Philips

Global Sourcing Strategy

IT Services

Master thesis
Management of Technology
by Dennis Baaten

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Global Sourcing Strategy for IT Services

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The author would like to dedicate this Master thesis to the memory of his grandfather *Jac H. Baaten*; an exemplary man with great character and perseverance.

Preface

This is my Master thesis, which is the direct result of a research project for Philips Electronics N.V. from February 2005 till March 2006. This Master thesis describes the development of a *global sourcing strategy for IT services for Philips* and is the last part of my study Management of Technology at the Delft University of Technology.

Accepting a challenge at Philips means that an overwhelming amount of information, governance, culture, and bureaucracy is coming your way. My gratitude goes out to all the people from Philips Corporate IT Purchasing and other departments who took the time and effort to support me throughout this research in every way they could. Especially my mentor Dennis Gerrits and Matthieu Groenewoud have been very helpful and supportive throughout my time at Philips.

I also very much appreciated the help of Gerard Wijers, Marc Zegveld and Rene Wagenaar from the Delft University of Technology for their guidance, feedback and input in order to guarantee a certain level of academic proportion.

Last but certainly not least, I would like to express my gratitude towards my father Chris Baaten and my mother Anita Baaten-Konings who are both strongly devoted to supporting me and my brother in reaching our goals.

Dennis Baaten

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Executive summary

This Master thesis' objective has been defined as the development of a global sourcing strategy for IT services for Philips. It has been written by Dennis Baaten under the authority of Philips Corporate IT Purchasing and the Delft University of Technology.

Traditionally Philips IT had an autonomous nature that was characterized by a strong silo structure, where the different businesses (product divisions) were empowered to make their own decisions and set up their own proprietary IT solutions. Eventually this fragmentation of IT services throughout the organization turned out to be rather inefficient, and Philips started to move towards a more common environment.

The ambition to *increase the degree of commonality* throughout Philips IT involves rather radical changes. Although these changes are generally considered to be advantageous, they are not always received with open arms. The transformation from an *autonomous* environment towards a *common* environment, stumbles upon a considerable amount of resistance. Amplified by Philips' consensus culture, this resistance causes the acceptance speed to be lower than one might prefer.

As a result of a strong focus on its core business, Philips approaches IT in the role of a *business support function* from an outsourcing perspective. The retained IT organization will increasingly be engaged in issues like: what, how, and where to outsource; a process that is generally referred to as *sourcing*. However, as a result of the earlier mentioned fragmentation, Philips' current sourcing environment can best be seen as a *multisourced environment* allowing duplicate and/or conflicting IT sourcing activities.

In order to increase efficient and maximize the business value of IT, Philips is in need of a *global sourcing strategy*. After an introduction to the subject matter and Philips' IT environment, this Master thesis' *main research question* has been formulated as:

What should a global sourcing strategy in the area of IT services contain for Philips?

As improvements from outsourcing are never achieved automatically but need to be supervised, and if necessary enforced, by an organization, this thesis describes how to manage outsourcing at a strategic level. Creating a global sourcing strategy will lift *sourcing at Philips IT* to a higher level by optimizing (a) the procurement process and (b) the structure and boundaries of the retained IT organization.

With a global sourcing strategy *framework* that unites outsourcing and related organizational aspects, a structured approach towards the creation of a global sourcing strategy has been created. Based on an investigation of the different aspects represented within the global sourcing strategy framework, this thesis will gradually shape Philips' *global sourcing strategy for IT services* with which Philips will be able to maximize the benefits of outsourcing.

Two of the most important global sourcing strategy aspects discussed throughout this thesis are: (1) the global implications, and (2) the Baaten-matrix.

Global sourcing emphasizes an organization's competences to deal with changing and versatile global supply markets. It widens Philips' market orientation, allowing Philips to benefit from bigger and new markets. On the other hand a global focus increases the complexity of the sourcing process. The *global implications* refer to Philips' ability to deal with foreign markets and suppliers, and stress the importance of continuously improving these competences.

The Baaten-matrix is a method with which Philips will be able to determine the best possible sourcing variant for a specific IT service. Arguing from the basis of an organization's service domains, the Baaten-matrix features two variables with which an organization will be able to determine *how* to source an IT service. One of these variables has an *internal* focus and involves an organization's preferred level of control over an IT service. The other variable has an *external* focus and involves the ability of an external supplier to deliver a mature service.

After having discussed all separate global sourcing strategy aspects, an analysis of Philips situation will result in a current and preferred

situation. An assessment of these situations' reflections upon the global sourcing strategy framework, results in a specific *global sourcing strategy for Philips for IT services*.

Philips' global sourcing strategy for IT services incorporates the following objectives:

- Adopt to the usage of the Baaten-matrix, while at the same trying to place as much IT services as possible in the area of 'out-house sourcing'.
- Improve competences to deal with a changing and versatile global supply markets.
- Adopt changes in the field of IT organization and governance, focused on increasing commonalities and harmonization.
- Move PD service domains to shared service centers being P-BAS and P-GIS.
- Start with the 'quick wins' and try to improve cultural characteristics, enabling the decrease of resistance to changes.
- Keep contracts aligned with the appropriate sourcing variants.
- Accept proposed changes regarding the supplier selection process.

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Abbreviations

BEST	Business Excellence through Speed and Teamwork. A method for assessing the maturity of processes.
CIO	Chief Information Officer.
CIT	Corporate IT.
CMM	Capability Maturity Model.
IAF	Integrated Architecture Framework.
IS	Information Systems.
IT	Information Technology.
P-BAS	Philips Business Application Services (shared service center).
PD IT	Product Division IT department.
PD	Product Division.
P-GIS	Philips Global Infrastructure Services (shared service center).
SSC	Shared Service Center.
TCO	Total Costs of Ownership.
TOP	Towards One Philips. A strategic objective focused on streamlining Philips' business support functions.

1. Introduction

Ever since the very beginning organizations have been searching for ways to keep ahead of the competition and be successful in their business. Information Technology has, in many ways, become important for organizations to be able to excel in their market area(s).

Nowadays, most organizations depend to some extent on computerized information systems and Information Technology is often of strategic importance. Naturally Information Technology decisions should be taken with care and the question of who is to provide these information systems is therefore very important [*Looff, 1996*].

Over the last 20 years, the term global sourcing strategy has been a hotly debated management trend. In its early years global sourcing had an in-house orientation, but in a later stage the focus shifted towards the outsourcing of activities [*Kotabe & Murray, 2004*]. Throughout the beginning of the nineties, the accommodating of IT activities at external suppliers really started to gain ground. About ten years later, outsourcing again became a popular subject of discussion.

Throughout these ten years, the technical possibilities concerning the outsourcing of entire processes increased enormously. Together with the current trend where organizations keep increasing the focus on their core businesses, organizations are increasingly encouraged to outsource IT activities. On top of that the economical downturn of the past years has also been a stimulus for outsourcing as this urges organizations to increase their operational efficiency [*Gianotten & Wijers, 2003*].

These developments do not only contribute to the growth of organizations making use of outsourcing, but also validate outsourcing in being a business strategy consideration.

Some organizations' outsourcing expectations are very high as they are fed by positive media attention and smooth promising stories from external suppliers. Other organizations on the other hand, doubt whether outsourcing will actually contribute in a positive way to the business and

fear that they will become too dependent on external suppliers. Even different employees in the same organization often have different opinions on what, how, and where to outsource. Such diversities increase the complexity of an already difficult outsourcing decision making process.

"Improvements from outsourcing need to be supervised or even enforced by an organization"

Improvements from outsourcing are never achieved automatically but need to be supervised, and if necessary enforced, by an organization. In order to be able to improve from outsourcing, an organization must not maintain a single focus on the outsourcing process, but should also take an effort to manage outsourcing at a strategic level. Implementing a sourcing strategy, which aligns with the business strategy while lifting sourcing to a higher level, can do this [*Looff, 1996*].

1.1 Philips

Over 110 years ago Philips was founded by Gerard and Anton Philips; entrepreneurs who proved it was possible to succeed in business while increasing the quality of life of the people around them. In fact, this has become the commitment of Philips: improving the lives of people all over the world by creating innovative and meaningful products in the fields of healthcare, lifestyle and technology [*Philips Intranet, 2005*].

Considering a turnover of over 30 billion euros in 2004, Philips Electronics N.V. is Europe's largest electronics company and at the same time also one of the biggest players in the world. With activities in the three interrelated domains of healthcare, lifestyle and technology and over 160.000 employees in more than 60 countries, Philips has market leadership positions in the fields of: medical systems, consumer electronics, domestic appliances, personal care, semiconductors and lighting.

1.2 Information Technology at Philips

At Philips the nature of Information Technology can be split up in two categories; (1) IT in the role of a business support function and (2) IT embedded in Philips' end products. Although both variants are critical success factors for Philips' profitability, the focus of this research is upon

IT in the role of a business support function. Therefore *IT in the role of a business support function* will hereinafter be referred to as *Information Technology* or simply *IT*.

"At Philips IT is approached from an outsourcing perspective"

As IT is not considered Philips' core business, IT is approached from an outsourcing perspective. This perspective has an impact upon the way Philips should manage and organize its IT. As a result, the retained IT organization will change and shall increasingly be engaged in issues like: what, how, and where to outsource (a process which is generally referred to as sourcing, but more about this in chapter 2).

As also shown by appendix A, involvement in IT occurs at three different places in the organization (structure of *Philips IT*):

1. Corporate level
   The Corporate IT department (CIT) is amongst other things responsible for the overall Philips IT strategy, Policy setting and the management of Philips' IT infrastructure. CIT is constantly trying to match IT solutions with key business requirements [*Philips Intranet, 2005*] [*Groenewoud, 2005*].

2. Product divisions
   Within Philips the following product divisions exist: Medical Systems (MS), Consumer Electronics (CE), Domestic Appliances (DAP), Lighting (LGH), and Semi Conductors (SC). The IT departments of these product divisions (PD IT) focus on business specific IT solutions.

3. Shared service centers
   Philips efforts to centralize and standardize IT services, has resulted in two shared service centers: P-GIS (Philips Global Infrastructure Services) and P-BAS (Philips Business Application Services). These service centers offer their services to Philips' product divisions.

The traditionally autonomous nature of Philips' IT (silo structure), has resulted into proprietary IT solutions at the different product divisions. As the product division IT departments were empowered to make their

own decisions and set up their own IT solutions, a lack of synergy has been created between the different IT departments.

For Philips this fragmentation of IT services throughout the organization (proprietary solutions at the product division) turned out to be rather inefficient. From a sourcing perspective this resulted into a *multisourced environment* allowing duplicate and/or conflicting IT sourcing activities.

Since 1997 Philips has been centralizing and standardizing IT services, and on the first of January 2005 this resulted into the shared service centers P-GIS and P-BAS (more about this in chapter 9.1) [*Groenewoud, 2005*]. Featuring a strong ambition to *increase the degree of commonality* throughout Philips IT, Philips is currently going through some radical changes. This is where a *global sourcing strategy* steps into the picture.

1.3 Global sourcing strategy for Philips

Due to Philips' focus on outsourcing, the move of IT services towards shared service centers (increasing of commonalities), is strongly related to the subject of sourcing. At Philips, IT solutions and sourcing are inextricable bound to each other.

In short, a *global sourcing strategy* should maximize the business value of IT from the perspective of the IT Purchasing function, but more about this in chapter 2. As a result, *Philips Corporate IT Purchasing* should play a central role in the process of global sourcing and the creation of a global sourcing strategy. But considering the existing lack of synergy throughout Philips IT, the involvement of CIT Purchasing can be improved.

Combining this with Philips' ambitions, and with the fact that there is no clear process on how to arrive at appropriate sourcing models/decisions, the need for a global sourcing strategy becomes obvious. According to [*Groenewoud, 2005*], Philips' Corporate IT Purchasing department wants to use a global sourcing strategy for basically two things:

1. As an evaluation tool of former taken sourcing decisions, enabling Philips to assess these decisions' contribution towards chosen strategic objectives.
2. As a guide for leading future sourcing decisions.

Do not consider a global sourcing strategy to be the 'Holy Grail' in sourcing IT, taking away all irregularities in the field of supply management. Instead, consider it as a method to streamline and optimize sourcing processes throughout the entire IT organization, while at the same time optimizing organizational and administrative aspects of Philips' IT organization.

Introducing the usage of a global sourcing strategy aimed at realizing Philips' ambitions induces radical changes. These changes are not always received with open arms. At Philips the intended changes, which are linked to a global sourcing strategy, are considered to have its pros and cons. The *pros* can best be seen as incentives for introducing and using a global sourcing strategy, while the *cons* represent possible obstructions regarding the introduction and usage of a global sourcing strategy.

Some incentives for introducing a global sourcing strategy were already described above. Chapter 1.4 will elaborate further on the incentives that have been recognized within Philips, but does this from a business perspective. It places a global sourcing strategy in the context of Philips' business strategy of the last couple of years.

Chapter 1.5 on the other hand, will elaborate on the recognized obstructions regarding the introduction of a global sourcing strategy. These aspects are not directly related to the creation of a global sourcing strategy, but could obstruct the introduction and usage of a global sourcing strategy. Notice that providing solutions for the recognized obstructions in chapter 1.5 is outside the scope of this research.

1.4 Recognized incentives

Basically Philips' need for a global sourcing strategy has resulted from the strategic aim to Transform into One Philips; an objective that became known as the 'TOP' program. This program was initiated in 2002

and designed to streamline Philips' business support functions by standardizing processes and introducing a shared way of working in the areas of IT, HRM, Finance, and Purchasing [*Kleisterlee, 2002*].

Going back to the year 2001, it becomes obvious that the TOP program is a result of the economical downturn in 2001, which was exacerbated by the dramatic events of September 11 in the United States [*Kleisterlee, 2001*]. However, not only the adverse economic environment, but also operational inefficiencies have been an incentive for adopting different strategies and organizational changes. Ultimately Philips' product divisions should have more in common than merely a brand name.

"Philips' product divisions should have more in common than merely a brand name."

The aim for these objectives has resulted into a continuous increase of cost pressure up into the farthest corners of the organization. The financial objectives for the IT departments became more and more difficult to achieve, as pressure from the business kept increasing. As a result the project Road to India (R2I) was initiated around 2002. This project can best be seen as Philips' attempt to successfully offshore IT services [*Engelen, 2005*].

Appealing to an IT cost overview from 2004, the project Road to India was very likely to drastically reduce the total costs of IT. In 2004 the total IT costs were € 1.1 billion of which 62% (€ 678 million) went to third parties [*Bemmelmans, 2005*]. The fact that 60% of this third-party IT spend (€ 407 million) was spend on IT services [*Bemmelmans, 2005*], indicates that offshoring would be very advantageous from an IT cost perspective.

However, one should notice that the TOP program is not just a method of cost control, but represents the means by which Philips wants to change the way they operate the organization. A successful implementation of TOP will result into a 'plug and play' support infrastructure, allowing new business to be launched quickly and easily [*Kleisterlee, 2002*]. This objective is in line with Philips' aim to become a market-driven company, as this requires flexibility and speed.

Philips' IT strategy is a direct derivative of the TOP program (business strategy), taking into consideration improvements and changes with respect to Philips' IT organization. Similarly, a global sourcing strategy is derived from the IT strategy to carry out changes and improvements in the field of supply management.

1.5 Recognized obstructions

Besides a number of incentives supporting the implementation and adoption of a global sourcing strategy, there is also some resistance to adopting a global sourcing strategy (new/shared way of working). In an attempt to identify the source of this resistance, the following aspects turned out to be significant:

- Move from autonomous to common environment.
- Many people involved in decision making.
- Multi-disciplinary perspectives.

Before continuing one should understand that these aspects are coherent and amplify each other's impact. Furthermore these aspects are likely to complicate the rollout and usage of a global sourcing strategy. Awareness is a first step towards improvements, which will maximize the added value of a global sourcing strategy.

Move from autonomous to common environment

Most resistance within Philips is the result of an increase in commonalities throughout the IT organization. Three years ago, when Philips' IT was much more fragmented, people were used to taking their own decisions. Nowadays the emphasis is on collaboration and moving towards a common/shared environment. As a result people become limited in their 'space to move'. Finding the right balance between common and unique provides a lot of material for discussion. Reducing (changing) an employee's 'space to move', basically results in resistance from a business perspective as well as resistance from a personal perspective [*Groenewoud, 2005*]. Resistance from a business perspective occurs as people feel they are becoming too dependant on others, resulting in limited involvement. On the other hand, resistance

from a personal perspective occurs because people are afraid to lose their prestige or even their jobs.

Many people involved in decision making

A common characteristic of decision making processes at Dutch organizations is the involvement of many people. In the Netherlands this phenomenon became known as the *Polder model*, which is equivalent to a so-called *consensus culture*. This *consensus culture* also applies to Philips and impacts the decision making process around global sourcing.

Introducing a shared way of working emphasizes the cooperation between Corporate IT, the product division IT (PD IT) departments, and the shared service centers (P-BAS and P-GIS). Although all parties are both strong advocates of the new/shared way of working, their cooperation is often hampered by differences in opinion on how to move forward [*Groenewoud, 2005*]. Reaching consensus concerning factors like scope, pace, priority, and capacity, often results in mutual disagreements affecting an already complex decision making process.

"Cooperation is often hampered by differences in opinion on how to move forward"

Multi-disciplinary perspectives

This can best be explained by using a classical oversimplified example described by [*Peterson & Carco, 1998*]. They describe a situation where IT professionals blame IT purchasers for having too little technological knowledge, while IT purchasers blame IT professionals for having too little business knowledge. They consider each other as bottlenecks in the sourcing process.

The truth is of course more nuanced, but the central idea remains the same. At Philips the cooperation between technical and none-technical employees offers room for improvement. Especially the easy with which this cooperation occurs is an important point for improvement. Although it is difficult to substantiate this statement with a concrete example, it has been recognized by Philips that the sourcing process, will benefit from a solid cooperation between the IT-demand and IT-supply side.

1.6 Research challenge and questions

Resulting from Philips' incentives and obstructions regarding the subject of global sourcing, this research will be engaged in the development of a global sourcing strategy. Due to limitations in time and the broad nature of global sourcing, the scope of this research has been limited to the *development* of a global sourcing strategy for IT services.

Furthermore this research will not provide any solutions with respect to the recognized obstructions described in the previous paragraph, as this has no direct relation with the development of a global sourcing strategy. On the other hand it would be unwise to simply ignore these obstructions, as they perform a considerable amount of influence upon the process of global sourcing. Therefore these obstructions will emerge regularly throughout this Master thesis.

As a result the objective of this research has been defined as follows:

Research objective

Development of a global sourcing strategy for IT services for Philips.

Based on this objective, while maintaining a strong focus on Philips' incentives, the main research question that has been addressed by this research is:

Research question

What should a global sourcing strategy in the area of IT services contain for Philips?

The answer to this main research question will be given in chapter 10 and will be based upon findings described in the preceding chapters. In order to lay a basis for a specific research approach, a number of sub questions have been derived from the main research question. These sub questions occur in two different kinds: *direct* and *indirect* sub questions.

Direct sub questions

When assessing the main research question, one can recognize four different terms: (out)sourcing, strategy, IT-services, global. The direct sub questions are focused on defining these different terms, which

should create a more detailed insight into the subject matter. As a result the direct sub questions are defined as:

1. What is (out)sourcing? (Chapter 2)
2. What is a strategy? (Chapter 2)
3. What is an IT-service? (Chapter 2)
4. What is the effect of 'global' upon sourcing? (Chapter 2)

Indirect sub questions

The creation process of the indirect sub questions can generally be split up in two parts. The first part is mainly characterized by literature orientation, internal data gathering (fact finding), and brainstorming sessions. These activities mainly lead towards the creation of the global sourcing strategy framework in chapter 3.

The second part involved the creation of sub questions on the basis of this framework. The elements that can be recognized within the framework, served as the basis for the creation of the greater part of the indirect sub questions.

Based on these two parts, the *indirect sub question creation process* resulted in the following questions:

5. What should a global sourcing strategy (at least) provide/contain? (Chapter 3)
6. What is the relation between global sourcing and an organization's core business? (Chapter 4)
7. How to determine the most suitable sourcing variant for an IT service? (Chapter 5)
8. How does global sourcing impact an organization's contracting activities? (Chapter 6)
9. How to choose a suitable supplier, when sourcing globally? (Chapter 7)
10. How does a global sourcing strategy impact the organizational structure of an IT department? (Chapter 8)
11. In which way is a global sourcing strategy related to IT governance? (Chapter 8)
12. What is the relation between global sourcing and shared service centers? (Chapter 8)
13. What is Philips' current and preferred situation with respect to sourcing? (Chapter 9)
14. With which existing strategies should a global sourcing strategy be aligned? (Chapter 9)
15. How to validate the authors' findings regarding this research? (Chapter 11)

1.7 Approach

Based on the assessment of the direct and indirect sub research questions, the creation of a global sourcing strategy (answering the main research question) will occur on the basis of a structured approach, which is illustrated in figure 1 below.

Research approach

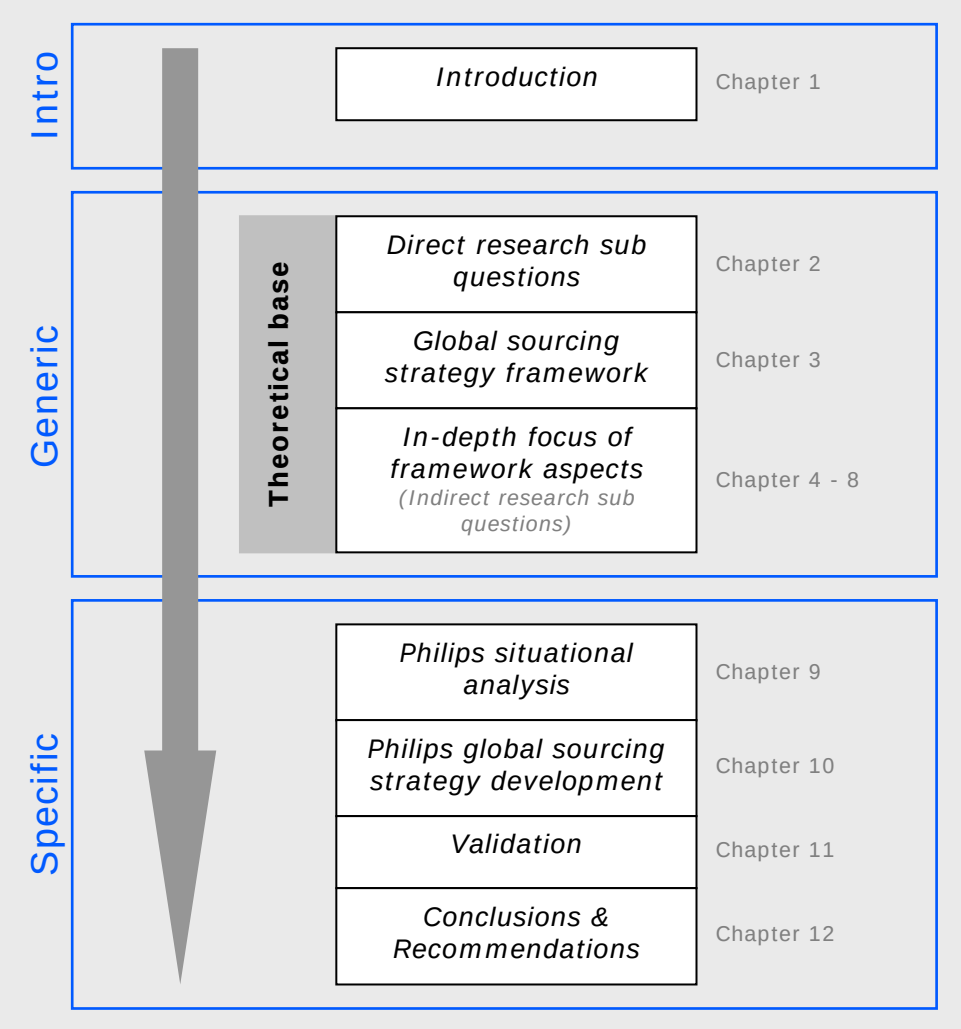

Figure 1: Approach and structure of this research

As you can see this approach exists out of three phases: (a) an introduction, (b) a theoretical (general) approach towards the creation of a global sourcing strategy for IT services, and (c) a specific approach towards the creation of a global sourcing strategy for Philips. Below you will find a short description of these phases.

Intro phase

The first phase represents a general introduction into the subject matter of this Master thesis and briefly explains Philips' interest in this topic. This resulted into a number of research questions and a structured research approach.

Generic phase

The second phase approaches the subject matter from a theoretical point of view. Starting with an analysis of the main research question in chapter 2, the second phase will end with an in-depth focus of the different aspects (chapter 4 till 8) that can be recognized within the global sourcing strategy framework from chapter 3.

Specific phase

The third and last phase is aimed at applying the theory from the generic phase upon Philips, which will result in a global sourcing strategy for IT services for Philips. The first step will be to create a clear insight into Philips' situation (chapter 9). With the information from chapter 9 and the theory from the generic phase, chapter 10 will describe Philips' global sourcing strategy for IT services.
In order to maintain a high level of academic proportion and to maximize the credibility of the research results for Philips, chapter 11 holds a validation. And last but not least, this thesis will end with a number of conclusions and recommendations in chapter 12.

1.8 Conclusion

Philips is a strong advocate of a global sourcing strategy. From the perspectives of (a) the product divisions (business) and (b) the IT departments, the support is strong. At both sides a number of advantages have been identified.

On the other hand there is also resistance to change, which is mainly caused by transforming from an *autonomous* towards a *common* situation. Amplified by Philips' consensus culture, this resistance causes the acceptance speed to be lower than one might prefer.

2. Research question analysis

This purpose of this chapter is to give a better insight into the different terms that can be identified in the main research question. These terms are: sourcing, strategy, global and IT-service. As a result, this chapter provides an answer to the sub research questions 1 to 4:

- What is (out)sourcing?
- What is a strategy?
- What is an IT-service?
- What is the effect of 'global' upon sourcing?

The definitions of these terms are considered very important as they form the foundation of a theoretical perspective upon global sourcing strategies. At the same time the defining of these terms will prevent misunderstandings, because many existing definitions show considerable differences.

