

## MASTER

### Outsourcing

what do we know? Where are we going?

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# **OUTSOURCING – WHAT DO WE KNOW? WHERE ARE WE GOING?**



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**MASTER'S THESIS**

TBM

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# **OUTSOURCING – WHAT DO WE KNOW? WHERE ARE WE GOING?**

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**PREFACE**

In front of you lies the final report of the results of my research project at the Eindhoven University of Technology. The project concerned a research assignment and aimed to improve the knowledge of the outsourcing phenomenon and address opportunities for future research. The research, conducted from April 2006 to April 2007 marks the completion of my Master's program in Industrial Engineering and Management Science at the Eindhoven University of Technology.

Although this report reflects the climax of my research, I could not have achieved this without the wisdom, cooperation and support of a lot of people. I would like to take this opportunity to thank them for their support.

First I would like to thank my supervisors at the Eindhoven University of Technology, Dr Ir A. Lindgreen and Dr M.D.J. Antioco for their valuable contributions to my research. Their insights and ideas during our meetings were invaluable to the progress of my research. They critically commented my progress reports and provided a refreshing different perspective on the subject. Without this I would not have been able to complete this research.

Secondly, I would like to thank everybody else who helped me with providing valuable input, listening to my proposals, giving feedback, reviewing this document, et cetera. Special thanks go to my former colleagues at DAF Trucks N.V. and present colleagues at ASML Netherlands B.V.

My greatest thanks, however, go to my family and friends who supported me in the past years of my part-time study in many, many ways. Especially their sense of putting things in perspective is much appreciated. Thanks!

Patrick Strijbosch  
Someren, April 2007

**ABSTRACT**

The research assignment elaborated on in this report, concerns a research within the Faculty of Technology Management, department of Organisation Science and Marketing at the Eindhoven University of Technology, studying the outsourcing phenomenon by analysing current literature with the aim to improve the knowledge of the phenomenon and address opportunities for future research. The literature analysis increased the knowledge with respect to the outsourcing phenomenon and showed several gaps in current research leading to interesting avenues for future research.

## EXECUTIVE SUMMARY

The underlying report concerns a research study within Faculty of Technology Management, department of Organisation Science and Marketing at the Eindhoven University of Technology. The subject of the research study concerns the outsourcing phenomenon.

### Problem framing

Outsourcing has grown in significance and size and has become an increasingly popular method for firms to organise their production in order to achieve competitiveness. Organisations are consequently forced to look for new sources of competitive advantages. In order to do so, organisations for instance:

- need to focus on those things that they do better than their competitors,
- need to gain access to world-class (manufacturing) capabilities to benefit from economies-of-scale, and
- need to beat competitors' time-to-market.

The outsourcing concept is still surrounded by indistinctness within the academic world, leading to the following problem statement:

*Although outsourcing was one of the major trends in the 1990s and remains an important topic, the concept is still surrounded by indistinctness.*

This problem statement leads to the subsequent research assignment:

*Study the outsourcing phenomenon and analyse current literature on outsourcing.*

The objective of the assignment is to:

*Improve the knowledge of the outsourcing phenomenon within the Faculty of Technology Management, department of Organisation Science and Marketing at the Eindhoven University of Technology and provide avenues for future research.*

### Methodology

Based on the Regulative Cycle of Van Aken, Berends and Van Der Bij (Aken, Berends and Van Der Bij, 2002), the problem has been selected distilling it from the causal tree.

Following the selection of the problem, a research model and research plan have been developed leading to six relevant research questions, viz. "What is outsourcing?", "What are the benefits of outsourcing?", "What are the risks of outsourcing?", "What are the determinants of success in outsourcing decisions?", "What does the outsourcing process look like?" and "What and how is current literature on outsourcing doing?". To be able to answer these research questions, one method has been deployed; literature review.

First, the literature review serves as a theoretical discussion dealing with various aspects of the outsourcing concept. Theory of different fields of research is explored, i.e. different theoretical points of view are explored. The literature review first of all aims at theoretically answering basically the first five research questions based on prior research.

In the process of selecting appropriate (scientific) literature, papers and journals have among other things been verified for relevance (does the literature address the concept of outsourcing?), verifiability (is one able to replicate the research?), reliability (does research replication using different but desired measurement tools, respondents, researchers or situations, but with same expected results than in current research, lead to the same results?) and validity (have multiple theoretical points of view been used?).

The second objective of the literature review is to analyse current and recent outsourcing literature to try to answer the sixth research question. The intention of the literature review is to be able to pin-point the main gaps in current research and identify avenues for future research related to the outsourcing phenomenon leading to a framework giving future direction to research efforts within the Faculty of Technology Management, department of Organisation Science and Marketing at the Eindhoven University of Technology. In order to be able to, two popular databases for academic literature research have primarily been searched (Emerald and Science Direct) using the search key word "outsourcing" focusing on articles published in journals and belonging to the subsequent subject areas:

- Business,
- Management & Accounting,
- Decision Sciences,
- Economics,
- Econometrics & Finance, and
- Engineering.

Only those articles published in journals that are considered to enjoy high prestige are retained in the final sample and are successively examined for:

- the research topic,
- the research scope(s),
- the research methodology,
- the key findings,
- the research limitations, and
- the proposed avenues for future research.

After identifying topics, scopes, methodologies, key findings, limitations and proposed avenues for future research, classifications are made implying that the findings are grouped in categories.

### **Findings and conclusions**

The concept of outsourcing is not clearly or uniformly defined and is frequently compared to terms such as contracting (out) and off-shoring. However, outsourcing, contracting (out) and off-shoring do technically differ and can therefore not be used interchangeably. An all-comprising definition of the outsourcing concept has been developed and reads:

*"Outsourcing is the practice of transferring the planning, management and operation, as set forth in a contract, of a recurring organisational function to a competent third party in which the outsourcing organisation has no direct ownership and over which it has no direct authority or control"*

Reasons to embark upon the outsourcing adventure is reducing short-term direct or indirect costs, improved access to new technologies and skills, a clear company focus and perceived flexibility in the outsourcing relationship. Every reason to outsource should be put in the light of an organisation's context and scope.

A clear and unambiguous view of company goals and objectives is a fundamental determinant for outsourcing success. Selecting the "right" provider, open communication and the understanding that outsourcing entails a long-term relationship between outsourcing

organisation and provider with a high degree of high-risk sharing, building of and management of relationships are crucial to outsourcing success. As the outsourcing phenomenon further matures and more research is conducted, identified success factors will become more and more abundant. By focusing on outsourcing successes and failures, new determinants for outsourcing success will be identified.

Literature on outsourcing is still increasing suggesting that the outsourcing phenomenon is still of interest to the academic world and that the phenomenon itself apparently is here to stay.

The most frequently category of topics discussed in current research is the one that views the phenomenon from the perspective of the outsourcing organisation.

Proposed avenues for future research particularly focus on performance measures & effects. Unremitting attention from both the scientific and industrial world for facts and figures that either prove or negate the supposed benefit(s) of outsourcing is considered to be the reason. It enjoyed sufficient attention in the past and it continues to enjoy significant attention in the future. Based on these findings it is concluded that this particular topic can not be considered in outsourcing research.

Outsourcing from the perspective of the relationship has not been strongly represented in previous research. Organisations embarking upon the outsourcing adventure enter into a (long-term) relationship and therefore need to build and manage this relationship to maximise the chance of success. However, the building and management of (long-term) viable relationships is hardly addressed in future research. Future research does also not address outsourcing success factors. Concluding, two significant gaps in future research are designated; success factors and outsourcing relationships. The latter gap has been divided into relationship determination, relationship building and relationship management.

Recent research addresses the "how" of outsourcing little and it is not addressed in future research as well. Proper project execution & transfer is determining for the effort to be put in relationship management. When an organisation fails to implement a change process or fails to transfer applicable knowledge for instance, managing the relationship will be challenging and chances on outsourcing success will decrease. Project execution & transfer is herewith another gap in future research.

Topics related to the contract negotiation and contract termination outsourcing process steps also lack attention in future research. However, these topics could logically be incorporated or at least affect each other.



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## INTRODUCTION

Over the last decade, outsourcing has grown in significance and size and has become an increasingly popular method for firms to organise their production in order to achieve competitiveness (Shy and Stenbacka, 2003). It has for instance become increasingly important to the U.S. economy for its production efficiency and for economic reasons (Lau and Hurley, 1997). Historically, companies attempted to diversify and achieve competitiveness by acquiring activities vertically in the value chain. For instance, virtually all required parts were manufactured "in-house". Manufacturers believed that by maintaining control of the entire production process, they would also reap the benefits of higher reliability of supply and economies of scale (Lau and Hurley, 1997). This contributes to competitiveness. However, it turned out the other way. An external source, often a specialist, can perform the activities at lower costs and thus supply a component with lower unit cost. As a response to vertically integrating, being on one end of the outsourcing continuum, the outsourcing concept emerged.

The outsourcing concept is still surrounded by indistinctness within the academic world. The assignment then is to study the outsourcing phenomenon and analyse current literature on outsourcing with the aim to enhance the knowledge of the outsourcing phenomenon within the Faculty of Technology Management, department of Organisation Science and Marketing at the Eindhoven University of Technology.

The research methodology follows the Regulative Cycle by Van Aken, Berends and Van Der Bij (Aken, Berends and van der Bij, 2002) up to and including the second step: Analysis and Diagnosis.

This report is organised as follows. Chapter 1 elaborates on the problem statement. It starts with the initial problem formulated after interviewing both supervisors. From the initial problem statement key elements are then identified from where six relevant research questions are formulated in Chapter 2, viz. "*What is outsourcing?*", "*What are the benefits of outsourcing?*", "*What are the risks of outsourcing?*", "*What are the determinants of success in outsourcing decisions?*", "*What does the outsourcing process look like?*" and "*What and how is current literature on outsourcing doing?*". Chapter 3 then answers the first five research questions. Drawing upon a literature review the drivers behind the outsourcing decision, the perceived benefits and risks of outsourcing and the key success factors of outsourcing are discussed. Chapter 4, examines the sixth and last research question: "*What and how is current literature on outsourcing doing?*". It describes the intention of the literature review conducted, pin-points the main gaps in current research and identifies avenues for future research related to the outsourcing phenomenon which leads to a framework giving future direction to research efforts within the Faculty of Technology Management, department of Organisation Science and Marketing at the Eindhoven University of Technology. Chapter 5 summarises research project in terms of conclusions drawn, research limitations and avenues for further research. Finally, Chapter 6 reflects on the research assignment conducted.

## 1 DEFINING THE PROBLEM

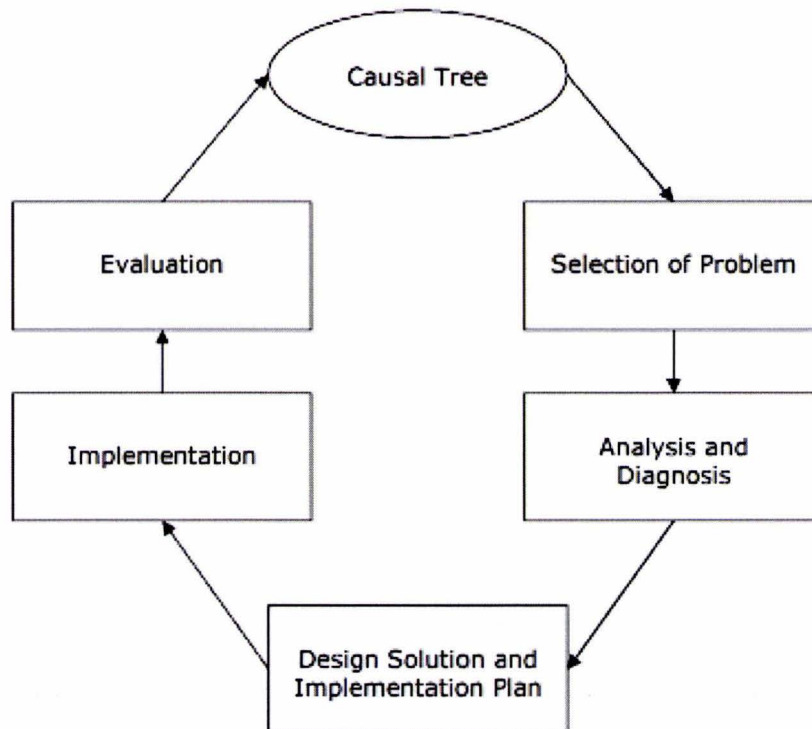
This section discusses the development of the problem definition where the Regulative Cycle of Van Aken, Berends and Van Der Bij (Aken, Berends and Van Der Bij, 2002) serves as a foothold.

The first phase in the Regulative Cycle which is considered in this section, deals with selecting the problem which is distilled from the causal tree. This causal tree is achieved by executing an orientating interview with Dr Ir A. Lindgreen and Dr M.D.J. Antioco, both employed at the department of Organisation Science and Marketing at the Eindhoven University of Technology. This causal tree leading to the problem statement is discussed in subsection 1.1.

From the problem statement the research assignment and research objective are distilled and presented in subsection 1.2 and 1.3 respectively.

Applying the first phase of the Regulative Cycle leads to a research model and plan according which the research assignment will be executed.

The Regulative Cycle is depicted in Figure 1-1.



**Figure 1-1: Regulative Cycle (Aken, Berends and Van Der Bij, 2002)**

### 1.1 Problem statement

To ameliorate their competitive position, organisations turned and are increasingly turning to a phenomenon called outsourcing. This outsourcing phenomenon has grown in significance and size over the last fifteen years. Were organisations striving for vertical integration to reduce costs and gain process control among other things, those same organisations now are reverting to vertical disintegration again. It goes without saying that outsourcing activities accordingly increase.

Is vertical disintegration one reason that outsourcing activities increase, another one is the intensifying competition in the (global) market place and a drive to become market oriented. To be competitive and create the opportunity for long-term prosperity, organisations need to meet ever changing customer requirements. In order to meet these changing customer requirements, organisations are forced to look for new sources of competitive advantages. In order to do so organisations for instance:

- need to focus on those things that they do better than their competitors,
- need to gain access to world-class (manufacturing) capabilities to benefit from economies-of-scale, and
- need to beat competitors' time-to-market.

Outsourcing then, can be one method for an organisation to turn to in order to fulfil these "needs" and thus enhance their competitiveness.

Reasons why organisations outsource are company-specific and plentiful. More generically speaking, reasons why organisations outsource often appear to be related to the disadvantages of a so-called "make" strategy. The "make" strategy is the opposite of following an outsourcing strategy. It implies that an organisation has decided to execute certain activities in-house rather than obtaining these activities from an external provider.

These disadvantages of executing a certain activity in-house often appear to have themselves translated to underlying reasons such as:

- financial problems,
- cost efficiency and
- company focus.

Given these seeming powerful underlying outsource drivers, in many cases it appears that organisations that outsource certain activities are disappointed with the outcome. In other words, expected benefits, both quantitative and qualitative were higher than factual benefits. The outsourcing relation then is often destined to fail. Reasons put forward regarding to outsourcing failure are ill preparation and lacunae and underestimation of significance in building and managing outsourcing relationships. In result, the consequence of a disappointing outcome concerning outsourcing may lead to loss of competitive advantage, in the widest sense of the word.

Ill preparation of an outsourcing decision manifests oneself for instance through:

- taking cost reduction into consideration only,
- ignoring implications of outsourcing on business strategy, and
- lack of formal outsourcing process.

It goes without saying that a direct consequence of outsourcing is that organisations become (globally) interconnected in a web-like fashion. After all, outsourcing implies that an organisation prefers to have certain activities obtained from an external provider instead of executing them in-house. Given these often extensive networks between organisations operating globally, it is obvious that the building of (inter-organisational) relationships but also the management of these relationships play a crucial role in the outsourcing success. Cultural background, work attitude and personality are just a few elements that shape a relation. Looking a bit deeper into relationships concerning outsourcing, loss of competitive advantage may be incurred for instance because:

- (critical) information is shared with the "wrong" outsourcing partner,
- price premiums are charged throughout the outsourcing relation,
- discrepancy in expected performance, and
- shifts in balance during the outsourcing contract occur.

Even when an outsourcing decision is thought through well, relationships are properly built and managed, some outsourcing decisions will fail anyway. The ever-changing and in some cases rapidly changing business environment, is thought to be culpable.

Although the concept of outsourcing is not new, it is still surrounded by indistinctness within the academic world. This leads to the following problem statement:

*Although outsourcing was one of the major trends in the 1990s and remains an important topic, the concept is still surrounded by indistinctness.*

## **1.2 Research assignment**

Given the description of the problem in Section 1.1, the dominant problem selected being lack of directional information and taking into consideration relevance of the problem, feasibility, research-ability and expertise of supervisors the following research assignment is formulated in consultation with Dr Ir A. Lindgreen and Dr M.D.J. Antioco:

*Study the outsourcing phenomenon and analyse current literature on outsourcing.*

## **1.3 Research objective**

From the orientating interview and agreed research assignment postulated in the previous subsection, the research objective is derived. The research objective derived is formulated as follows:

*Improve the knowledge of the outsourcing phenomenon within the Faculty of Technology Management, department of Organisation Science and Marketing at the Eindhoven University of Technology and provide avenues for future research.*

## 2 RESEARCH APPROACH

Following the selection of the problem, a research model and research plan have been developed, necessary to enter the second phase of the Regulative Cycle; Analysis and Diagnosis (Aken, Berends and Van Der Bij, 2002).

This section subsequently discusses the research questions formulated in order to aid in successfully executing the research assignment, the research model, the research plan and finally the used research techniques and methods.

### 2.1 Research questions

From the initial assignment, two elements are identified as key elements for the initial research; the outsourcing concept and unfamiliarity with the phenomenon itself. The research questions defined in this subsection serve as a foothold for the second phase of the Regulative Cycle; Analysis and Diagnosis.

Over the last decade, outsourcing has grown in significance and size. It has for instance become increasingly important to the U.S. economy for its production efficiency and for economic reasons (Lau and Hurley, 1997). Furthermore, outsourcing has become an increasingly popular method for firms to organise their production in order to achieve competitiveness (Shy and Stenbacka, 2003). Did outsourcing in the beginning mainly concern simple activities, it has progressed to include many "higher order" functions such as finance functions, product development and design. Jennings supports this by stating that the potential for using outside supply has moved from those activities that are normally regarded as of peripheral concern to a business, such as cleaning, catering and security, to include critical areas of activities such as design, manufacture, marketing, distribution and information systems with almost the entire value chain open to the use of outside supply (Jennings, 1997). Given this, it is concluded that virtually any (business) function could be outsourced.

While outsourcing has been growing in size and significance, it appears that the concept is not clearly or uniformly defined. Several definitions exist in literature; one simpler and less detailed than the other, one with a narrower scope than the other. Besides, related terms such as "off-shoring" and "contracting out" are used interchangeably but do technically differ. Given this ambiguity surrounding the outsourcing concept, the first research question can be defined:

*What is outsourcing?*

Further elaborating on the question what exactly the outsourcing phenomenon comprises in terms of definition, the question rises what the arguments are both for and against outsourcing. The potential risks and benefits of outsourcing indicate that there is a need for better understanding of this phenomenon. Consequently, two more research questions related to the "why?" and "why not?" of outsourcing can be defined:

*What are the benefits of outsourcing?*

*What are the risks of outsourcing?*

Drawing on Shy and Stenbacka, outsourcing is a method for firms to achieve competitiveness. In the short run, a company's competitiveness derives directly from the price/performance attributes of current products (Pralahad and Hamel, 1990). Long run competitiveness however was initially not the focus of organisations to outsource; short run competitiveness by cutting costs was (Quinn and Hilmer, 1994; Brandes, Lilliecreutz and Brege, 1997; Jennings, 1997; Embleton and Wright, 1998; McIvor, 2000; Ehie, 2001). Cost-cutting to achieve short run competitiveness thus is argued to be a tactical decision.

