in the Netherlands. Accenture develops and maintains KPN's business support systems, which are mostly developed in Accenture's India Delivery Center located in Bangalore, India.

## 1.9 Structure of the Book

This book continues with a description of the theoretical framework underlying the research conducted in Chapter 2. Chapter 3 presents the results of the aforementioned six case studies in detail and provides an overview of best practices derived. Chapter 4 provides a birds-eye perspective, including an analysis of the results described in the preceding chapter. Chapter 5, in turn, elaborates upon the best practices and paves the way for recommendations provided in Chapter 6 on how to actually implement the best practices within IT partnerships.