2.1 (out)Sourcing

The term sourcing is often used to refer to the process of outsourcing, but is in fact something entirely different. To substantiate the difference between sourcing and outsourcing, both terms will be defined and compared throughout this paragraph.

In an attempt to define the term sourcing, the following list shows some existing definitions found in literature.

1. The procurement of resources — whether from internal or external sources — to accomplish business objectives. Sourcing purely from external sources is known as 'outsourcing' [*Gartner, 2004*].
2. Strategic sourcing means that for every service or need the best outsourcing- or purchasing variant will be chosen, depending on the objective of sourcing [*PinkRoccade, 2004*].

3. Information System (IS) sourcing consists of the delegation of all or any part of the technical resources, the human resources, and the management capabilities associated with providing IT services to the external vendor [*Balaji & Brown, 2005*].
4. The term sourcing is used to describe management by multinational companies of the flow of components and finish products in serving foreign and domestic markets [*Kotabe & Murray, 2004*]

A remarkable definition is the one from [*Gartner, 2004*], as this definition seems to assert that sourcing from external sources is equal to outsourcing. However, the other definitions feature a more careful approach, emphasizing a somewhat larger difference between sourcing and outsourcing.

From the authors point of view outsourcing has a strong focus on content, related to the process of purchasing information systems. Sourcing on the other hand, incorporates a stronger focus on strategic direction and the function of the retained IT organization.

Based on the existing definitions of sourcing and the author's personal believes, the term sourcing will be defined as follows:

Definition of sourcing

Sourcing is a process of decision-making, where a company's needs or requirements are constantly reflected upon market- and/or internal supply, while trying to determine the best possible fulfillment of the needs taking into consideration strategic directives and organizational implications.

At this point, the differences between sourcing and outsourcing have partly been substantiated by the definition of sourcing. In order to complete this substantiation the term outsourcing needs to be defined. Once more this is done by first evaluating some existing definitions.

1. IS outsourcing is the commissioning of part or all of the IS activities an organization needs, and/or transferring the associated human and other IS resources, to one or more external IS suppliers [*Looff, 1996*].

2. Outsourcing is the transferring of management responsibility to an external party for a longer time based on a contract with result-obligations [*PinkRoccade, 2004*].
3. Outsourcing reflects the use of external agents to perform one or more organizational activities (e.g. purchasing of a good or service), is now in vogue in the IS domain and applies to everything from use of contract programmers to third party facility management [*Lacity & Hirschheim, 1993*].
4. Outsourcing is the act of transferring some of an organization's recurring internal activities and decision rights to outside providers, as set forth in a contract [*Greaver, 1999*].
5. Outsourcing refers to a contractual relationship with an outside vendor that is usually characterized by the transfer of assets, such as facilities, staff or hardware. It can include facilities management (for data centers or networks), application development and maintenance functions, end-user computing or business process services [*Gartner, 2004*].
6. Outsourcing is the transferring of a service, and if applicable, the employees and means that go with that, to a specialized service supplier, while afterwards receiving a service on the basis of a contractual agreement, in which both parties have amongst other things agreed upon a certain level of quality, a certain period in time, and a financial compensation structure [*PON, 2005*].

The definitions described above show strong similarities. As the definition of [*PON, 2005*] is considered to be most complete without requiring any changes or additions, this definition is chosen to represent the term outsourcing with respect to this research. The definition of outsourcing will therefore be:

Definition of outsourcing

Outsourcing is the transferring of a service, and if applicable, the employees and means that go with that, to a specialized service supplier, while afterwards receiving a service on the basis of a contractual agreement, in which both parties have amongst other things agreed upon a certain level of quality, a certain period in time, and a financial compensation structure [PON, 2005].

When comparing the definitions of sourcing and outsourcing it becomes clear that sourcing is indeed different from outsourcing. Sourcing can lead to outsourcing, but can also lead to, for example, in-sourcing. So basically outsourcing is a result of sourcing.

Outsourcing is focused on the purchasing of IT services (procurement process), while sourcing has a stronger focus on the client organization as a whole. As a result sourcing is much more related to strategic direction, organizational structure, and an organization's internal capabilities.

From a decision making perspective, sourcing can be described as a multifaceted process entailing both contractual and locational implications [*Kotabe & Murray, 2004*]. This means that sourcing involves the choices of who to source to, and where to source.

From a contractual point of view the sourcing process of a multinational company involves the choice whether to outsource to a service department within the own organization, or to outsource to an external supplier. Sourcing within the own organization is defined as 'intrafrim sourcing' and can possibly take place at a parent or (foreign) subsidiary [*Kotabe & Murray, 2004*].

Outsourcing to an external supplier on the other hand, is generally known as outsourcing and induces a choice regarding the outsourcing location. According to [*Kotabe & Murray, 2004*] this choice involves choosing between outsourcing locally ('domestic outsourcing') or outsourcing abroad ('offshore outsourcing').

"global sourcing is meant to overcome geographical distances"

However, differentiating between different outsourcing variants on the basis of the supplier's geographical location seems rather conflicting with the basic idea behind global sourcing; which is to overcome geographical distances. Its purpose is to diminish the so-called locational implications instead of explicitly making a difference based on this factor. Chapter 5.2 will elaborate more on the different outsourcing variants.

2.2 Strategy

For years the term strategy has been a well-discussed issue and depending on its context it can be defined in hundreds of different ways. Before applying a focus towards souring and IT, the first step will be to examine the more general definition of the term strategy.

A lot of definitions regarding the term strategy can be found, and as [*Zegveld, 2004*] already states, most of these strategies have in common that they concern survival and deal with changing environments.

In order to be able so survive, an organization must be able to successfully interact with its environment [*Zegveld, 2004*]. If successful, the organization will be able to create a competitive advantage by adding value for its buyers that exceeds the firm's cost of creating it [*Porter, 1985*].

In general there are three types of generic strategies (creators of competitive advantage): cost leadership, differentiation, and focus [*Porter, 1985*]. Cost leadership involves an organization that is aimed at being the number one low-cost producer in its industry. An organization featuring a differentiation strategy, seeks to be unique in its industry along some dimensions that are widely valued by its customers.

The third generic strategy, known as a focus strategy, can either occur in a cost leadership variant, as well as a differentiation variant. The difference is the competitive scope. A focus strategy has a narrow competitive scope as it is focused towards a specific segment within the industry. Figure 2 below shows an overview of these generic strategies [*Porter, 1985*].

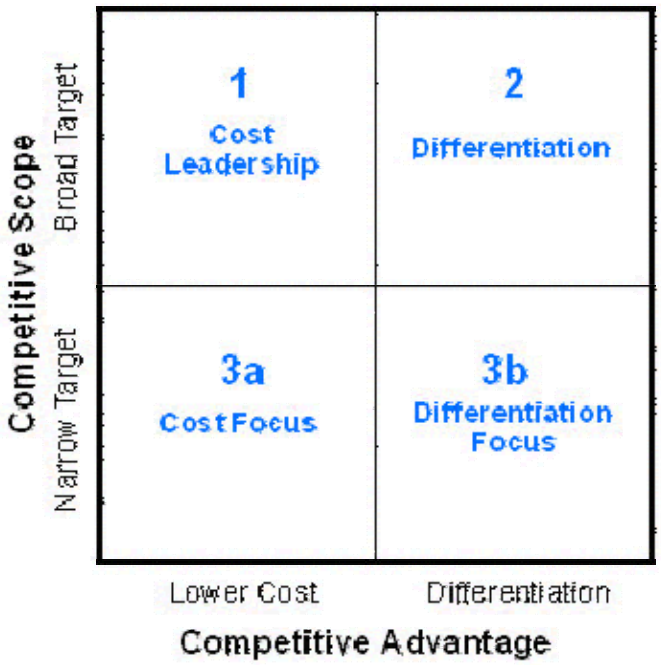

Figure 2: Porter's generic strategies

Strategies in the field of sourcing shown similar characteristics, but are very often aimed at reducing the costs of IT. However, there is (and should be) more to it then merely the reduction of costs. The previous paragraph has already shown that there is more to sourcing than the purchasing of information systems. Besides a focus on the costs of IT, a global sourcing strategy should also focus on the efficiency of the entire retained IT organization.

In order to get to a definition of the word strategy represented in the main research question, first consider the following list of existing definitions.

1. A sourcing strategy is a set of scenarios, plans, directives and decisions that define and integrate the internal and external resources required to fulfill an enterprise's business objectives [*Dreyfuss & Karamouzis, 2002*].
2. Strategic sourcing is the dynamic delivery of internal and external business- or IT-oriented resources and services to meet business objectives. Strategic sourcing enables businesses to manage innovation and to deliver process and services effectively and efficiently, both to the internal organization and to business

partners, clients and other external constituencies [*Gartner, 2004*].

3. Strategies are defined as deliberate policies that companies pursue to improve their performance, following the more or less standard perception of strategy in terms of broad commitments that define both corporate objectives and ways to pursue these objectives [*Duysters & Hagedoorn, 1996*].
4. Sourcing strategy includes several basic choices companies make in deciding how to serve foreign markets [*Kotabe & Murray, 2004*].

When investigating the definitions above, it becomes clear that the terms 'strategy' and 'strategic' are different. The term 'strategic' is an adjective and has a strong connection with the term 'core'. Both terms ('core' and 'strategic') indicate that certain processes or activities are important to companies, because these processes should be able to increase a company's (financial) performance.

The word 'strategy' on the other hand is often considered to be a plan (roadmap) that describes the main direction an organization is heading. Strategies should be used as a guide while making business decisions, in order to take an organization closer to its objectives. In order to be able to create a strategy, one needs to possess knowledge regarding an organization's policies and objectives. Furthermore one should be able to translate this organizational know-how into an organization's current situation and an organization's preferred situation. Therefore the term strategy can best be defined as:

Definition of strategy

A strategy is plan over a certain period in time that guides an organization within the boundaries of company policies, from a current situation to a preferred situation, setting direction while trying to meet business objectives.

However, a sourcing strategy has a focus on the field of supply management (narrow target, figure 2), which makes it different and more specific than a general strategy. As a result a sourcing strategy should strongly consider the objectives of related/parental strategies,

and should translate these objectives towards specific aims in the field of supply management.

All strategies within an organization should be hierarchical related to each other. The general business strategy is the root strategy from which all other strategies are (directly or indirectly) derived. Therefore, existing strategies determine the boundaries of new strategies.

Taking into consideration this strategic solidarity and the definition of the term 'sourcing' from the preceding paragraph, the term sourcing strategy can best be defined as:

Definition of sourcing strategy

A plan over a certain period of time, that guides an organization towards achievements in the field of supply management, while taking into consideration organizational policies, existing strategies, and the implications for the retained IT organization.

2.3 Global

This paragraph is meant to describe the added value of the term global represented in the main research question. What effect does the term 'global' have upon a sourcing strategy?
When looking up the word 'global' in a dictionary you will find entries like: 'involving the entire earth' and 'worldwide'. This is in fact exactly what the word global is meant to add to the main research question: it underlines the multinational character of an organization.

However, within this context, the term 'global' is considered to be a two-sided element. In the area of supply management, organizations should not only focus on the supply side, but also on the demand size. Reaching 'purchasing excellence' is not just a matter of maximizing efficiency in the field of outsourcing, but only occurs when an organization is able to realize a certain level of alignment between an organization's supply and demand. However, realizing coherence between supply and demand is much more complex when arguing from a global perspective.

Global supply is primarily related to the worldwide recruiting of services and/or products, a process that is generally known as outsourcing.

Advantages are often obtained by seeking supplier in low-costs countries, aiming for a more advantageous price/quality ratio.

Similarly global demand comprises the worldwide needs of an organization. In order to increase the efficiency of the outsourcing process, demand needs to be centralized enabling the advantages of economies of scale. However, before an organization will be able to centralize their demand flow, they first need to harmonize and standardize their processes.

Before describing the implications of the term 'global' upon the area of sourcing, first some existing definitions related to the word 'global':

1. Global sourcing is a service delivery model in which work is performed by a virtual team, which may consist of personnel that are on-site, domestic, nearshore or offshore [*Gartner, 2004*].
2. Operating globally means striking a balance between central and local control of operations [*Rowsell-Jones & McDonald, 2005*]
3. In an increasing competitive global marketplace, your ability to operate profitably in diverse geographic markets, and to shift operations flexibly between countries may be essential to the success of your business [*PWC, 2005*].
4. Your options are broader and more complex if you consider nondomestic locations for services to realize greater cost benefits or to access critical skills not readily accessible in your country [*Young & Karamouzis, 2005*].
5. In developing viable sourcing strategies on a global scale, companies must consider not only manufacturing costs, the costs of various resources, and exchange rate fluctuations, but also availability of infrastructure (including transportation, communication, and energy), industrial and cultural environments, the ease of working with foreign host governments, and so on. Furthermore, the complex nature of sourcing strategy on a global scale spawns many barriers to its successful execution. In particular, logistics, inventory management, distance, nationalism, and lack of working knowledge about foreign business practices, among others, are

major operational problems identified by multinational companies engaging in international sourcing [*Kotabe & Murray, 2004*].

6. Implementing global strategies requires attention to macroeconomic and business-cultural differences among countries. When all the countries in which a business operates are at the same macroeconomic and regulatory level, the company and IT can operate more uniformly than when there's a great deal of diversity [*Rowsell-Jones & McDonald, 2005*].

When going through the definitions shown above, it becomes clear that global sourcing is much more complex than local sourcing. Besides many advantages, sourcing globally also involves a large amount of disadvantages. Global sourcing requires a lot of knowledge about the culture and rules applying to organizations all over the world.

Taking into consideration the above-mentioned definitions and the two-sided nature of the term global, its added value can best be described as:

Implications of the term global

In order to maximize the benefits of global sourcing, an organization needs to centralize their demand flow as much as possible. Doing this on a global basis is very complex and requires detailed insights into the organization's own processes and activities. On the other hand, global sourcing widens an organization's market orientation, allowing it to benefit from bigger and new markets. The advantages of a global market often involve the ability to achieve advantageous price/quality ratios, and early availability of new technology. However, at the same time, the complexity of the sourcing process increases enormously as differences in culture, habits, and regulations result in new barriers to overcome.

Notice that global sourcing is not equal to offshoring. Global sourcing is the doming process of which offshoring is a result. The same goes for every other outsourcing variant, but more about that in chapter 5.

2.4 IT service

The last term that can be identified within the main research question is IT service. This paragraph is meant to explain the impact of an IT-service focus, upon the process of global sourcing.

In order to determine this impact, the term 'service' or 'IT service' needs to be defined. Therefore, first an overview of some existing definitions containing the word 'service' or 'IT service'.

1. An IT service is a business function. With the help of IT, information systems deliver IT services [*Snieders, 2004*].
2. A service is a (series of) activities of more or less intangible nature that normally, but not necessarily, take place in interactions between the customer and service employees and/or physical resources or goods and/or systems of the service provider, which are provided as solutions to customer problems [*Blom, 2005*]
3. Services involve any process executed by one person or organization for another one. ISPL addresses two types of services [*ISPG, 2004*]:
    a. Projects, which aim at changing processes or systems within an organization. Examples are system development, system renovation, business process redesign, and helpdesk installation.
    b. Ongoing services, which aim at executing processes at an agreed service level. Examples are configuration management process, network management processes and the helpdesk function.

Considering these definitions, the best definition of the term 'IT service' would be a combination of [*Blom, 2005*] and [*ISPG, 2004*]. The definition of [*Blom, 2005*] is considered to be the most versatile, but lacks the presence of the IT service's ongoing nature. Therefore this aspect will be added, resulting in the following definition of the term IT service:

Definition of IT service

An IT service is a (series of) ongoing activities related to IT of more or less intangible nature, that normally (but not necessarily) take place in interactions between the customer and service provider, featuring a combination of service employees, physical resources/goods, and systems, which are provided as solutions to customer problems.

2.4.1 Sourcing influence

Now that the term IT-service has been defined, the impact of an IT service focus upon the process of sourcing can be described. In other words: is sourcing of IT services different than sourcing of hard- and software?

The answer is yes; sourcing of IT services is indeed different from sourcing hard- or software. While taking into account the differences between sourcing and outsourcing, this answer is mainly substantiated by differences related to the process of outsourcing. Below are some arguments that indicate a clear difference between the (out)sourcing of IT services and the (out)sourcing of hard- and software.

- *Measurement of the results*
  Due to its intangible nature, the degree of satisfaction regarding the delivering of an IT service is hard to measure. The added value is primarily determined by the participation of one or more human beings. Therefore the sourcing of IT services is very susceptible to fluctuations regarding the quality.

- *Comparing of suppliers*
  It is very difficult to get a detailed and clear insight into the contents of an IT service. Therefore the comparing of suppliers becomes more complex. The organization needs to have a clear and detailed overview of all requirements that have to be met by the supplier.

- *Global implications*
  As most of an IT service's added value comes from one or more human beings, the delivering of an IT service on a global scale is heavenly impacted by the global implications described in paragraph

2.3. Due to differences in regulations, habits, and culture, cooperating with a foreign supplier, is much more complex in the area of IT services.

2.5 Conclusion

So far the analysis of the terms identified within the main research question. Something that once started with simple *make or buy* decisions [*PinkRoccade, 2004*], has slowly evolved into an umbrella-like business process called 'global sourcing' handling complex contracts and partnerships [*Balaji & Brown, 2005*].

As strategic systems are meant to distinguish an organization from its competitors [*Looff, 1996*], the ultimate objective of a global sourcing strategy, is to exploit both its own and its suppliers' competitive advantages to a maximum. Arguing from a global perspective, this includes the suppliers' geographical and situational advantages [*Kotabe & Murray, 2004*].

Therefore it is important to distinguish between several different types of outsourcing as these types have a different impact upon a company's long-term competitiveness [*Kotabe & Murray, 2004*].

3. Global sourcing strategy framework

"The ultimate objective of a global sourcing strategy, is to exploit your own and your suppliers' competitive advantages"

As concluded in the previous chapter, the ultimate objective of a global sourcing strategy, is to exploit your own and your suppliers' competitive advantages. This is done by assisting an organization in identifying, evaluating and deploying outsourcing opportunities on a global basis, but also by adopting changes regarding the retained IT organization.

This chapter is meant to provide a global sourcing strategy framework, illustrating the aspects that should at least be covered by a global sourcing strategy from an IT Purchasing point of view. With this objective, this chapter will answer sub research question 5:

What should a global sourcing strategy (at least) provide/contain?

The framework resulting from this chapter will be used for creating a global sourcing strategy for Philips. At the same time, this framework will also result into a number of sub research questions to further research the subject matter. The defining of sub research questions will occur in paragraph 5 of this chapter, and will partly define the further structure of this thesis.

The actual creation of a specific global sourcing strategy for Philips will occur in chapter 10. Within this process of strategy creation, the framework will serve as basis for assessing an organization's current and preferred situation. An assessment of the differences between these situations will result into a specific global sourcing strategy for Philips.

3.1 The outsourcing process

As written before, the process of sourcing can lead to a number of different sourcing variants. One of these sourcing variants is outsourcing. Outsourcing is often considered to improve an organization's financial performance. Especially outsourcing to low-cost countries (offshoring) has become popular due to its strong cost reducing potential.

From an IT Purchasing perspective the most important outcome of sourcing is of course outsourcing. Therefore, the first step in building a global sourcing strategy framework will be to perform an analysis of the outsourcing process.

In order to create an overview of the key elements represented in the outsourcing process, two existing descriptions of the outsourcing process will be investigated. The first overview is shown below and was created by [*Aalders, 2001*]. This overview incorporates thirteen steps in the outsourcing process.

1. Know your motives
2. Developing critical success factors and selection criteria
3. Discovering your environment
4. Setting management principles
5. preselecting service providers
6. Preparing the request for proposal
7. issuing the request for proposal
8. evaluating responses to the request for proposal
9. undertaking due diligence
10. forming the contract
11. managing the transition
12. managing the relationship
13. renewing or terminating the contract

Noteworthy about this overview, are the steps 1 to 4. These steps are related to preparing the organization for the transferring of a service to an external service provider. This emphasizes the importance of the readiness of the retained IT organization throughout the process of outsourcing.

The second overview has been described by [*Looff, 1996*] and is shown in appendix B. This overview is rather interesting as it approaches the process of outsourcing from the perspective of decision making. Where [*Aalders, 2001*] emphasizes the ‘readiness’ of the retained IT organization, [*Looff, 1996*] emphasizes the decisions that need to be

taken. Appendix B shows that the process of outsourcing is structured along side the following decision points:

1. Initial sourcing decision
2. Design outsourcing relationship
3. Select supplier
4. Implement outsourcing decision
5. Managing outsourcing relationship
6. Terminating outsourcing relationship

Besides the overview shown in appendix B, [*Looff, 1996*] also described the principles that were used to come to this 'information system outsourcing decision model'. These principals are described below.

A. The outcome of outsourcing decision making is situation-dependent and therefore outsourcing decision making should include an analysis of situational factors.
B. The outsourcing decision process should start with determining the part of the IS function that is under consideration. The factors that are permitted to change and the factors that must be taken as they are.
C. Outsourcing decisions must be based upon the information system requirements with respect to quantity and quality. At the same time, outsourcing decisions influence the number and nature of IS activities that can be performed.
D. Outsourcing should not be a one-off isolated decision. IS functions do not only improve from outsourcing, but also from a number of other aspects. Therefore all internal and external options for improving the IS function must be considered equally and on a regular basis.
E. Outsourcing decisions should consider all goal variables of an organization. Variables can be giving a different weight depending on the specific situation. However, one should not only consider the goal variables which weigh most, but should also try to assess the impact upon other variables. Short term reduction in costs for example, might result in unacceptable changes in other variables such as flexibility, quality or controllability of the IS function.

The remarkable aspect about these principles is that they too seem to attach a certain level of significance to the organization that is applying the process of outsourcing. Therefore the overviews of [*Aalders, 2001*] and [*Looff, 1996*] show more resemblance than initially has been assumed.

Arguing from the definitions described in chapter 2, it seems to be that [*Aalders, 2001*] has 'mixed up' the processes of outsourcing and sourcing. [*Looff, 1996*] on the other hand, shows a clear distinction between the actual procurement decisions and the organizational implications.

Both overviews have shown that outsourcing should have a strong inside out character. The adequacy and willingness of the retained IT organization are therefore considered to be at least as important as finding an appropriate supplier and entrusting this supplier with the organization's IT services.

Based on the perspective that sourcing is a decision making process (chapter 2), the overview of [*Looff, 1996*] is considered to be the most suitable representation of the outsourcing process concerning this research. Not only because of the process overview in appendix B, but also because the clear distinction between outsourcing and sourcing.

3.2 The sourcing process

At this point it should be clear that sourcing is different from outsourcing. In the basis, a sourcing process should be engaged in two different aspects: (I) constant optimization of the outsourcing function and (II) manage changes in the retained IT organization, as a result of applying a strong outsourcing perspective.

"IS functions do not only improve from outsourcing, but also from a number of other aspects"

The real added-value of sourcing is in aspect II. This is also recognized by [*Looff, 1996*] in principle D: "Outsourcing should not be a one-off isolated decision. Information system (IS) functions do not only improve from outsourcing, but also from a number of other aspects". Again, these words emphasize the importance of 'a strategic focus upon global sourcing', which is inclined to maximizing the benefits of outsourcing.

The remainder of this paragraph will describe the aspects (key elements) that should be present within the sourcing process. This will be done by taking into account:

- The decision model principles by [*Looff, 1996*];
- The definitions described in chapter 2;
- The author's own insights.

The first aspect that should be present in the sourcing process is an overview regarding the contents of existing strategies and organizational policies. This is confirmed by principle B and E, and also described in chapter 2. Strategic ambitions, objectives, visions, and policies should be considered on a continuous basis, as they influence the decisions within the outsourcing process and should therefore be incorporated within the sourcing process.

Aspect number two that should be present in the sourcing process is more or less the other way around. Instead of influencing outsourcing decisions, the outsourcing decisions influence the way an IT organization is structured and managed. Principle C describes this as: "outsourcing decisions influence the number and nature of IS activities that can be performed".

The third and last aspect is rather exceptional. It involves a certain level of awareness of an organization's bureaucracy, politics, and culture. Although this has no direct relation with the process of sourcing, it determines the ease with which changes can be made. Arguing from the perspective of principle A, this aspect is a situational factor and can therefore not be ignored.

Summarized the sourcing process holds the following aspects:

1. Continuous optimization of the outsourcing function;
2. Continuous considerations regarding existing strategic ambitions, objectives, visions, and policies;
3. Manage organizational and governance changes, induced by a strong outsourcing perspective;

4. Awareness of an organization's bureaucracy, politics, and culture.

Now that all aspects with the outsourcing and sourcing process have been introduced, the following paragraph will combine these aspects into an actual global sourcing strategy framework.

3.3 The framework

Combining the processes of outsourcing (chapter 3.1) and sourcing (chapter 3.2), has resulted in the global sourcing strategy framework shown in figure 3. This framework is considered to be the foundation of a global sourcing strategy. When using it in accordance with an organization's specific characteristics one will be able to create a global sourcing strategy. Notice that this is a generic framework; besides using it for Philips, it can also be used for other organizations.

"The purpose of the framework is to optimize outsourcing from a sourcing perspective"

The purpose of the framework is to optimize the outsourcing process from a sourcing perspective. This means that besides a focus on the organization's outsourcing capabilities, the framework also focuses on the shape and boundaries of the retained IT organization. This perspective will enable an organization to lift sourcing to a higher level and approach outsourcing from a strategic perspective.

After figure 3, this paragraph will continue with a description of the aspects that can be recognized within the framework. Their function and coherence will be explained. Later in this chapter, these aspects will lead to a number of sub research questions.