Despite the tactical decision on which outsourcing initially was based, research by Lonsdale and Cox (Lonsdale and Cox, 1997) reveals that outsourcing decisions should be taken within a broader perspective than cost-cutting criteria solely. Hence, outsourcing decisions should be taken within a more strategic perspective to achieve long run competitiveness. Strategy after all, is a way of responding to changes in the business environment. A fact is that business environments do change e.g. as a result of changing customer needs and technological changes. So, in order to be competitive, but more important remain competitive, a company should adapt to this changing business environment and anticipate on the changing customer needs and technological changes.

Looking at a definition of long run competitiveness, Pralahad and Hamel argue that this derives from an ability to build, at lower cost and more speedily than competitors, the core competencies that spawn unanticipated products (Pralahad and Hamel, 1990). Core competencies subsequently, are defined as the "collective learning" in the organisation and are built through a continuous improvement process that spans a long period of time. McIvor states that competencies are the skills, knowledge and technologies that an organisation possesses on which its success depends and core competencies underpin the ability of the organisation to outperform the competition and therefore must therefore be defended and nurtured (McIvor, 2000).

Particular competencies can be build by a company by concentrating on its core areas of business. Outsourcing helps in this by shortening the cycle time to build that particular competency so that the company is able to develop its core competence to provide formidable barriers against present and future new entrants, while gaining superior market position, transforming its workforce, and reaching new levels of performance (Ehie, 2001).

In summary, it is concluded that core competencies appear to be key to long run competitiveness. Given the discussion that outsourcing thus is indeed one (of many) concept(s) that can be a determinant of profitability making a significant contribution to the health of the company, the question raises what the determinants of success in outsourcing decisions are. This leads to the fourth research question:

*What are the determinants of success in outsourcing decisions?*

Yet another question rises if one considers that before actually having a certain activity performed and supplied by an external provider, activities such as provider assessment, contract negotiation, knowledge transfer et cetera have to be performed first. In other words, certain steps, or phases, need to be taken before an organisation actually has the activity provided by an external supplier. This leads to the fifth research question:

*What does the outsourcing process look like?*

Do the research questions listed above aid in a general understanding of the outsourcing phenomenon, the arguments both for and against the phenomenon and examine the key success factors in outsourcing decisions, an open issue in relation to knowledge enhancement of the Faculty of Technology Management, department of Organisation Science and Marketing



at the Eindhoven University of Technology with the concept remains; the question of what and how the research on the subject of outsourcing is doing. These latter questions help in:

- improving the basic knowledge of the field of outsourcing, and
- identifying avenues for future research on the topic of outsourcing.

For instance, finding evidence on the results of outsourcing aids in understanding outsourcing success by relating the results of an outsourcing decision to the outsourcing drivers. Another example that helps in knowledge improvement of the outsourcing phenomenon would be research considering the effect of outsourcing on firm performance by examining the outsourcing behaviour of firms in introduction- and decline-stage industries. Furthermore, this kind of research is essential and useful to the future corporate outsourcing strategy and management for instance. An avenue for future research is thus born.

Building upon the concept of core competencies elucidated above, a provider possesses specific skills, knowledge and technologies. This is why organisations that decide to outsource certain activities select this provider. If this provider truly excels, it is not difficult to imagine that in time, multiple competing organisations outsource certain activities to the same provider. Then, an interesting question would be if price and quality are still relevant competitive issues, or is the field “levelled” on those factors. Yet another fascinating question would be how the development of relationships and issues between organisations affect outsourcing performance.

In summary, the Faculty of Technology Management, department of Organisation Science and Marketing at the Eindhoven University of Technology aims at further improving the knowledge of the outsourcing phenomenon. Obtaining a better understanding of the fundamentals on outsourcing is one thing but the derivative aim, to understand the progress, scopes, methodologies, limitations and proposed avenues for future research in current outsourcing research is yet another. This translates into the sixth and last research question:

*What and how is current literature on outsourcing doing?*

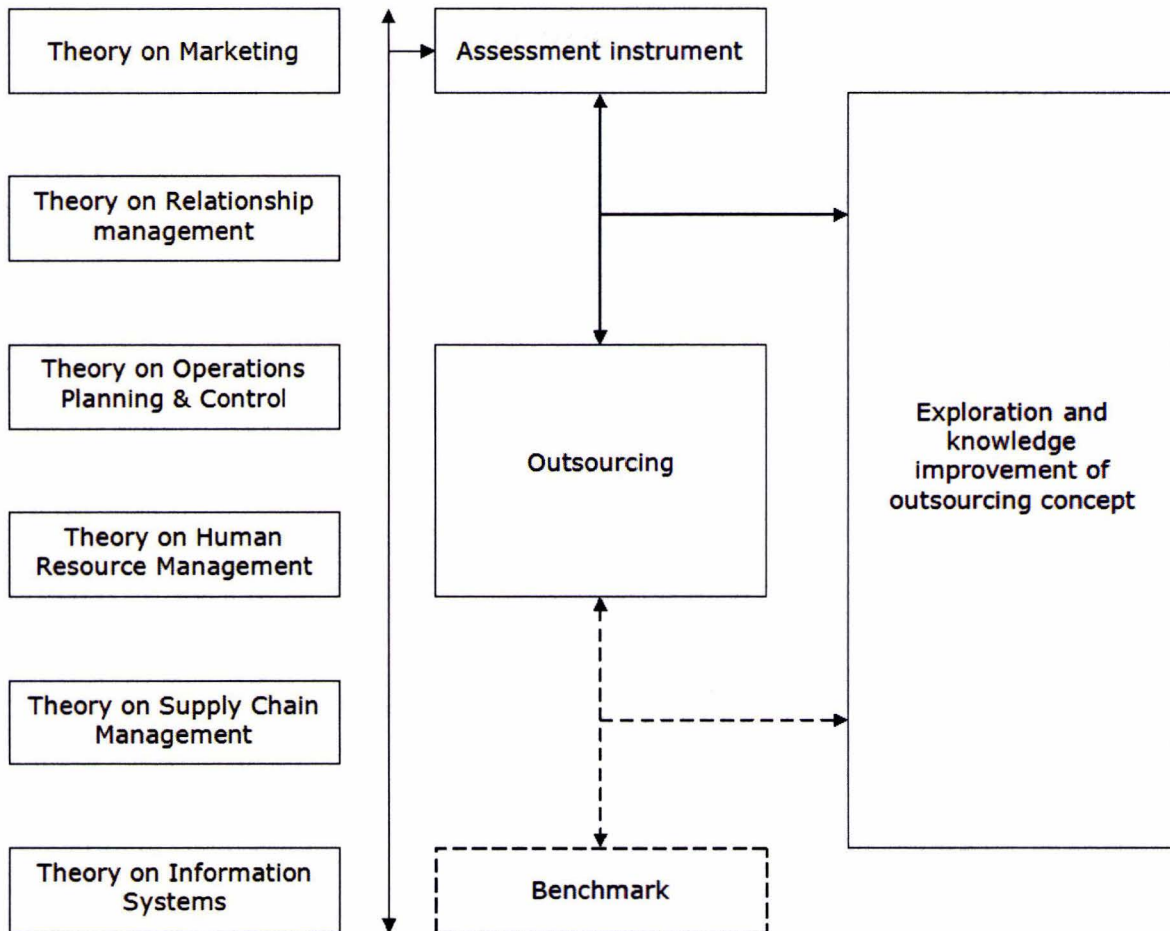
## 2.2 Research model

Following the Regulative Cycle (Aken, Berends and Van Der Bij, 2002), the research model subsequently distinguishes:

- the research object,
- the research (theoretical) point of view,
- confrontation between theory and practice, and
- the intended research result.

Figure 2-1 represents the research model that serves as the basis for this research. Note the interrupted lines in this figure, addressing the confrontation between theory and practice. This confrontation is not a part of the scope of this research assignment. However, if and when it is decided to analyse e.g. relationship management issues in outsourcing relations in a given business environment, a confrontation between theory and practice can not be omitted.

The confrontation between theory and practice has only been added in Figure 2-1 to the research model for the sake of completeness.



**Figure 2-1: Research model**

In the research model the research objective or intended research result is situated on the right-hand side. The research object "Outsourcing", is situated in the centre of the middle column of Figure 2-1. The middle column also includes two different points of view with which the research object can be confronted. Again, the confrontation with practice is not part of the scope of this research assignment. In other words, this research is limited to a theoretical exploration of the outsourcing concept. In the most left column the research angle is translated into specific theories expected to discuss the outsourcing phenomenon and its implications.

### 2.3 Research methodology

Six relevant research questions have been developed in Section 2.1 in order to aid in successfully executing the research assignment. To be able to answer these research questions, one method has been deployed; literature review. This subsection elaborates on this method.

First, the literature review serves as a theoretical discussion dealing with various aspects of the outsourcing concept. Following from the research model depicted in Figure 2-1, theory of different fields of research is explored, i.e. different theoretical points of view are explored. Having said this, the literature review first of all aims at theoretically answering basically the first five research questions based on prior research.

For the sake of completeness, the five formulated research questions are listed below:

- What is outsourcing?
- What are the benefits of outsourcing?
- What are the risks of outsourcing?
- What does the outsourcing process look like?
- What are the determinants of success in outsourcing decisions?

In the process of selecting appropriate (scientific) literature, papers and journals have among other things been verified for relevance (does the literature address the concept of outsourcing?), verifiability (is one able to replicate the research?), reliability (does research replication using different but desired measurement tools, respondents, researchers or situations, but with same expected results than in current research, lead to the same results?) and validity (have multiple theoretical points of view been used?).

The second objective of the literature review is to analyse current and recent outsourcing literature to try to answer the sixth research question; *"What and how is current literature on outsourcing doing?"*. The intention of the literature review is to be able to pin-point the main gaps in current research and identify avenues for future research related to the outsourcing phenomenon leading to a framework giving future direction to research efforts within the Faculty of Technology Management, department of Organisation Science and Marketing at the Eindhoven University of Technology. In order to be able to, two popular databases for academic literature research have primarily been searched (Emerald and Science Direct) using the search key word "outsourcing" focusing on articles published in journals and belonging to the subsequent subject areas:

- Business,
- Management & Accounting,
- Decision Sciences,
- Economics,
- Econometrics & Finance, and
- Engineering.

The position of not including articles currently in press and books and papers presented at conferences is based on the belief that researchers in the academic world prefer using journals to acquire and disseminate knowledge. Books and papers presented at conferences usually are limited to a mere summary of previously developed knowledge, often topped with factual experience.

Only those articles published in journals that are considered to enjoy high prestige are retained in the final sample and are successively examined for:

- the research topic,
- the research scope(s),
- the research methodology,
- the key findings,
- the research limitations, and
- the proposed avenues for future research.

After identifying topics, scopes, methodologies, key findings, limitations and proposed avenues for future research, classifications are made meaning that the findings are grouped in categories.

### 3 OUTSOURCING

This chapter explores the outsourcing phenomenon by answering the first five research questions: "What is outsourcing?", "What are the benefits of outsourcing?", "What are the risks of outsourcing?", "What does the outsourcing process look like?" and "What are the determinants of success in outsourcing decisions?".

This chapter is neither a comprehensive survey, nor a critical overview of the outsourcing phenomenon. The objective is to provide enough background information on the phenomenon to begin the literature analysis described in Chapter 4.

The first research question is examined in Section 3.1. To be able to fully understand what the outsourcing phenomenon comprises, definitions used in previous research of both outsourcing and off-shoring are examined besides definitions of outsourcing. Section 3.2 examines the potential benefits and risks of outsourcing, thus answering the second and third research question. Next, Section 3.3 discusses the determinants of success in outsourcing decisions, or explores the keys to successful outsourcing. Section 3.4 elaborates on the outsourcing process. Finally, Section 3.5 concludes this chapter.

#### 3.1 What is outsourcing?

The premier goal of this section is to answer the first research question; "What is outsourcing?". To answer this research question, definitions as used in previous research are examined. In addition to the examination of definitions of outsourcing as used in previous research, a comprehensive outsourcing definition will be developed that includes all key elements of outsourcing following from the outsourcing literature.

##### 3.1.1 Definitions of outsourcing

While outsourcing is growing, the concept is not clearly or uniformly defined. True, outsourcing basically concerns a "make" or "buy" decision where an organisation decides whether or not to execute a certain activity in-house or acquire it from an external organisation.

From a historical perspective, the term "outsourcing" stems from "outside resource using" (Quinn and Hilmer, 1994). The construct consists of three parts: "outside", "resource" and "using". Arnold in (Arnold, 2000) analyses these three identified parts of the construct:

- *Outside* means creating value outside the own organisation and as a result strategic networks arise.
- The outside focus does not end in itself; it means a strategic perspective on external *resources* where getting knowledge and resources from the environment enables the survival of an organisation.
- To reinforce an organisation's position in competition it is not enough to know about the external resources but they must be *used*.

Given this apparently uncomplicated explanation by Arnold, one would expect one clear and unambiguous definition of outsourcing. However, in (scientific) outsourcing literature many definitions of outsourcing do exist, one simpler and less detailed than the other. We divided the definitions encountered in (scientific) outsourcing literature into two groups: the simple and concise definitions and the detailed definitions.

Some of the simpler and concise definitions are:

- "...purchasing parts or components for the final product rather than making them" (Womack, 1990)
- "...the transfer of routine and repetitive tasks to an outside source" (Gibson, 1996)
- "...the process of determining which of the numerous manufacturing activities should be given out to a third-party provider" (Ehie, 2001)

Although being concise, these definitions do not address certain aspects such as core competencies and long-term relationships that much other research stresses. Apart from that, these definitions seem to have only a narrow scope. In this way, both Womack and Ehie define outsourcing from a manufacturing perspective and thus only consider manufacturing activities. Moreover, no notice of handing over issues such as planning and management is taken. The definitions suggest that only operation activities are handed over to a third party.

More detailed definitions of outsourcing encountered in scientific literature include:

- "...the practice of one company providing a service or product for another; and in this process, organisations become interconnected in a network or web-like fashion" (Avery, 1992)
- "...finding new suppliers and new ways to secure the delivery of raw materials, goods, components and services, by utilising the knowledge, experience and creativity of new suppliers not used previously" (Kraker, 1995)
- "...the practice of handing over the planning, management and operation of certain functions to an independent third party" (Neale, 1995)
- "...the act of transferring some of an organisation's recurring internal activities and decision rights to outside providers, as set forth in a contract" (Greaver, 1999)
- "...the handing over to a third party of the management and operation of an organisation's (IT) assets and activities" (Kern and Willcocks, 2001)

These latter, more detailed, definitions take a wider scope and refer to long-term relationships and the concept of looking for expertise, or core competencies, externally to handle certain business functions. These definitions differentiate outsourcing from business relationships in which the buyer retains control of the process or, in other words, tells the supplier how to do the work. In other words, the transfer of control is key to outsourcing. Realising what the business functions are viz. Human Resources, Sales and Marketing, Research and Development, Production/Operations, Customer Service, Finance and Accounting, Administration and IT, implies that basically any function could, hypothetically, be outsourced. This might range from the production of a (key) component to the outsourcing of "higher order" functions including finance functions and even product development and design. One could argue that in the ultimate case of outsourcing, virtual enterprises evolve. The virtual enterprises then, are built up of partners and allies, each a specialist in their respective areas, relying on each other for the provision of all essential organisational functions.

In summary, it is argued that outsourcing takes place when an organisation transfers the ownership of a recurring organisational function or business process to a supplier in which the aspect of the transfer of control is key. This transfer of ownership defines outsourcing. The outsourcing organisation, or buyer, does not instruct the supplier, or provider, how to perform its task but focuses on what results it wants to buy. The process of accomplishing these results is a responsibility of the provider. This argumentation leads to the subsequent definition of outsourcing, developed from the definitions listed above and aiming to include all key elements of outsourcing:

*"Outsourcing is the practice of transferring the planning, management and operation, as set forth in a contract, of a recurring organisational function to a competent third party in which the outsourcing organisation has no direct ownership and over which it has no direct authority or control"*

### 3.1.2 Definitions of contracting (out) and off-shoring

Embleton and Wright note that often no differentiation is made between contracting (out) and outsourcing. However, contracting (out) refers to work assigned to an outside supplier on a job-by-job basis, usually involving a cost-plus arrangement whereas outsourcing entails a long-term relationship between supplier and beneficiary, with a high degree of risk-sharing (Embleton and Wright, 1998). Given the differentiation argued by Embleton and Wright, it is argued here that in the situation of contracting (out), the outsourcing organisation “owns and controls” the process of the provider. In other words, the outsourcing organisation dictates the provider exactly what it wants and how it wants the provider to execute the outsourced activities. The provider commits to the outsourcing organisation’s instructions. Furthermore, given the “job-by-job basis”, a long-term agreement does not appear to be present in a contracting (out) situation. As a result, the outsourcing organisation can replace the provider quite easily by breaking the contract.

An example of contracting (out) would be a situation where the outsourcing organisation says it wants 1000 copies of a certain product. The outsourcing organisation dictates the provider what kind of paper to use, which method to use in binding the product, which processes to use etc.. In other words, all requirements are specifically laid down. In case of an outsourcing situation, the outsourcing organisation says it wants 1000 copies of a certain product and it needs to be premium quality, produced at a cost lower than the outsourcing organisation can produce oneself etc.. The provider then decides how to accomplish the requirements.

Just as contracting (out) is quite frequently used interchangeably with outsourcing in discussions, so are outsourcing and off-shoring. However, based on scientific literature encountered, important technical differences between outsourcing and off-shoring also do exist although some consensus appears to emerge regarding the terms “outsourcing” and “off-shoring”. Most articles encountered regard off-shoring as the transfer of an organisational function to another country that has thus far been done in their home country. In other words, a company moves jobs to one of its own branches or subsidiaries in another country.

A recent example of off-shoring in the Netherlands would for instance be Royal Philips N.V. transferring the production of tube lighting to a Royal Philips N.V. branch in Poland.

By definition, outsourcing concerns the transfer of an organisational function to a third party in which the outsourcing organisation has:

- no direct ownership, and
- in which it has no direct authority or control.

The third party to which an organisational function is transferred could be located in the home country of the organisation willing to transfer an organisational function but could also be located abroad.

### 3.2 Outsourcing – why, why not?

Outsourcing is becoming more and more a strategic issue in many industries. Van Weele argues that outsourcing is of great importance for the survival of a company (Van Weele, 2002). The fact that many (large) companies outsource and continue to outsource suggests that in many, but probably not all, cases, outsourcing appears to be successful. As argued before, in the beginning outsourcing mainly concerned simple activities with a focus on short run competitiveness, viz. cost-cutting. Nowadays it has progressed to include many “higher order” functions such as finance functions, product development and design with a focus to achieve long run competitiveness.

Driving forces behind outsourcing, or benefits expected driving the outsourcing decision, are plural and are extensively discussed in scientific literature. To name a few, Brandes *et al.* indicate that the driving forces behind outsourcing can be a combination of financial problems, a need for clear focus on core competence, and cost efficiency reasons (Brandes, Lilliecreutz and Brege, 1997). They even state that the belief that one can obtain a component more cheaply by purchasing rather than manufacturing it oneself is a powerful argument for outsourcing. Gupta and Zhender argue that outsourcing is a means for organisations to achieve high value (Gupta and Zhender, 1994). Ehie on the other hand refers to outsourcing as a way of leveraging both internal and external capabilities (Ehie, 2001).

In this section, we seek to summarise the most important benefits of outsourcing to the outsourcing company and elaborate a bit more on the abstract driving forces described above. This section draws primarily upon several scientific sources.

Besides an exploration of the advantages of outsourcing, the disadvantages are investigated. Finally, literature is also explored on who is involved in the decision making process regarding to outsourcing.

### **3.2.1 Outsourcing – why?**

Cost cutting, or reducing short-term direct costs, is still considered to be one of the main benefits of outsourcing (Quinn and Hilmer, 1994; Brandes, Lilliecreutz and Brege, 1997; Jennings, 1997; Embleton and Wright, 1998; McIvor, 2000; Ehie, 2001). The chairman of an international group quoted in Kakabadse and Kakabadse (Kakabadse and Kakabadse, 2002) could not express it more vividly by stating: "*The driver is to achieve cost benefits. We can cut costs, whether that is operational costs or whether it's the total cost of technology*". Cutting costs in this respect should be considered as if it is, for various reasons, calculated that an external source can supply a component more cost efficiently. In other words, the external source, often a specialist working with many clients, can perform the outsourced activities at lower costs and thus supply a component with lower unit cost than the buying company can make oneself. This reduction in unit cost results from increased production, realised through operational efficiencies, called economies of scale. Embleton and Wright support this argument and states that small companies can, by outsourcing, benefit from economies of scale (Embleton and Wright, 1998). Large companies on the other hand, benefit by repelling ineffective and inefficiently managed peripheral activities (Embleton and Wright, 1998). In conclusion, costs are reduced directly by benefiting from superior supplier performance and the supplier's lower cost structure. From a 1995 survey executed by the Outsourcing Institute followed that 64% of the respondents indicated that the reason to outsource was reducing and controlling operating costs. A more recent IT outsourcing survey conducted by the PA Consulting Group in 2006 enforces the fact that cost reduction is still one of the main benefits sought: 76% of all clients interviewed were looking for cost reduction when outsourcing IT.

Can direct costs be reduced when outsourcing, indirect costs can also be lowered through outsourcing. Through (strategic) outsourcing, companies can lower their long-term capital investments (Quinn and Hilmer, 1994). After all, the specialist source, often working with many clients facing similar challenges, makes investments in technology, methodologies, and people and gains expertise. This combination of specialisation and expertise gives buyers a competitive advantage and helps them avoid the cost of chasing new technologies and training because the firm outsourced to will be acting in its core competency.

Logically derived benefits to the outsourcing company having providers acting in their core competency, the provider is a specialist in its key area, are plural. First, specialist suppliers can often perform the outsourced activities with greater value added than the buying company (Van Weele, 2002) which translates into improved quality. Second, since it is their core competency, the firm outsourced to brings access to state-of-the-art technology (Antonucci, Lordi, and Tucker, 1998; Petrie, 2000). It is argued then that access is gained to world-class capabilities with providers being more likely to remain abreast of technological innovations.

Through outsourcing, an organisation has the ability to utilise the technological know-how of the provider. In other words, the outsourcing organisation then gains easier access to expertise and new technological developments. Quinn and Hilmer support this by arguing that the buyer is not limited to its own innovative capabilities but can tap into a stream of new product and process ideas and quality improvement potentials (Quinn and Hilmer, 1994). Having these multiple world-class providers work simultaneously on individual components provides greater flexibility to the outsourcing organisation in terms of purchasing developing new technologies and access to specialist resources, skills, tools or technology and decreases time-to-market. Outsourcing thus aids in being the first into the market to gain the edge.

Another, not unimportant, benefit of outsourcing is that it spreads the organisation's risk for component and technology developments among a number of suppliers (Quinn and Hilmer, 1994). The outsourcing company does not have to constantly invest in or update e.g. production capabilities for each component. Furthermore, the provider is bound by contract to provide agreed levels of service (Embleton and Wright, 1998). We argue here that when the outsourcing organisation

The principal benefit according Ehie however is that by outsourcing a company can develop its core competence. This core competence then provides the company formidable barriers against present and future new entrants, while gaining superior market position, transforming its workforce, and reaching new levels of performance (Ehie, 2001). This argumentation is supported by Petrie (Petrie, 2000). Kern and Willcocks support this as well by stating that IT outsourcing has been portrayed as an opportunity to apply a core-peripheral model to managing and organising which consequently should have an organisation focus on its key tasks and capabilities. All other tasks and capabilities should be outsourced to world-class providers (Kern and Willcocks, 2001). Petrie argues that the outsourcing organisation as a result of focusing on its core competency focuses on broader business issues, or maintains a clearer strategic focus, while operational details are assumed by an outside expert.

Another benefit as a result of outsourcing in order to develop core competencies lies within the definition of core competencies. Recalling the definition following Prahalad and Hamel of core competencies being defined as the "collective learning" in the organisation and are built through a continuous improvement process that spans a long period of time, outsourcing can help an organisation in shortening the cycle time to build particular competencies. After all, by outsourcing the organisation concentrates on its core activities of business.

In summary, outsourcing is thought to be beneficial because of cost efficiency, improved access to new technologies and skills, a clear company focus and the flexibility inherent in the outsourcing relationship. In other words, the decisive criterion to decide what activities to outsource is the question whether or not the activity contributes to achieving a competitive advantage.

The overview presented in Table 3-1 lists the top 16 benefits derived from manufacturing outsourcing decisions following from a 1995 survey executed by the Outsourcing Institute. Note that the top four derived benefits appear to be of a strategic nature, whereas reduction and control of operating costs, a benefit of a tactical nature and considered to be one of the main benefits, lags.



Rank	Benefits	Mean*	Std.error
1	Enhanced ability to concentrate on core competencies	3.19	.15
2	Improved responsiveness to customer needs	3.13	.16
3	Enhanced flexibility	3.13	.14
4	Improved efficiencies	3.06	.13
5	Financial gains	2.98	.14
6	Increased customer satisfaction	2.92	.14
7	Improved/enhanced company focus	2.71	.15
8	Strategic enhancements	2.68	.15
9	Shortened cycle time	2.59	.15
10	Technological improvement of operations	2.47	.14
11	Better access to new technology	2.26	.15
12	Reduced employee training cost	2.17	.13
13	Improved management system	2.17	.14
14	Increased innovations	2.14	.14
15	Decreased business risks	2.10	.15
16	Provided formidable barrier to market entry	1.71	.13

\* based on a 5-point Likert scale, "1 = no benefit, 5 = most benefit"

\*\* Adapted from the Outsourcing Institute (1995)

**Table 3-1: Benefits Derived From Manufacturing Outsourcing Decisions \*\***

### 3.2.2 Outsourcing – why not?

Just as there are reasons to outsource, there are aspects considered to be negative to outsourcing.

In any relationship, including an outsourcing relationship, one participant is dependent of the other participant. The nature of outsourcing thus creates a greater dependence on the provider, with a consequent loss of independence (Antonucci, Lordi and Tucker, 1998; Petrie, 2000). However, according to Gupta and Zhender suppliers know that if they do not meet or even exceed the outsourcing organisation's expectations the relationship might come to an end (Gupta and Zhender, 1994). A second argument toning down the dependency argument is when multiple providers supply the same activity. By the time the outsourcing organisation finds out that the provider does not meet or exceed the outsourcing organisation's expectations because the provider is either unable or unwilling, another argument against outsourcing appears: loss of skills the outsourcing company needs to gain and sustain competitive. Moreover, one can imagine that once activities have been handed over to an external provider, it is difficult and costly to bring these activities back "in-house".

Another argument against the practice of outsourcing results from information sharing, inherent to a relationship. Sharing (critical) information with providers could have providers expand into the business of the outsourcing organisation (Gupta and Zhender, 1994). Gupta and Zhender pose that, while there is always some risk in any relationship, each participant in the relationship is specialised in its distinctive competence knowing that it can not be and do all things best.

A subsequent concern is that, over time, outsourcing providers will demand ever great premiums. Having outsourced the internal activity, outsourcing organisations will have no other choice then to pay increased premiums. Embleton and Wright confirm this by arguing that the initial contract may be very competitive but that inevitable changes may cost significantly more (Embleton and Wright, 1998).

Employee morale is also considered to be inherent to the outsourcing decision because as a fact, people do not welcome change. Most employees see the practice of outsourcing as a

negative development whereas for some employees outsourcing can actually take their career further up the ladder (Lonsdale and Cox, 1997). Yet another argument against outsourcing and dealing with employees, this time employees at the provider, is that they are not actually paid agents of the outsourcing organisation. It is then argued that as a consequence there is less incentive for the provider employee to show loyalty or work ethic in its representation. As a result, quality levels of customer service and technical support of outsourced activities are lower than when remained "in-house". Embleton and Wright have a different opinion on loss of quality of service. They argue that quality of service must be monitored because of the provider's incentive to save money (Embleton and Wright, 1998).

Lonsdale and Cox name yet another inherent risk of outsourcing: loss of cross-functional contact. When a provider is away from the outsourcing organisations' site, a loss of profitable contact between that function and others that relate to it may occur (Lonsdale and Cox, 1998). Quinn and Hilmer support this argumentation. They state that interactions among skilled people in different functional areas often develop unexpected new insights or solutions and fear that outsourcing makes cross-functional serendipity less likely (Quinn and Hilmer, 1994).

### **3.3 What are the determinants of success in outsourcing decisions?**

Obviously, the outsourcing process starts with the outsourcing decision to be made. In other words, do I want to outsource a certain activity? To be able to make a decision on outsourcing the company goals and objectives need to be understood. Remember that outsourcing is no longer only a tactical decision chasing lowest unit cost but includes long-term aspects such as focus on core competence and spreading the organisation's risk for component and technology developments among a number of suppliers. These are all of a strategic nature and therefore an outsourcing decision should match with an organisation's vision, mission, goals and objectives. It is trivial that an outsourcing decision that is not lined up with corporate strategy has a hard time getting support and involvement from senior management and is more likely to fail than an outsourcing decision that is.

Remembering that the key of the definition of outsourcing is the transfer of control, it speaks for itself that it makes outsourcing a challenging and sometimes painful process. Given this transfer of control we argue that it is extremely important to select the "right" provider, a provider you can trust, or in other words a provider that is reliable. Support for this argument is given by Ehie (Ehie, 2001). He finds that among the most critical success factors in manufacturing outsourcing is suppliers' reliability. Embleton and Wright in (Embleton and Wright, 1998) also argue that choosing the right provider is essential. They argue that outsourcing typically is a long-term relationship which requires close cooperation between the outsourcing organisation and the provider. They reason among other things that additional services might be required and that co-operation of providers is required when terminating the agreement until the outsourced activity is settled elsewhere. Besides the aspect of provider reliability, technical competence is also an important part of supplier selection. Without a competent provider, an outsourcing organisation will have difficulty developing its core competence and consequently will have difficulty raising barriers against present and future new entrants, while gaining superior market position, transforming its workforce, and reaching new levels of performance. Ehie supports this by stating in powerful phrase that "to realise the full potential of outsourcing, companies would have to ensure that there is a strategic fit between the company and the supplier, and that the supplier has the requisite expertise the company seeks", (Ehie, 2001). Alexander and Young (Alexander and Young, 1996) conclude their research by stating that "even in apparently trivial outsourcing initiatives, poor attention to ..., supplier selection,... will lead to problems". They implicitly say that selecting the right provider indeed is a key success factor. It is noted here that to be successful in selecting the right provider, the selection process obviously has to be thorough as well.

Drawing on the definition of outsourcing in Section 3.1 two factors can be identified that are related to outsourcing success: contract and third party. Obviously, without a properly structured and clear contract an outsourcing relation starts at its worst. The outsourcing contract is the first step in open communication with affected individuals or groups. This view is supported by Allen and Chandrashekar in (Allen and Chandrashekar, 2000). Saunders, Gebelt and Hu in (Saunders, Gebelt and Hu, 1997) also supports that open and direct communication needs to be maintained with everyone involved in the activity.

Continuing with the idea of open communication and the understanding that outsourcing entails a long-term relationship between outsourcing organisation and provider with a high degree of risk-sharing, building of and management of relationships is crucial. Ehie found that the most critical success factors centre on supplier management and relationships, (Ehie, 2001). Saunders, Gebelt and Hu reaffirm the importance of supplier management and relationships in outsourcing success, (Saunders, Gebelt and Hu, 1997). Finally, we argue here that outsourcing organisations often face not only the challenge of building and managing complex relationships with suppliers, but also the challenge of effectively managing important relationships internally, across business units, functions and sometimes cultures.

### 3.4 Outsourcing process – what does it look like?

This section primarily draws upon research conducted by Momme and Hvolby (Momme and Hvolby, 2002) who extensively discuss the outsourcing process based on a combination of a theory study with a case study and action research in the heavy industry sector. Their focus is obviously on manufacturing outsourcing. We argue here that whatever activity to outsource in any which industry, the main phases should not differ. After all, a process should consist of a logical sequence of steps that provides users with a structured approach. Furthermore, McIvor argues that it is basically concerned with normative recommendations of "what" to do, "why" to do it and "how" to do it (McIvor, 2000).

Momme and Hvolby identify six generic phases in the outsourcing process:

- Competence analysis,
- Assessment & Approval,
- Contract negotiation,
- Project execution & Transfer,
- Managing relationship, and
- Contract termination.

They extend the outsourcing process framework by adding a varying number of identified key activities with related performance measures and expected output. The outsourcing process framework is depicted in Figure 3-1, shown on the next page.

The expected output, or decision variables as Momme and Hvolby refer to them, depend on the context and scope of the individual organisation implying that *"they must be reviewed and adapted by the responsible outsourcing team based on the situational factors"* (Momme and Hvolby, 2000).

Momme and Hvolby furthermore argue that an outsourcing team should consist of a multidisciplinary group of people. Reason for this argument is the *"wide range of synergetic perspectives to the decision variables"* (Momme and Hvolby, 2000). Recalling the reasons, risks and success factors discussed in previous sections support this argument that many disciplines are either implicitly or explicitly involved in an outsourcing. Consider not only the departments such as Purchasing, Research & Development and Logistics which are often explicitly involved but also Human Resources and Service which are implicitly involved. Human Resources might for instance have to deal with employee relocation or lay-offs because manufacturing activities are outsourced and therefore loss of manufacturing jobs.

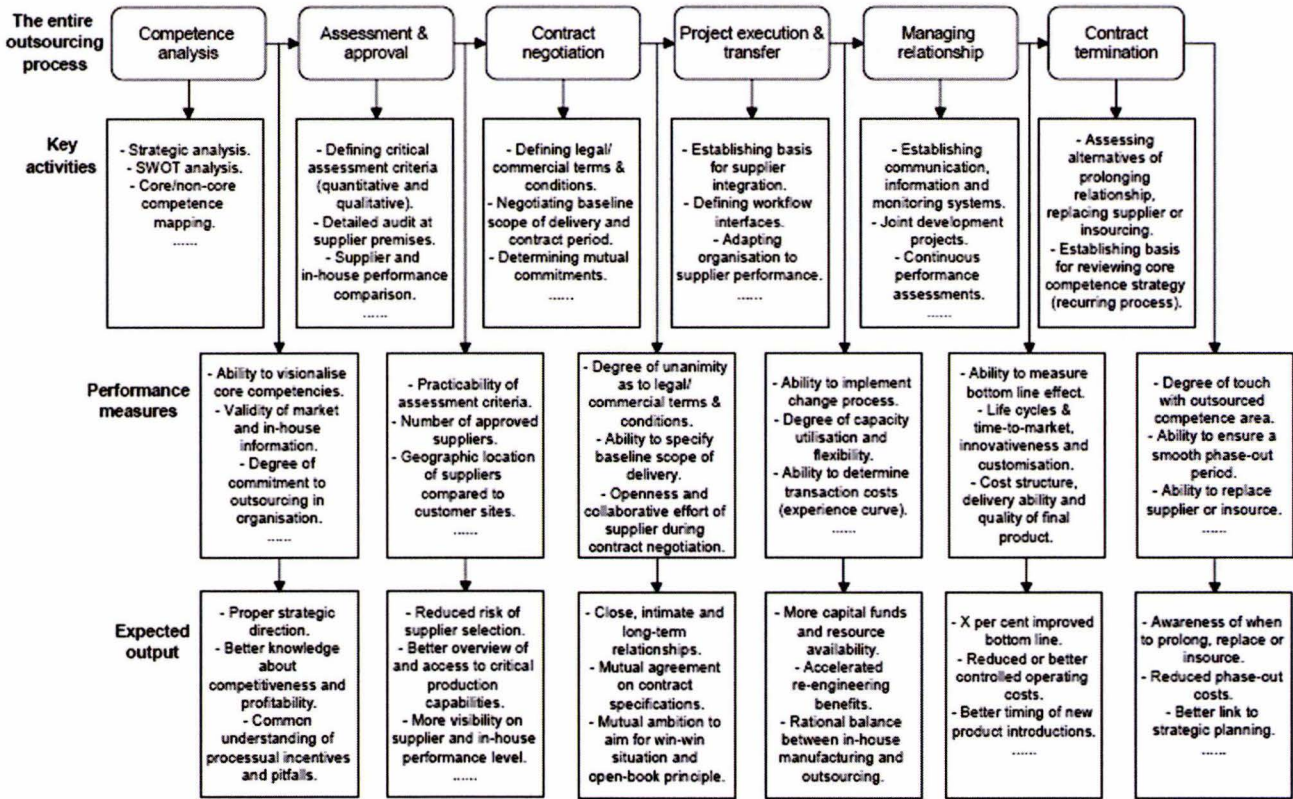


Figure 3-1: Outsourcing process, adapted from Momme and Hvolby (Momme and Hvolby, 2000)

### 3.5 Conclusions

As has been discussed, the concept of outsourcing is not clearly or uniformly defined, although historically the term stems from "outside resource using" and basically concerns a "make" or "buy" decision. Although one clear and unambiguous definition of outsourcing would be expected, many definitions of outsourcing do in fact exist, one simpler and less detailed than the other. The first research question, "What is outsourcing?", has been answered by developing an all-comprising definition of the concept. To enforce this answer the term outsourcing is compared to terms such as contracting (out) and off-shoring which are quite often interchanged in (scientific) literature. In order to understand the apparent indifference often made, definitions of both terms have been included. The conclusion is that outsourcing, contracting (out) and off-shoring do technically differ and should therefore not be used interchangeably.

The answers to questions dealing with the "why" and "why not" of outsourcing are quite extensive. From literature follows that reducing short-term direct or indirect costs are still one of the most important drivers to embark upon the outsourcing adventure. Other reasons, or benefits sought, are improved access to new technologies and skills, a clear company focus and perceived flexibility in the outsourcing relationship. We conclude here by arguing that every reason to outsource is a potential pitfall. A striking example would be an extreme focus on reducing costs and potentially neglecting quality and thus customer added value. Every reason to outsource should be put in the light of an organisation's context and scope; it should always be put in perspective.

Determinants of success in outsourcing decisions have also been found to be multiple. A clear and unambiguous view of company goals and objectives is fundamental. If an outsourcing decision is not lined up with corporate strategy it has a hard time getting support and involvement from senior management and is therefore destined to become a disaster. Next to a clear view of strategic goals and objectives, selecting the "right" provider, open communication and the understanding that outsourcing entails a long-term relationship between outsourcing organisation and provider with a high degree of high-risk sharing, building of and management of relationships is crucial to outsourcing success. It is concluded here that as the outsourcing phenomenon further matures and more research is conducted, identified success factors will become more and more abundant. We argue here that every research, be it a case study, field study or survey but focusing on outsourcing successes and failures, new determinants will be identified.

With respect to the fifth and last research question answered in this chapter, "*Outsourcing process – what does it look like?*", the outsourcing process framework drawn upon research conducted by Momme and Hvolby indeed is a process consisting of a logical sequence of steps that provides users with a structured approach. The framework is basically concerned with normative recommendations of "*what*" to do, "*why*" to do it and "*how*" to do it.

## 4 LITERATURE ANALYSIS

The number of publications dedicated to outsourcing appears to have steadily increased in recent years and covers a wide range of objectives. The aim of analysing the current and recent outsourcing literature is to try to answer the sixth and last research question: *"What and how is current literature on outsourcing doing?"*. To be able to answer this research question that aims at improving the knowledge on the progress scopes, methodologies, limitations and proposed avenues for future research in current outsourcing research, six derivative questions are formulated. These subsequently are: *"What is the topic of the research?"*, *"What is the scope of the research?"*, *"What is the most commonly used research methodology?"*, *"What are the key findings?"*, *"What are the research limitations?"* and *"What are opportunities for future research?"*.

This chapter tries to answer the aforementioned derivative questions by examining the encountered topics, scopes, methodologies and proposed avenues for future research in Section 4.1 through Section 4.5 whereas the results are presented and discussed in Section 4.6. Finally, this chapter concludes with conclusions drawn and recommendations in Section 4.7.