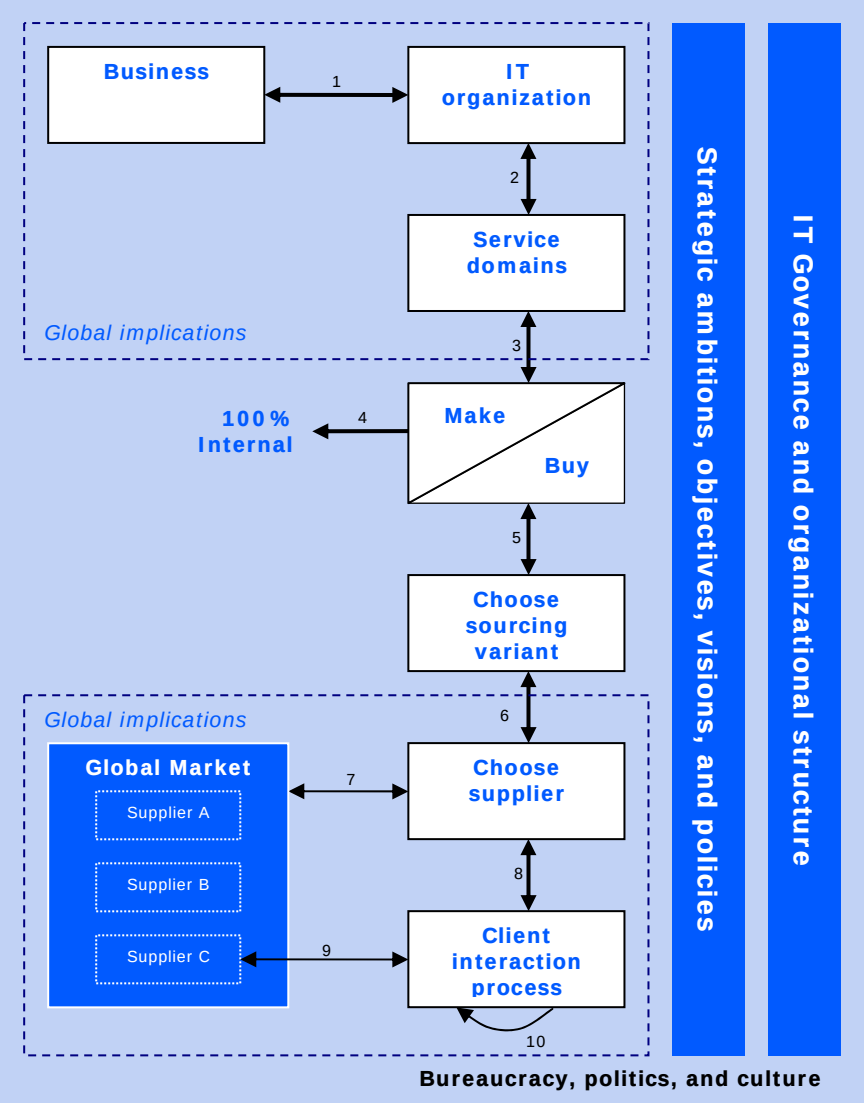

Figure 3: Global Sourcing Strategy framework

Using the framework can be very time consuming and complex, depending on the structure and size of the organization. Naturally it starts with the business in the top left. Based on certain strategic objectives, the business defines a number of business requirements. It is the IT organization's responsibility to translate these business requirements into an IT strategy and supply the business with specific IT solutions. Therefore the interaction between the business and the IT organization can best be seen as service delivery <1>.

The structure of an IT organization is an important factor in optimizing service delivery, and is often represented by a so-called IT architecture. The different IT architecture elements are maintained by service domains [*Wijers, 2005*]. As a service domain relates to a specific IT

service and narrows the strategic focus, outsourcing will then occur on the basis of a specific service domain. From the framework's perspective, service domains enable us to zoom in on a specific service <2>.

The next step in the framework is answering the 'make or buy' question <3>. Notice that this step is equal to the first decision point described in the process of outsourcing (appendix B). Some IT service will be considered 'core' or 'key' and will therefore be provided by the own organization (in-sourcing) <4>.

The IT services that will not be in-sourced will be outsourced. In order to outsource an IT service one needs to determine which sourcing variant is most suitable <5> (second decision point appendix B). The sourcing variant determines to what extend an IT service will be transferred to an external supplier. It is not always preferred to transfer an IT service for 100% to an external supplier.

"The sourcing variant determines to what extend a service or activity will be transferred to an external supplier."

After having determined how to source an IT service, one needs to choose a suitable supplier <6> (third decision point appendix B). As this research concerns global sourcing, choosing a supplier will be done from a global perspective <7>.

Finally the transferring of an IT service to an external supplier will take place in <8>. This step involves the creating of contract which is illustrated by arrow <9>. When the contract has been set up and the service transferred to the supplier, the supplier relationship requires continuous management <10>. This so-called *client interaction process* represents the fourth, fifth, and sixth decision points from the outsourcing process (appendix B).

Besides these successive white rectangles, other important aspects are represented by the blue rectangles at the right. These rectangles represent a part of the sourcing process. The inner blue rectangle emphasizes the consideration of *strategic ambitions, objectives, visions, and policies* throughout the sourcing decision making process. The outer bleu rectangle represents the optimization of the shape and boundaries of the retained IT organization.

The last aspect within the framework is represented by the background of the framework, which is meant to represent the whole of an organization's bureaucracy, politics, and culture. This has intentionally been illustrated as the background, as it is mainly responsible for the flexibility and speed with which decisions are taken and changes are accepted.

3.4 Global implications

The implications of an organization's global focus upon the sourcing process have already been explained in chapter 2. These implications are illustrated in the global sourcing strategy framework (figure 3) by means of the dotted rectangles.

Initially one might think that a global focus mainly applies to the 'client interaction' process. However, chapter 2 and figure 3 both emphasize a more extensive impact, applying to the demand- as well as the supply side.

As shown in figure 3 the global implications regarding the demand side apply to the business, the IT organization, and the way the IT organization is structured. In order to be efficient in sourcing, these internal aspects require a certain level of harmony. This often involves organizational changes, aiming for objectives featuring standardization and centralization.

On the other hand, the global implications concerning an organization's supply side, apply to the processes of supplier choice and client interaction. As a result of cultural differences, regulation, and complicated communication efforts, a global orientation increases the complexity throughout these sourcing processes.

In a nutshell it comes down to a widened procurement focus, which brings along some advantages and disadvantages. The choice to actively exploit global advantages automatically provokes a number of related disadvantages. Dealing with global implications is a core competence which is required for successful global sourcing.

Initially organizations might experience these global implications as insurmountable constraints, but when their ability to handle global complexity grows, so will their global advantages.

3.5 Conclusion

Throughout the creation of the global sourcing strategy framework a number of elements have been introduced (figure 3). As these elements represent the core of global sourcing, they will be used to define a number of indirect sub questions.

An assessment of the framework elements from the perspective of the main research question and the direct sub questions, has resulted in a number of indirect sub questions. These indirect sub questions have already been mentioned in chapter 1.

Chapter 4 till 8 will address these questions and with that provide an in-dept focus of the framework's elements. This will clarify the function of each element. After this in-depth focus, chapter 9 will feature an analysis of Philips' situation. This analysis will provide Philips' strategic *ambitions, objectives, visions, and policies*, which are represented within the framework. Finally the creation of a specific global sourcing strategy for IT services for Philips will occur in chapter 10.

4. Global sourcing: a core competence

One of the main reasons (incentives) given by companies to outsource IT, is to maintain/create a stronger focus upon the company's core competences [*Gianotten & Wijers, 2003*] or core business [*Looff, 1996*]. Arguing from this incentive, this chapter will answer sub research question 6:

What is the relation between global sourcing and an organization's core business?

The trend, in which organizations increase the focus upon their core business or core competences, is a reaction to a followed strategy in the 1980's: the expansion strategy. On the basis of this strategy, companies started expanding their businesses by taking over the activities up or down the value system[1] (figure 4) in order to increase control [*Looff, 1996*]. External activities executed by third parties, transformed into internal activities which had little to do with an organization's original focus.

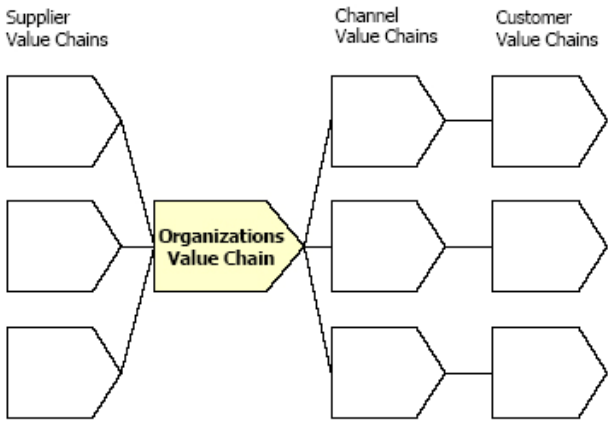

Figure 4: Porter's value system

Over time companies experienced that controlling all activities in the value chain was not possible. Therefore they started to focus on their original business again: their core business. This focus on core business slowly evolved into a focus upon core competences. The differences

[1] [*Looff, 1996*] originally referred to 'value chain', but the correct term that should have been used is 'value system'.

between core business and core competences are explained in the next paragraph.

4.1 Core business versus core competences

A core business- and core competence focus are both based on the same principle: the activities that create value for your customers and determine your profitability are important and should be of strategic importance. However, the difference is that a core business focus argues from the perspective of an organization's end products, while a core competence focus argues from the perspective of an organization's capabilities.

Core business refers to a company's activities, which are directly related to the end product. These are the activities that create money and should therefore be considered as 'core'. Core competences on the other hand can be described as a 'bundle of skills and technologies' or a 'pool of experience, knowledge, and systems that together can act as catalysts that create and accumulate new strategic assets' [*Duysters & Hagedoorn, 1996*].

When organizations started to focus on their core business, IT was often considered to be none-core business, as it had no direct relation with the end product. Arguing from a core business perspective, one could say that IT would be a suitable activity to outsource, as it is not core business. As a result managers would try to increase their focus on core business activities, creating a lack of attention for IT [*Looff, 1996*].

However, IT differs from most other technologies/activities used by companies, as it is closely tied up with the value chain (figure 5) at every point. As mentioned before, IT is often of strategic importance for an organization and indispensable for today's business [*Looff, 1996*]. As a result IT can be seen as a core competence, which adds value to the actual end product [*Duysters & Hagedoorn, 1996*].

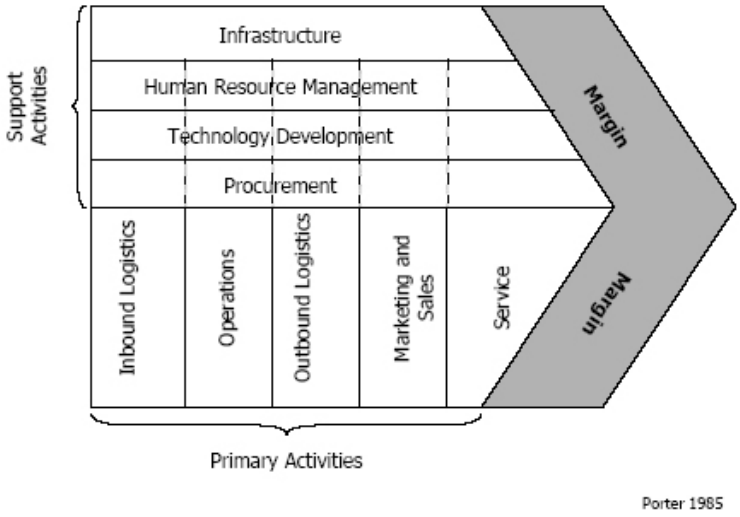

Figure 5: Porter's value chain

Generally, organizations should consider their strengths in terms of activities or services, instead of end products and market shares. The activities directly related to the end product do not add the most value to a product, but knowledge bases, skill sets, and service activities create the most value and competitive advantage. Focus on what gives your company its competitive edge and outsource the rest [*Looff, 1996*].

4.2 Core competences from a business perspective

Arguing from a business perspective, core competences could be determined by making an analysis of an organization's industry, using the five forces model [*Porter, 1985*].

In short, this five forces model determines the ability of firms to be profitable in a certain industry, by analyzing five different determinants of industry profitability:

1. Threat of new entrants.
2. Bargaining power of suppliers.
3. Bargaining power of buyers.
4. Threat of substitute products or services.
5. Rivalry among existing firms.

With the results of this analysis an organization will be able to map an industry's strengths and weaknesses. This information can then be used to determine an organization's required core competences necessary to be profitable in that industry.

Unfortunately, Porter's five forces model cannot be used for determining whether or not an *IT service* is core. IT is a rather exceptional competence featuring a deviant nature, as it is tied up with the value chain at every point. Therefore the *make or buy* decision regarding an IT service cannot be taken from merely a business perspective. It requires a more comprehensive method to determine the *core level* of an IT service.

"An IT service's make or buy decision cannot be taken from merely a business perspective"

IT services are often labeled as 'business enabler', which indicates the importance of a carefully considered sourcing decision. The *sourcing*- or *make or buy* decision of an IT service basically involves the choice of (a) keeping an IT service in-house, or (b) transferring the service to a third party service provider [*Lane, Subramanian & Yelavalli, 2005*]. The fact that an IT service's *degree of importance* can different in other circumstances makes this a complicated decision. As a result the sourcing decision of an IT service cannot be generalized and should therefore be considered for every separate IT service or service domain.

Therefore, a global sourcing strategy for IT services should contain a method or a number of criteria, with which it will be possible to determine whether to keep an IT service in-house or transfer to a third party service provider.

4.3 IT competences from a sourcing perspective

Speaking of *core IT competences* within an organization that considers IT a none-core competence seems rather conflicting. However, organizations that tend to outsource all of their IT often seem very busy shaping the boundaries of their retained IT organization [*Joha, 2003*]. The IT services that retain in the organization are often referred to as *core IT competences*.

Many companies keep activities deliberately in house, because they have historically performed these activities internally, or because it seems essential to their business [*Quinn & Hilmer, 1995*]. However, shaping the boundaries of the retained IT organization is a very careful consideration and should be based on legitimate arguments and not on historical implications.

For years organizations have been using Ansoff's interpretation of managing organizations [*Cummings & Wilson, 2003*]. Ansoff recognizes three different decision / management levels in a business strategy: the strategic, tactical, and operation level. These levels can also be recognized in figure 6, which shows two different perspectives in shaping the boundaries of the retained IT organization [*Joha, 2003*].

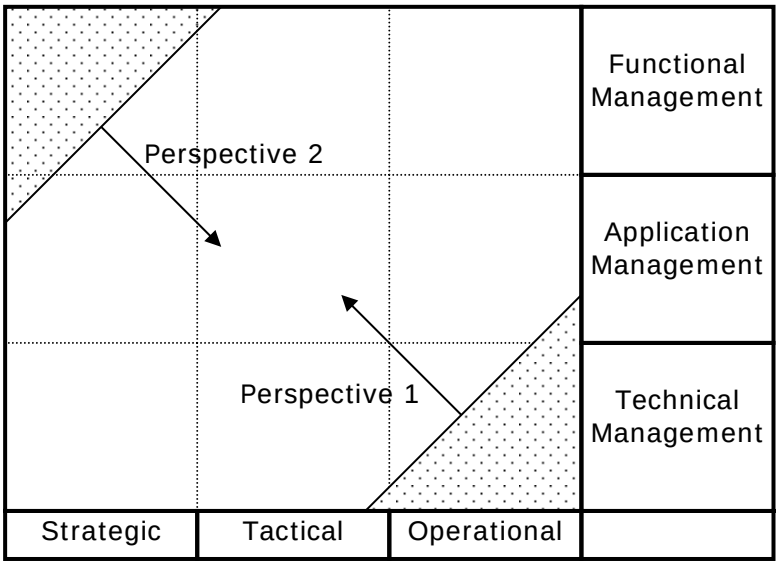

Figure 6: perspectives on outsourcing

On the horizontal axis you see a distinction concerning the three different management levels described above. On the vertical axis you see a distinction of three dimensions by which organizations address the challenges of IT exploitation.

Perspective one belongs to organizations, which consider IT as being their core business. These organizations will keep most IT activities in-house and will be involved in the operational aspects of IT. The number and nature of these operational aspects lead to a specific IT strategy.

The second perspective on the other hand, belongs to organizations featuring an outsourcing perspective. These organizations do not consider IT as their core business and are therefore not involved in operational aspects. As a result, IT is primarily approached from a strategic perspective featuring a strong focus on (out)sourcing.

4.4 Controllability over IT services

Arguing from the second perspective shown in figure 6, organizations should outsource most of their IT, as it is not their core business. However, shaping the boundaries of the IT organization is inextricably bound to determining the *core level* of an IT service. As a result, shaping of boundaries of the IT organization's is just as complex as determining the *core level* of IT service. Therefore the perspectives shown in figure 6 are not sufficient and also require a more comprehensive method.

Taking Philips as an example, one can assume that Philips is an advocate of perspective two. However, if Philips only wants to focus on managing IT suppliers, then why is their IT department so big and what are all employees in the field of IT doing?

Arguing from the perspective of Philips IT, the author discovered that sourcing of IT is a very complex process and that it is not just shifting activities and responsibilities towards suppliers. Considering the strong tied up character and importance of IT regarding today's business, organizations only want to depend on a third party up until certain limits. This sounds very straightforward, but finding the proper balance between self-control and outsourcing to a third party, seems to be a difficult and complex process. In fact, this is exactly the reason why there are so many people involved in IT in an organization that argues to outsource IT as it is not considered core business.

"Organizations only want to depend on a third party up until certain limits"

Apparently a lot of criteria have to be taken into consideration in order to determine whether to outsource an IT service completely or whether to maintain a certain amount of control. Intentionally keeping / maintaining IT activities in-house is not necessarily a bad thing, assuming that this decision is substantiated with valid arguments.

Data gathering, brainstorming sessions, and discussions at Philips, have resulted in a list of criteria that can be used to determine the preferred level of controllability over an IT service. A high level of preferred controllability means that an organization considers an IT service to be *core*. Therefore the determination of an organization's preferred level of controllability over an IT service can be used to substantiate sourcing (make or buy) decisions. One could argue that the preferred level of controllability represents a reflection of an organization's IT strategy.

The criteria that can be used throughout the determination of the preferred level of controllability are[2]:

- Business critical level
- Complexity level
- Risk level
- Flexibility level
- Understanding of your own business / Insight into own processes
- Experience / Common sense

Besides substantiating sourcing decisions, the preferred level of controllability over an organization's IT services can also be used to shape the boundaries of the retained IT organization.

Notice that these criteria are determined while arguing from the perspective of Philips IT. A different organization might require different criteria. However, the basic idea remains the same: the criteria should be valid determinants for an organization's preferred level of controllability over an IT service.

4.5 Conclusion

Organizations arguing from an outsourcing perspective put a strong emphasis on the sourcing process. Sourcing becomes a core competence, as the make or buy decision becomes increasingly important.

[2] Due to limitations in time and scope, not all aspects have been investigated in full detail. Although further investigation is required to provide more information and/or evidence, this statement is supported by Philips Electronics N.V.

Finding the proper balance between self-control and outsourcing to a third party (sourcing), turns out to be a difficult and complex process. In order to support organizations in making substantiated sourcing decisions, a number of criteria have been introduced. Together these criteria represent an organization's *preferred level of controllability over an IT service*, which can best be seen as an important *decision element* in the sourcing process.

A high level of preferred controllability represents a strong in-house desire, while a low level of preferred controllability represents a strong out-house desire. Arguing from the perspective of an entire IT organization, this decision element will not only impact the boundaries of the retained IT organization, but will also impact the determination of an IT service's most suitable sourcing variant.

5. Determining the sourcing variant

IT purchasers often start thinking in terms of 'service domains' and 'sourcing variants', hoping to come up with a match between a specific IT service and a sourcing variant. Elaborating on this 'need', this chapter will provide an answer regarding sub research question 7:

How to determine the most suitable sourcing variant for an IT service?

Preferably IT purchasers would like to have a method with which they can determine an IT service's sourcing variant i.e. an indication telling them how and where to source [*Groenewoud, 2005*].

Such a model is considered to be a crucial aspect of a global sourcing strategy, but does not yet exist. Therefore this chapter will be used to create such model, starting with closer look at the subject of service domains.

5.1 Service domains

Although the subject of *service domains* seems somewhat out of place in this chapter, the explanation of this framework element has deliberately been placed here. Before deciding which sourcing variant to use, it is important to have a clear insight into an organization's service domains.

"Service domains are the basis from which sourcing takes place"

An organization's service domains are the basis from which sourcing takes place, as these domains represent the different IT services that can be recognized within an IT organization. From the framework's perspective, service domains enable us to zoom in on a specific IT service, while at the same time constricting the strategic focus.

The structure of an organization's IT department is often illustrated by a so-called *IT landscape* or *IT architecture*. An IT architecture can best be seen as a mapping of all the elements or components within an IT organization, while at the same time illustrating the relation between

these elements/components. The different IT architecture elements are maintained by so-called service domains [*Wijers, 2005*].

Service domains are also known as service lines or service towers and feature two different perspectives: a client perspective and a supplier perspective. From the perspective of the supplier, service domains can best be seen as a representation of a supplier's knowledge fields and skills [A*ccenture, 2005*]. Examples of services (service domains) offered by suppliers are: 'helpdesk services', 'datacenter services', and 'telecom services'.

On the other hand, while arguing from a client-side (e.g. Philips) perspective, service domains represent an organization's service needs. Within this context, a single service domain represents a cluster of activities [*Wijers, 2005*] that is used to maintain a certain area of the IT architecture.

An overview of an IT organization's service domains can best be acquired by an analysis of the organization's IT architecture/landscape. IT organizations are often literally structured/organized by means of logical alignments of services or activities.

[*Joha, 2003*] distinguishes different kinds of outsourcing, which could be used as a guide to classify different alignments within an organization's IT landscape. The distinction made by [*Joha, 2003*] is as follows:

1. Infrastructure outsourcing
    a. Mainframe services
    b. Midrange services
    c. Desktop services
    d. Network and telecommunication services
2. IT application outsourcing
    a. Application support and maintenance
    b. Application development

Another distinction that is often used by organizations is based on different layers of the business architecture. [*Scantlebury, 2004*] from

The Boston Consulting Group recognizes the following layers in business architectures with respect to IT:

- Business strategies and policies
- Business processes
- Fully configured applications
- Software packages
- Middleware and development tools
- Database management systems
- Operating systems and systems management tools
- Mainframes, servers, and storage devices
- User devices (for example, laptops, desktop PCs, and PDAs)
- Networks (for example, wide and local-area networks)

When comparing the distinctions of [*Joha, 2003*] and [*Scantlebury, 2004*], you should be able to recognize some similarities. Considering the different fields of IT and how different services are combined to provide total solutions, both divisions look rather logical.

However, [*Scantlebury, 2004*] has a stronger focus upon the IT organization as a whole, featuring a more strategic perspective on how the different layers within the IT organization logically rely on each other. This overview can therefore also be considered as an IT organization's IT stack.

On the other hand, [*Joha, 2003*] is very much aimed at distinguishing the different kind of IT services from an operational perspective, but remains rather shallow in its description.

Based on a combination of the distinctions by [*Joha, 2003*] and [*Scantlebury, 2004*], the following service domains have been recognized:

- Helpdesk services
- Application services
- Desktop services
- Database services
- Storage services

- Mainframe services
- Infrastructure services

5.2 Sourcing variants

Sourcing variants represent *how* an IT service can be sourced. Common used variants occurring in the business world are: off shoring, nearshoring, smart sourcing, in-sourcing, co-sourcing, business process outsourcing, and many more. Each variant involves a different way regarding the supply of IT services.

In order to enable an organization to determine which sourcing variant can best be used for a certain IT service, an organization needs to be able to discriminate between sourcing variants. However, the existing terms are not standardized and often interpreted in different ways. Therefore a more general method is required to distinguish between different sorts of sourcing.

In order to discriminate between sourcing variants, one first needs to be able to discriminate between IT services. Making a distinction between different IT services, can be done by an analysis of *the definition of IT services* from chapter 2.5. An analysis of this definition shows that IT services distinguish themselves by means of the following aspects:

- **Intangibility (of the result)** – A strong characteristic of an IT service is its intangibility. Most added value does not come from tangible assets, but from intangible aspects like human interaction and efficiency. However, the results of some services have a more intangible nature than others i.e. consultancy versus software development.
- **Interaction** – The hierarchical position and the amount of interaction between the demand and the supply side are also differentiating factors for services. Basically more interaction on strategic level increases the tactical and operational responsibility for the supplier.
- **Physical resources** – Although most of the added value comes from human interaction, a service can include the use of a

supplier's physical resources, i.e. hardware or software. (This aspect can be related to the intangibility level of an IT service)

Now, in order to come from these IT service characteristics to a distinction between sourcing variants, one must first determine the two extremes in the area of IT services. While at the same time relating these extremes to the various sourcing variants used in the business world, the following figure can be created:

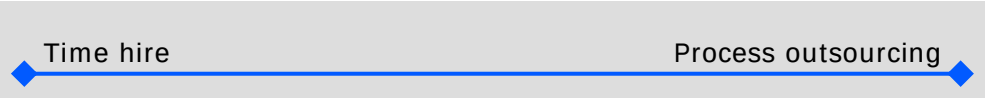

Figure 7: sourcing variant continuum

This figure represents a so-called continuum, providing the two extremes of IT-service sourcing, based on their specific IT service characteristics. Every variant of sourcing can be plotted on this continuum.

Time hire (the left side) features a low level of physical resources, a high level of intangibility, and interaction mainly takes place in the tactical and operational fields. Time hire basically involves the hiring of manpower or knowledge, while the organization maintains a high level of control. Example: consultant, programmer.

Process outsourcing (the right side) features a high level of physical resources, a lower level of intangibility, and interaction mainly occurs on a strategic level. Responsibilities and activities are largely transferred towards the IT supplier, while the organization basically remains interested in the quality of the deliverable and the price that has to be paid.

5.3 An external focus

Remaining in an attempt to develop a method, with which an organization (IT purchasers) can determine the most suitable sourcing variant for an IT service, it can be concluded that at this point we are able to:

1. Determine the preferred controllability of an IT service / activity (chapter 4).
2. Establish an organization's service domains, i.e. zoom in on a specific IT service, while at the same time constricting the strategic focus.
3. Discriminate between sourcing variants (sourcing variant continuum);

However, these abilities are not sufficient for determining which sourcing variant to use for a certain IT service. In order to do this, an extra variable is required.