### 4.1 Current literature on outsourcing

To be able to identify current articles that are outsourcing-related, two popular databases for academic literature research have primarily been searched (Emerald and Science Direct) using the search key word "outsourcing". Limiting the key word to be included in the document title and key word helps in increasing the chance to identify the most relevant articles. Furthermore, the study focuses on articles published in journals and does not include articles currently in press nor does it include sources such as books or papers presented at conferences. This position is based on the belief that researchers in the academic world prefer using journals to acquire and disseminate knowledge. Books and papers presented at conferences usually are limited to a mere summary of previously developed knowledge, often topped with factual experience. The journals searched belong to the subsequent subject areas: Business, Management & Accounting, Decision Sciences, Economics, Econometrics & Finance and Engineering.

The aforementioned search method yields 184 unique articles published between 1990 and 2006 and all these articles are also included in the widely recognised ABI/Inform database. Only those articles that are published in journals that are considered to enjoy high prestige are retained in the final sample. The idea behind this selection is twofold:

- it is felt that articles retained in the final sample represent the mainstream of scientific work on outsourcing, and
- to define the research assignment.

In cooperation with the primary supervisor these prestigious journals have been identified and are listed hereafter: Business Horizons, California Management Review, Decision Support Systems, European Journal of Operational Research, European Management Journal, Industrial Marketing Management, Information & Management, International Journal of Information Management, International Business Review, International Journal of Operations & Production Management, Journal of Business Research, Journal of High Technology Management Research, Journal of International Management, Journal of Management, Journal of Management Information Systems, Journal of Operations Management, Journal of Purchasing & Supply Management, Long Range Planning, Management Decision, Marketing Intelligence & Planning, Research Policy, Sloan Management Review, Strategic Management Journal, Supply Chain Management: An International Journal, The Academy of Management Executive, The British Accounting Review and The Journal of Business Strategy.

Taking into consideration articles published in prestigious journals limits the initial sample to 100 articles. From these remaining articles three were not included in the study because either they expressed the editor's opinion and/or no research methodology could be established and could therefore not be regarded as a scientific article. Another article had to be removed because it elaborated on another topic, off-shoring. Finally, another three articles were removed because they dealt with a literature review. A total of 93 articles therefore were retained in the final sample which were carefully read and listed among the further reading section. Note however, that references have been made to these articles throughout the text. Each selected article was successively examined for:

- the research topic,
- the research scope(s),
- the research methodology,
- the key findings,
- the research limitations, and
- the proposed avenues for future research.

Note that in case where it is felt that the article abstract is a good representation of the contents, the examination is based on the abstract. In those cases where the abstract is not highly descriptive of the article contents, the examination is based on article contents.

The examination of the key findings and research limitations shall not be discussed separately. Encountered key findings and research limitations have only been examined to aid in article understanding and for the purpose of proper positioning of proposed avenues for future research.

In particular, by examining the various research scopes and methodologies, we are able to get a big picture of what and how the research on the subject of outsourcing is doing. Specifically, the objective of this examination is to:

- identify outsourcing research scopes,
- identify research methodologies in outsourcing research, and
- identify gaps in outsourcing research.

Summarising, the intention of the literature review is to be able to pin-point the main gaps in current research related to the outsourcing phenomenon. Thus, a benchmark is established for tracking status of outsourcing literature while focusing attention on outsourcing requiring more research.

## 4.2 Research topics in outsourcing research

To be able to identify and subsequently classify the research topic of each article, the keywords mentioned in the article, if present, were initially used as a foundation for identification. Some articles discuss more than one topic. The topics encountered were subsequently categorised. As the number of articles reviewed increased, more topics, thus more categories evolved. Because one or more topics can be discussed in an article, an article can be classified into one or more categories. The topics identified are listed and briefly explained hereafter. The identified topics are clustered according to the four identified categories. The actual topics are placed between brackets behind the defined category.

- *Outsourcing – outsourcing organisation (decision-making, outsourcing object, reasons or benefits sought, outsourcing process, success factors, risks, effects, global outsourcing, general view)*

This category views outsourcing from the perspective of the company that is deciding to obtain certain activities from an external provider rather than executing these activities in-house. It roughly consists of topics related to outsourcing determinants, outsourcing process, and outsourcing results. Research focused on outsourcing determinants typically studies the drivers behind an organisations' outsourcing

decision, i.e. the “why” of outsourcing is studied. Driving forces such as cost-cutting, improved access to new technologies and skills, a clear company focus and the flexibility inherent in the outsourcing relationship among other things are reviewed. The process-oriented approach on the other hand, examines the “how” of outsourcing. It examines the tools used and the route an organisation follows in transferring a certain activity currently executed in-house to purchasing the activity from an external provider. More specifically, it might deal with processes such as decision-making, partner selection, contract negotiation, implementation and monitoring but also risk mitigation. In addition, it might elaborate on who is involved in the outsourcing process. Finally, the result-oriented approach studies what the (dis-)advantages of an outsourcing decision are for an organisation. It studies the effect(s) of an outsourcing decision and may comprise quantitative as well as qualitative effects. Quantitative effects could for instance be interpreted as factual evidence with respect to induced measurable cost savings as a result of the outsourcing decision. Qualitative effects on the other hand deal with aspects that are more difficult to measure or in some cases can not even be measured. Examples are improved access to new technologies and skills, a clear company focus and increased flexibility in allocating resources. In other words, topics included in this category try to answer questions related to the “Why”, “How”, “Who” and “What” of outsourcing. Typical questions e.g. are “Why does an organisation outsource?”, “Why does an organisation abandon outsourcing?”, “What are the determinants of outsourcing success?”, “Who is involved in the decision making process”, “What are the effects of the outsourcing decision?” and “What activities do typically apply for outsourcing?”. Besides the rough arrangement described above, topics such as global outsourcing and general review have been added to this category. Global outsourcing deals specifically with organizations that decide to obtain a certain activity from abroad, usually to chase low labour cost but still enough knowledge. The general review finally, explains how outsourcing arose, evolved, where it is now and how much it grew. In summary one could say that this category covers topics that guide an organisation embarking upon the outsourcing adventure.

- *Outsourcing – relationship (contract, client-provider relationship)*

Articles emphatically discussing the outsourcing contract or how to shape and maintain the relationship between the outsourcing organization and the provider are joined in this category. More specifically, articles in this category elaborate e.g. on structuring contracts and establishing the type of relationship. In other words, articles that view outsourcing from the perspective of the relationship are grouped together here.

- *Outsourcing – theories (core competencies theory, transaction cost theory, supply chain theory, resource-based theory)*

Various reviewed articles appear to lay the emphasis on a theoretic approach of the outsourcing phenomenon, it forms an essential part. They explore in a pure theoretical manner the effects of an outsourcing decision, develop theoretic models that guide the outsourcing decision and compare outsourcing strategies through mathematical modelling for instance. Theories used involve core competence theory, transaction cost theory, supply chain theory and resourced-based theory.

- *Outsourcing – others (culture, location, predictors)*

Finally, this category includes those issues that can not be related to any of the categories discussed above. A typical topic would be culture, where the editor tries to correlate observed differences in outsourcing with nationality. Another research topic encountered which could not be assigned to any other category is outsourcing predictors.



### 4.3 Research scopes in outsourcing research

Like identifying the research topics, the number of research scopes increased as the number of articles reviewed increased. Research scopes encountered can be classified into ten distinct categories. These categories are primarily based on the branch of industry or business or line of business or department concerning the outsourcing decision. Note that one or more research scopes might apply to one article. The scopes identified are listed hereafter:

- Outsourcing generic,
- Outsourcing HR functions,
- Outsourcing IS/IT,
- Outsourcing logistic functions,
- Outsourcing manufacturing,
- Outsourcing marketing,
- Outsourcing purchasing,
- Outsourcing sales-force,
- Outsourcing services, and
- Outsourcing technology.

One identified category requires some explanation: outsourcing generic. This category comprises those articles that do not specifically address or leave aside any branch of industry or business or line of business or department.

### 4.4 Research methodologies in outsourcing research

The analysis of the research methods used draws upon Alavi and Carlson who make a distinction between empirical and non-empirical, or theoretical, studies (Alavi and Carlson, 1992). Alavi and Carlson argue that non-empirical articles are primarily based on ideas, frameworks, and speculation rather than on systematic and direct observation. Theoretical studies may include some empirical observations or data however, but these observations or data play a secondary role, it plays a supporting role. Note that the emphasis is on ideas and not on data and observations. Alavi and Carlson divide non-empirical studies into three distinct categories: conceptual, illustrative, and applied concepts. An explanation of these three categories is given hereafter.

- *Conceptual studies* describe frameworks or structures, models or theories and provide explanations and reasons. Conceptual studies might include, in the light of this research, development of a conceptual framework including strategic guideline development and (predictive) mathematical modelling.
- *Illustrative studies* intend to guide practice quite often offer recommendations for action or steps and explain stages to be fulfilled. The focus is on "what" and the "how", rather than on the "why". These studies express an opinion whether or not supported by examples and applications.
- *Applied concepts* are a combination of both conceptual and illustrative studies. These studies may present a framework and then examine an application of it. In other words, applied concept studies concern conceptual studies illustrated or enforced using case studies.

Empirical studies according to Alavi and Carlson principally rely on observation. They distinguish between those empirical studies that describe an object and those that describe an event or process. In the light of this research we only consider the empirical study that describes an event or process. After all, the outsourcing phenomenon suggests it is an event or process and not an object. In relation to empirical studies that focus on events or processes, Alavi and Carlson distinguish several methodological approaches relevant to the present research: laboratory experiments, field experiments, field studies, case studies,

surveys and studies using secondary data. An explanation of the empirical methodological approaches encountered is given hereafter.

- *Case studies* in the light of this research study are defined as a method for learning about a phenomenon, based on a comprehensive understanding of that phenomenon, obtained by an extensive description and analysis of that phenomenon taken as a whole in its context or natural environment. Data is obtained either via direct observation, interviews (telephone or face-to-face), discussions, mailed questionnaires and polls and document analysis. The analysis of information is considered to be either qualitative or quantitative. The problem with this basically qualitative data collection method is that generalizing results is difficult because it tends to focus on the analysis of one or only a few cases.
- A *field study* analyses several organisations using an experimental design but no experimental control. Just like the case studies, field studies are carried out in the natural environment but use quantitative methods in analysing the information.
- A *survey* involves large numbers of representative subjects using an experimental design but no experimental control without detailed verification. The difference with a field study essentially is the number of observations. Surveys may include polls, mailed questionnaires, telephone interviews, or face-to-face interviews.
- Studies using *secondary data* concern studies using data from secondary sources, or data collected by sources other than the researcher. (Financial) analysis drawing on publicly available (financial) data from firms' audited financial reports or from government statistics is such an example of a study using secondary data. The article written by Rothaermel, Hitt and Jobe is such an example (Rothaermel, Hitt and Jobe, 2006). Another example of a study using secondary data would be an empirical analysis based on plant-level information drawn from the Chemintell databases, such as the research conducted by Cesaroni (Cesaroni, 2004).

Given the fact that the essential difference between a field study and a survey is the number of representative subjects according to Alavi and Carlson, the inability to define the exact borderline with respect to the number of representative subjects between the two studies leads to an aggregation of the two. In other words, no difference is made between a field study and a survey in analysing the literature.

Summarising, six types of methodological approaches have been identified and categorised into theoretical and empirical studies: conceptual study, illustrative study, applied conceptual study, field study and study using secondary data.

#### **4.5 Avenues for future research in outsourcing research**

Another way to identify gaps in outsourcing research, besides analysing topics, scopes and methodologies is to correlate proposed avenues for future research to the outsourcing process as discussed in Section 3.4. By correlating the proposed avenues to the various phases, we are able to determine what the focus of future research will be and thus distilling the gaps that need to be filled in, in terms of outsourcing process steps or phases. This approach is beneficial in that respect that main gaps will not only be identified using the angle of looking at individual topics, scopes and proposed avenues for future research, but also by looking from a wider and more abstract angle on process step level.

Critically examining the proposed avenues for future research and the outsourcing process described by Momme and Hvolby (Momme and Hvolby, 2002), depicted in Figure 3-1, Section 3.4, brings some lacunae to light; more detail could be added. To be able to properly categorise the articles with respect to proposed avenues for future research, process steps and peripheral issues influencing or even affecting the outsourcing process need to be added. Addition of process steps and peripheral issues is besides own reasoning, inspired by research by C  nez, Platts and Probert (C  nez, Platts and Probert, 2000).

Cáñez, Platts and Probert (Cáñez, Platts and Probert, 2000) argue that the external environment consists of elements such as competition, supplier availability, social, economical, environmental and political elements on which the organisation has little or no influence. These elements subsequently activate triggers for starting what Momme and Hvolby name the competence analysis. Triggers, or reasons, may range from cost cutting to focus on core competence to increase quality. An example would be increased (global) competition which forces an organisation to take action to be able to survive. One way to do so is to reduce costs. Section 3.2 elaborated on these reasons, or benefits sought on outsourcing. The external environment however, does not only activate triggers. We argue here that this external environment potentially affects any or even every process step in the outsourcing process. Once the decision to outsource has been made it is not so difficult to imagine that for instance cultural or social differences might affect the outsourcing process steps such as contract negotiation, project execution & transfer and relationship management. Noting that culture determines that people have different norms, thinking, attitudes, and behaviour from different national cultural background, then it speaks for itself that if one is not aware of cultural or social differences, or allows the opportunity to explore cultural or social similarities, communication will be less effective. In summary, the framework of Momme and Hvolby is expanded by including the external environment that activate the triggers and affecting potentially all outsourcing process steps.

The first actual step to be added is the make-or-buy decision itself. Having identified the core competences and organisation strategy, among other things, in the competence analysis, the decision whether or not to outsource has to be taken. A logical step following the competence analysis is a proposal whether or not to outsource. This proposal should list the suggested way of working, pros and cons included, and provide alternatives, again pros and cons included. Momme and Hvolby do not explicitly mention this decision-making step in their suggested framework. Therefore, this decision-making step is added.

With respect to the process step that considers managing the relationship we argue here that before a relationship can be managed, it needs to be built. A shared vision needs to be developed aiming at agreement between all parties, knowledge gaps need to be identified and a common language needs to be developed and a way of working needs to be determined. In order to be able to build a relationship subsequently, the kind of relationship first needs to be determined. Aspects expected to influence the future relationship need to be determined. Concluding, two process steps dealing with relationships have been added to the framework proposed by Momme and Hvolby; determination kind of relationship and relationship building.

Finally, the framework is expanded by having arrows coming out from the performance measures, implying that outsourcing is not a static issue. Performance measures feed back into the external environment and might activate (other) triggers that start the competence analysis again (Cáñez, Platts and Probert, 2000). This representation does not conflict with the framework proposed by Momme and Hvolby. They state that their framework implicitly contains feedback (Momme and Hvolby, 2002).

The framework proposed by Momme and Hvolby is expanded with the elements and process steps described above leading to the framework depicted in Figure 4-1. The performance measures proposed by Momme and Hvolby have not been presented explicitly here but still remain valid.

In summary, proposed avenues for future research will be examined for interface with one of nine outsourcing process steps or one of three elements defined in presented in Figure 4-1. In other words, the proposed avenues for future research will be grouped according to the process steps or elements. The nine identified outsourcing process steps together with the three elements are repeated here for the sake of completeness: Competence analysis, Decision-making, Assessment & approval, Determination kind of relationship, Contract negotiation, Relationship building, Project execution & transfer, Managing relationship, Contract termination, External environment, Triggers and Performance measures & effects.

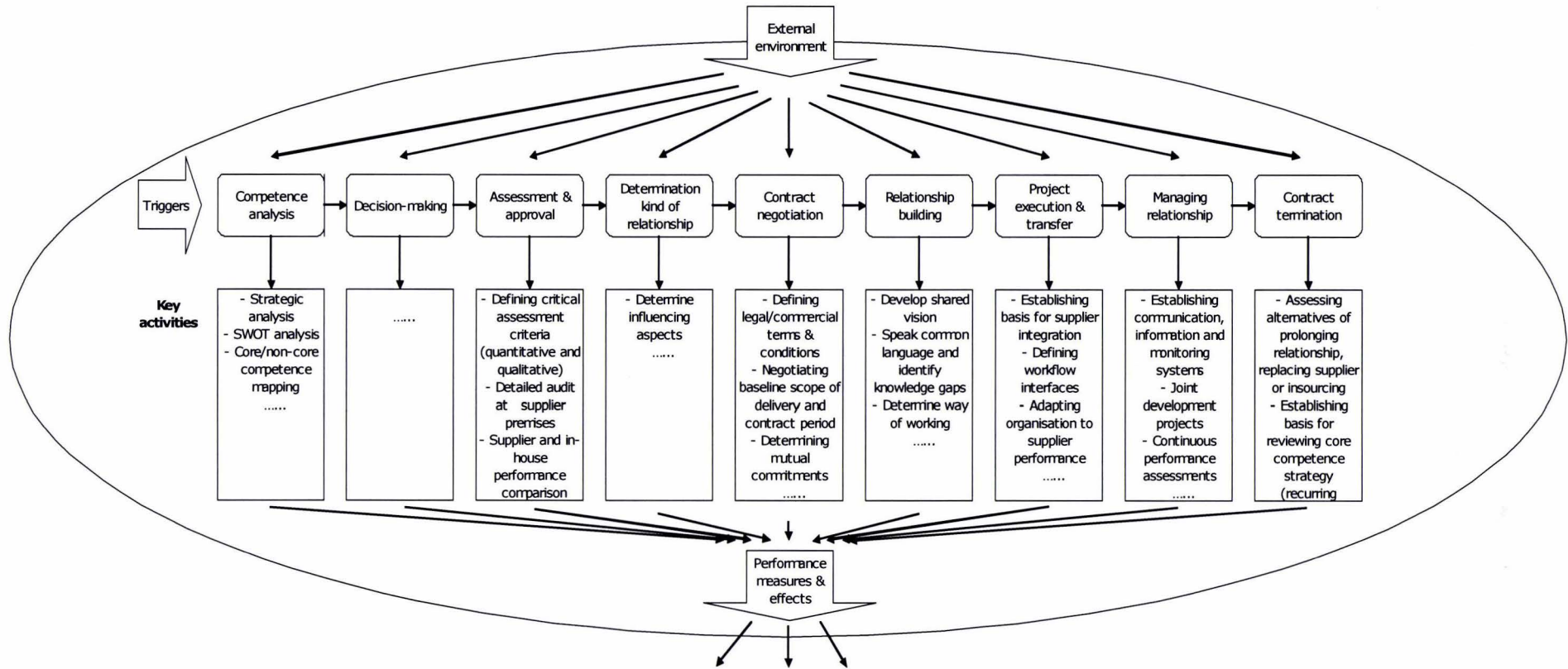


Figure 4-1: Outsourcing process

Note that it is not the goal of this research to develop an unambiguous, all comprising framework. Nor is it a goal to work out the details in terms of key activities, external environment, triggers and performance measures. Again, the goal is to pin-point the main gaps in current research related to the outsourcing phenomenon. This explains the (semi-) blank boxes in Figure 4-1.

## 4.6 Results

Where the previous sections in this chapter discussed the encountered topics, scopes and methodologies among other things, this section will elaborate on the results following from the literature analysis.

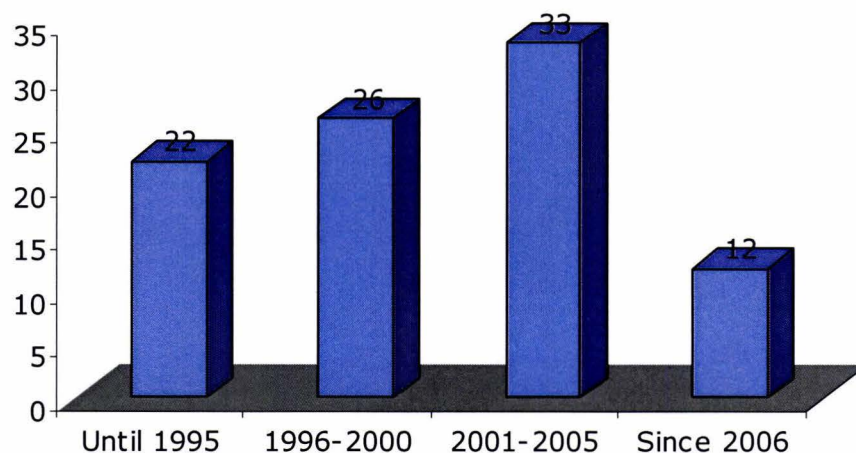
### 4.6.1 Number of articles published and journals analysed

To be able to judge whether outsourcing was a trend or is here to stay, the period under study ranging from 1990 through 2006 has been divided into four blocks. Each block covers five consecutive years as can be seen in Figure 4-2, which can be found on the next page. The number above each column represents the number of articles published on outsourcing during a certain period.