When reviewing the results of paragraph 3.1 it becomes clear that the process of outsourcing generally comprehends a focus on two different fields. In order to understand this, first take a look at these quotes taken from chapter 3.1:

- "The remarkable aspect about these principles is that they too seem to attach a certain level of significance to the organization that is applying the process of outsourcing."
- "[*Looff, 1996*] on the other hand, shows a clear distinction between the actual procurement decisions and the organizational implications."
- "Therefore all internal and external options for improving the IS function must be considered equally and on a regular basis."
- "Both overviews have shown that outsourcing should have a strong inside out character."

"Outsourcing is also related to factors outside the own organization"

These quotes, especially the latter two, show us that the success of outsourcing is not only related to factors within the own organization, but also to factors outside the organization. There are conditions that need to be met by the own organization, but there are also conditions that need to be met by the supplier.

Arguing from this perspective, it can be concluded that the 'missing variable' should have an external nature. It should focus on an aspect outside the organization, without actually focusing on a specific supplier, as this choice will occur at a later stage.

The *internal variable* related to determining a sourcing variant was already described in chapter 4.4 and has been identified as an organization's *preferred level of controllability over an IT service*.

Reasoning from the perspective that the *sourcing variant determination process* is related to the question: "how to (to what extend) place a service in the market", the *external variable* has been identified as: overall market maturity i.e. the ability of one or more suppliers to deliver a mature service. This variable has an external focus, but is not specifically aimed at certain suppliers.

However, one should notice that the *assumed maturity* of a market and/or supplier is also related to the maturity of the own organization. Therefore one could argue that in case of a *high* market maturity the added value induced by a supplier's capabilities, surpluses the added value induced by the own organization's capabilities; a none-core service is not automatically transferred towards an IT supplier.

5.4 The Baaten-matrix

After having determined 'the missing variable' as being the overall market maturity, there are currently four different variables (abilities) that should be taken into consideration while developing a model to support organizations in determining an IT service's most suitable sourcing variant.

Arguing from the perspective of a specific IT service, an organization should assess two variables in order to determine the IT service's most suitable sourcing variant. First an organization needs to determine their *preferred level of controllability over the IT service*, and then this variable should be associated with the *market's maturity* regarding the supply of the IT service. This results in respectively the vertical and horizontal axis of the matrix shown in figure 8.

Relating this association to the sourcing variant continuum described in chapter 5.2 (blue arrow in figure 8), results in four different sourcing variant segments, also shown in figure 8.

The model that originated from combining all variables (abilities) is shown in figure 8 and is called the Baaten-matrix. Its function is to support organizations (Philips) in determining the most suitable sourcing variant regarding a specific IT service.

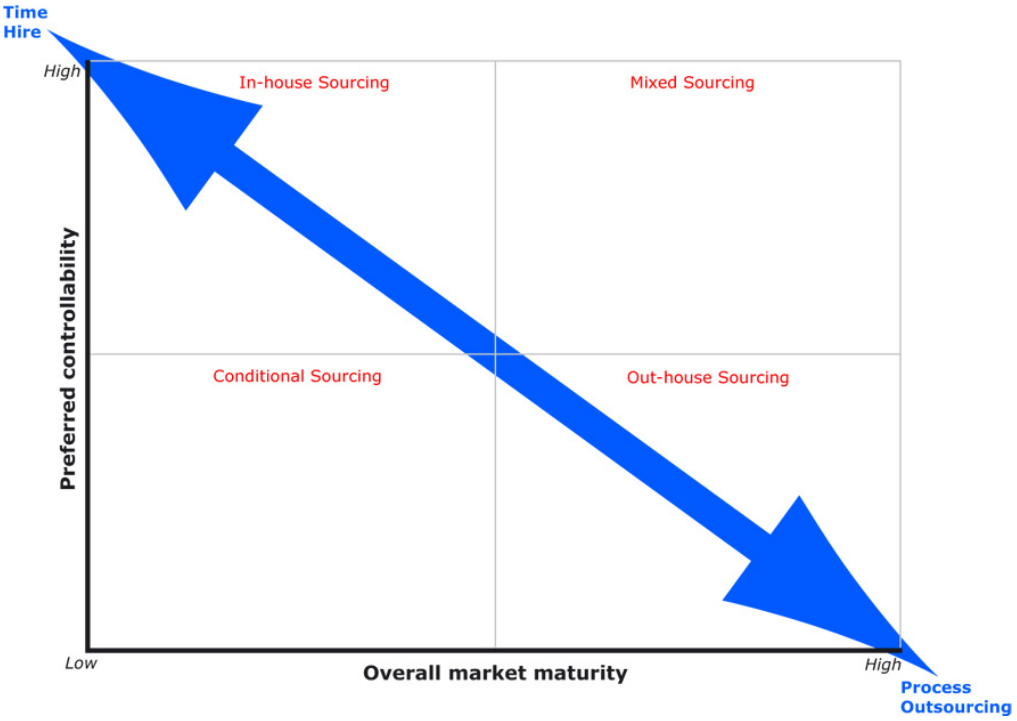

Figure 8: The Baaten-matrix

In order to create a better understanding regarding the usage of the Baaten-matrix, the different sourcing variant segments will be explained below.

IT services plotted in the segment in-house sourcing feature a high level of preferred controllability and a low overall market maturity. This means that the services within this area are delivered by an organization's internal IT department. A sourcing variant matching this segment is known as *time hire* and involves the hiring of man power and/or knowledge. It allows organizations to stay in control of the project and bear the full responsibility.

The out-house sourcing segment on the other hand, represents the opposite. IT services in this area have a low preferred controllability, a high overall market maturity, and often involve the outsourcing of entire processes. IT service suppliers bear a large amount of responsibility and

have a certain amount of freedom in executing and optimizing the IT service. Within this area, the client organization's main interest is the price-quality ratio.

The two remaining segments (mixed- and conditional sourcing) can best be seen as deviations from the most idealistic sourcing perspective, which is represented by the blue arrow. However, if substantiated by valid arguments, the plotting of IT services in one of these segments is considered a satisfying possibility.

Very typical about the mixed sourcing segment is that despite a high market maturity, organizations have the tendency to maintain a high level of control over the concerned IT service. The reason behind this tendency can be found within the criteria determining an IT service's preferred level of controllability (chapter 4.4). Arguments like 'too critical for the business' or 'maintain flexibility' are often used to substantiate the choice for this sourcing variant.

The conditional sourcing segment is rather exceptional. While arguing from an IT service featuring a low preferred controllability, assume a situation with no suppliers able to surplus the IT service's value compared to *IT service delivery* by the own organization (low market maturity). In this case, one could be tempted to state that such service should be depreciated and is considered unsuitable for meeting business requirements.

But what if the IT service is absolutely required by the business and the client organization, as well as the IT service suppliers are unable to deliver this service on a mature basis? In this case the most appropriate term to use would be innovation, as there are generally two possibilities: (a) the client organization chooses to develop the service internally, or (b) the client organization will enforce outsourcing, enabling the supplier to develop the service.

When the client chooses to develop the service internally, it would be a typical case of knowledge creation. On the other hand, when the client chooses to enforce outsourcing, this choice might involve knowledge transfer. Both scenarios are shown in figure 9 below. In either case, the

service's maturity will be increased, which results in an IT service suitable for supporting the business.

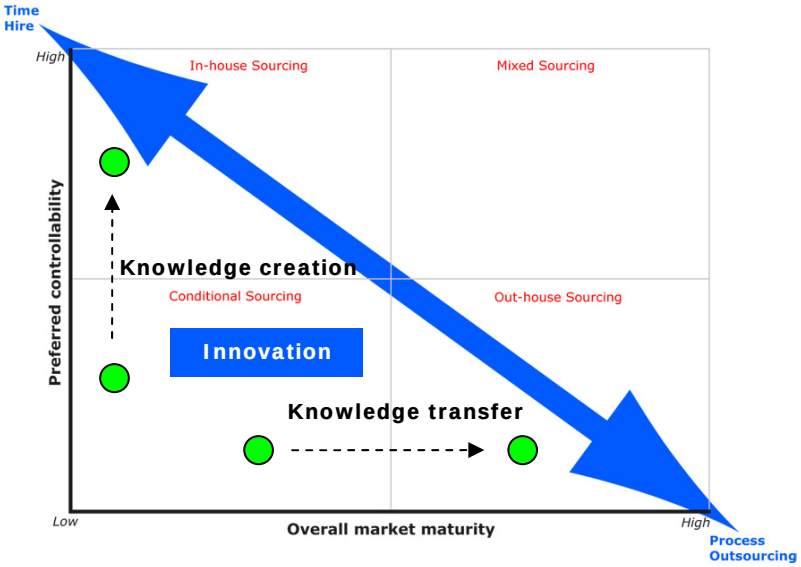

Figure 9: Baaten-matrix: conditional sourcing scenarios

5.5 Baaten-matrix and Kraljic

The Kraljic matrix is a common used tool in the field of supply chain management. Its purpose is to optimize supplier collaboration and minimize purchasing risks, by defining separate strategies for different stages of purchasing sophistication [*Kraljic, 1983*].

Figure 10 below shows two versions of the Kraljic matrix: the classical representation and a more modern representation. The Kraljic matrix enables a purchasing organization to classify its portfolio by means of four different purchasing strategies (stages of sophistication) [*Kraljic, 1983*]. It allows organizations to differentiate between products and/or services [*Groenewoud, 2005*]. Notice that the remainder of this paragraph will argue from the perspective of the classical representation of the Kraljic matrix.

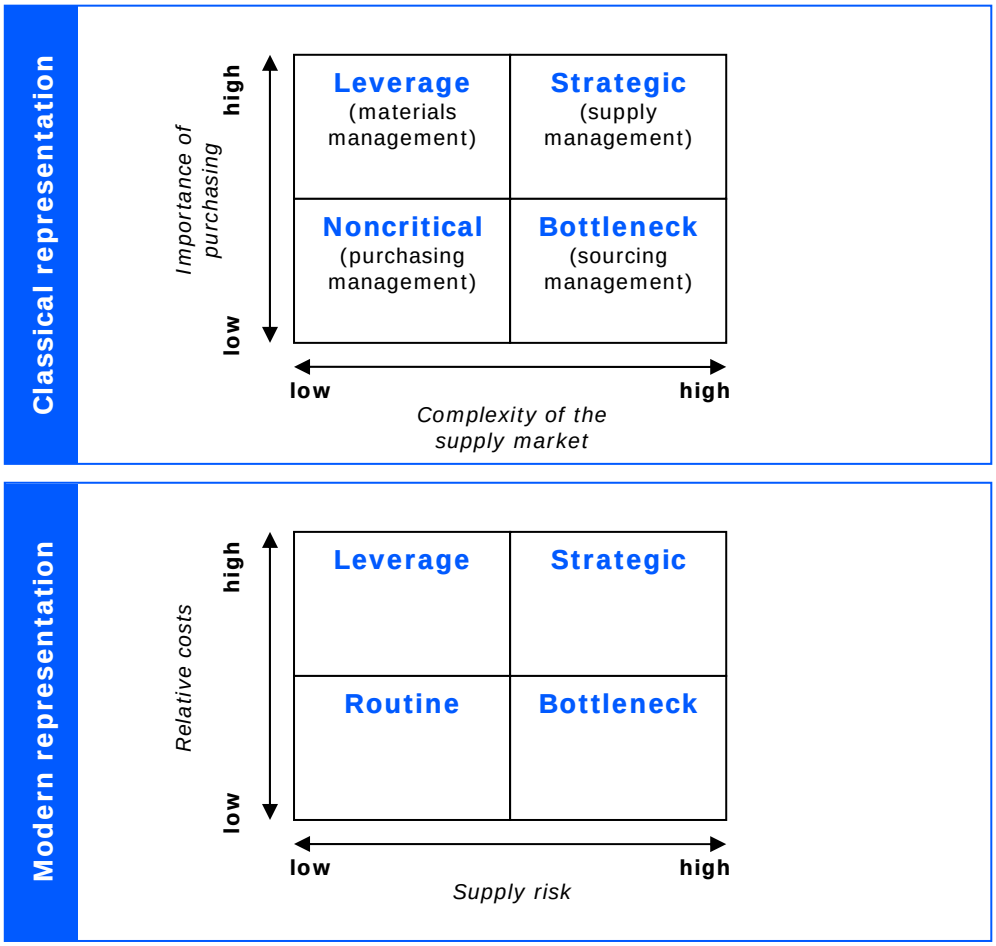

Figure 10: The Kraljic matrix (classic and modern representation)

The strategies (quadrants) represented within the Kraljic matrix distinguish themselves by two different variables: (1) the complexity of the supply market *or* supply risk, and (2) the importance of purchasing *or* relative costs.

Associating these variables has resulted in four different quadrants representing four different purchasing strategies (i.e. stages of purchasing sophistication). Every quadrant features a different complexity that is in proportion to its strategic implications. In practice this means, that every strategy involves a different mix of suppliers, tools, methods, and assumptions with respect to price, volume, and risk [*Kraljic, 1983*].

At this point you are probably starting to wonder how this is related to the Baaten-matrix described in the previous paragraph. The answer to this question is relatively easy.

The Kraljic matrix can be used to position an IT service in a specific quadrant that basically indicates the approach for acquiring these IT services. However, the Kraljic matrix cannot be used to determine how to source an IT service. This is where the Baaten-matrix steps into the picture.

The Baaten-matrix has a strong focus on sourcing, while the Kraljic matrix has a strong focus on outsourcing. Furthermore, the Baaten-matrix is more tied up with the make/buy decision, while the Kraljic matrix is only used after a 'buy' decision. One could say that the Baaten-matrix and the Kraljic matrix are complementary to each other. From a Kraljic perspective the sourcing decision (usage Baaten-matrix) of an IT service is most complex in the 'strategic' top right corner.

However, one should notice that this complexity is not a valid incentive to move the service towards the 'in-house sourcing' quadrant of the Baaten-matrix. It is an organization's responsibility to develop the skills and competences, necessary to deal with complex sourcing deals.

5.6 Baaten-matrix examples

In order to provide a better insight into the function of the Baaten-matrix, this paragraph will feature a few examples. Besides the more general examples in this paragraph, more Philips related examples will follow in chapter 11.

5.6.1 IT service lifecycle

When illustrating the IT service lifecycle by means of risk and value, you get a graph like shown in figure 11 below (on the left). Within this graph you can recognize four little circles numbered from 1 to 4. These numbered circles represent the steps in an IT service's lifecycle. The movement throughout the Baaten-matrix will be explained below.

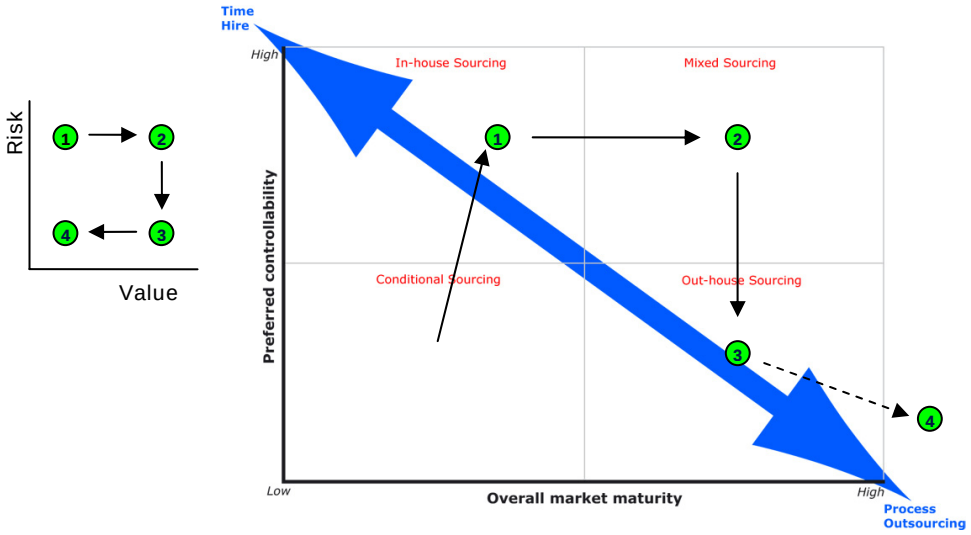

Figure 11: Baaten-matrix: IT service lifecycle

As explained before, there are basically two options when the business requires an IT service which is not yet sufficiently mature. The first option is to transfer the service to a supplier (knowledge transfer), while the second option involves the choice to develop the IT service at the own organization (knowledge creation). Eventually an IT service that was developed in house (as a result of knowledge creation) can gradually be transferred to an external party.

In the matter of internal development, one can recognize a 'sourcing path' as shown in figure 11 in the Baaten-matrix. It starts at number 1 which represents an IT service in an immature state that is being developed. After a while the IT service will slowly become more mature and more valuable, which result in the movement towards number 2. At the same time, the service can slowly be transferred to an external supplier, starting with a mixed sourcing variant. Then the market starts to mature which induces the decision to fully transfer the service to an external party, resulting in the movement towards number 3.

Eventually, the IT service will start moving towards number 4, as the technology slowly becomes outdated. This often means that there are newer/better alternatives, and slowly the value of the current IT service begins to decrease. Eventually the service will be depreciated and replaced by one of its preferred alternatives.

5.6.2 Partnerships

Outsourcing is often related to building and maintaining partnerships with service providers. As shown in figure 12 below, partnerships are primarily located in the marked area, because there the amount of interaction between the client and the supplier is considered to be the highest.

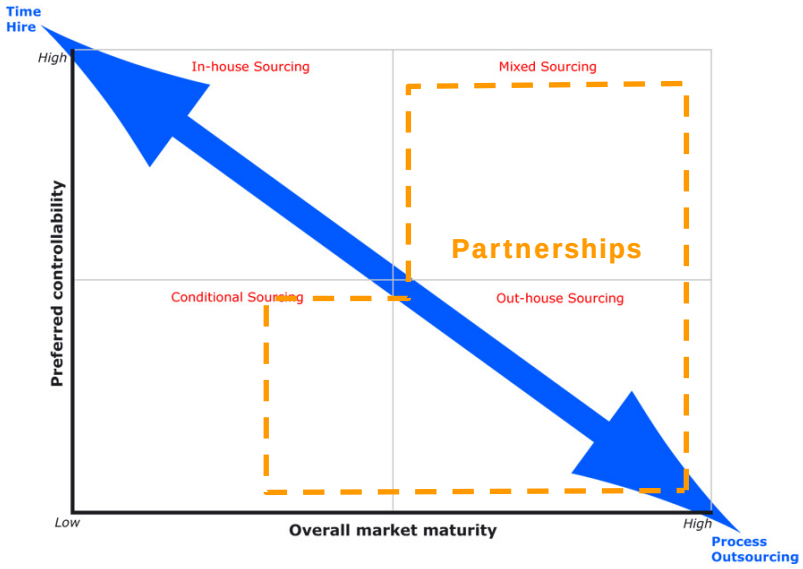

Figure 12: Baaten-matrix: Partnerships

In contrast to what one might expect, good partnerships are most critical in the area of mixed sourcing. There the integration of operational aspects is much more emphasized compared to other areas of sourcing.

5.7 Conclusion

The Baaten-matrix is associated with many existing aspects within a purchasing organization. Its usage will support an organization's sourcing decision making process, and therefore reduce the risks of sourcing.

Every position within the model is the result of a careful consideration of various organizational variables and can therefore be considered unique. The outcome can be different for another organization or another IT service. The Baaten-matrix has a generic nature, as it can be used for all kinds of organizations and (IT) services.

In a nutshell, the Baaten-matrix can be used to:

- Assess former sourcing decisions.
- Manage sourcing decisions of ongoing projects.
- Determine the sourcing variants of new sourcing decisions.

With this result the Baaten-matrix contributes to Philips' global sourcing strategy requirements/intentions described in chapter 1.

Appendix C shows a large version of the Baaten-matrix, including the criteria used for determining the variables.

6. Contractual arrangements

A strong focus on outsourcing increases the emphasis on supplier relationship management. Organizations primarily manage sourcing relationships by means of service level specifications [*Joha, 2003*] established within contracts. These service level specifications are used to measure a supplier's performance and enable clients to check whether they are receiving the results they are paying for.

Managing relationships using incomplete or inadequate contracts are a large risk and may cause serious frictions between the client and the supplier. Therefore these specifications must be designed effectively and defined clearly throughout the contract. Within this context, this chapter will answer sub research question 8:

How does global sourcing impact an organization's contracting activities?

6.1 Contract shaping

"Outsourcing contracts need to be optimized for flexibility"

Due to fast changing competitors, rapid developments in IT, and constant changing business requirements, organizations tend to increase their levels of flexibility [*Joha, 2003*]. Therefore outsourcing contracts need to be optimized for flexibility, as contracts just cannot anticipate future changes. Flexible contracts should prevent suppliers charging high fees for new or changed services, and should therefore contain a detailed and complete description regarding amongst other things: (1) the scope of the services and (2) the responsibilities of all parties involved.

As shown in figure 13 below, [*Joha, 2003*] defines an outsourcing contract as a tradeoff between detailedness and flexibility.

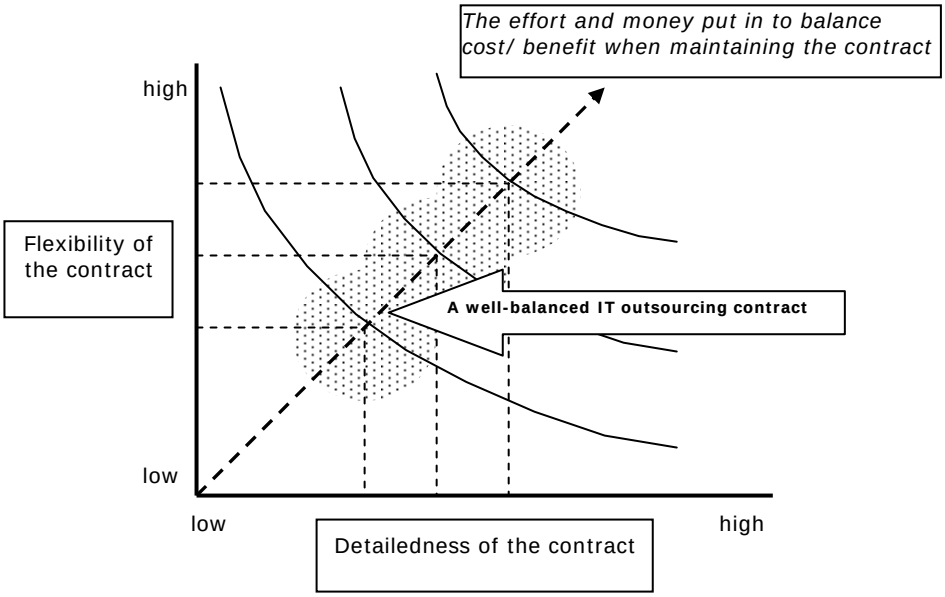

Figure 13: Relation between the factors shaping an outsourcing contract

This figure describes the conflicting character between the detailedness and flexibility of outsourcing contracts. It shows that outsourcing contracts should comprise a certain balance between detail and flexibility in order to lower outsourcing risks in the areas of (1) technology, (2) finance, and (3) business [*Joha, 2003*].

Increasing a contract's flexibility without increasing the risk is only possible by increasing a contract's detailedness without disturbing the preferable balanced between these factors. The amount of flexibility and detailedness, while retaining a preferable balance is determined by the amount of effort and money an organization puts into creating and maintaining its contracts.

Remaining in the field of flexibility, [*Quinn & Hilmer, 1995*] argue that there is a constant tradeoff between flexibility and control, resulting in a different contract form. This tradeoff is illustrated below in figure 14.

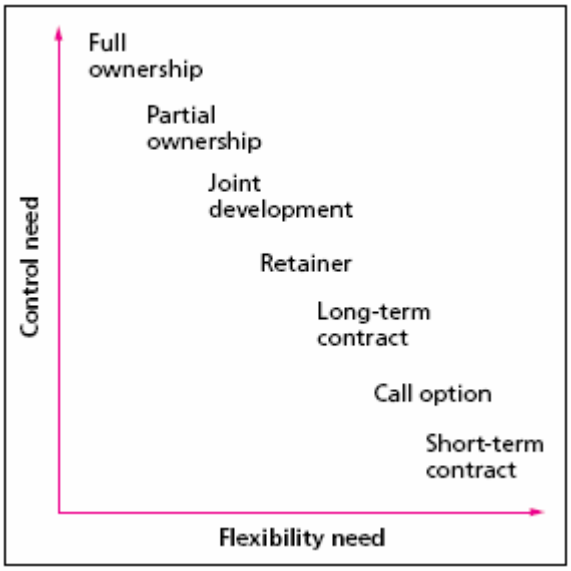

Figure 14: Potential contract relationships

With this figure [*Quinn & Hilmer, 1995*] show that the issues is less whether to make or buy an activity, but that the emphasis is on how to structure internal versus external sourcing on an optimal basis. And this is directly reflected upon the sort of contract between the organization and the supplier.

The Baaten-matrix also emphasizes the importance of internal versus external sourcing. In fact, the Baaten-matrix was created because existing models were focusing too much on the *make or buy* decision, instead of a focusing on a combination of both.

When relating the contract relationships from figure 14 to the Baaten-matrix, the following figure can be created:

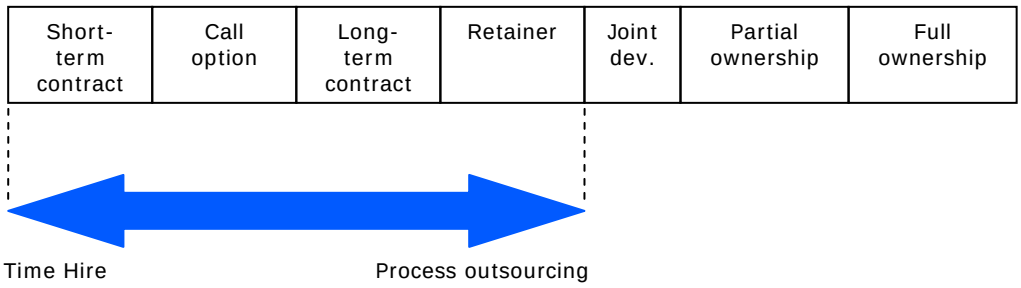

Figure 15: Potential contract relationships related to the Baaten-matrix principles

"In the long run flexibility lowers TCO and prevents technological lock-ins"

Flexibility seems to be extremely important in today's business as it enables organizations to concentrate on new technologies and put them into use when necessary. As short-term contracts are generally more expensive, flexibility seems to increase the costs. However, in the long run flexibility lowers the total costs of ownership (TCO) and prevents technological lock-ins [*Gerrits, 2005*].

Structuring an organization alongside determined service domains has a direct impact upon an organization's flexibility. As mentioned before service domains zoom in on a specific IT service and constrict the strategic focus. From a contracting perspective this means that a service domain can be seen as a pre-defined *scope* of a possible outsourcing contract.

The scope of a contract is very important as the proper splitting up of services and therefore the number of contracts can increase an organization's flexibility. Philips for example, increased their flexibility by intentionally taking the ownership of some of their IT infrastructural activities. This increased their flexibility in the service domains that rely on these infrastructural activities; switching supplier(s) does not affect the infrastructure anymore.

[*Ortt, 2004*] recognizes three different contract variants: fixed price, sub results, and open end contracts. Based on this division, the following contracting variants can generally be distinguished throughout an organization:

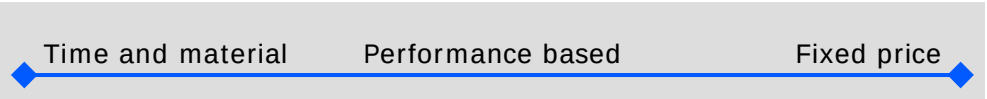

Figure 16: contract variant continuum

Time and material often involves the hiring of people and/or material at an hourly rate, while fixed price often involves fixed amounts per period regarding certain agreements. Performance based is more of a mix of these variants as it basically involves paying people on the basis of their performance. This can of course only be done, if the provided service is measurable with respect to quality.

6.2 Contract model

After having elaborated upon the shape of contracts, this paragraph elaborates upon an organization's overall contracting model. This will be done by taking Philips' contracting model as an example.

Considering the fact that global sourcing at Philips also involves the movement from an autonomous towards a common environment, one could say that global sourcing impacts Philips' contracting model. As shown in figure 17 below, the change can be recognized by the disappearance of relationships between product divisions (business areas) and suppliers. A common environment is characterized by global contracts between an organization and the supplier.

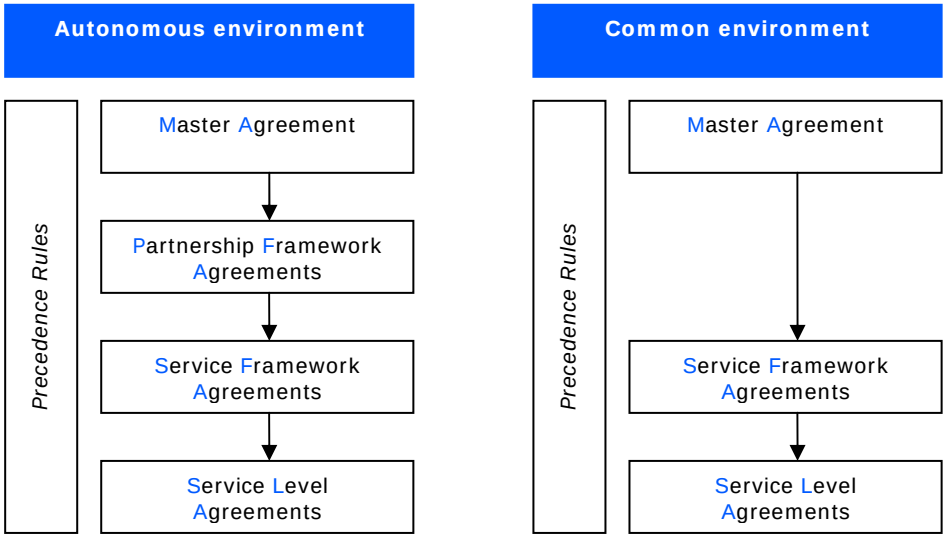

Figure 17: Impact of global sourcing upon Philips' contracting model

As shown in figure 17 above, the contracting model at Philips exists out of the following aspects [*Groenewoud, 2005*]:

- *Master Agreement*
  The MA is formulated at the highest corporate levels of both Philips and the supplier, and defines the relationship between Philips and the supplier. This agreement is generic and the same for all service domains.

- *Partnership Framework Agreements*
  The PFA describes the relationship between a certain Philips Product Division and the supplier. With respect to global sourcing and the move Towards One Philips, this aspect is no longer used.

- *Service Framework Agreements*
  The SFA defines the specification, objectives and overall requirements for the service(s) to be provided by the supplier. The SFA basically holds the requirements of Philips.

- *Service Level Agreements*
  The SLA can best be seen as an agreement on *how* to meet Philips' requirements defined in the SFA.

The precedence rules shown in figure 17 indicate that upper agreements will prevail in case of a conflict. So if a conflict occurs at SLA level and it remains to be unsolved, it will eventually be escalated at MA level.

6.3 Contracts from a Baaten-matrix perspective

As shown throughout this chapter, there are generally three contracting models: time and material, performance based, and fixed price. These contracting models also occur in a research report of Morgan Chambers for Philips Corporate IT [*Morgan Chambers, 2004*]. This research has shown that Philips IT has opportunities to improve the usage of appropriate contracting models. While arguing from the perspective of *contractual arrangements*, the most important conclusions that can be drawn from Morgan Chambers' research are:

- Optimization and standardization of contracting models is likely to result in better price/quality ratios.
- Increase the usage of *performance based* at the expense of *time and material*.

When reflecting these conclusions upon the Baaten-matrix, the following figure can be created:

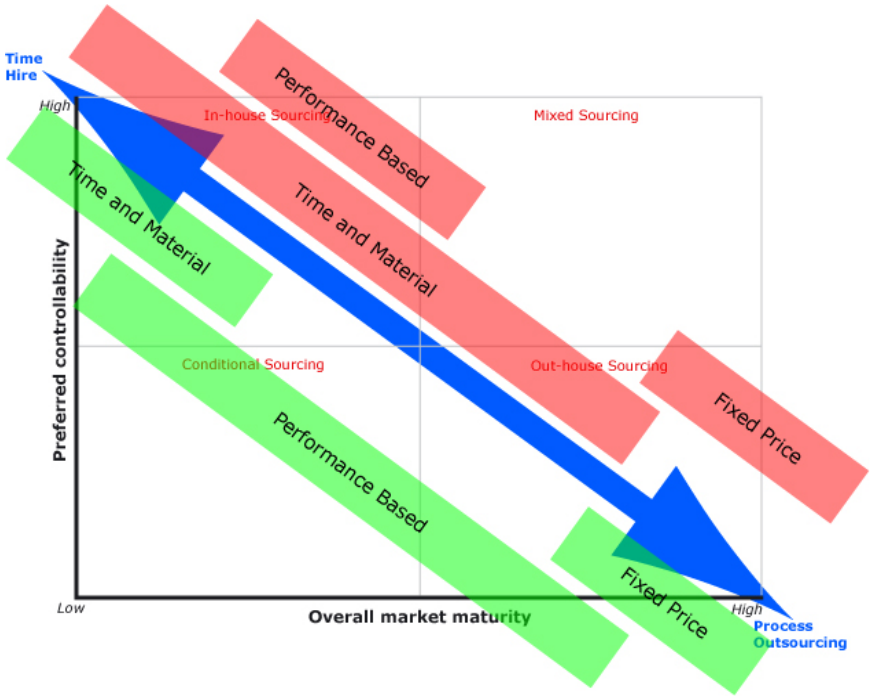

Figure 18: Potential contract relationships related to the Baaten-matrix principles

The contracting models shown in red represent the way Philips used to shape supplier relationships. The contracting models in green represent the advice of Morgan Chambers; more *performance based* and less *time and material*.

6.4 Conclusion

Not only literature, but also Philips specific examples have shown that an organization's contracting activities are important and complex. Not only does global sourcing impact the shape of the contracts, it also impacts an organization's overall contracting model. It can therefore be concluded that the impact of global sourcing upon an organization's contracting activities can be identified from different perspectives[3].

[3] Due to limitations in time and scope, not all aspects have been investigated in full detail. Although further investigation is required to provide more information and/or evidence, this statement is supported by Philips Electronics N.V.

7. Supplier choice

Arguing from the perspective of the earlier described global implications, the choosing of an appropriate supplier has also become more complicated. Within this context this chapter will provide an answer to sub research question 9:

How to choose a suitable supplier, when sourcing globally?

7.1 Capability Maturity Model

In choosing a supplier the sourcing organizations (clients) increasingly looks at the capabilities of the supplier as a benchmark for the quality of its services [*Balaji and Brown, 2005*].

A well-known model for assessing a supplier's capabilities is called the Capability Maturity Model (CMM). This model assesses the maturity level of the supplier's processes, which often increases by means of experience [*Balaji and Brown, 2005*]. In practice the Capability Maturity Model is used to assess the supplier's maturity with respect to software development [*Schuuring and Gianotten, 2005*].

By assessing several suppliers in different countries by means of the Capability Maturity Model, the differences between these countries become visible as shown in figure 19. This figure illustrates a distinction between several popular offshore countries by means of CMM levels and related costs [*Snieders, 2004*].

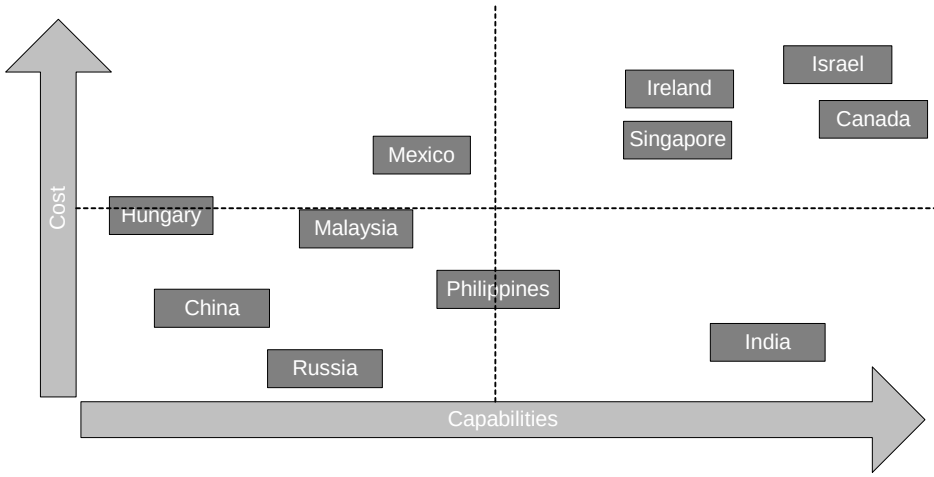

Figure 19: offshore countries by costs and capabilities

According to figure 19, India seems to be a very good choice when it comes to the outsourcing of software development. And this explains why India is a very popular outsourcing country at the moment of writing. However, the perspective of IT outsourcing is much broader than merely the development of software. And within this broad perspective, organizations are constantly looking for suitable suppliers to meet their requirements.

7.2 Global implications

"CMM level considerations are not sufficient in choosing a supplier"

Choosing a supplier by means of the Capability Maturity Model seems a rather limited approach, as it primarily focuses on a supplier's internal capabilities without taking into consideration other decisive factors throughout this process. Not only internal maturity (core capabilities) is important but also the environment in which the supplier is located plays an important role. Differences with respect to regulations, culture, technological advancement, and habits have a large impact on a relationship's success.

From the perspective of the Capability Maturity Model countries like India, Russia, and China seem to deliver low-priced services. But considering the factors described above while arguing from a western-European perspective, these low-wage countries are not always highly preferred.

As figure 20 illustrates, it is not only important to recognize environmental differences between the client and supplier, but it is also important to assess a client's and a supplier's ability to integrate with, and adapt to the other party's environment.

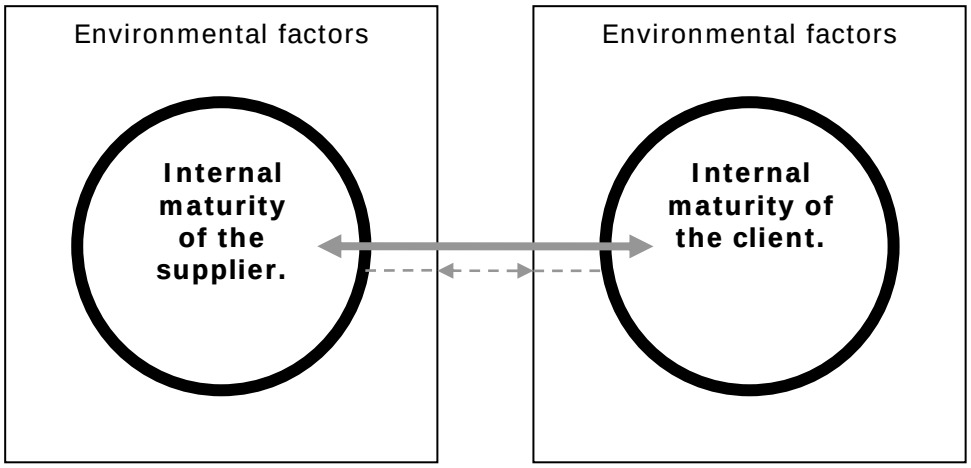

Figure 20: Complicated relationship as a result of different environments

In many cases the ability to seamlessly integrate businesses between a client and a supplier is much more determinative for a successful relationship than a supplier's core capabilities (i.e. internal maturity). Not only from the perspective of the supplier, but also from the perspective of the client. A successful relationship is based on optimal interaction between both parties, while defeating environmental barriers related to the "effects of global" (chapter 2.3). This requires certain skills at both sides.

7.3 Empowering suppliers

A successful sourcing relationship between two organizations can only be established when the supplier as well as the client hold a certain level of maturity with respect to the ability of integrating their businesses. At the client side, this 'ability to integrate' is mainly dependent on the maturity of processes like vendor management, project management, and process management [*Balaji & Brown, 2005*]. At the supplier side similar processes are important, but efforts to integrate businesses (i.e. overcome existing environmental differences) mainly seem to originate from the client side (western European perspective).

Clients seem to prefer low costs over the supplier's ability to integrate each others businesses. And due to the fact that western-European organizations are much more mature in integrating businesses, European organizations tend to seize the responsibility of integrating businesses. As a result suppliers are limited in developing these skills, while they (India for example) are often very eager to develop these skills as they want to increase their responsibility throughout a relationship [*Althof, 2005*].

7.4 Conclusion

In short it is not only about the knowledge (capabilities) an organization possesses, but also about the organization's ability to successfully apply this knowledge in various environments. A high CMM level does not automatically mean that a supplier is suitable. This shows that a global sourcing strategy remains very important, as it should stimulate the development of integration skills and should provide guidance throughout the process of choosing a suitable supplier[4].

[4] Due to limitations in time and scope, not all aspects have been investigated in full detail. Although further investigation is required to provide more information and/or evidence, this statement is supported by Philips Electronics N.V.

8. IT organization and IT governance

Sourcing challenges the way in which an organization is structured. Accommodating IT in a shared service center or at an external supplier, results into a situation where supply and demand get separated from each other. This situation increases the pressure upon IT governance as a separation of supply and demand strongly appeals to the quality of an organization's retained IT organization [*Gianotten, 2005*].

This chapter will answer the following three sub research questions (10 to 12):

- How does a global sourcing strategy impact the organizational structure of an IT department?
- In which way is a global sourcing strategy related to IT governance?
- What is the relation between global sourcing and shared service centers?

IT governance is an integral part of enterprise governance and is the main responsibility of the board of directors and executive management [*Blom, 2005*]. Its purpose is to extend an organization's strategies and objectives through IT, by optimizing the added value of IT while at the same time controlling the risks involved. It governance can therefore best be described as:

Definition of IT governance

The totality of rules, procedures, separation of responsibility, and organizational structure, which is aimed at an efficient and strategic application of IT and the limiting and controlling of risks [Schuuring & Gianotten, 2005].

Considering the above, IT governance is mainly engaged in the shape and functioning of the retained IT organization, trying to optimize its added value. The shape of an IT organization could be recognized and/or described by means of the IT architecture, which describes all parts of an IT organization. Terms like consolidation, standardization and

centralization often indicate changes in the shape of an IT organization, and are often induced by outsourcing.

The functioning of the retained IT organization can be improved by maintaining by a governance policy in accordance with the definition of IT governance above. In order to ensure that outsourced IT delivers, governance is needed. Aspects like structure, communication, vision and strategy are very important in optimizing the success of a retained IT organization.

IT managers for example, should clearly set forth their future visions so that all employees understand an organization's strategies, but also because it enables employees to see how their personal activities and functions fit into the whole. This will help employees to understand the bigger picture: where the organization is going and why outsourcing is a tool contributing to achieving a vision [*Greaver, 1999*]

"IT governance goes beyond the boundaries of an IT organization"

IT governance often goes beyond the boundaries of an IT organization as it not only should optimize the operation of the internal IT organization, but should also optimize communication and integration skills to the 'outside' world. This is shown in figure 21 below.

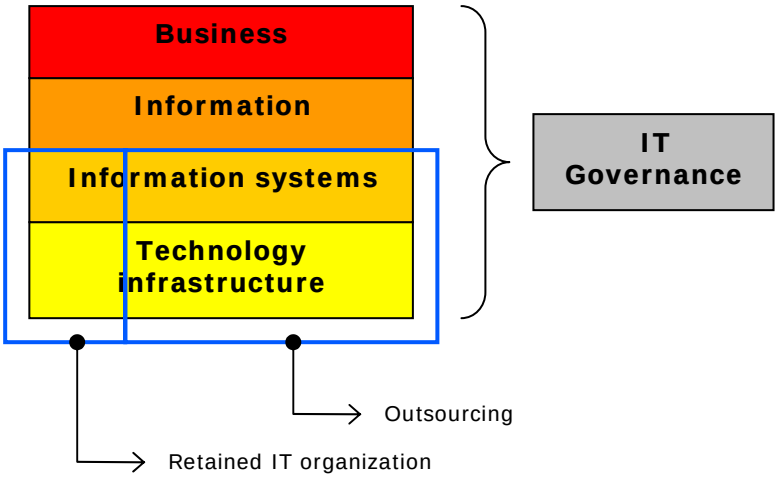

Figure 21: Integrated Architecture Framework

Figure 21 above, shows a part of Cap Gemini's IAF model [*Goedvolk, 1999*] which is used to illustrate the boundaries of an IT organization and IT governance. The two bottom layers 'Information systems' and 'Technology infrastructure' represent an organization's IT facility, while

the blue squares clearly represent a separation between supply and demand. Furthermore this figure shows that the boundaries of IT governance go far beyond the boundaries of the (retained) IT organization. It also involves the integration and communication with its contacting area's, which are the business and the suppliers.

"In the future IT organizations will change heavily"

The IAF model representation in figure 21 shows us that the IT organization as we know it today is going to change. Considering the popularity and advantages of outsourcing, the emphasis of the retained IT organization will more and more be on strategic planning, business transformation and strategic assets of information and process [*Boersma, 2005*].

Gradually organizations will go in search of the ultimate border between the retained IT organization and the IT suppliers (maximize outsourcing). Organizations involved in providing their own IT services, will slowly evolve into organizations trying to match demand and supply according to these organizations' strategies, visions and policies.

Notice that moving the remaining activities within the IT organization towards the business will be catastrophic. Knowledge of IT remains very important in order to be able to manage IT. However, technology staff will be decreased to a minimum level.

8.1 IT governance structures

Arguing from an outsourcing perspective IT organizations are often structured using service oriented architectures. An IT service should support various business and information services (figure 21), without making these service dependant from each other [*Boer, 2005*]. Partly thanks to the re-usable character of an IT service, a service oriented architecture enables the increase of flexibility and controllability, while at the same time reducing the costs. But it affects the way IT should be managed, which emphasizes the importance of IT governance.

As mentioned before, IT governance is mainly engaged in the shape and functioning of the retained IT organization. A basis for improving the functioning of an IT organization can be found in a so called 'governance

structure'. In general there are three different sorts of IT governance structures [*Gianotten, 2005*]:

1. Centralized governance
2. Decentralized governance
3. Federative governance

The differences between these governance structures are illustrated in figure 22 below [*Gianotten, 2005*].

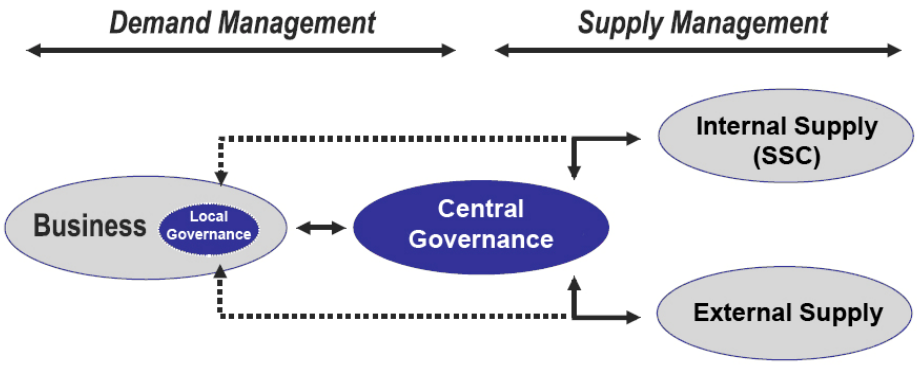

Figure 22: governance structures with respect to IT organizations

Centralized governance is positioned between the suppliers (internal and external) and the business, covering the role of an intermediary where Service Level Agreements (SLA) are often set up towards both parties. Decentralized governance on the other hand allows every business unit to have its own sourcing strategy and manage its own suppliers, while federative governance is a mixture between centralized and decentralized governance. Federative IT organizations contract suppliers and determine the scope with which suppliers and business units can cooperate directly. One could say that the differences between these governance structures are basically reflected in the transparency of an IT service towards the business.

Although IT governance and global sourcing initially seemed two separate things, it slowly becomes clear that they are very much related to each other. A study by Giarte among 180 companies in the Netherlands confirms this. This study concluded that the following aspects increased the desire to have a mature IT governance structure [*Gianotten, 2005*]:

1. ‘One company’ strategy
2. Rise of process outsourcing
3. Complexity of outsourcing deals
4. coordination of compliance
5. usage of external and internal (SSC) supply

These aspects and the content of this chapter, clearly indicate that a global sourcing strategy benefits from a solid IT governance structure. IT governance can be seen as the infrastructure between all IT related aspects, optimizing and connecting the separate building blocks of IT.

8.2 Shared service centers

Organizations and institutions are constantly seeking for ways to increase efficiency and/or quality. An organizational structure which is aimed towards these objectives is a shared service center (SSC). Result responsible shared service centers enable organizations to disable the disadvantages of the business unit structure, without loosing its advantages. Shared service centers reduce the high costs of decentralized governance and enable organizations to increase control over outsourcing. Furthermore shared service centers offer the possibility to realize synergy and to share knowledge, while increasing the professional level and quality of supportive processes [*Strikwerda, 2003*].

Shared service centers exist in different forms offering various services, using different names. Therefore a shared service center will be defined as follows:

Definition of shared service center (ssc)

A shared service center is a result responsible unit within the internal organization of a firm, public institution or none-profit organization, which is aimed towards the delivering of services in a specific field (i.e. administration, information technology or supply management) to the operational unites of that firm (i.e. business units or divisions) regarding a specific agreement [Strikwerda, 2003].

Arguing from an outsourcing perspective while taking into consideration the changing nature of the retained IT organization (chapter 8), it seems that shared service centers will eventually disappear from the scene. However, one must take into consideration that this will not happen in a short notice, as the maturity of outsourcing is not sufficient and also because organizations are in many aspects not ready for this. Until that time, shared service centers are extremely important. Not only because of its advantages, but also because shared service centers in its most extreme form are the stepping stone towards this “new” retained IT organization.

Shared service centers have many proven advantages, which are described by [*Strikwerda, 2003*]. There are however three advantages which are considered to be very much related to a global sourcing strategy. The next three paragraphs discuss these advantages.

8.2.1 Outsourcing control

For some organizations the introduction of shared service centers is like internal outsourcing. The business units outsource a part of their activities to an internal party (SSC) instead of an external party. In this way the advantages of outsourcing can be exploited, without possible market uncertainty. A next step could be to outsource services to external service providers, but without changing the service oriented structure towards the business.

8.2.2 Standardization

Many business units still have their own IT systems with specific software and applications. This obstructs the exchange of information and increases consolidation costs and therefore the costs of management control. Due to the increasing costs of IT (especially maintenance costs), the increasing demands regarding internal transparency, and the necessity to reduce costs, the pressure to standardize IT, operating systems, application software, but also administrative procedures has been increasing over the past years.

In practice standardization kept stumbling upon business as well as psychological arguments. Business arguments often appeal to the fact that specific products and services require specific IT systems. Psychological arguments where often based on the desire to maintain a certain level of autonomy (especially from a business unit perspective), which is directly reflected on the IT systems.

Under the pressure of costs and normative software systems like SAP, Baan and Oracle this is changing and standardization of systems and procedures is more and more appearing on the scene. Of course one of the primary goals of shared service centers is to standardize as much as possible.

8.2.3 Flexibility

Arguing from the traditional business unit organization, the starting of new market activities brings about the creation of a new support mechanism. As a result the barriers to new markets are relatively high, because it takes more time (=money) before the new activity is ready-to-use and profitable. On the other hand the ending of a market activity results into the disposal of the investments made in a support mechanism. As a result the exit costs of an activity are much higher compared to the usage of shared services.

An existing infrastructure offering shared services solves these problems, as capital intensive activities are organized within a shared service. Because of this it is possible to start or stop activities with relatively low costs. The shared service centers of an organization form some sort of plug-and-play mechanism for market activities.