As can be observed from Figure 4-2, the number of articles on outsourcing is steadily increasing. This observation would imply that the outsourcing phenomenon can no longer be seen as a trend but suggests that the interest in the outsourcing phenomenon is here to stay. Note that the last column in Figure 4-2 considers only one year, and already 12 articles on outsourcing have been published.

Table 4-1 lists the number of encountered articles published per journal. It can be observed that the European Management Journal is the journal which has published the highest number of outsourcing related articles (17), followed at some distance by two journals related to the Information Systems area: Information & Management (10) and International Journal of Information Management (10). Another observation made is the relative strong presence of practitioner-oriented work, e.g. those articles on outsourcing appearing in Business Horizons, Long Range Planning and Sloan Management Review. The articles appearing in these three journals add up to a total of eighteen, or just over 19%, of all articles.

The analysis results regarding to the articles published and journals analysed can be found in Appendix 1.



**Figure 4-2: Number of articles on outsourcing**

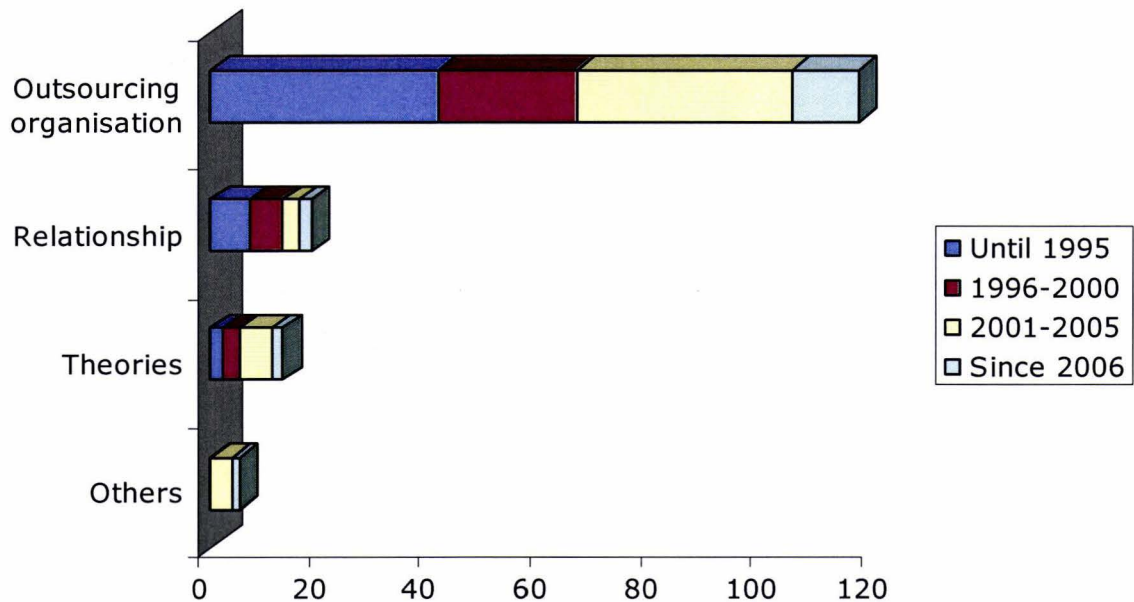
<b>Journal</b>	<b>N</b>	<b>%</b>
European Management Journal	17	18.3
Information & Management	10	10.8
International Journal of Information Management	10	10.8
Business Horizons	7	7.5
European Journal of Operational Research	6	6.5
Long Range Planning	6	6.5
Sloan Management Review	5	5.4
International Journal of Operations & Production Management	4	4.3
Supply Chain Management: An International Journal	3	3.2
Industrial Marketing Management	3	3.2
Journal of Management	3	3.2
Research Policy	3	3.2
Decision Support Systems	2	2.2
Journal of International Management	2	2.2
Journal of Operations Management	2	2.2
Management Decision	1	1.1
California Management Review	1	1.1
International Business Review	1	1.1
Journal of Business Research	1	1.1
Journal of High Technology Management Research	1	1.1
Journal of Management Information Systems	1	1.1
Marketing Intelligence & Planning	1	1.1
Strategic Management Journal	1	1.1
The Academy of Management Executive	1	1.1
The British Accounting Review	1	1.1
<b>Total</b>	<b>93</b>	<b>100.0</b>

**Table 4-1: Number of articles on outsourcing in each journal**

#### **4.6.2 Research topics**

Figure 4-3 visualises a joint analysis of the topic categories indicated in Section 4.2 which are repeated here for the sake of completeness: outsourcing organisation, relationship, theories and others.

It is obvious from Figure 4-3 shown on the next page that those topics that view outsourcing from the perspective of the organisation that decides to have a certain activity provided by an external supplier rather than executing that activity in-house have been and still are important. Articles elaborating e.g. on structuring contracts and establishing the type of relationship, in other words, view outsourcing from the perspective of the relationship follow at a large distance. The category of articles exploring the effects of an outsourcing decision, develop theoretic models that guide the outsourcing decision and compare outsourcing strategies through mathematical modelling for instance, also do not seem to be so important. However, more attention seems to be paid to the theoretical view on outsourcing, the number of articles is slowly but steadily increasing. On the other hand, the number of articles from the perspective of the relationship seems to be slowly decreasing.



**Figure 4-3: General areas in articles on outsourcing**

To be able to explain the evolution observed in more detail, an analysis of the number of encountered topics on outsourcing has been developed and is depicted in Table 4-2, together with the percentage of the total. As can be observed, the total in this study was 153 and not 93, being the number of articles reviewed. As stated in Section 4.2, articles sometimes deal with more than one topic.

From Table 4-2 follows that in particular reasons or benefits sought, risks, effects, decision-making and the development of a general view are important and thus contribute largely to the fact that outsourcing from the perspective of the outsourcing organisation has been so important in recent and current scientific literature. On the other hand, the success factors topic within the outsourcing organisation category does hardly seem important. It is argued here that this apparent underexposure of success factors could be a consequence of the immaturity of the outsourcing phenomenon. Typically, (outsourcing) effects will reveal themselves only after considerable time. To be able to determine, and moreover (statistically) prove what the factors are that lead to outsourcing success, tangible and intangible effects are merely a requirement. This reasoning possibly explains the lack of interest in success factors in recent research. It is expected though, that future research is not only able to, but will address outsourcing success factors. Section 4.6.5 will more closely examine proposed avenues for future research.

Outsourcing from the perspective of the relationship is not predominantly represented as was already indicated in Figure 4-3, only 11,8% of all reviewed articles. However, various authors state that viable (long-term) relationships with the supplier are a pre-condition for outsourcing success. Ehie for instance (Ehie, 2001), finds that the most critical success factors in manufacturing outsourcing are suppliers' reliability, technical competence, manufacturing capability and choosing the right supplier. All these factors indeed do centre on supplier management and relationships. McFarlan and Nolan (McFarlan and Nolan, 1995) argue that "managing the relationship less as a contract and more as a strategic alliance determines outsourcing success" also indicates that the building of and management of relationships is a key success factor in outsourcing. Assuming that viable relationships are indeed key to success, than why have the building of, or development of, and management of relationships apparently been underexposed in scientific literature? We argue here that one possible reason for the underexposed subject of viable relationships could be the immaturity of the

outsourcing phenomenon. After all, throughout the 1990's outsourcing has been growing in significance and size (Lau and Hurley, 1997) and it has become an increasingly popular method for firms to organise their production in order to achieve competitiveness (Shy and Stenbacka, 2003). It would then not be illogical to suggest that organisations primarily focus on issues such as decision-making including framing a business case with reasons why outsourcing would be beneficial for instance.

	Until 1995 (%)	1996–2000 (%)	2001–2005 (%)	Since 2006 (%)	Total (%)
<b>Outsourcing organisation</b>	<b>41; 26,8</b>	<b>25; 16,3</b>	<b>39; 25,5</b>	<b>12; 7,8</b>	<b>117; 76,5</b>
Decision-making	4; 2,6	7; 4,6	3; 2,0	4; 2,6	18; 11,8
Outsourcing object	2; 1,3	1; 0,7	1; 0,7	0; 0,0	4; 2,6
Reasons	13; 8,5	4; 2,6	8; 5,2	2; 1,3	27; 17,6
Outsourcing process	5; 3,3	4; 2,6	3; 2,0	0; 0,0	12; 7,8
Success factors	0; 0,0	1; 0,7	1; 0,7	0; 0,0	2; 1,3
Risks	8; 5,2	3; 3,0	7; 4,6	2; 1,3	20; 13,1
Effects	1; 0,7	3; 2,0	11; 7,2	3; 2,0	18; 11,8
Global outsourcing	1; 0,7	0; 0,0	3; 2,0	0; 0,0	4; 2,6
General view	7; 4,6	2; 1,3	2; 1,3	1; 0,7	12; 7,8
<b>Relationship</b>	<b>7; 4,6</b>	<b>6; 3,9</b>	<b>3; 2,0</b>	<b>2; 1,3</b>	<b>18; 11,8</b>
Contract	4; 2,6	3; 2,0	1; 0,7	1; 0,7	9; 5,9
Client-provider relationship	3; 2,0	3; 2,0	2; 1,3	1; 0,7	9; 5,9
<b>Theories</b>	<b>2; 1,3</b>	<b>3; 2,0</b>	<b>6; 3,9</b>	<b>2; 1,3</b>	<b>13; 8,5</b>
Core competencies theory	1; 0,7	1; 0,7	0; 0,0	0; 0,0	2; 1,3
Transaction-cost theory	1; 0,7	2; 1,3	4; 2,6	1; 0,7	8; 5,2
Supply chain theory	0; 0,0	0; 0,0	1; 0,7	0; 0,0	1; 0,7
Resource-based theory	0; 0,0	0; 0,0	1; 0,7	1; 0,7	2; 1,3
<b>Others</b>	<b>0; 0,0</b>	<b>0; 0,0</b>	<b>4; 2,6</b>	<b>1; 0,7</b>	<b>5; 3,3</b>
Culture	0; 0,0	0; 0,0	1; 0,7	1; 0,7	2; 1,3
Location	0; 0,0	0; 0,0	1; 0,7	0; 0,0	1; 0,7
Predictors	0; 0,0	0; 0,0	2; 1,3	0; 0,0	2; 1,3
<b>Total</b>	<b>50; 32,7</b>	<b>34; 22,2</b>	<b>52; 34,0</b>	<b>17; 11,1</b>	<b>153; 100,0</b>

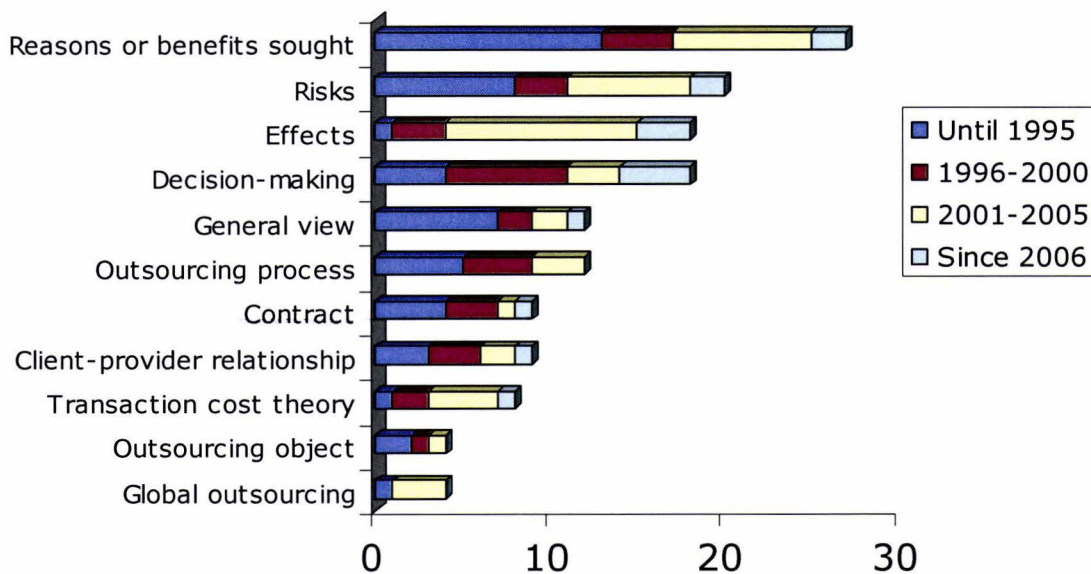
**Table 4-2: Topics in articles on outsourcing**

Finally, Figure 4-4 represents the topics that were most frequently encountered and gives an indication of the evolution of identified topics over time. The general view on outsourcing is now less important than it used to be until 1995 when the phenomenon was still in its infancy. Outsourcing effects, on the other hand, currently enjoy more attention. A possible explanation could be that notably long-term effects of outsourcing decisions made are now becoming more and more visible. After all, the outsourcing phenomenon is rather young and organisations that embarked upon an outsourcing adventure most certainly have not all been successful. Consequently, this will be a breeding-ground for (scientific) research. Another topic that more attention is being paid to is transaction cost theory which may be a symptom of maturity in the area. Transaction cost theory modelling for instance, includes more and more aspects introducing more rigour to these theories. Ross, Dalsace and Anderson for instance discuss additional cost factors to be considered when questioning whether or not to outsource an



organisation's sales-force. These additional cost factors complicate the analysis but improve it significantly (Ross, Dalsace and Anderson, 2005). Finally, the topic of global outsourcing seems to expand enormously. We argue here that the reason for this is the ongoing globalisation. After all, given globalisation, new markets evolve and world-wide competition increases which forces organisations to look for an external source performing the outsourced activities at lower costs. Globalisation gives way to vast (specialist) resources located world-wide and why would an organisation not utilise these resources to sustain (global) competition and added value?

Detailed analysis results regarding to research topics can be found in Appendix 2.



**Figure 4-4: Most frequent topics in articles on outsourcing**

#### 4.6.3 Research scope

Table 4-3 shows the scope of articles on outsourcing encountered again together with the percentage of the total. Most of the articles dealt with outsourcing IS/IT (48,4%) followed by outsourcing in general (23,7%). In most cases this latter category of articles does not provide details about the type of activities that are or could be subject to outsourcing. In other words, this category comprises those articles that do not address or leave aside any branch of industry or business or line of business or department.

Figure 4-5 shows the encountered scopes of the articles on outsourcing graphically. Examining the evolution of the scopes over time clearly shows that outsourcing IS/IT was and remains important. Outsourcing manufacturing functions appears to gain significant interest. Another noticeable issue is the increased interest in outsourcing the less obvious activities such as outsourcing HR functions, marketing, purchasing and sales-force.

Detailed analysis results regarding to research scopes can be found in Appendix 2.

	Until 1995 (%)	1996–2000 (%)	2001–2005 (%)	Since 2006 (%)	Total (%)
Outsourcing IS/IT	15; 16,1	11; 11,8	14; 15,1	5; 5,4	45; 48,4
Outsourcing generic	4; 4,3	9; 9,7	6; 6,5	3; 3,2	23; 23,7
Outsourcing manufacturing	2; 2,2	3; 3,2	6; 6,5	1; 1,1	12; 12,9
Outsourcing HR functions	0; 0,0	0; 0,0	3; 3,2	0; 0,0	3; 3,2
Outsourcing logistic functions	1; 1,1	0; 0,0	1; 1,1	1; 1,1	3; 3,2
Outsourcing technology	0; 0,0	2; 2,2	1; 1,1	0; 0,0	3; 3,2
Outsourcing services	0; 0,0	1; 1,1	1; 1,1	0; 0,0	2; 2,2
Outsourcing marketing	0; 0,0	0; 0,0	0; 0,0	1; 1,1	1; 1,1
Outsourcing purchasing	0; 0,0	0; 0,0	0; 0,0	1; 1,1	1; 1,1
Outsourcing sales-force	0; 0,0	0; 0,0	1; 1,1	0; 0,0	1; 1,1
<b>Total</b>	<b>22; 23,7</b>	<b>26; 28,0</b>	<b>33; 35,5</b>	<b>13; 12,9</b>	<b>93; 100,0</b>

Table 4-3: Scope of the articles on outsourcing

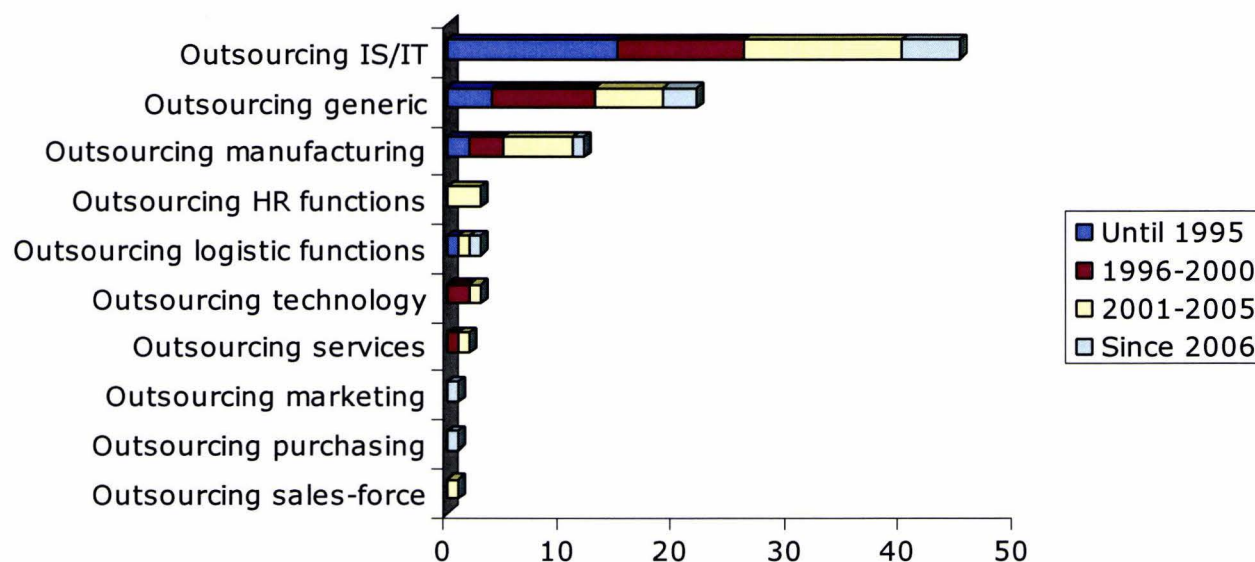


Figure 4-5: Scope of the articles on outsourcing

#### 4.6.4 Research methodologies

Table 4-4 shows the research methodologies encountered based on the definitions in Section 4.4 and shows that most of the methodologies encountered concern empirical studies, 64,5%. In the first two defined periods, until 1995 and 1996-2000 the difference between theoretical and empirical studies is only marginal. From 2001 onwards, the percentage of empirical studies significantly increased whereas the percentage of theoretical studies in contrast significantly decreased. One reason could be that outsourcing by that time has been around long enough to use trustworthy empirical data to validate earlier developed theories.