8.3 Conclusion

Global sourcing heavenly impacts the way an IT organization should be structured and governed. As a result of global sourcing, the shape and capabilities of the retained IT organization are changing. The function of IT governance is to guide these changes while reducing the risks to minimum.

IT governance focuses beyond the boundaries of the IT organization, while its main purpose is to increase the benefits of sourcing by governing the separate building blocks of IT.

Shared service centers on the other hand, are organizational structures featuring a centralized governance model. From the perspective of the retained IT organization featuring maximum outsourcing, shared service centers will eventually disappear. But for now this is merely a theoretical statement, as practice indicates that shared service centers are still becoming increasingly important.

In the basis, shared service centers reduce the high costs of decentralized governance and enable organizations to increase control over outsourcing.

9. Philips' situational analysis

This chapter will perform a situational analysis upon Philips within the period from February 2005 till March 2006. This analysis will be used to answer the sub research questions 13 and 14:

- What is Philips' current and preferred situation with respect to sourcing?
- With which existing strategies should a global sourcing strategy be aligned?

Strategic objectives, organizational structures, future visions, governance, and other sourcing related aspects will be addressed in order to be able to create a Philips specific global sourcing strategy for IT services. The results of this chapter will be used throughout the creation of a global sourcing strategy in chapter 10.

9.1 Philips IT organization

As shown in appendix A, Philips IT basically consists of three different departments:

- Corporate IT (CIT)
- Philips Global Infrastructure Services (P-GIS)
- Philips Business Application Services (P-BAS)

Corporate IT is the IT Function Organization (service creation) while the other two are IT Service Organizations (service delivery) [*Philips (B), 2004*]. Besides these departments there are also a number of product divisions featuring an IT department (PD IT) that is involved with PD specific IT solutions.

The overview as shown in appendix A only exists since 1 January 2005. The clear distinction between the IT function and the IT services allowing optimal solutions and advice to Philips' businesses, are the result of historical changes and developments.

Global infrastructure services were already set up in 1997, starting with *PGN* (Philips Global Network). Around 2001/2002 Philips introduced the *GSU shared services* (Global Service Unit) to offer more comprehensive infrastructure services to Philips' product divisions on a global scale.

A first step towards the globalization of application services was taken on 1 January 2005 by the introduction of *P-BAS*. In order to align the naming of the shared service centers, the *GSU shared services* unit was renamed to *P-GIS*.

At the time of writing P-BAS is still heavenly under development, while a lot of effort is put in tightening the cooperation between all organizations.

9.2 IT Landscape

In an overview of Philips' IT landscape as shown in figure 23 below, one can recognize the IT service organizations, the IT function organization, and the product division IT organizations [*Philips (H), 2005*].

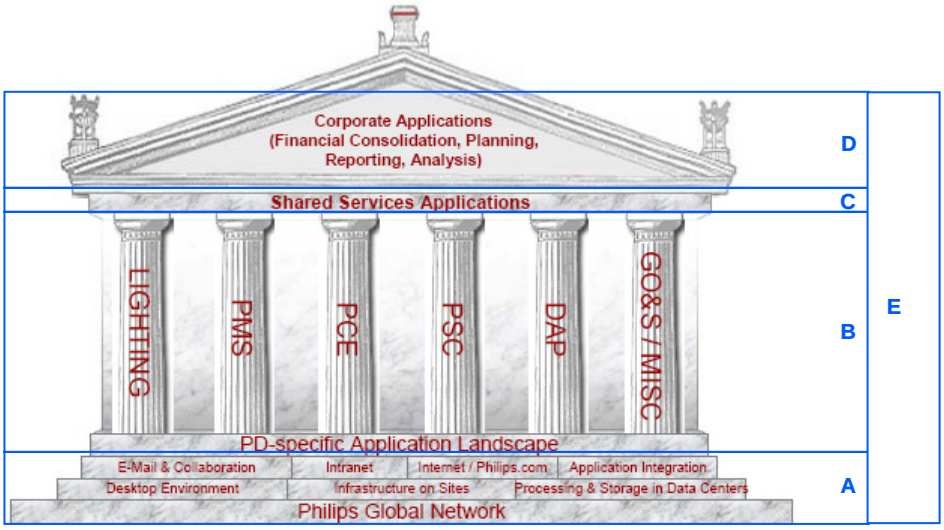

Figure 23: Philips IT landscape overview

The area marked by A, represents the common global infrastructure. The area on top of that (B) illustrates specific product division applications, while area C represents applications for support processes like purchasing, financing & accounting and human resources. Finally, the top area (D) contains corporate level applications.

Area E illustrates the IT Function organization, which is mainly involved in service creation and changes throughout the entire IT landscape.

P-GIS is responsible for area A, while P-BAS is responsible for area C and D. Area B on the other hand is managed by a mixture of P-BAS and the product division IT departments.

9.2.1 Service domains

When analyzing the IT landscape describe above, while looking into the organizational structures of the P-GIS and P-BAS service organizations, the following service domains are recognized [*Philips (A), 2004*]:

Infrastructure services (P-GIS):

- Common Desktop (CODE)
- Diamond
- Philips Global Network (PGN)
- Data Center & eBusiness
- IT Security

Application services (P-BAS):

- Marketing Info Systems (MIS)
- Finance Info Systems (FIS)
- Supply base Mgt Info Systems (SMIS)
- Human Resource Info Systems (HRIS)
- PD Business Application Systems (FIL)
- Rapid Application & Information System Engineering (RAISE)

Another part of the P-BAS organizations is the Service Lines department. This department originated by combining the services described below, which was done to benefit from a higher degree of commonality.

- Managed Operations
- Enterprise Application Integration
- Technical Service Team (Basis and Development)

9.3 IT Governance

The fact that Philips' product divisions have their own proprietary IT organization, with independent IT solutions and supplier contracts, implies that a federative governance model is in place. This 'IT spread' increases the complexity of IT governance and emphasizes the importance of an IT governance structure, which is shown in figure 24 [*Philips (H), 2005*].

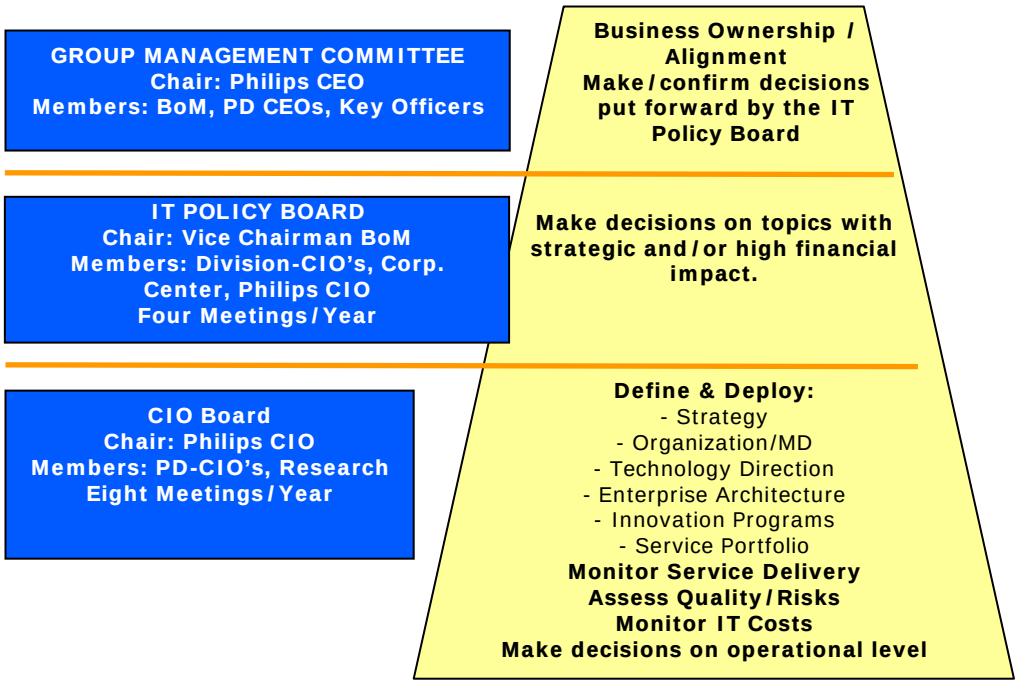

Figure 24: Philips IT governance structure

Although the governance structure shown in figure 24 is not a representation of Philips' governance model in terms of centralized, federative or decentralized, it is a nice overview of the process of decision making from the business till the actual IT operations. It shows very clearly that the IT strategy is based on the business strategy, and that the product division IT strategies are based on the overall IT strategy. Furthermore it shows the most important people that are involved in the decision making process and setting of a certain vision which later on result in a specific strategy.

9.4 Corporate IT strategy

Philips' mission in the field of IT is to maximize the business value of IT by providing functional leadership for IT and common IT solutions and services. The strategy to fulfill this mission is to adapt an IT landscape that enables Philips to [*Philips (D), 2004*]:

- Become an open enterprise;
- Change focus from transactional to knowledge workers;
- Change focus from supply chain to customer/product creation;
- Become flexible, agile and market driven.

The enablers for this strategy are described as follows:

- Increase the level of standardization for IT infrastructure and applications;
- Develop commodity and demand based IT Services;
- Transform into a global, virtual center of excellence that leverages existing competences and promotes sharing.

As the paragraphs 9.2 and 9.3 show, a lot of effort is being put in creating an organization in which commonalities can be increased and shared service centers can be created. These efforts show a strong resemblance with the strategic objectives described above, as the usage of and movement towards shared service centers is aimed towards reducing costs, increasing flexibility, and increasing commonalities.

The IT governance structure (figure 24) already showed that all IT strategies are related to each other and to the business strategy. However, Philips' strategic objectives described above, resulted into a different strategy creation approach, which is clearly aimed towards the increase of commonalities and the move towards a shared service center organization.

As shown in figure 25 below, the business strategies for the product divisions are derived from the overall Philips strategy. In a likewise manner the product divisions' IT strategies are derived from the overall corporate IT strategy, while taking into consideration business strategy objectives [*Philips (G), 2004*].

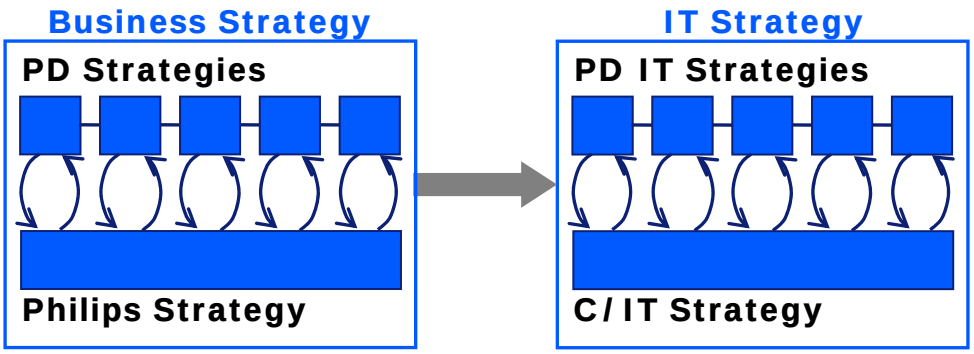

Figure 25: Philips strategy development

However, considering objectives like increasing commonalities and setting up a shared service organization, great efforts are currently put in consolidation and standardization. As shown in figure 26 below the new vision on strategy alignment and creation is fully in compliance with these goals [*Philips (G), 2004*].

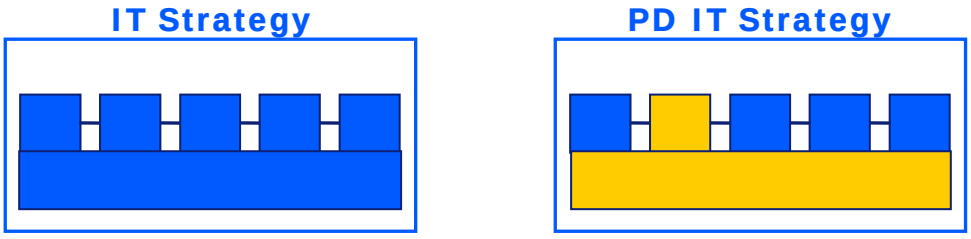

Figure 26: Philips new IT strategy alignment and development

This figure shows that the product divisions' IT strategies, and therefore its IT operations, are no longer derived from a more general strategy, but are based on a solid foundation provided by an overall IT strategy and IT operations. This is very typical to a shared service center organization. The bottom represents the common business requirements, while the specific product division blocks represents unique business requirements.

In order to grow towards an efficient shared service center organization, the degree of commonality throughout the entire organization needs to be increased. This includes both the demand and the supply side, represented by respectively the business and the IT organization. In both areas processes and activities need to be standardized.

Figure 27 represents the so-called frontier of commonalities (appendix D) by the Boston Consultancy Group [*Scantlebury, 2004*]. Philips uses

this model to illustrate their process of standardization throughout several layers of the organization. The area of uniqueness is equal to a product division block shown in figure 27, while the (increasing) area of commonality area is equal to the joint foundation shown in figure 27 [*Philips (G), 2004*].

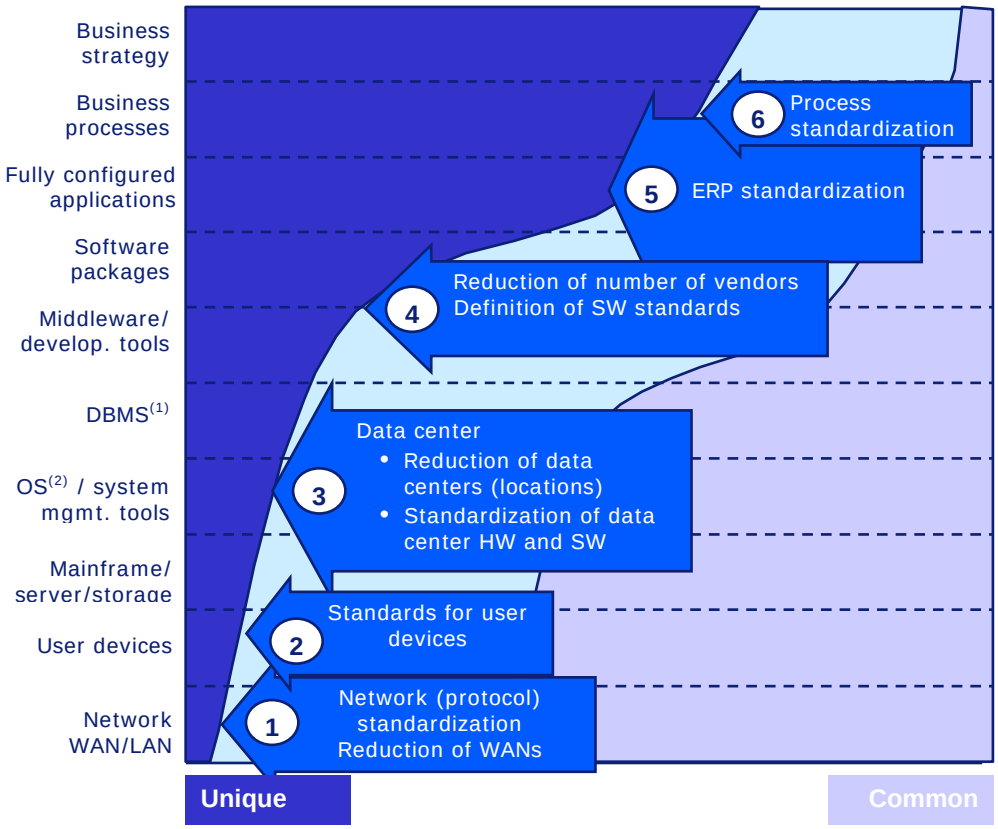

Figure 27: Increasing commonalities throughout the organization

The difficult part of increasing commonalities is the fact that Philips has multiple product divisions. So it is not just a matter of standardization towards a certain standard, but also about reaching consensus about the best possible standard. Therefore it is important to first reach consensus about the standards within the higher levels of the hierarchy, before the process of standardization can be continued throughout the operational levels of the IT organization.

The remaining challenge Philips is then facing, is where to draw the line between common and unique.

9.5 IT purchasing

IT purchasing objective

Naturally the IT strategy objectives are being reflected in the area of supply management by means of an IT purchasing strategy. Within Philips, IT purchasing provides purchasing knowledge and expertise to IT services, programs and projects by [*Philips (D), 2005*]:

- Process expertise
- Supply market expertise
- Negotiation knowledge & skills
- Contracting knowledge & expertise

Resulting from these objectives, the IT purchasing function will provide support to the business by being excellent in:

- Purchasing strategy development
  - Creating strategic advantage from the supply markets
  - Seamlessly integrated with, and contributing value to key business processes
- Supply base management
  - Establish and maintain sustainable global supply markets
  - Continuously optimize the supply base
  - Get access to market intelligence
- Supplier relationship management
  - Selecting, segmenting and managing suppliers to achieve high levels of performance
  - Showing one consistent face towards our suppliers
  - Seen as a valued customer by our suppliers

These ambitions clearly show that also the IT Purchasing department is focusing very much on standardization, cost reduction and increase of commonalities in order to work towards an efficient shared service center organization.

Furthermore global sourcing is becoming increasingly important. The initiatives for the year 2006 involve a strong global sourcing focus featuring objectives like an increase of the low-cost-country spend and an assessment of the current supplier engagement and contracting model [*Philips (E), 2005*].

9.5.1 IT Purchasing organization

As shown in appendix A, the IT purchasing organization is a part of corporate IT and is structured alongside a number of commodities:

- Hardware
- Software
- Services
- Telecom

These commodities represent multiple IT spend categories and all have separate 'commodity strategies'. These strategies can best be seen as a translation of the IT purchasing strategy taking into account specific commodity parameters. Philips uses the following definition of Monczka for a commodity strategy [*Philips (F), 2004*]:

Definition of commodity strategy

A systematic plan or approach to achieve both short and longer-term (more than one year) goals. The elements of the strategy include supply base structure, sourcing, contracting, supplier development, product/process characteristics and supply chain considerations.

Throughout the author's time at Philips, the IT Purchasing organization was part of the Corporate IT organization. Later on the IT Purchasing organization became part of Philips General Purchasing (PGP).

From a shared service center point of view the embedding of the IT Purchasing organization within the PGP organization is a correct move. However, as an integrated part of the Corporate IT organization, IT Purchasing has a stronger alignment with the demand-side (IT organization). Some feel that a close integration with the demand-side generates most benefits.

One thing is for certain and that is that the role of the IT purchasing organization is only about to increase in the future. Therefore its position within the organization should be a careful consideration.

9.5.2 Process maturity

Another objective which really excelled within the Corporate IT Purchasing department is Philips' effort to increase the maturity of processes throughout the entire organization. Taking into consideration a high level of outsourcing, the activities remaining in the retained IT organization need to be mature in order to optimize efficiency and supplier integration. On the other hand the activities that are transferred to an external supplier need to be mature in order to reduce the risks of outsourcing.

The maturing of processes is done by means of the BEST assessment methodology. BEST stands for Business Excellence through Speed and Teamwork and can best be seen as the Philips way to achieve excellence in all business aspects [*Philips (C), 2004*].

Based on the principles of this method, Philips Corporate Purchasing has developed a process survey tool for purchasing and supply management. Within the Corporate IT Purchasing department this tool is being used to identify and improve the maturity levels of the process within the Corporate IT Purchasing department.

The assessment criteria are based on the World Class Excellence Strategic and Enabling Processes that have been developed by Dr. Robert Monczka Ph.D. at Michigan State University, which are shown in appendix E. The resulting 14 elements (enumerated below) have been covered in the survey tool and are scored on a ten point scale.

- In-sourcing/outsourcing
- Commodity strategy development
- Supply base optimization and management
- Supplier partnerships
- Supplier integration in product creation process
- Supplier integration into the order realization process
- Supplier development and quality management
- Strategic cost management
- Strategies and plans
- Organization and teaming strategies
- Globalization

- Measurements
- IS/IT systems
- Human resource management

In principle the maturing of organizational processes is a good initiative, which is bound to increase an organization's efficiency and profitability. However, one must carefully consider every step in the maturing process, as an increase in the level of maturity might not always be desirable.

This can best be explained by taking 'supplier partnerships' as an example. According to the survey tool a score of 10 in the field 'supplier partnerships' means that there is complete openness between the client and the supplier; processes are fully integrated with each other and future technologies, objectives and strategies are aligned.

However, reaching the highest level of maturity in the field of 'supplier partnerships' would mean that issues like core business, competitive advantage, and secrecy are being depreciated. In the worst case confidential information or even a part of an organization's core business might be given away to another party. The question whether this is actually desired, is probably more important than reaching the highest possible score in a survey tool.

9.6 Conclusion

Philips' objectives and ambitions seem to lead them towards an even more profitable future. Objectives featuring standardization, consolidation, harmonization, reducing of costs and maturing processes, can be found in all layers of the IT landscape.

In an attempt to generalize these objectives and ambitions, one could say that most activities within Philips' IT organization are currently aimed at three different targets:

1. Increasing harmonization throughout the (IT) organization
2. Increasing commonalities throughout the (IT) organization
3. Maturing the (IT) organization.

These targets generally result in organizational and operational changes. The maturing of Philips' IT organization for example, is very much aimed at operational changes. Arguing from an IT purchasing perspective, the maturing involves improvements throughout the procurement process.

On the other hand, the increase of harmonization and commonalities is much more aimed at organizational changes. Improvements and changes resulting from these targets are often involved in organizational optimizations. Philips' aim to move towards a shared service center organization, featuring a high level of outsourcing, is a typical example of organizational optimization.

Throughout the previous chapters it has become clear that the importance of the Corporate IT Purchasing department is increasing, as 'sourcing' should be considered a core competence. This chapter has described Philips' current and preferred situation, and has described Philips' IT strategy and IT Purchasing strategy objectives.

Arguing from the global sourcing strategy framework in chapter 3, these objectives (which have been combined to three general targets) should be incorporated within Philips' global sourcing strategy. They are represented by the blue rectangle "strategic ambitions, objectives, visions, and policies" shown in the framework from chapter 3.

10. Philips global sourcing strategy

Throughout the preceding chapters of this paper several global sourcing strategy related aspects have been introduced, elaborated and explained. Based on the results of the previous chapters, this chapter will provide the answer towards this research's main research question:

What should a global sourcing strategy in the area of IT services contain for Philips?

The creation of Philips' global sourcing strategy will occur on the basis of the difference (delta) between Philips' current situation and Philips' preferred situation. The framework plays a central part in this whole, as it provides a theoretical founded base that can be reflected upon Philips in order to define Philips' current and preferred situation. As a result, the framework offers material for comparison, allowing the creation of an actual global sourcing strategy (the delta between the current and preferred situation). This has been illustrated in figure 28 below.

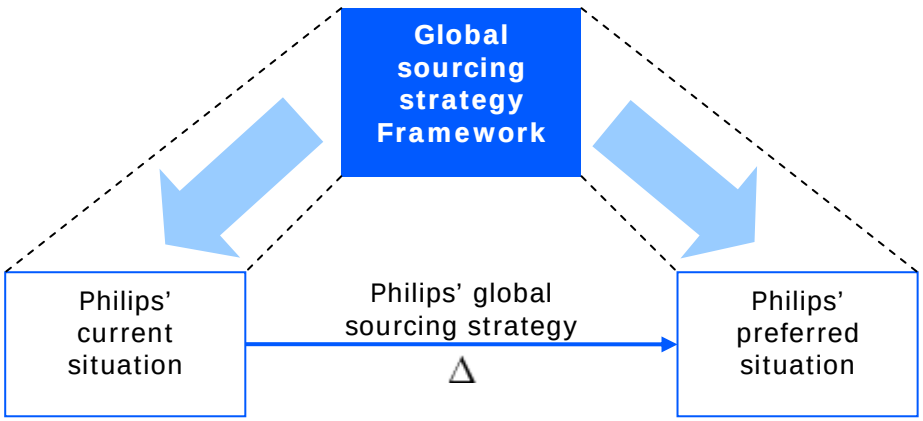

Figure 28: Creation process of Philips' global sourcing strategy

The following paragraph will define the current and preferred situation from the perspective of the global sourcing strategy framework. At the same time the differences between the current and preferred situation will be assessed, resulting into a global sourcing strategy for Philips.

10.1 The current and preferred situation

Philips' situation and strategic objectives have been described in chapter 9. This chapter will reflect these aspects upon the global sourcing strategy framework from chapter 3, in order to define a comparable current and preferred situation.

The defining of a current and preferred situation is limited to the white rectangles represented within the framework. The blue rectangles (on the right) merely represent organizational boundaries and change processes in order to create a global sourcing strategy. Therefore these aspects can and will not be reflected upon Philips' current and preferred situation.

Defining a current and preferred situation will occur on the basis of separate descriptions of every (white) aspect represented within the framework. These descriptions will feature a current situation, a preferred situation, and the delta (difference) between these situations.

Business

Philips' product divisions (the business) are primarily focusing on process and ERP standardization. This is difficult to accomplish as Philips' product divisions feature a strong global perspective and are therefore influenced by global implications.
Furthermore these standardizations/changes at the business side have direct consequences for Philips support functions, which are reflected in their business requirements. For Information Technology, these requirements involve the creation of a plug-and-play shared service center organization.

Current	PD proprietary business processes and ERP systems.
Preferred	Standardized and consolidated business processes on a global basis.
Delta	For the support function IT these changes have resulted in the aim to streamline processes and introduce a shared way of working. A strong focus on standardization.

IT organization

Philips' global sourcing strategy is the direct results of Philips' IT strategy, which is in its turn the result of Philips' business strategy. Philips' IT strategy is aimed at creating a shared way of working. This means an increase of harmonization and commonalities, complicated by a global focus and internal resistance to adopt changes (framework's background).

Current	Fragmentation of IT services throughout Philips' IT organization.
Preferred	With the exception of specific PD IT, all IT should be centralized in the shared service organizations (P-GIS and P-BAS).
Delta	Increase commonalities, increase harmonization, transform to shared service organization.

Service domains

Changes in this area are mainly resulting form changes in the IT organization. As a result of increasing Philips' commonalities and harmonization, service domains will shift and consolidate towards the shared environment. While embedding the service domains in the shared service centers, the focus is on increasing maturity and adopting a global perspective.

Current	Fragmentation of service domains throughout Philips IT. Large focus on maturity of processes.
Preferred	Shared service domains embedded in a global shared service center organization, allowing IT services to be offered in a plug-and-play matter.
Delta	There should be an increase in shared service applications and a decrease in PD specific applications. Resulting from the aim to maximize commonalities, the balance between common and unique will (should) move.

Make / buy

The make or buy decision represented within the framework will not suffer any changes. Philips already featured a strong outsourcing perspective, and that will remain the same. The difference is that with the results of this Master thesis, Philips will have better methods to substantiate their decisions.

Current	strong focus on buying IT services.
Preferred	strong focus on buying IT services.
Delta	no changes required, but better substantiation of decisions possible.

Choose sourcing variant

In contrast to the make or buy decision, the process of choosing a suitable sourcing variant has been improved. Philips did not have a method at its disposal for choosing a sourcing variant on the basis of significant factors. The Baaten-matrix provides Philips with a method to carefully consider which sourcing variant to used.

Current	Lack of a method to determine how to source an IT service.
Preferred	Determine most suitable outsourcing variant on the basis of significant factors.
Delta	Adopt the usage of the Baaten-matrix.

Choose supplier

The process of choosing a supplier has been complicated by a global focus on the supply market. Philips should not only assess suppliers by means of the CMM level, but should also take into consideration the ability of the supplier to integrate processes and whether or not the supplier is able to deliver services on a global scale.

Furthermore the contract variants between Philips and the supplier should be aligned with the chosen sourcing variant in the sourcing variant determination process.

Current	Suppliers are mainly chosen by means of their CMM level. Contract variants not aligned with sourcing variants.
Preferred	Choose suppliers by means of CMM level and the ability of to (a) integrate and (b) provide services on a global scale. Use contract variants that match the relationship's sourcing variant.
Delta	Expand supplier selection process with the criterion to evaluate the supplier's ability to integrate and deliver on a global scale. Align contract variants with the chosen sourcing variant.

Client interaction process

Changes throughout this process are mainly the result of the described global implications earlier in this paper. Philips' ability to deal with foreign suppliers should be improved in order to maintain successful. As global sourcing increases, so does the emphasis on the competence to deal with the global implications.

Current	Focus on maturing the purchasing organization's competences.
Preferred	Continue with a focus on process maturity, but specifically focus on the ability to deal with global implications.
Delta	Increasing the ability to act and interact on a global scale.

10.2 Connecting the dots

This paragraph will evaluate the delta between Philips' current and preferred situation as described in the previous paragraph. Combining this delta with Philips' current strategic objectives (chapter 9) will result in a global sourcing strategy for Philips for IT service.

As shown in figure 29 below, not all aspects represented within the framework require major changes. As you can see the emphasize of Philips' global sourcing strategy, is on changes in the field of IT organization and governance, and changes induced by a global focus,

which is mainly reflected in the client interaction process and the process of supplier choice.

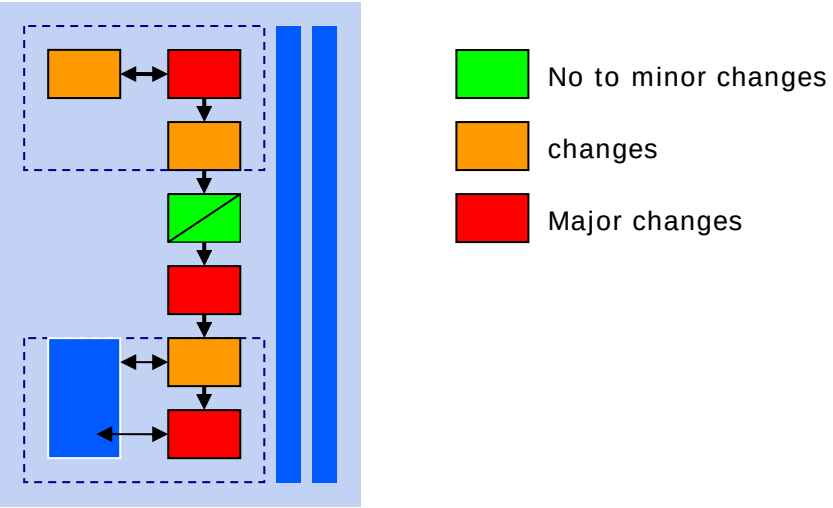

Figure 29: Philips' change intensity

Up until now the implications of a global focus have had relatively small consequences. However, considering the fact that an increasing amount of IT service will move to foreign suppliers in for example India, puts a strong emphasize on Philips' ability to deal with global implications. This is reflected in Philips' BEST assessment method (chapter 9).

Various competences featured within Philips' BEST assessment method, are related to the ability to deal with global implications. Therefore a global sourcing strategy for Philips should include a focus on the maturing of these competences.

Regarding the changes in the IT organization and IT governance, Philips should focus on the increase of harmonization and commonalities. These objectives should enable a smooth transition towards a shared service center organization, featuring a plug-and-play interface for all the product divisions.

The complexity of these objectives is strongly related to the 'willingness' of the product divisions to transfer most IT services towards the shared environment. Especially when arguing from a global perspective it is difficult to reach consensus about the 'line between common and unique' (figure 27).

Defining a 'new' retained IT organization and belonging IT governance model is only possible when the boundaries of the retained IT organization are clear. A first step towards consensus regarding this matter would be to start with the so-called 'quick wins'. This is shown in figure 30 below [*Kinder, 2005*].

This figure represents an overview of Philips' IT landscape, featuring the different layers of the IT stack on the vertical axis and a distinction between several sorts of IT systems on the horizontal axis. If every PD would use this figure to indicate to what extend it is willing to transfer IT services towards the shared environment, the result will be an overview of the IT services that can be centralized and standardized.

Besides a first step towards the shaping of the retained organization this figure also provides a basis for negotiation on further transfer of IT services towards the corporate environment. The purpose is to maximize the commonalities between the PD's, contributing the step Towards One Philips.

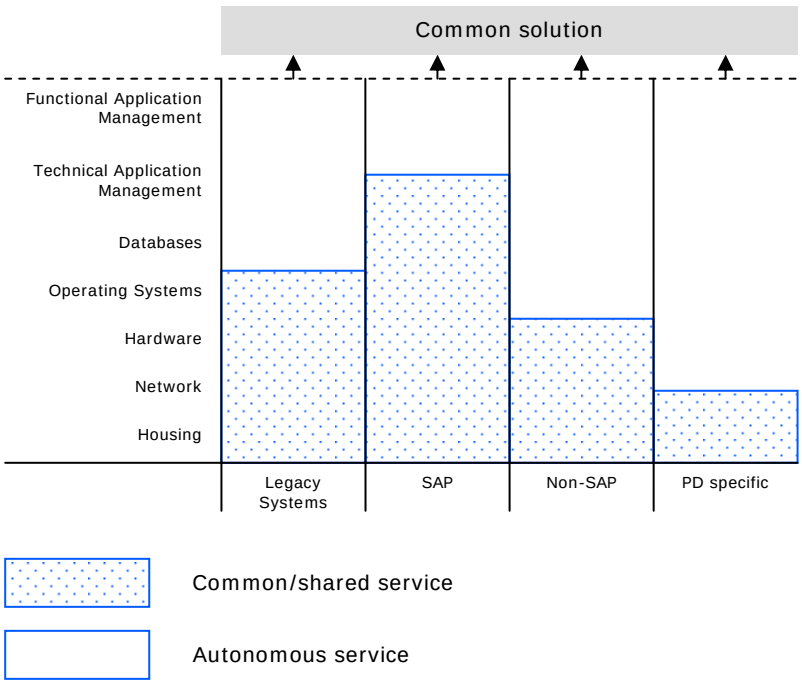

Figure 30: IT stack versus IT systems

10.3 Philips' characteristics

Philips is a rigid organization, where the implementation of changes regularly runs into resistance. Chapter 1 already described where this resistance comes from, while the framework in chapter 3 illustrates the importance of Philips' bureaucracy, politics, and culture by means of the framework's background.

This paragraph will not step into detail regarding these issues, but is merely here to indicate that the management of Philips should take into consideration a certain amount of caution when applying the changes described by this global sourcing strategy. Philips can best be seen as big containership where you do not just turn over the rudder.

Besides the fact that these organizational characteristics should be considered throughout the implementation of changes, it is also very important that Philips' management is focused on improving these obstructing aspects. Cultural changes are difficult, but have an enormous impact on an organization's efficiency.

Exemplary aspects that could 'easy up' decision making and reduce resistance are:

1. Decrease the number of people involved in decision making (polder model).
2. Provide employees carrying responsibility with the necessary authority to act on situations as they occur.

10.4 Conclusion

The global sourcing strategy described in this chapter is a prolongation of Philips' aim to create an efficient IT organization, featuring the proper competences to successfully approach IT from a global sourcing perspective. Global sourcing is not just the next step in the field of supply management, but represents a new vision upon the retained IT organization and its activities.

As shown throughout this chapter, Philips' global sourcing strategy incorporates the following objectives:

- Adopt to the usage of the Baaten-matrix, while at the same trying to place as much IT services as possible in the area of 'out-house sourcing'.
- Improve competences to deal with a changing and versatile global supply markets.
- Adopt changes in the field of IT organization and governance, focused on increasing commonalities and harmonization.
- Move PD service domains to shared service centers being P-BAS and P-GIS.
- Start with the *quick wins* (figure 30) and try to improve cultural characteristics, enabling the decrease of resistance to changes.
- Keep contracts aligned with the appropriate sourcing variants.
- Accept proposed changes regarding the supplier selection process.

Reflecting these objectives upon Philips' IT landscape, shown in figure 23, results in area C overtaking a large part of area B. Similarly these objectives also result in an increase of commonalities (figure 27), and a realization of Philips' 'new' vision upon IT strategy alignment and development (figure 25 and 26).

As you can see, the global sourcing strategy shows strong similarities with Philips' strategic objectives described in chapter 9. The only difference is that the objectives described above are primarily argued from a global IT purchasing perspective.

11. Validation

Arguing from an academic point of view, the findings throughout this thesis need to be validated. Therefore this chapter will answer sub research question 15:

How to validate the authors' findings regarding this research?

When assessing the creation process of Philips' global sourcing strategy and the aspects within this strategy, there are three aspects that can be identified as 'innovative' or 'unique'. These aspects are: (a) the framework described in chapter 3, (b) the Baaten-matrix in chapter 5, and (c) the impact of the global implications upon Philips (amongst other things described in chapter 2).

Idealistically, the best possible validation regarding Philips' global sourcing strategy would be a validation of the strategy itself. Unfortunately this is not possible, as the results of applying a strategy only become visible on the long term. The same goes for the global implications. Validating the global implications would mean comparing Philips' ability to deal with foreign suppliers and markets over a certain period of time. Considering the nature of the changes this is also only possible in the long run.

As a result, the main focus regarding the validation of these thesis' findings, are on the framework and the Baaten-matrix (aspect a and b).

11.1 Framework

The global sourcing strategy framework from chapter 3 describes an, from a theoretical perspective, idealistic global sourcing strategy. It unites outsourcing and related organizational aspects, resulting into a structured approach supporting an organization to think about global sourcing strategy issues. The crucial aspects that should at least be considered when creating a global sourcing strategy are represented within the framework.

The actual validation of the framework has already occurred in chapter 10. Here the framework has been applied to Philips' current and preferred situation, resulting in an actual global sourcing strategy. This is considered to be a validation of the framework's usability.

11.2 Baaten-matrix

The validation of the Baaten-matrix is based on personal assessments by Philips employees, appealing to their knowledge and experience in the field of (IT) purchasing. Besides the members of the Corporate IT Purchasing organization, the Baaten-matrix was discussed with:

- Andreas Schumm (*Philips IT*, Vice President IT Strategy & Innovation Management)
- Erik Goertz (*Philips Semiconductors*, External Foundry Relations)
- Gijs Teeuwen (*Philips IT*, Director Quality & Information Management)
- Harmen Lamme (*Philips Lighting*, Purchasing Manager IT)
- Matti Kinder (*P-GIS NAM*, Director CDC)
- Raymond Althof (*Philips P-BAS*, Program Manager BIF Projects)
- Roel Straetemans (*Philips Semiconductors*, Manager BP&A Technical Infrastructure)

First the model and its purpose were explained and then the employees were asked to perform a critical verbal assessment upon the subject matter. In other words: try to come up with an invalidating example showing the incorrectness of the Baaten-matrix, while at the same time enabling the author to make improvements.

The model appeared to be valid and correct and the author obtained several specific Philips examples, validating the Baaten-matrix. After a presentation of the results to the Corporate IT Purchasing group, it was concluded that the model was useful for Philips.

The examples obtained throughout the assessment process described above, are described in the following paragraphs. Some examples have a somewhat general nature, while others specifically focus on former taken sourcing decisions and improvements.

11.2.1 Helpdesk services

Generally helpdesks are often considered ideal activities to source out-house. Helpdesk services feature a high market maturity and are relatively easy to outsource. At the same time the client organization's often consider the preferred controllability criteria (chapter 4) to be rather low, resulting in a low preferred controllability.

However, at Philips there are also exceptions. Some helpdesk services feature a high preferred controllability or even a low overall market maturity, resulting in a different outsourcing variant as shown in figure 31 below.

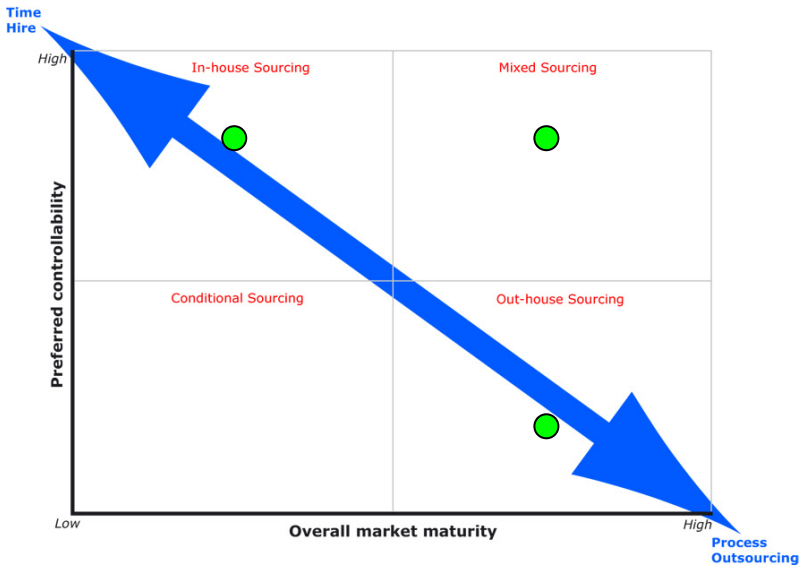

Figure 31: Baaten-matrix: helpdesk services

Considering these different sourcing variant possibilities, helpdesk services are good indicators of the versatility of the Baaten-matrix. Depending on the specific service characteristics services are placed at a specific position within the model.

11.2.2 Hiring of consultant / programmer

The hiring of a consultant or programmer (often referred to as time hire) is generally a good example of a client organization featuring a high involvement in a project or service. As shown in figure 32 below, this

high involvement results in an in-house activity allowing the client organization to maintain a certain amount of control.

At Philips the hiring of an individual featuring a specific skill or expertise is also often related to a high involvement in a project or service. This high involvement often originates from the combination of a low market maturity and a high level of controllability. Time hire enables Philips to focus on the strategic/tactical side of a project or service, while at the same time maintaining a higher level of responsibility of service delivery towards the business.

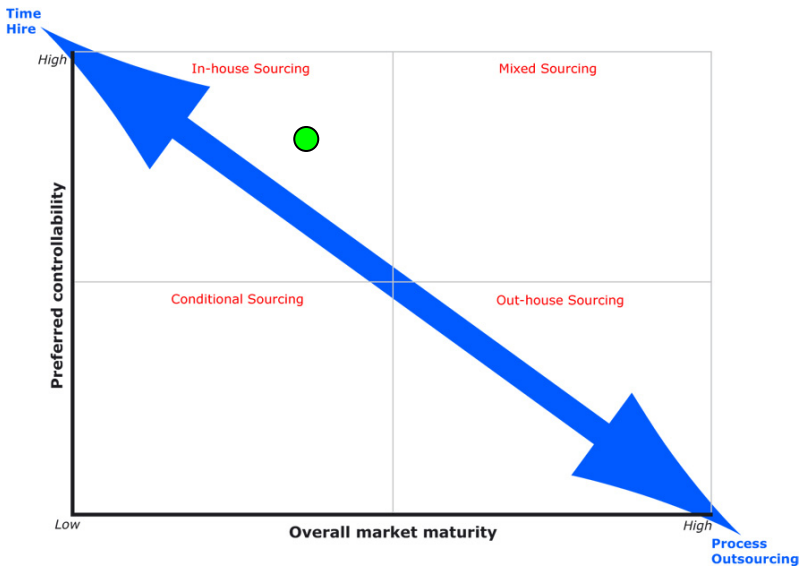

Figure 32: Baaten-matrix: time hire

11.2.3 Philips Global Network

The sourcing history of Philips Global Network is a good example of an organization having difficulties determining the best suitable sourcing variant. As shown in figure 33 below, Philips' global network currently features a mixed-sourcing perspective. However, as indicated by the red circle in figure 33, this has not always been the case.

At a certain point in time Philips considered the network services in the market to be mature, and expected to reduce the costs of the global network by transferring it to a local IT supplier. As a result, the global network was outsourced to a supplier in the Netherlands (red circle figure 33).

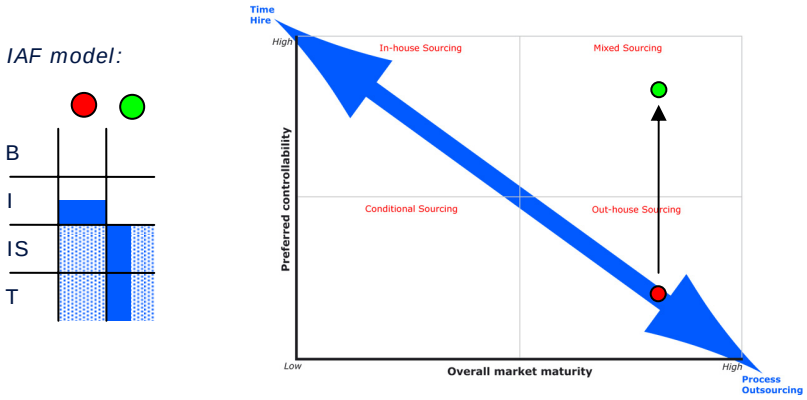

Figure 33: Baaten-matrix: Philips Global Network

This decision resulted in three different observations:

- Philips' ability to interact with supplier became highly emphasized.
- The relationship with the supplier was maintained by none-technical staff (shown by the IAF model in figure 33 above).
- Outsourcing the global network resulted in a lack of flexibility.

Over time Philips experienced a lack of control over the supplier. Not only because the ability to deal with global implications became emphasized, but also because the relationship was maintained by none-technical staff. Together with a decrease in flexibility this eventually resulted in higher cost than before. As a result the global network was taken back in house as a mixed sourcing variant (figure 33).

11.2.4 Oxygen

Another example illustrating the importance of the Baaten-matrix is project Oxygen. At project initiation project Oxygen featured a specific technology (let's say technology A). Technology A services were considered to be mature, which resulted into out-house sourcing to a low cost country.

In a later stage project Oxygen featured a technology change from technology A to technology B. Philips should have evaluated the consequences of this change with respect to the project's sourcing

variant, but it did not. As a result project Oxygen was continued with a strong out-house sourcing focus, while the supplier's 'technology-B-services' were considered immature.

Difficulties arose and the global implications complicated the cooperation between Philips and the supplier. Eventually, communication efforts became to high as either Philips or the supplier appeared to lack the competences to set up a successful partnership. As a result, project Oxygen obtained an in-house focus, which is shown in figure 34 below.

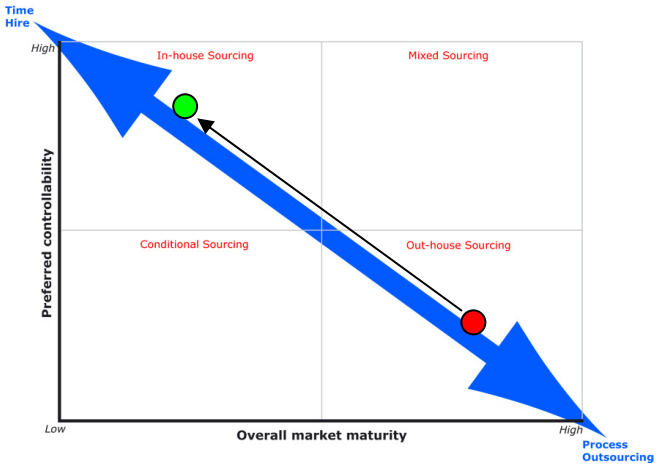

Figure 34: Baaten-matrix: Oxygen

11.3 Conclusion

This chapter has validated the global sourcing strategy framework (chapter 3) and the Baaten-matrix (chapter 5).

The global sourcing strategy framework has been applied to Philips in chapter 10, which is considered to be its validation. Furthermore the Baaten-matrix validation has shown that the Baaten-matrix works for Philips, and decrease the risks of (out)sourcing. It was shown that inaccuracies or mistakes throughout former sourcing decisions could have been prevented while using the Baaten-matrix.

12. Conclusions and recommendations

For an organization like Philips, featuring a strong outsourcing perspective upon its business support functions, global sourcing is becoming increasingly important. This does not only include the ability to actually outsource an IT service to a supplier on a global basis, but also involves the consequences of this perspective upon the structure and boundaries of the retained IT organization. In order to maximize Philips' benefits of outsourcing, changes need to be made.

This chapter will conclude this Master thesis by gathering the answers to the research questions described in chapter 1. Paragraph one will concentrate this research's *sub* research questions, while paragraph two will provide an answer to this research's *main* research question. Furthermore the third paragraph will represents the author's recommendations towards Philips concerning this research, and paragraph four will provide a number of suggestions with respect to future research regarding the subject matter.

12.1 Conclusions sub research questions

What is (out)sourcing?

Sourcing is a process of decision-making, where a company's needs or requirements are constantly reflected upon market- and/or internal supply, while trying to determine the best possible fulfillment of the needs taking into consideration strategic directives and organizational implications.

Outsourcing is the transferring of a service, and if applicable, the employees and means that go with that, to a specialized service supplier, while afterwards receiving a service on the basis of a contractual agreement, in which both parties have amongst other things agreed upon a certain level of quality, a certain period in time, and a financial compensation structure.

What is a strategy?

A *strategy* is plan over a certain period in time that guides an organization within the boundaries of company policies, from a current situation to a preferred situation, setting direction while trying to meet business objectives.

A *sourcing strategy* is a plan over a certain period of time that guides an organization towards achievements in the field of supply management, while taking into consideration organizational policies, existing strategies, and the implications for the retained IT organization.

What is an IT-service?

An *IT service* is a (series of) ongoing activities related to IT of more or less intangible nature, that normally (but not necessarily) take place in interactions between the customer and service provider, featuring a combination of service employees, physical resources/goods, and systems, which are provided as solutions to customer problems.

What is the effect of 'global' upon sourcing?

In order to maximize the benefits of global sourcing, an organization needs to centralize their demand flow as much as possible. Doing this on a global basis is very complex and requires detailed insights into the organization's own processes and activities. On the other hand, global sourcing widens an organization's market orientation, allowing it to benefit from bigger and new markets. The advantages of a global market often involve the ability to achieve advantageous price/quality ratios, and early availability of new technology. However, at the same time, the complexity of the sourcing process increases enormously as differences in culture, habits, and regulations result in new barriers to overcome.

What should a global sourcing strategy (at least) provide/contain?

The best answer to this question is the global sourcing strategy framework described in chapter 3, as the framework is basically the direct result of this sub research question. The framework represents the aspects with which a global sourcing strategy should be involved. This means that a global sourcing strategy should have a strong focus on an organization's outsourcing capabilities, but should also focus on the

shape and boundaries of the retained IT organization. The framework emphasizes the aspects it contains, but also the relationship between these aspects. Therefore focus of global sourcing strategy goes beyond the boundaries of the own IT organization.

What is the relation between global sourcing and an organization's core business?

From a business perspective outsourcing enables an organization to focus on the activities that create value for the customers. This puts a strong emphasis on the sourcing process and validates sourcing in being a core competence, as the make or buy decision becomes increasingly important. Furthermore sourcing appears to be a difficult and complex process, which cannot be taken from merely a business perspective. As a result chapter 4 introduces a number of criteria that can be used to make substantiated sourcing decisions.

How to determine the most suitable outsourcing variant for an IT service?

The most suitable outsourcing variant for an IT service can be determined by means of the Baaten-matrix described in chapter 5. This model uses two variables: (a) an organization's preferred level of controllability over an IT service, and (b) the overall ability of the market to deliver the IT service at a mature level. The association of these variables results in a specific sourcing variant.

How does global sourcing impact an organization's contracting activities?

An organization's contracting activities are important and complex. Global sourcing impacts the shape of the contracts, but also impacts an organization's overall contracting model. The current trend is that the shapes of sourcing contracts are focused on flexibility. Furthermore the overall contracting model changes, because global sourcing involves the move from an autonomous to a common environment. This movement disposes the creation of contracts between business units (product divisions) and suppliers.

How to choose a suitable supplier, when sourcing globally?

Choosing a supplier on a global scale basically involves the assessing of two different supplier characteristics. The first characteristic is related to the supplier's capabilities with respect to technological know how and application of the service it is expected to provide. The second characteristic on the other hand, is related to the supplier's ability/maturity to integrate with the client's environment. This is critical for maximizing the benefits of a relationship/partnership. Notice that a successful integration also depends on the maturity of the client's ability to integrate.

How does a global sourcing strategy impact the organizational structure of an IT department?

Becoming a true outsourcing organization requires considerable changes in the field of IT organization. Terms like consolidation, standardization, and centralization indicate changes in the shape of an IT organization and are often induced by outsourcing. They key is maximize outsourcing by finding the ultimate border between the retained IT organization (self-control) and the IT suppliers (outsourcing), without increasing the risk of outsourcing. As a result technology staff will be reduced to a minimum.