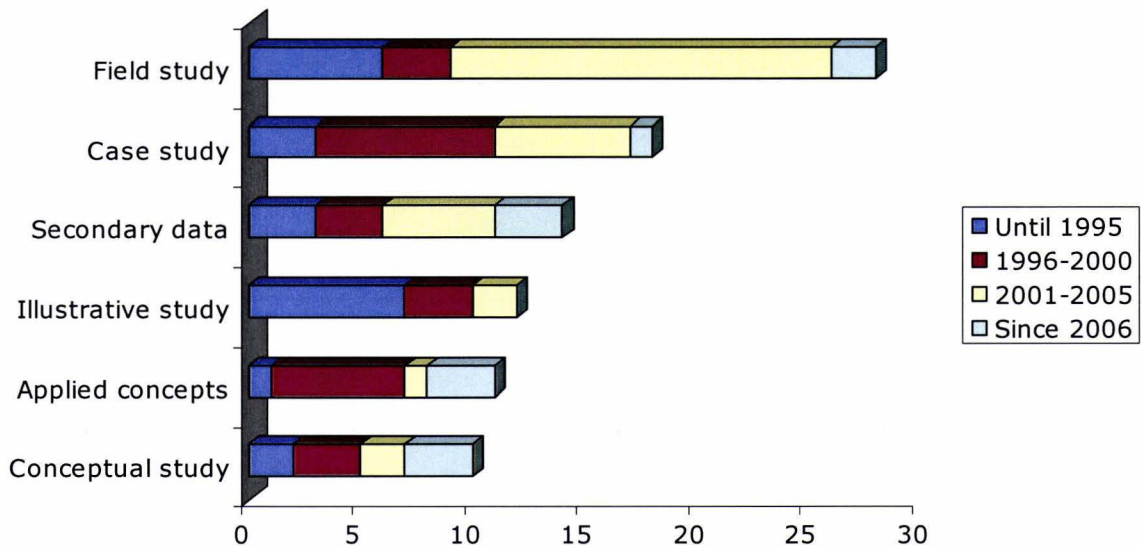
Looking closer at the theoretical studies, illustrative studies are the most common, closely followed by the applied concepts and the conceptual ones.

With respect to empirical studies, the field study obviously stands out. This finding would suggest that quantitative research is considered to be important in the outsourcing area. Field studies are successively followed by case studies and studies using secondary data.

Details of the literature analysis regarding to research methodologies can be found in Appendix 2.

	Until 1995 (%)	1996–2000 (%)	2001–2005 (%)	Since 2006 (%)	Total (%)
<b>Theoretical studies</b>	<b>10; 10,8</b>	<b>12; 12,9</b>	<b>5; 5,4</b>	<b>6; 6,5</b>	<b>33; 35,5</b>
Conceptual study	2; 2,2	3; 3,2	2; 2,2	3; 3,2	10; 10,8
Illustrative study	7; 7,5	3; 3,2	2; 2,2	0; 0,0	12; 12,9
Applied concepts	1; 1,1	6; 6,5	1; 1,1	3; 3,2	11; 11,8
<b>Empirical studies</b>	<b>12; 12,9</b>	<b>14; 15,1</b>	<b>28; 30,1</b>	<b>6; 6,5</b>	<b>60; 64,5</b>
Case study	3; 3,2	8; 8,6	6; 6,5	1; 1,1	18; 19,4
Field study	6; 6,5	3; 3,2	17; 18,3	2; 2,2	28; 30,1
Study using secondary data	3; 3,2	3; 3,2	5; 5,4	3; 3,2	14; 15,1
<b>Total</b>	<b>22; 23,7</b>	<b>26; 28</b>	<b>33; 35,5</b>	<b>12; 12,9</b>	<b>93; 100,0</b>

**Table 4-4: Research methodologies encountered**



**Figure 4-6: Research methodologies encountered**

**4.6.5 Future research**

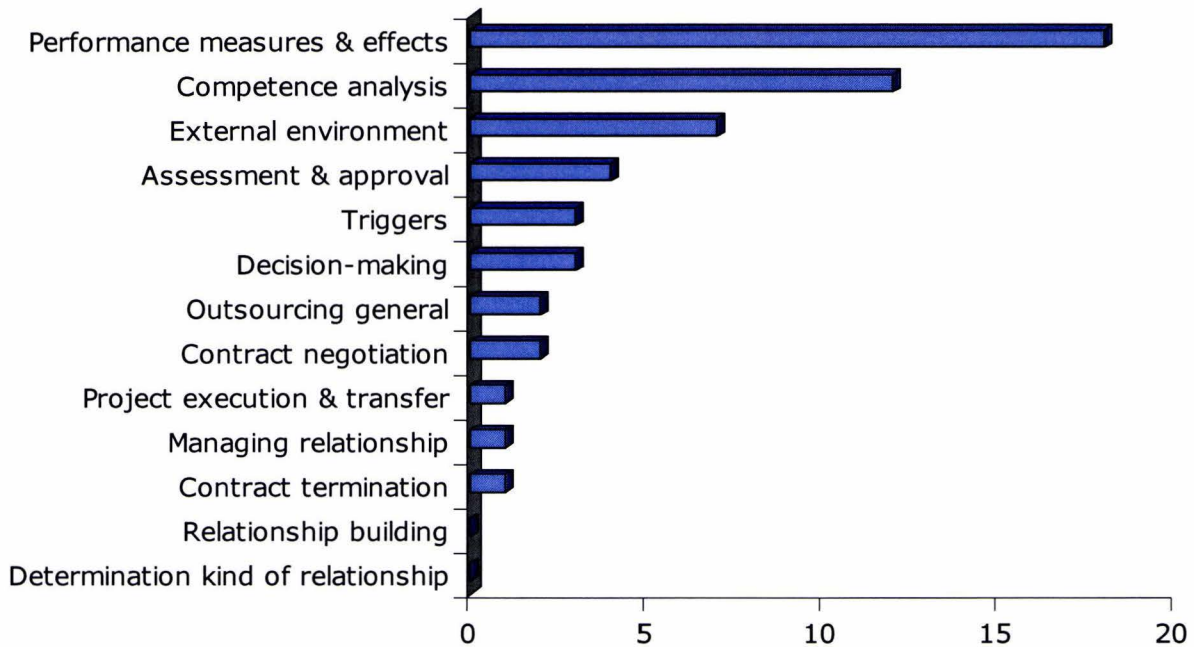
From 93 articles analysed only 43 explicitly or implicitly mention avenues for future research. The details on proposed avenues for future research are listed in Appendix 3. Note that only those articles that included proposed avenues for future research have been included in Appendix 3.

As discussed in Section 4.5, proposed avenues for future research are categorised according to the process steps and peripheral issues influencing or even affecting the outsourcing process as depicted in Figure 4-1, Section 4.5. For the sake of completeness, these process steps and so-called peripheral issues are repeated here: Competence analysis, Decision-making, Assessment & approval, Determination kind of relationship, Contract negotiation, Relationship building, Project execution & transfer, Managing relationship, Contract termination, External environment, Triggers and Performance measures & effects.

Based on the literature analysis, one category has been added; Outsourcing process general. This category is unique from the other categories in that respect that the proposed avenues for future research do not specifically address one or a few process steps or peripheral issues, but addresses the outsourcing process in general.

With respect to the proposed avenues for future research, authors sometimes suggest further research that relates to more than one process step or area. Therefore, the proposed avenues for future research in one article can be classified into one or more categories.

The proposed avenues for future research are graphically presented in Figure 4-7.



**Figure 4-7: Proposed avenues for future research**

From Figure 4-7 follows almost immediately that the primary focus of future research is on the External environment, Performance measures & effects and the first few outsourcing process steps; Competence analysis, Decision-making and Assessment & approval.

Particular focus is on Performance measures & effects. One reason for this might be the unremitting attention or demand from both the scientific and in particular the industrial world, for facts and figures. After all, facts and figures prove or negate the supposed benefit(s) of outsourcing. If the benefits of outsourcing can not be proven, organisations will be reluctant to embark upon the outsourcing adventure. One example of a, for that matter valid, question practitioners might ask themselves is what the effect of outsourcing has on their organisation's value or performance. Bryce and Useem (Bryce and Useem, 1998), Gilley and Rasheed (Gilley

and Rasheed, 2000) and Jiang, Frazier and Prater (Jiang, Frazier and Prater, 2006) suggest future research should address this particular question. Other research, such as Mol, van Tulder and Bijte suggest that future research should focus on the development of more sophisticated performance measures. For instance, they propose to look at a form of performance that is more closely related to outsourcing, such as reliability, quality or innovation (Mol, van Tulder and Bijte, 2005). Another example is the research by Gilley, Greer and Rasheed (Gilley, Greer and Rasheed, 2004) proposing to focus on intermediate outcome variables such as satisfaction with the decision to outsource and ability to focus on areas of core competence. Yet another example of developing sophisticated performance measures, conducted by Conklin (Conklin, 2005), suggests to examine the question how one can best measure the potential for goodwill, trust and relevant cultural features in an outsourcing relationship. Research finally making up the Performance measures & effects category is the research suggesting to examine the applicability of the findings in a broader setting. Rothaermel, Hitt and Jobe for instance suggest to continue their research efforts on outsourcing effects by e.g. testing their developed theoretical model in other industry settings (Rothaermel, Hitt and Jobe, 2006).

It becomes apparent from Figure 4-7 that it is still necessary for future research to focus on the more strategic issues with which the outsourcing phenomenon is surrounded. After all, strategic issues, or issues related to the creation of fit among a company's activities (Porter, 1996), such as core/non-core competence mapping and SWOT-analysis are just a few key activities part of the competence analysis process step. In their research, Holcomb and Hitt propose to explore the sources of value creation (Holcomb and Hitt, 2006) whereas Altinkemer, Chaturvedi, and Gulati wonder whether organisations relive the "hollowed out corporation" (Altinkemer, Chaturvedi, and Gulati, 1994). These are just two examples of research suggesting avenues for future research focusing on the strategic aspects of outsourcing.

Drawing upon Allen and Chandrashekar (Allen and Chandrashekar, 2000), the success or failure of an outsourcing deal is unknown on the day the contract is signed. Getting the contract right however is a necessary and fundamental step, but not sufficient for a good outcome. Evidently, organisations engage in an outsourcing mode for mutual benefit. However, during the course of the outsourcing relation conflicts might arise which need to be resolved, management wants to monitor and evaluate adherence to the outsourcing contract and joint development projects might be started. These are just a few examples that clearly show that an organisation entering into a (long-term) outsourcing relationship needs to manage this relationship to maximise the chance of success. However, as we have already observed in Section 4.6.2, outsourcing from the perspective of the relationship has not been a predominant topic in recent and current research. From Figure 4-7 follows that the topic of outsourcing relationships has hardly been addressed as a future research opportunity as well. Managing relationships has been addressed only once when it comes to opportunities for future research; Barthelemy (Barthelemy, 2003). The determination of the kind of relationship and building the relationship has not even been addressed at all as an avenue for future research. Just like we argued in Section 4.6.2, this is questionable given the fact that various authors state that viable (long-term) relationships with the supplier are a pre-condition for outsourcing success.

Finally Figure 4-7 suggests that Project execution & transfer will hardly be addressed in future research as well. This is surprising. After all, no matter how well the previous process steps have been prepared and executed, when an organisation fails to implement a change process or fails to transfer applicable knowledge for instance, managing the relationship will be challenging and chances on outsourcing success will decrease.

## 4.7 Conclusions

The sixth and last research question, "*What and how is current literature on outsourcing doing?*" was answered in this chapter by collecting and analysing outsourcing literature published in highly prestigious journals in the period 1990 – 2006. By successively examining each selected article for research topic, research scope, research methodology, key findings, research limitations and proposed avenues for future research, an overall picture of the field of outsourcing and its evolution is painted.

The literature review concerning the outsourcing phenomenon shows that literature on outsourcing is still increasing suggesting that the outsourcing phenomenon is still of interest to the academic world and that the phenomenon itself apparently is here to stay.

The most frequently discussed category of topics is the one that views the phenomenon from the perspective of the outsourcing organisation; just over 77% of all 95 reviewed articles. Specifically, topics dealing with reasons or benefits sought, risks, effects and decision-making are of interest to academic research. The general views that deal with the rise of outsourcing, how it evolved and how much it grew are also strongly represented within this category, although a decline in the number of articles since 1995 is observed. The fact that the outsourcing phenomenon can be considered to be in its infancy up to 1995 possibly explains this decline. In contrast to the general view topic, outsourcing effects enjoy more attention in more recent years. A possible explanation here is the long-term effect of outsourcing decisions which become more and more visible as the outsourcing phenomenon matures. With respect to future research, particular focus is on performance measures & effects. One reason for this is the unremitting attention from both the scientific and industrial world for facts and figures that either prove or negate the supposed benefit(s) of outsourcing. It is observed here that research on performance measures & effects enjoyed sufficient attention in the past and it continues to enjoy significant attention in the future. Based on these findings it is concluded here that this particular topic can not be designated as a gap in outsourcing research.

Outsourcing from the perspective of the relationship, including topics such as contract and client-provider relationship, have not been strongly represented in previous research. Although getting the contract right is a prerequisite and fundamental step, it is not sufficient for a good outcome nor is known on the day the contract is signed whether the outsourcing deal results in success or failure. An organisation enters into a (long-term) outsourcing relationship and therefore needs to build and manage this relationship to maximise the chance of success. Although acknowledged by some researchers to be a key success factor, the building and management of (long-term) viable relationships is hardly addressed in future research. Moreover, future research does not specifically address outsourcing success factors at all. This was expected given the maturing of the outsourcing phenomenon which logically results in measurable tangible and intangible effects that are a mere requirement to determine, and moreover (statistically) prove what the factors are that lead to outsourcing success. In conclusion, two gaps in future research can be designated; success factors and outsourcing relationships. This latter gap can be divided into relationship determination, relationship building and relationship management.

Recent research addressed the "how" of outsourcing little, examining the tools used and the route an organisation follows in transferring a certain activity currently executed in-house to purchasing the activity from an external provider, including implementation. However, knowledge transfer, workflow definition and adaptation to provider performance which are just a few examples related to implementation or project execution & transfer, will not be addressed in future research at all. Proper project execution & transfer is determining for the effort to be put in relationship management. After all, when an organisation fails to implement a change process or fails to transfer applicable knowledge for instance, managing the relationship will be challenging and chances on outsourcing success will decrease. Project

execution & transfer is herewith another gap in future research which should be addressed however.

The gaps in future research listed above have been designated to be the biggest gaps based on the literature analysis conducted here. Topics related to the contract negotiation and contract termination outsourcing process steps also do lack attention in future research. However, the type of relationship the outsourcing organisation aims for will shape the type and contents of the contract for a great deal. After all, when determining the kind of relationship, aspects expected to influence the future relationship will be determined and will be accounted for in the contract. In this respect, contract negotiation could be part of research on the determination of the kind of relationship implicitly. With respect to contract termination a similar reasoning holds. When determining, building and managing the outsourcing relationship the (un-)predicted ending of the relationship should always be considered.

## 5 CONCLUSIONS, LIMITATIONS AND FUTURE RESEARCH

### 5.1 Conclusions

The concept of outsourcing is not clearly or uniformly defined. Many definitions of outsourcing do exist, one simpler and less detailed than the other. Outsourcing is frequently compared to terms such as contracting (out) and off-shoring. As a result these terms are quite often used interchangeably in (scientific) literature. However, outsourcing, contracting (out) and off-shoring do technically differ and should therefore not be used interchangeably. An all-comprising definition of the outsourcing concept has been developed and reads:

*"Outsourcing is the practice of transferring the planning, management and operation, as set forth in a contract, of a recurring organisational function to a competent third party in which the outsourcing organisation has no direct ownership and over which it has no direct authority or control"*

One of the most important drivers to embark upon the outsourcing adventure is reducing short-term direct or indirect costs. Other reasons, or benefits sought, are improved access to new technologies and skills, a clear company focus and perceived flexibility in the outsourcing relationship. However, every reason to outsource is a potential pitfall. An extreme focus on reducing costs might lead to neglecting quality and thus customer added value. Every reason to outsource should be put in the light of an organisation's context and scope; it should always be put in perspective.

A clear and unambiguous view of company goals and objectives is a fundamental determinant for outsourcing success. An outsourcing decision not lined up with corporate strategy has a hard time getting support and involvement from senior management and is therefore destined to become a disaster. Selecting the "right" provider, open communication and the understanding that outsourcing entails a long-term relationship between outsourcing organisation and provider with a high degree of high-risk sharing, building of and management of relationships is crucial to outsourcing success. As the outsourcing phenomenon further matures and more research is conducted, identified success factors will become more and more abundant. By focusing on outsourcing successes and failures, new determinants for outsourcing success will be identified.

Literature on outsourcing is still increasing suggesting that the outsourcing phenomenon is still of interest to the academic world and that the phenomenon itself apparently is here to stay.

The most frequently category of topics discussed in current research is the one that views the phenomenon from the perspective of the outsourcing organisation. Topics dealing with reasons or benefits sought, risks, effects and decision-making have been of specific interest to academic research. The general views that deal with the rise of outsourcing, how it evolved and how much it grew have also been strongly represented, although a decline in the number of articles since 1995 has been observed. The topic of outsourcing effects enjoys more attention in more recent years. The long-term effect of outsourcing decisions which become more and more visible as the outsourcing phenomenon matures is considered to be a reason.

Proposed avenues for future research particularly focus on performance measures & effects. Unremitting attention from both the scientific and industrial world for facts and figures that either prove or negate the supposed benefit(s) of outsourcing is considered to be the reason. It enjoyed sufficient attention in the past and it continues to enjoy significant attention in the future. Based on these findings it is concluded that this particular topic can not be considered in outsourcing research.



Outsourcing from the perspective of the relationship has not been strongly represented in previous research. Although getting the contract right is a prerequisite and fundamental step, it is not sufficient for a good outcome nor is known on the day the contract is signed whether the outsourcing deal results in success or failure. Organisations embarking upon the outsourcing adventure enter into a (long-term) relationship and therefore need to build and manage this relationship to maximise the chance of success. However, the building and management of (long-term) viable relationships is hardly addressed in future research. Furthermore, future research does not address outsourcing success factors. This was expected however given the maturing of the outsourcing phenomenon which results in measurable tangible and intangible effects that are a requirement to determine, and moreover (statistically) prove what the factors are that lead to outsourcing success. Concluding, two significant gaps in future research were designated; success factors and outsourcing relationships. The latter gap has been divided into relationship determination, relationship building and relationship management. Given the arguments above relevant questions that remain unanswered could be:

- Are (the building of and the management of) relationships important in outsourcing success?
- How should outsourcing relations be fashioned to contribute to outsourcing success?
- How should an outsourcing contract be fashioned to support relationship building and relationship management?

Recent research addressed the “how” of outsourcing little and it is not addressed in future research as well. Proper project execution & transfer is determining for the effort to be put in managing the relationship. When an organisation fails to implement a change process or fails to transfer applicable knowledge for instance, managing the relationship will be challenging and chances on outsourcing success will decrease. An interesting question would be how the process of knowledge transfer should be shaped in order to support relationship management. Project execution & transfer is herewith another gap in future research.

Topics related to the contract negotiation and contract termination outsourcing process steps also lack attention in future research. However, these topics could logically be incorporated or at least affect each other.

## 5.2 Limitations

The literature analysis conducted obviously knows some limitations which we will mention here.

The first limitation is the limited sample size of articles analysed. Reason for this limited sample size is twofold:

- the limitation of the search key word “outsourcing” to the document title and key word, and
- the division in articles published in journals enjoying high prestige and others.

When the search key word would also have been applied to the body of the article text, more relevant articles would have been found, thus increasing the sample size. Only considering the articles published in journals enjoying high prestige obviously reduces the sample size. On the other hand, critical examination of the contents of the articles is required when all journals would be included. After all, some journals can not be considered scientific journals; they express the editor’s opinion and/or no research methodology can be established.

Another limitation is the time span considered, ranging from 1990 – 2006. Not only would repositioning the considered time span increase the sample size, it might also have given another, perhaps more accurate, view on topics and scope. A more accurate and clearer picture of the evolution of the outsourcing phenomenon might have been obtained.

The next limitation lies in the defined time periods of analysis and also violates literature analysis accuracy. The literature analysis ranges from 1990 through 2006 and has been divided into four blocks, each covering five consecutive years; until 1995, 1996-2000, 2001-2005 and since 2006. By decreasing the considered time periods more detail, and thus more accuracy, could have been added in terms of the evolution of the outsourcing phenomenon.

Yet another limitation could be the breadth of the research conducted here. Proposed avenues for future research limit themselves to identified areas based on the adapted outsourcing process by Momme and Hvolby presented in Figure 4-1. The suggested research questions as a result, do lose depth. When for instance a literature analysis was conducted on part of the outsourcing phenomenon, say outsourcing results, research questions could have been formulated more sharply, giving better aimed direction to future research.