In which way is a global sourcing strategy related to IT governance?

Separating demand and supply (sourcing), or moving from an autonomous towards a common environment, has not only an impact upon the shape of an IT organization, but also impacts the way the retaining IT activities should function. The 'new' separated and common environment leaves no to little room for supplier relationships at the level of business units or lower. As a result a centralized IT governance model arises, which explains the connection between a global sourcing strategy and IT governance. Maintaining or introducing a centralized IT governance model can stumble upon a lot of resistance, but research by Giarte has shown that global sourcing strategies benefit from a solid IT governance structure. So efforts in this field will be rewarded.

What is the relation between global sourcing and shared service centers?

As mentioned before global sourcing is often involved in centralizing and standardizing IT services. Demand gets separated from supply and the autonomous IT environment is slowly being replaced by a common IT environment. Within this context a shared service center can best be seen as an organizational structure aimed at increasing an organization's efficiency by functioning as an intermediary (governor) between an organization's demand and internal/external supply. This often involves a centralized governance model, but other governance models are also possible.

Eventually, when there is no internal supply anymore, the usage of shared service centers could be depreciated. However, until that time shared service centers provide proven advantages to global sourcing in the fields of: outsourcing control, standardization, and flexibility.

What is Philips' current and preferred situation with respect to sourcing?

Traditionally Philips IT had an autonomous nature that was characterized by a strong silo structure, where the different businesses (product divisions) were empowered to make their own decisions and set up their own proprietary IT solutions. From an IT sourcing perspective this resulted into a multisourced environment allowing duplicate and/or conflicting IT sourcing activities.

Eventually this fragmentation of IT services throughout the organization turned out to be rather inefficient, and Philips started to move towards a more common environment by increasing the degree of commonality throughout Philips IT; an ambition that became known as the 'TOP' program.

On 1 January 2005, this resulted in the introduction of the shared service center P-BAS and the renaming of the existing 'GSU shared services' into P-GIS. Supported by a global sourcing strategy, these shared service centers are basically aimed at: (a) increase of harmonization, (b) increase of commonality, and (c) maturity of the organization.

With which existing strategies should a global sourcing strategy be aligned?

From the perspective of organizational strategies, a global sourcing strategy can best be seen as an addition of an organization's IT strategy and IT purchasing strategy. As a global sourcing strategy focuses on the area of IT purchasing, it should be mostly aligned with the IT purchasing strategy. However, due to its broad nature a global sourcing strategy is also connected to an organization's IT- and business strategy.

How to validate the authors' findings regarding this research?

As explained in chapter 11, the validations of the author's findings in this Master thesis are on the global sourcing strategy framework from chapter 3, and on the Baaten-matrix from chapter 5.
The validation of the global sourcing strategy framework is based on the application of this framework to Philips current and preferred situation (described in chapter 10). The validation of the Baaten-matrix is based on personal assessments by Philips employees, appealing to their knowledge and experience in the field of (IT) purchasing.

12.2 Conclusion main research question

What should a global sourcing strategy in the area of IT services contain for Philips?

Philips' global sourcing strategy for IT services incorporates the following objectives:

- Adopt to the usage of the Baaten-matrix, while at the same trying to place as much IT services as possible in the area of 'out-house sourcing'.
- Improve competences to deal with a changing and versatile global supply market.
- Adopt changes in the field of IT organization and governance, focused on increasing commonalities and harmonization.
- Move PD service domains to shared service centers being P-BAS and P-GIS.
- Start with the 'quick wins' and try to improve cultural characteristics, enabling the decrease of resistance to changes.

- Keep contracts aligned with the appropriate sourcing variants.
- Accept proposed changes regarding the supplier selection process.

For a more detailed description of Philips' global sourcing strategy for IT services please see chapter 10.

12.3 Recommendations

The aspects and changes described throughout this thesis are intended to give Philips IT a positive impulse in reaching its ultimate goal: 'become a true global sourcing organization, maximizing the benefits of outsourcing and with that the business value of IT'.

Therefore the author recommends Philips to actively pursue the global sourcing strategy objectives described in chapter 10.4. The realization and argumentation of these objectives are described throughout this entire thesis.

Besides the concrete global sourcing strategy objectives, this thesis should also lead to insights regarding necessary future changes aimed at reaching Philips' ultimate goal. As described throughout this thesis, moving forward is generally difficult and slow for rigid organizations as Philips. Changes stumble upon a lot of resistance, restricting Philips from moving forward at a 'high' speed. Nevertheless, the only way to maximize the benefits of global sourcing is by moving forward in the direction described by this Master thesis.

12.4 Future research

Based on the results of this research project, the author recommends continuing to study the subject matter. This will keep Philips up to date and enable Philips to respond to changes in an early stage.

Philips' global sourcing strategy for IT services described in this paper is primarily located in the strategic/tactical field (figure 35) of Philips' organization.

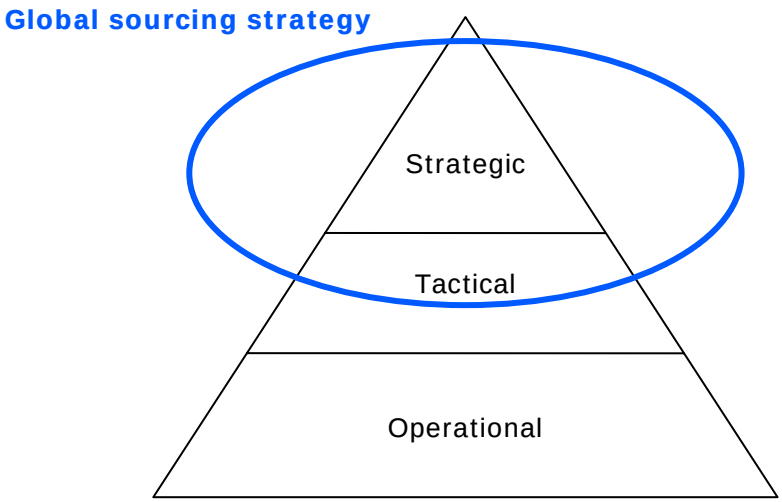

Figure 35: Global sourcing strategy – strategic / tactical focus

Taking into consideration the focus of this paper on the strategic/tactical part, while at the same time assessing Philips' overall impression, the author recommends to continue the 'line' of this study.

- Continue this research project by developing toolsets that argues from the perspective of this paper, but focus on questions related to the tactical/operational field of global sourcing.
- Investigate the impact of cultural changes upon (out)sourcing.
- Provide further evidence regarding the statements that lack a detailed investigation due to limitations in time and scope.

Epilogue

Due to the fact that I like to give credit where credit is due, I would like to seize this opportunity to personally thank a number of people, which I have not been able to thank in the preceding pages of this thesis. I am very grateful for the help and support of the following people (in alphabetically order by last name):

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Owen, Colin
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Veenhof, Carla
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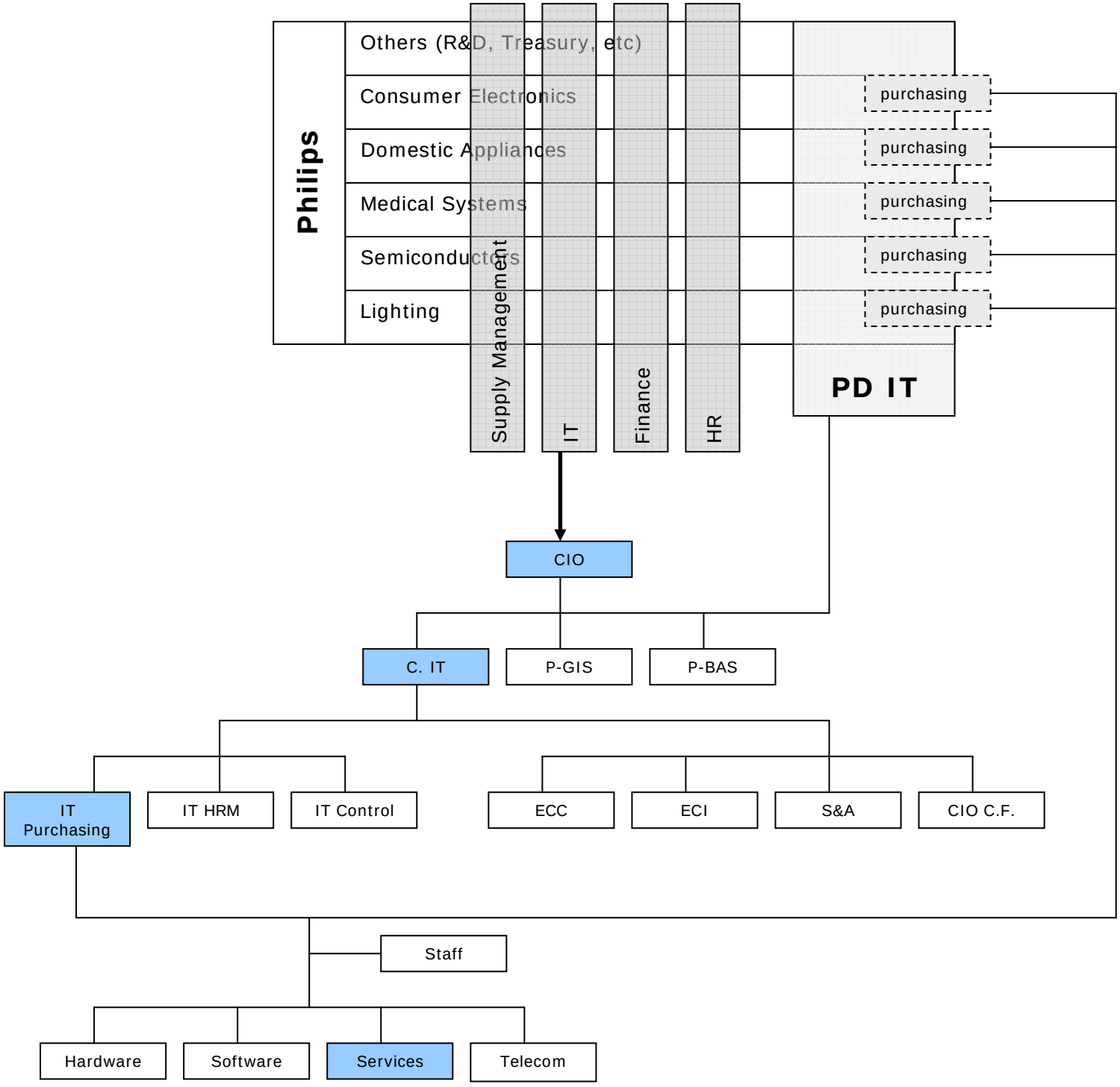
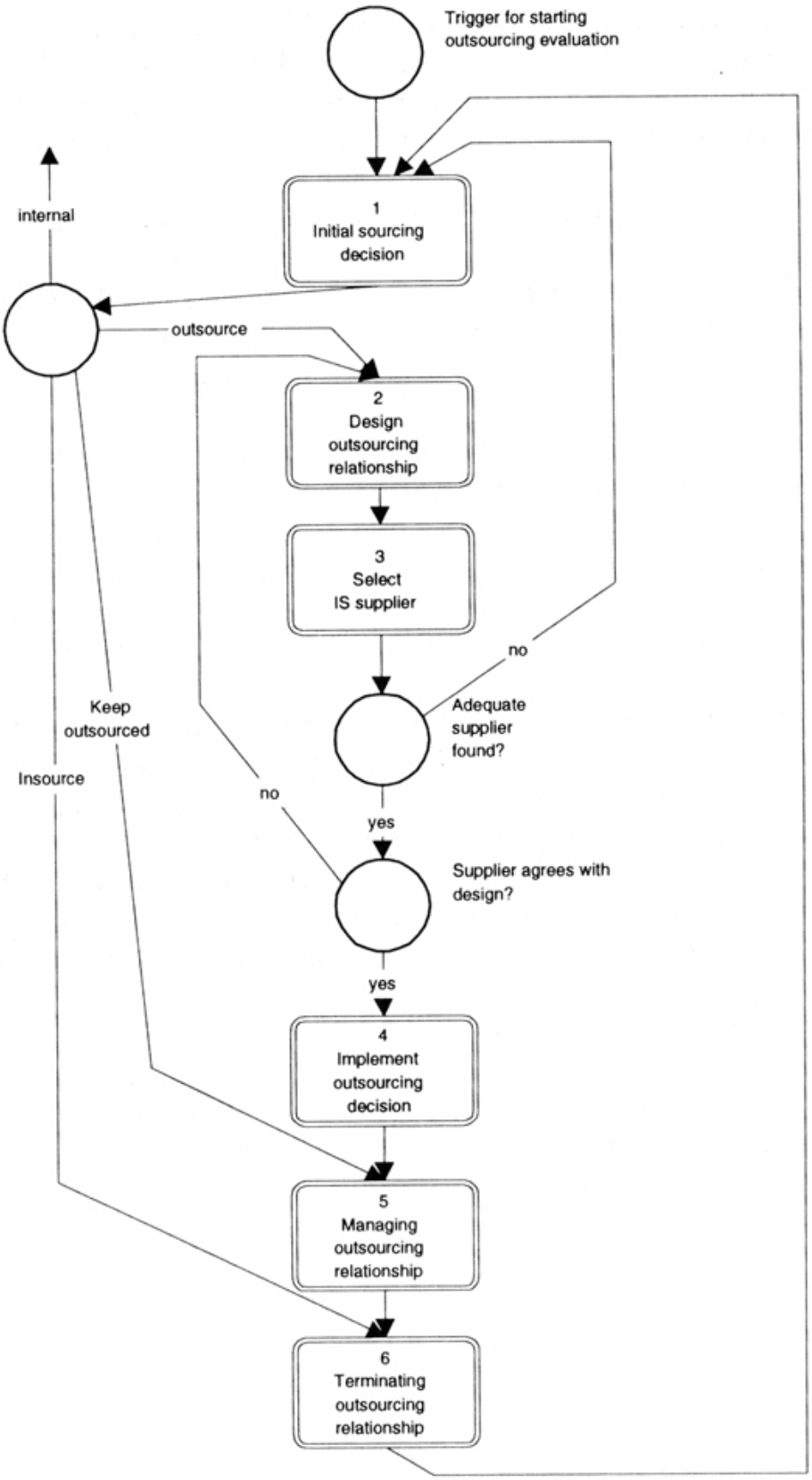
Appendices

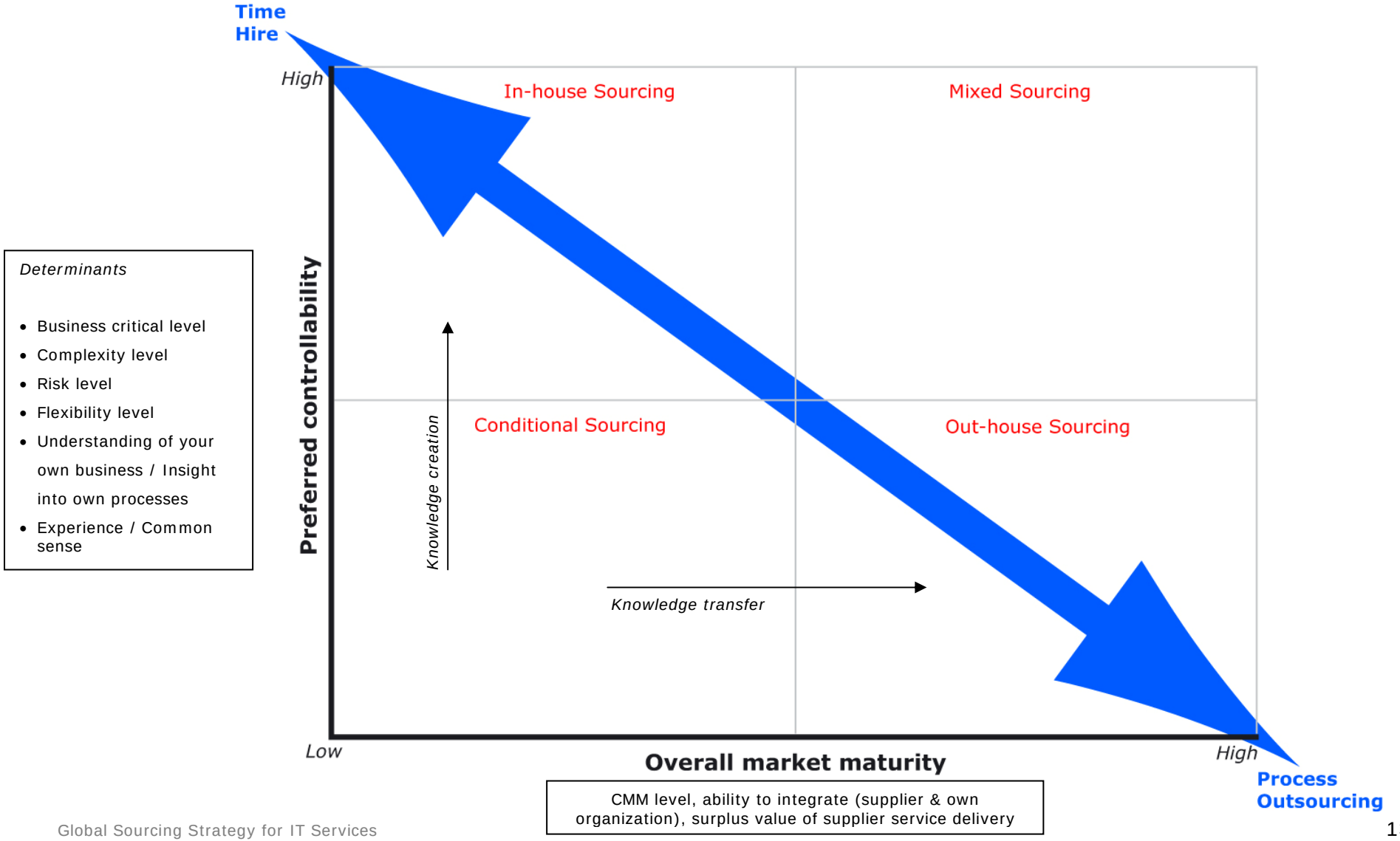
Appendix A – Organizational structure



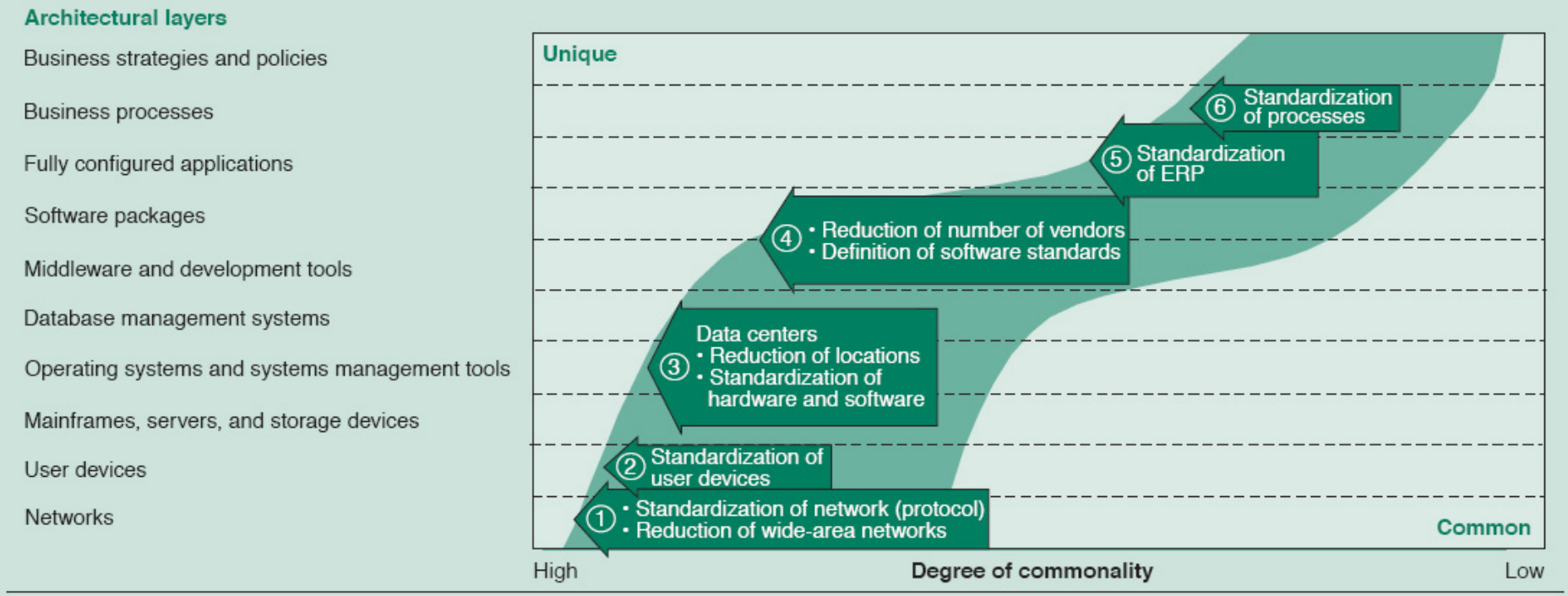
Appendix B – IS outsourcing decision making



Appendix C – Baaten-matrix

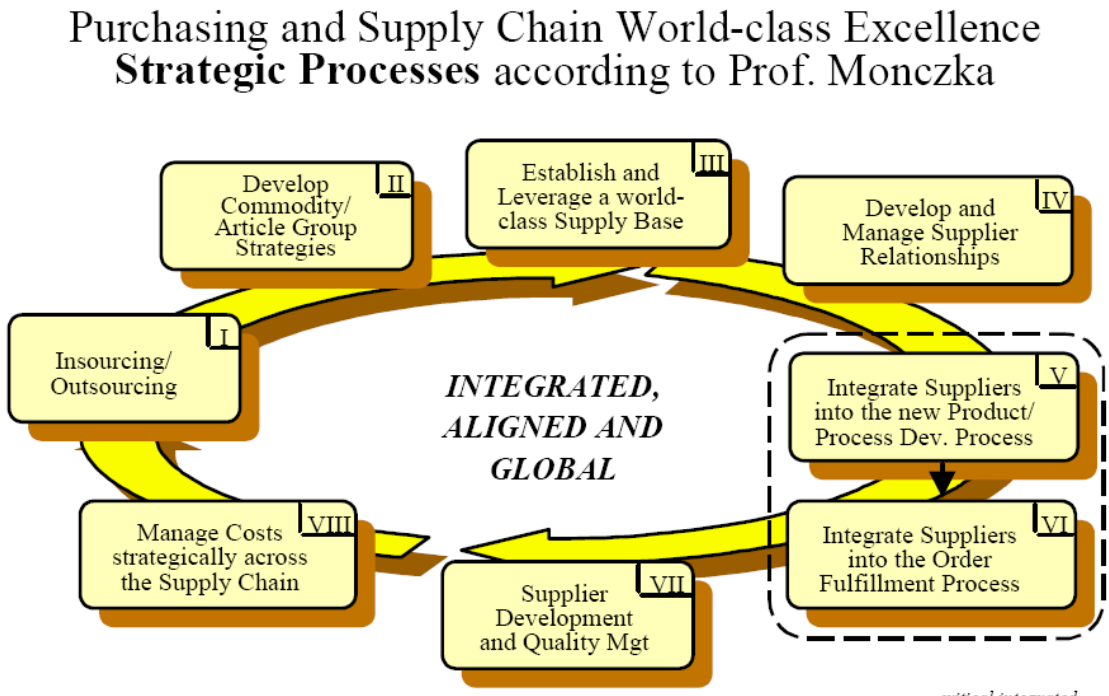


Appendix D – Frontier of commonalities

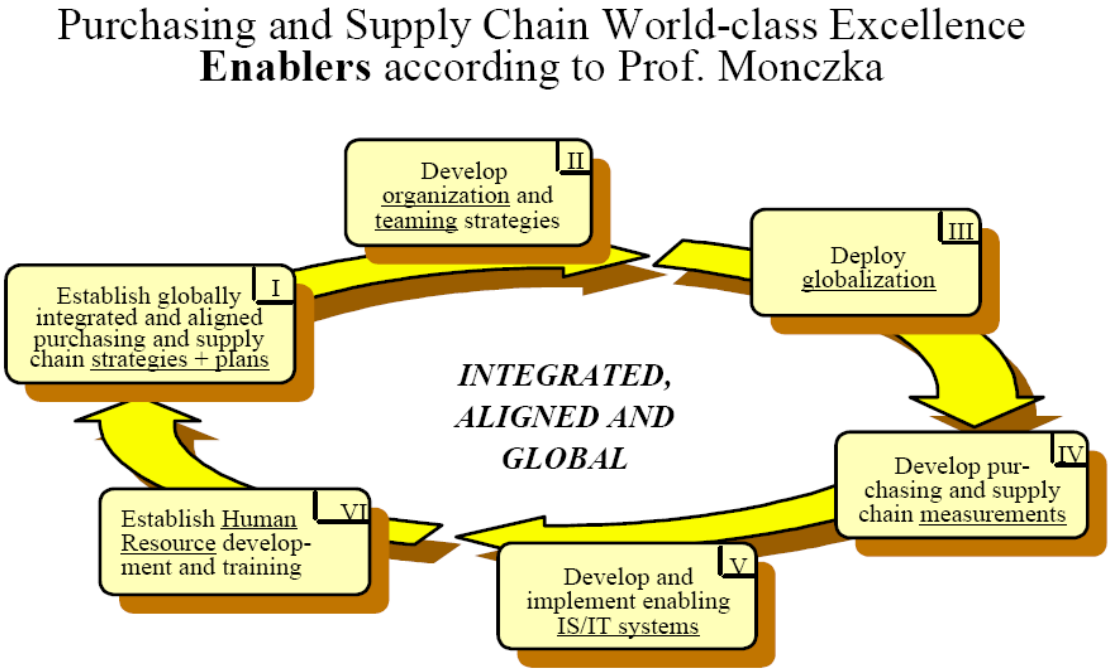


SOURCE: BCG analysis.

Appendix E – Monczka assessment criteria



Source: R.M. Monczka, Ph.D.



Source: R.M. Monczka, Ph.D.