A last limitation is the mere qualitative analysis and reasoning of the results. Statistically proving observed differences by using statistical test methods such as Chi-square would add more power to the underlying literature analysis. An example would be to calculate for every defined time the proportion of articles encountered addressing a certain topic in order to subsequently compare the means by using the Chi-square test. Declining or rising interest in a particular topic can thus be statistically proven.

### 5.3 Future research

The research limitations indicated in Section 5.2 and the conclusions drawn provide plural avenues for future research.

Starting with the indicated research limitations, the first opportunity for further research is to replicate the underlying literature study, taking into account a sufficiently large sample size based on which meaningful statistical analyses can be conducted and so a more accurate overall picture of the field of outsourcing and its evolution can be painted. Three ways of increasing the sample size is to:

- increase the time span of articles published on outsourcing,
- apply the search key word "outsourcing", or other outsourcing related search key words, to the body of the article text, abstract or article key words, and
- include a wider range of journals

Note that the division of the time period covered in a certain number of consecutive years is attuned to the detail the research aims at.

Based on the designated gaps in previous research and the avenues for future research indicated in previous studies, future research within the Faculty of Technology Management, department of Organisation Science and Marketing at the Eindhoven University of Technology should particularly aim their research efforts on the subsequent outsourcing process steps:

- Determination kind of relationship,
- Contract negotiation,
- Relationship building,
- Project execution & transfer,
- Managing relationship, and
- Contract termination

The most important research proposals related to the outsourcing process steps above which need in-depth analysis are:

- Are (the building of and the management of) relationships important in outsourcing success?
- How should outsourcing relations be fashioned to contribute to outsourcing success?
- How should an outsourcing contract be fashioned to support relationship building and relationship management?
- How should the process of knowledge transfer be fashioned?

Figure 5-1 on the following page presents the outsourcing process where the highlighted areas represent the areas where future research should focus.

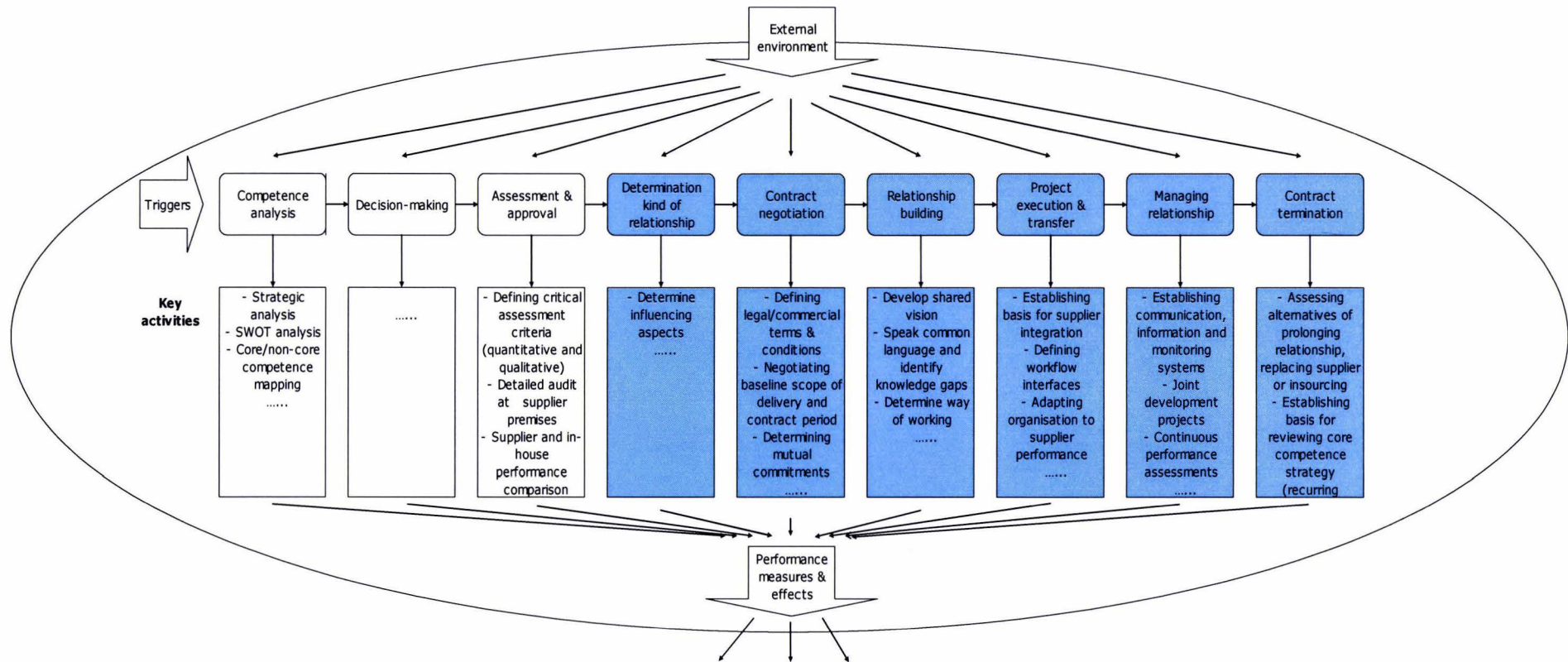


Figure 5-1: Avenues for future research

## 6 REFLECTIONS

Although the research conducted provided an improvement of the knowledge of the outsourcing phenomenon within the Faculty of Technology Management, department of Organisation Science and Marketing at the Eindhoven University of Technology by answering five relevant research questions, viz. "*What is outsourcing?*", "*What are the benefits of outsourcing?*", "*What are the risks of outsourcing?*", "*What are the determinants of success in outsourcing decisions?*" and "*What does the outsourcing process look like?*", the true scientific value does not lie within the answers to these questions. The answer to the sixth defined research question, viz. "*What and how is current literature on outsourcing doing?*", is however. Based on the literature review of recent and current research on outsourcing, a roadmap of future research on outsourcing is provided in the research in front of you. The gaps identified by analysing recent and current research on outsourcing based on a critical examination of research topics, research scopes, research methodologies, key findings, research limitations and proposed avenues or future research raise some opportunities for future research. These raised opportunities for future research fit particularly well within the field of interest of the Faculty of Technology Management, department of Organisation Science and Marketing at the Eindhoven University of Technology.

Although literature analyses on outsourcing or certain outsourcing aspects have been a research topic in itself or have been part of a greater whole, to the author's best knowledge no research has been conducted before that examines and frames proposed avenues for future research, linking it to the outsourcing process and based on that addresses future research opportunities.

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## APPENDIX 1

## NUMBER OF ARTICLES PUBLISHED AND JOURNALS ANALYSED

Author	Year	Journal	Article title
Adeleye, B.C., Annansingh, F., Baptista Nunes M.	2004	International Journal of Information Management	Risk management practices in IS outsourcing: an investigation into commercial banks in Nigeria
Agrawal, A., Kishore, R., Raghav Rao, H.	2006	Information & Management	Market reactions to E-business outsourcing announcements: An event study
Alexander, M., Young, D.	1996	Long Range Planning	Strategic Outsourcing
Allen, S., Chandrashekar, A.	2000	Business Horizons	Outsourcing Services: The Contract Is Just the Beginning
Altinkemer, K., Chaturvedi, A., Gulati, R.	1994	International Journal of Information Management	Information Systems Outsourcing: Issues and Evidence
Arnett, K.P., Jones, M.C.	1994	Information & Management	Firms that choose outsourcing: A profile
Aubert, B.A., Rivard, S., Patry, M.	1996	Information & Management	A transaction cost approach to outsourcing behavior: Some empirical evidence
Aubert, B.A., Rivard, S., Patry, M.	2004	Information & Management	A transaction cost model of IT outsourcing
Baden-Fuller, C., Targett, D., Hunt, B.	2000	European Management Journal	Outsourcing to Outmanoeuvre: Outsourcing Re-defines Competitive Strategy and Structure
Balakrishnan, S.	1994	European Journal of Operational Research	The dynamics of make or buy decisions
Barthelemy, J.	2003	European Management Journal	The Hard and Soft Sides of IT Outsourcing Management
Barthelemy, J., Geyer, D.	2001	European Management Journal	IT Outsourcing: Evidence from France and Germany
Barthelemy, J., Geyer, D.	2005	Information & Management	An empirical investigation of IT outsourcing versus quasi-outsourcing in France and Germany
Baxendale, S.J.	2004	Business Horizons	Outsourcing opportunities for small businesses: A quantitative analysis
Berggren, C., Bengtsson, L.	2004	European Management Journal	Rethinking Outsourcing in Manufacturing: A Tale of Two Telecom Firms
Beulen, E., Fenema, P. van, Currie, W.	2005	European Management Journal	From Application Outsourcing to Infrastructure Management: Extending the Offshore Outsourcing Service Portfolio
Boer, L. de, Gaytan, J., Arroyo, P.	2006	Supply Chain Management: An International Journal	A satisficing model of outsourcing

Bryce, D.J., Useem, M.	1998	European Management Journal	The Impact of Corporate Outsourcing on Company Value
Burdon, S., Bhalla, A.	2005	European Management Journal	Lessons from the Untold Success Story: Outsourcing Engineering and Facilities Management
Cánez, L.E., Platts, K.W., Probert, D.R.	2000	International Journal of Operations & Production Management	Developing a framework for make-or-buy decisions
Cesaroni, F.	2004	Research Policy	Technological outsourcing and product diversification: do markets for technology affect firms' strategies?
Chiesa V., Manzini R., Tecilla F.	2000	International Journal of Operations & Production Management	Selecting sourcing strategies for technological innovation: an empirical case study
Collins, R., Bechler, K., Pires, S.	1997	European Management Journal	Outsourcing in the Automotive Industry: From JIT to Modular Consortia
Conklin, D.W.	2005	Long Range Planning	Risks and Rewards in HR Business Process Outsourcing
Davis, E.W.	1992	Business Horizons	Global Outsourcing: Have U.S. Managers Thrown the Baby Out with the Bath Water?
Earl, M.J.	1996	Sloan Management Review	The Risks of Outsourcing IT
Elfring, T., Baven, G.	1994	Long Range Planning	Outsourcing Technical Services: Stages of Development
Florin, J., Bradford, M., Pagach, D.	2005	Journal of High Technology Management Research	Information technology outsourcing and organizational restructuring: An explanation of their effects on firm value
Ford, D., Cotton, B., Farmer, D., Gross, A., Wilkinson, I.	1993	Industrial Marketing Management	Make-or-Buy Decisions and their Implications
Gainey, T.W., Klaas, B.S.	2003	Journal of Management	The Outsourcing of Training and Development: Factors Impacting Client Satisfaction
Gilley, K.M., Greer, C.R., Rasheed, A.A.	2004	Journal of Business Research	Human resource outsourcing and organizational performance in manufacturing firms
Gilley, K.M., Rasheed, A.A.	2000	Journal of Management	Making More by Doing Less: An Analysis of Outsourcing and its Effects on Firm Performance
Gonzalez, R., Gasco, J., Llopis, J.	2005	International Journal of Information Management	Information systems outsourcing reasons in the largest Spanish firms

Goo, J., Kishore, R., Nam, K., Rao, H.R., Song, Y.	2007	Decision Support Systems	An investigation of factors that influence the duration of IT outsourcing relationships
Graf, M., Mudambi, S.M.	2005	Journal of International Management	The outsourcing of IT-enabled business processes: A conceptual model of the location decision
Grover, V., Cheon, M.J., Teng, J.T.C.	1994	Information & Management	A descriptive study on the outsourcing of information systems functions
Harland, C., Knight, L., Lamming, R., Walker, H.	2005	International Journal of Operations & Production Management	Outsourcing: assessing the risks and benefits for organisations, sectors and nations
Harris, A., Giunipero, L.C., Hult, G.T.M.	1998	Industrial Marketing Management	Impact of Organizational and Contract Flexibility on Outsourcing Contracts
Hendry, J.	1995	European Management Journal	Culture, Community and Networks: The Hidden Cost of Outsourcing
Holcomb, T.R., Hitt, M.A.	2006	Journal of Operations Management	Toward a model of strategic outsourcing
Insinga, R.C., Werle, M.J.	2000	The Academy of Management Executive	Linking outsourcing to business strategy
Jennings, D.	1996	Long Range Planning	Outsourcing Opportunities for Financial Services
Jiang, B., Frazier, G.V., Prater, E.L.	2006	International Journal of Operations & Production Management	Outsourcing effects on firms' operational performance An empirical study
Johnson, J.C., Schneider, J.C.	1995	Business Horizons	Outsourcing in Distribution: The Growing Importance of Transportation Brokers
Kakabadse, A., Kakabadse, N.	2002	European Management Journal	Trends in Outsourcing: Contrasting USA and Europe
Kakouris, A.P., Polychronopoulos, G., Binioris, S.	2006	Marketing Intelligence & Planning	Outsourcing decisions and the purchasing process: a systems-oriented approach
Ketler, K., Walstrom, J.	1993	International Journal of Information Management	The Outsourcing Decision
Khalfan, A.M.	2004	International Journal of Information Management	Information security considerations in IS/IT outsourcing projects: a descriptive case study of two sectors
Kotabe, M., Murray, J.Y.	2004	Industrial Marketing Management	Global sourcing strategy and sustainable competitive advantage
Lacity, M., Willcocks, L., Feeny, D.	2004	European Management Journal	Commercializing the Back Office at Lloyds of London: Outsourcing and Strategic Partnerships Revisited



Lee, J.N.	2001	Information & Management	The impact of knowledge sharing, organizational capability and partnership quality on IS outsourcing success
Lei, D., Hitt, M.A.	1995	Journal of Management	Strategic Restructuring and Outsourcing: The Effect of Mergers and Acquisitions and LBOs on Building Firm Skills and Capabilities
Loebbecke, C., Jelassi, T.	1999	European Management Journal	Business Strategies and IT Outsourcing: The Case of CompuNet AG
Lorence, D.P., Spink, A.	2004	International Journal of Information Management	Healthcare information systems outsourcing
Martinsons, M.G.	1993	Long Range Planning	Outsourcing Information Systems: A Strategic Partnership with Risks
McFarlan, F.W., Nolan, R.L.	1995	Sloan Management Review	How to Manage an IT Outsourcing Alliance
McIvor, R.	2000	Supply Chain Management: An International Journal	A practical framework for understanding the outsourcing process
McIvor, R., Humphreys, P.K., McAleer, W.E.	1997	Management Decision	A strategic model for the formulation of an effective make or buy decision
McLellan, K., Beamish, P.	1994	European Management Journal	The New Frontier for Information Technology Outsourcing: International Banking
Miozzo, M., Grimshaw, D.	2005	Research Policy	Modularity and innovation in knowledge-intensive business services: IT outsourcing in Germany and the UK
Mol, M.J.	2005	Research Policy	Does being R&D intensive still discourage outsourcing? Evidence from Dutch manufacturing
Mol, M.J., Pauwels, P., Matthyssens, P., Quintens, L.	2004	Journal of International Management	A technological contingency perspective on the depth and scope of international outsourcing
Mol, M.J., Tulder R.J.M van, Beijer, P.R.	2005	International Business Review	Antecedents and performance consequences of international outsourcing
Nam, K., Chaudhury, A., Rao H.R.	1995	European Journal of Operational Research	A mixed integer model of bidding strategies for outsourcing

Ngwenyama, O.K., Bryson, N.	1999	European Journal of Operational Research	Making the information systems outsourcing decision: A transaction cost approach to analyzing outsourcing decision problems
Nicholson, L., Vakharia, A.J., Erenguc, S.S.	2004	European Journal of Operational Research	Outsourcing inventory management decisions in healthcare: Models and application
Osei-Bryson, K., Ngwenyama, O.K.	2006	European Journal of Operational Research	Managing risks in information systems outsourcing: An approach to analyzing outsourcing risks and structuring incentive contracts
Paisittanand, S., Olson, D.L.	2006	European Journal of Operational Research	A simulation study of IT outsourcing in the credit card business
Palvia, P.C.	1995	Information & Management	A dialectic view of information systems outsourcing: Pros and cons
Parry, G., James-Moore, M., Graves, A.	2006	Supply Chain Management: An International Journal	Outsourcing engineering commodity procurement
Palvia, P.C.	1995	Information & Management	A dialectic view of information systems outsourcing: Pros and cons
Parry, G., James-Moore, M., Graves, A.	2006	Supply Chain Management: An International Journal	Outsourcing engineering commodity procurement
Pinnington, A., Woolcock, P.	1995	International Journal of Information Management	How Far is IS/IT Outsourcing Enabling New Organizational Structure and Competences?
Pinnington, A., Woolcock, P.	1997	International Journal of Information Management	The Role of Vendor Companies in IS/IT Outsourcing
Quélin, B., Duhamel, F.	2003	European Management Journal	Bringing Together Strategic Outsourcing and Corporate Strategy: Outsourcing Motives and Risks
Quinn, J.B.	1999	Sloan Management Review	Strategic Outsourcing: Leveraging Knowledge Capabilities
Quinn, J.B.	2000	Sloan Management Review	Outsourcing Innovation: The New Engine of Growth
Quinn, J.B., Hilmer, F.G.	1994	Sloan Management Review	Strategic Outsourcing
Richmond, W.B., Seidmann A., Whinston, A.B.	1992	Decision Support Systems	Incomplete contracting issues in information systems development outsourcing
Ross Jr., W.T., Dalsace, F., Anderson, E.	2005	Business Horizons	Should you set up your own sales force or should you outsource it? Pitfalls in the standard analysis

Rothaermel, F.T., Hitt, M.A., Jobe, L.A.	2006	Strategic Management Journal	Balancing Vertical Integration and Strategic Outsourcing: Effects on Product Portfolio, Product Success, and Firm Performance
Samaddar, S., Kadiyala, S.	2006	Journal of Operations Management	Information systems outsourcing: Replicating an existing framework in a different cultural context
Saunders, C., Gebelt, M., Qing, H.	1997	California Management Review	Achieving success in information systems outsourcing
Shepherd, A.	1999	European Management Journal	Outsourcing IT in a Changing World
Shi, Z., Kunnathur, A.S., Ragu-Nathan, T.S.	2005	Information & Management	IS outsourcing management competence dimensions: instrument development and relationship exploration
Smith, J.A., Morris, J., Ezzamel, M.	2005	The British Accounting Review	Organisational change, outsourcing and the impact on management accounting
Smith, M.A., Mitra, S., Narasimhan, S.	1996	Information & Management	Offshore outsourcing of software development and maintenance: A framework for issues
Smith, M.A., Mitra, S., Narasimhan, S.	1998	Journal of Management Information Systems	Information systems outsourcing: A study of pre-event firm characteristics
Ueltschy, L.C., Ryans Jr., J.K., Herremans, I.	2006	Business Horizons	Marketing: Who's really minding the store globally?
Vining, A., Globerman, S.	1999	European Management Journal	A Conceptual Framework for Understanding the Outsourcing Decision
Weidenbaum, M.	2005	Business Horizons	Outsourcing: Pros and cons
Willcocks, L., Choi, J.C.	1995	European Management Journal	Co-operative Partnership and 'Total' IT Outsourcing: From Contractual Obligation to Strategic Alliance?
Willcocks, L., Fitzgerald, G., Feeny, D.	1995	Long Range Planning	Outsourcing IT: The Strategic Implications
Willcocks, L., Lacity, M., Fitzgerald, G.	1995	International Journal of Information Management	Information Technology Outsourcing in Europe and the USA: Assessment Issues
Yang, C., Huang, J.B.	2000	International Journal of Information Management	A decision model for IS outsourcing

## APPENDIX 2

## RESEARCH TOPICS, SCOPE AND METHODOLOGY

Author	Year	Research topic	Research scope	Research methodology
Adeleye, B.C., Annansingh, F., Baptista Nunes M.	2004	Risks	Outsourcing IS/IT	Survey
Agrawal, A., Kishore, R., Raghav Rao, H.	2006	Decision-making	Outsourcing IS/IT	Secondary data
Alexander, M., Young, D.	1996	Risks	Outsourcing generic	Survey
Allen, S., Chandrashekar, A.	2000	Contract Client-Provider relationship	Outsourcing services	Illustrative study
Altinkemer, K., Chaturvedi, A., Gulati, R.	1994	Reasons Risks Contract Outsourcing object General view	Outsourcing IS/IT	Secondary data
Arnett, K.P., Jones, M.C.	1994	General view	Outsourcing IS/IT	Survey
Aubert, B.A., Rivard, S., Patry, M.	1996	Transaction cost theory	Outsourcing IS/IT	Case study
Aubert, B.A., Rivard, S., Patry, M.	2004	Transaction cost theory	Outsourcing IS/IT	Survey
Baden-Fuller, C., Targett, D., Hunt, B.	2000	Reasons Core competencies theory	Outsourcing generic	Case study
Balakrishnan, S.	1994	Transaction cost theory	Outsourcing manufacturing	Conceptual study
Barthelemy, J.	2003	Contract Client-Provider relationship	Outsourcing IS/IT	Case study
Barthelemy, J., Geyer, D.	2001	Reasons Risks Culture	Outsourcing IS/IT	Survey
Barthelemy, J., Geyer, D.	2005	Reasons	Outsourcing IS/IT	Survey
Baxendale, S.J.	2004	Transaction cost theory	Outsourcing generic	Conceptual study
Berggren, C., Bengtsson, L.	2004	Effects	Outsourcing manufacturing	Case study
Beulen, E., Fenema, P. van, Currie, W.	2005	Risks Outsourcing process	Outsourcing IS/IT	Case study

Boer, L. de, Gaytan, J., Arroyo, P.	2006	Decision-making	Outsourcing logistic functions	Applied concept
Bryce, D.J., Useem, M.	1998	Effects	Outsourcing generic	Secondary data
Burdon, S., Bhalla, A.	2005	Reasons Success factors	Outsourcing services	Field study
Cánez, L.E., Platts, K.W., Probert, D.R.	2000	Decision-making	Outsourcing manufacturing	Applied concept
Cesaroni, F.	2004	Predictors	Outsourcing technology	Secondary data
Chiesa V., Manzini R., Tecilla F.	2000	Decision-making	Outsourcing technology	Applied concept
Collins, R., Bechler, K., Pires, S.	1997	Client-provider relationship	Outsourcing manufacturing	Case study
Conklin, D.W.	2005	Decision-making Outsourcing process	Outsourcing HR functions	Secondary data
Davis, E.W.	1992	Decision-making Reasons Global outsourcing	Outsourcing generic	Secondary data
Earl, M.J.	1996	Risks	Outsourcing IS/IT	Case study
Elfring, T., Baven, G.	1994	Reasons General view	Outsourcing IS/IT	Case study
Florin, J., Bradford, M., Pagach, D.	2005	Effects	Outsourcing IS/IT	Secondary data
Ford, D., Cotton, B., Farmer, D., Gross, A., Wilkinson, I.	1993	Decision-making Reasons	Outsourcing manufacturing	Survey
Gainey, T.W., Klaas, B.S.	2003	Transaction cost theory Resource based theory Social exchange theory	Outsourcing HR functions	Survey
Gilley, K.M., Greer, C.R., Rasheed, A.A.	2004	Effects	Outsourcing HR functions	Survey
Gilley, K.M., Rasheed, A.A.	2000	Effects	Outsourcing manufacturing	Survey
Gonzalez, R., Gasco, J., Llopis, J.	2005	Reasons	Outsourcing IS/IT	Survey

Goo, J., Kishore, R., Nam, K., Rao, H.R., Song, Y.	2007	Client-provider relationship	Outsourcing IS/IT	Survey
Graf, M., Mudambi, S.M.	2005	Decision-making Location	Outsourcing IS/IT	Conceptual study
Grover, V., Cheon, M.J., Teng, J.T.C.	1994	Reasons Risks General view	Outsourcing IS/IT	Survey
Harland, C., Knight, L., Lamming, R., Walker, H.	2005	Risks Effects	Outsourcing generic	Case study
Harris, A., Giunipero, L.C., Hult, G.T.M.	1998	Contract	Outsourcing IS/IT	Secondary data
Hendry, J.	1995	Reasons Risks	Outsourcing generic	Illustrative study
Holcomb, T.R., Hitt, M.A.	2006	Transaction cost theory Resource based theory	Outsourcing generic	Conceptual study
Insinga, R.C., Werle, M.J.	2000		Outsourcing generic	Applied concept
Jennings, D.	1996	Outsourcing object Reasons	Outsourcing generic	Case study
Jiang, B., Frazier, G.V., Prater, E.L.	2006	Effects	Outsourcing generic	Secondary data
Johnson, J.C., Schneider, J.C.	1995	General view	Outsourcing logistic functions	Survey
Kakabadse, A., Kakabadse, N.	2002	Reasons Outsourcing object Effects Staff	Outsourcing generic	Secondary data
Kakouris, A.P., Polychronopoulos, G., Binioris, S.	2006	Decision-making	Outsourcing generic	Conceptual study
Ketler, K., Walstrom, J.	1993	General view Reasons Risks Decision-making	Outsourcing IS/IT	Illustrative study
Khalfan, A.M.	2004	Risks	Outsourcing IS/IT	Case study

Kotabe, M., Murray, J.Y.	2004	Global outsourcing Effects	Outsourcing manufacturing	Illustrative study
Lacity, M., Willcocks, L., Feeny, D.	2004	Outsourcing process Effects	Outsourcing generic	Case study
Lee, J.N.	2001	Client-provider relationship Effects	Outsourcing IS/IT	Survey
Lei, D., Hitt, M.A.	1995	Effects	Outsourcing generic	Illustrative study
Loebbecke, C., Jelassi, T.	1999	General view	Outsourcing IS/IT	Case study
Lorence, D.P., Spink, A.	2004	General view	Outsourcing IS/IT	Survey
Martinsons, M.G.	1993	Reasons Risks Staff Outsourcing object Contract Outsourcing process	Outsourcing IS/IT	Illustrative study
McFarlan, F.W., Nolan, R.L.	1995	General view Reasons Contract Client-Provider relationship	Outsourcing IS/IT	Illustrative study
McIvor, R.	2000	Decision-making Outsourcing process	Outsourcing generic	Applied concept
McIvor, R., Humphreys, P.K., McAleer, W.E.	1997	Decision-making Outsourcing process	Outsourcing generic	Applied concept
McLellan, K., Beamish, P.	1994	Reasons Risks	Outsourcing IS/IT	Illustrative study
Miozzo, M., Grimshaw, D.	2005	Reasons	Outsourcing IS/IT	Secondary data
Mol, M.J.	2005	Predictors	Outsourcing manufacturing	Field study
Mol, M.J., Pauwels, P., Matthyssens, P., Quintens, L.	2004	Global outsourcing	Outsourcing manufacturing	Field study
Mol, M.J., Tulder R.J.M van, Beije, P.R.	2005	Global outsourcing Effects	Outsourcing manufacturing	Survey
Nam. K., Chaudhury, A., Rao H.R.	1995	Outsourcing process Providers	Outsourcing IS/IT	Conceptual study

Ngwenyama, O.K., Bryson, N.	1999	Transaction-cost theory Decision-making	Outsourcing IS/IT	Applied concept
Nicholson, L., Vakharia, A.J., Erenguc, S.S.	2004	Supply chain theory	Outsourcing logistic functions	Applied concept
Osei-Bryson, K., Ngwenyama, O.K.	2006	Risks Contract	Outsourcing IS/IT	Applied concept
Paisittanand, S., Olson, D.L.	2006	Reasons Risks	Outsourcing IS/IT	Conceptual study
Palvia, P.C.	1995	Reasons Risks Outsourcing process	Outsourcing IS/IT	Case study
Parry, G., James-Moore, M., Graves, A.	2006	Effects	Outsourcing purchasing	Applied concept
Palvia, P.C.	1995	Reasons,	Outsourcing IS/IT	Field study
Parry, G., James-Moore, M., Graves, A.	2006	Providers	Outsourcing IS/IT	Field study
Pinnington, A., Woolcock, P.	1995	Reasons Risks General view Decision-making	Outsourcing manufacturing	Field study
Pinnington, A., Woolcock, P.	1997	Reasons Outsourcing process	Outsourcing generic	Illustrative study
Quélin, B., Duhamel, F.	2003	General view	Outsourcing technology	Illustrative study
Quinn, J.B.	1999	Core competencies theory Outsourcing process Reasons Risks	Outsourcing generic	Illustrative study
Quinn, J.B.	2000	Contract	Outsourcing IS/IT	Applied concept
Quinn, J.B., Hilmer, F.G.	1994	Transaction cost theory Effects	Outsourcing sales-force	Applied concept
Richmond, W.B., Seidmann A., Whinston, A.B.	1992	Effects	Outsourcing manufacturing	Applied concept



Ross Jr., W.T., Dalsace, F., Anderson, E.	2005	Decision-making Success factors Culture	Outsourcing IS/IT	Case study
Rothaermel, F.T., Hitt, M.A., Jobe, L.A.	2006	Risks Contract	Outsourcing IS/IT	Secondary data
Samaddar, S., Kadiyala, S.	2006	Reasons Risks	Outsourcing IS/IT	Case study
Saunders, C., Gebelt, M., Qing, H.	1997	Effects Success factors	Outsourcing IS/IT	Case study
Shepherd, A.	1999	Outsourcing process Contract Client-provider relationship	Outsourcing IS/IT	Case study
Shi, Z., Kunnathur, A.S., Ragu-Nathan, T.S.	2005	Other?	Outsourcing IS/IT	Field study
Smith, J.A., Morris, J., Ezzamel, M.	2005	Effects	Outsourcing generic	Survey
Smith, M.A., Mitra, S., Narasimhan, S.	1996	Other?	Outsourcing IS/IT	Conceptual study
Smith, M.A., Mitra, S., Narasimhan, S.	1998	Reasons	Outsourcing IS/IT	Secondary data
Ueltschy, L.C., Ryans Jr., J.K., Herremans, I.	2006	General view Reasons	Outsourcing marketing	Survey
Vining, A., Globerman, S.	1999	Decision-making Risks	Outsourcing generic	Conceptual study
Weidenbaum, M.	2005	Reasons Risks Staff	Outsourcing generic	Illustrative study
Willcocks, L., Choi, J.C.	1995	Client-provider relationship	Outsourcing IS/IT	Case study
Willcocks, L., Fitzgerald, G., Feeny, D.	1995	Decision-making	Outsourcing IS/IT	Secondary data
Willcocks, L., Lacity, M., Fitzgerald, G.	1995	Outsourcing process	Outsourcing IS/IT	Field study
Yang, C., Huang, J.B.	2000	Decision-making	Outsourcing IS/IT	Conceptual study

## APPENDIX 3

## PROPOSED AVENUES FOR FUTURE RESEARCH

Only those articles that included proposed avenues for future research have been included here.

Author	Year	Proposed avenues for future research	Research category
Adeleye, B.C., Annansingh, F., Baptista Nunes M.	2004	<ul style="list-style-type: none"> <li>▪ Expand the body of literature</li> <li>▪ Critically examine, document and recommend the role of managers in banks and regulatory and supervisory bodies in enforcing the adoption and adaptation of global best practices</li> </ul>	Competence analysis
Altinkemer, K., Chaturvedi, A., Gulati, R.	1994	<ul style="list-style-type: none"> <li>▪ Where are we heading?</li> <li>▪ Is this growing trend unique to IS or does it involve other functional areas as well or is it a US or global phenomenon?</li> <li>▪ Are we reliving 'the hollowed out corporation?' In other words, 'are companies becoming virtual?'</li> <li>▪ Study the concrete proof of IS outsourcing expenditures</li> </ul>	Competence analysis
Arnett, K.P., Jones, M.C.	1994	Given small limitations, research findings provide a basis on which future research should be build	?
Balakrishnan, S.	1994	<ul style="list-style-type: none"> <li>▪ Develop more general models and specifically, a model that extends the dynamic analysis to industries in which buyers and suppliers may both initiate profit generating innovations</li> <li>▪ Modelling the choice of these intermediate forms of vertical control</li> </ul>	Competence analysis
Barthelemy, J.	2003	<ul style="list-style-type: none"> <li>▪ Study outsourcing across different activities, next to IT</li> <li>▪ Collect longitudinal data</li> </ul>	<ul style="list-style-type: none"> <li>▪ Contract negotiation</li> <li>▪ Managing relationship</li> </ul>
Barthelemy, J., Geyer, D.	2005	Simultaneously analyse the decision to insource, outsource or quasi-outsource	Competence analysis
Beulen, E., Fenema, P. van, Currie, W.	2005	Develop framework for knowledge transfer in offshore outsourcing	Building relationship
Boer, L. de, Gaytan, J., Arroyo, P.	2006	<ul style="list-style-type: none"> <li>▪ Further operationalise the model and investigate its effectiveness in practice, both in basic and more complex situations</li> <li>▪ Address the potential of interactive multi-criteria methods such as the direction point approach for finding efficient sourcing solutions</li> </ul>	<ul style="list-style-type: none"> <li>▪ Competence analysis</li> <li>▪ Decision-making</li> <li>▪ Assessment &amp; approval</li> </ul>

Bryce, D.J., Useem, M.	1998	Further study on the impact of outsourcing on company value best follows research agendas including outsourcing announcements, strategic cases, best practices, where it works, outsourcing and options, and globalisation challenges	Performance measures & Effects
Burdon, S., Bhalla, A.	2005	<ul style="list-style-type: none"> <li>▪ Closely examine outsourcing cost savings and the reasons for these</li> <li>▪ Test the generic applicability of reasons for outsourcing success</li> </ul>	Performance measures & Effects
Cánez, L.E., Platts, K.W., Probert, D.R.	2000	Operationalisation of presented make-or-buy framework considering feasibility, usability, and utility	<ul style="list-style-type: none"> <li>▪ Competence analysis</li> <li>▪ Decision-making</li> </ul>
Conklin, D.W.	2005	<ul style="list-style-type: none"> <li>▪ Extent and nature of economies of scale in inter-company governance structures</li> <li>▪ How can a vendor create a core competence in the cultivation of trust with customers?</li> <li>▪ Will cross-ownership of shares strengthen trust? Will subcontracting by the vendor impact this trust negatively?</li> <li>▪ To the degree that inter-corporate governance structures involve economies of scale, can a vendor create new systems with lower costs for small and mid-size companies?</li> <li>▪ Will growth in the number of vendors and increased competition create a more efficient market for HR-BPO?</li> <li>▪ Will this development reduce asymmetries in bargaining power, especially for small companies negotiating with large vendors?</li> <li>▪ Can the off-shoring of certain components of the business process reduce costs, and how can a vendor deal with the challenges of distance and jurisdictional differences?</li> <li>▪ How can one best measure the potential for goodwill trust and relevant cultural features in the outsourcing relationship?</li> <li>▪ Should a company require that the vendor not accept an HR-BPO contract with its competitors?</li> <li>▪ What factors account for apparent differences across countries in management opinions concerning HR outsourcing?</li> </ul>	Performance measures & Effects
Florin, J., Bradford, M., Pagach, D.	2005	Understand the actual benefits of IT/IS outsourcing arrangements (tangible and intangible benefits and costs associated with IT/IS outsourcing)	Performance measures & Effects
Gainey, T.W., Klaas, B.S.	2003	Refine the measurement of key constructs	Performance measures & Effects

Gilley, K.M., Greer, C.R., Rasheed, A.A.	2004	<ul style="list-style-type: none"> <li>▪ Focus on intermediate outcome variables such as satisfaction with the decision to outsource and ability to focus on areas of core competence</li> <li>▪ Intensive examinations of organisational and environmental contingencies</li> </ul>	Performance measures & Effects
Gilley, K.M., Rasheed, A.A.	2000	Further specify the effects of outsourcing on performance by examining the outsourcing behavior of a broader sample of firms, including those in introduction- and decline-stage industries, firms with high levels of unionization, and service firms	Performance measures & Effects
Gonzalez, R., Gasco, J., Llopis, J.	2005	Carry out a Delphi analysis	Triggers
Goo, J., Kishore, R., Nam, K., Rao, H.R., Song, Y.	2007	<ul style="list-style-type: none"> <li>▪ Develop and validate scales for these organisational-level constructs with an adequate number of items for each construct</li> <li>▪ Examine the effect of the factors identified in different outsourcing contexts</li> <li>▪ Expand on findings by examining the possible interaction effect of these two factors (strategic importance and opportunism) on the duration of outsourcing relationships</li> <li>▪ Incorporate constructs and measures that not only capture client satisfaction with output quality but also capture the contribution of the vendor to business performance improvement</li> </ul>	<ul style="list-style-type: none"> <li>▪ Contract termination</li> <li>▪ Performance measures &amp; Effects</li> </ul>
Graf, M., Mudambi, S.M.	2005	<ul style="list-style-type: none"> <li>▪ Explore the outsourcing partner selection decision itself</li> <li>▪ Examine the rise of India as a leading destination for a wide range of BPO including software development</li> </ul>	Assessment & Approval
Harland, C., Knight, L., Lamming, R., Walker, H.	2005	<ul style="list-style-type: none"> <li>▪ Address the motivations for outsourcing; currently there is little research evidence to assess whether outsourcing is a mechanism for failing to solve internal problems, and moving responsibility and risk out of the firm</li> <li>▪ Explore the circumstances in which mixed models (activity either being "in" or "out") might be appropriate</li> </ul>	<ul style="list-style-type: none"> <li>▪ Triggers</li> <li>▪ Competence analysis</li> </ul>
Holcomb, T.R., Hitt, M.A.	2006	<ul style="list-style-type: none"> <li>▪ Explore the process by which specialized capabilities are deployed and integrated along a value chain</li> <li>▪ Explore the sources of value creation</li> <li>▪ Examine specific attributes of outsourcing 'deals,' especially when such deals involve the divestment of assets by a focal firm as part of the exchange</li> </ul>	Competence analysis

Jiang, B., Frazier, G.V., Prater, E.L.	2006	Examine impact of outsourcing on firms' performance by archival data	Performance measures & Effects
Kakouris, A.P., Polychronopoulos, G., Binioris, S.	2006	Check validity, and in-depth case studies of outsourcing arrangements	Decision-making
Ketler, K., Walstrom, J.	1993	<ul style="list-style-type: none"> <li>▪ Should the problems be solved inside or outside the organisation?</li> <li>▪ Will there be improvement in the IS function if outsourcing is selected?</li> </ul>	<ul style="list-style-type: none"> <li>▪ Competence analysis</li> <li>▪ Performance measures &amp; Effects</li> </ul>
Khalfan, A.M.	2004	<ul style="list-style-type: none"> <li>▪ How can IT departments be expected to keep pace with ever-changing security requirements, especially considering the unprecedented rate of change of IT technology</li> <li>▪ Evaluation and assessment of the benefits and risks of outsourcing security services</li> </ul>	<ul style="list-style-type: none"> <li>▪ External environment</li> <li>▪ Performance measures &amp; Effects</li> </ul>
Kotabe, M., Murray, J.Y.	2004	How to cope with the world market no so peaceful, characterised by wild and unpredictable currency fluctuations as well as other unfortunate regional events?	External environment
Lei, D., Hitt, M.A.	1995	<ul style="list-style-type: none"> <li>▪ Determine the relationship between restructurings and outsourcing</li> <li>▪ Empirical research is needed to test the propositions</li> <li>▪ Assess whether the degree of relatedness of the acquisition, its hostile or friendly nature, mode of financing and/ or synergy affect the amount of outsourcing</li> <li>▪ Determine if there are differences in the effects of LBOs, MBOs (management buyouts) and EBOs (employee buyouts) on outsourcing, given the potentially different agency relationships</li> <li>▪ Examine outcomes of different types of restructuring (e.g., downsizing, down scoping)</li> </ul>	<ul style="list-style-type: none"> <li>▪ External environment</li> <li>▪ Performance measures &amp; Effects</li> </ul>
McIvor, R.	2000	Expand outsourcing framework in a number of key areas	Competence analysis
Miozzo, M., Grimshaw, D.	2005	IT outsourcing raises further questions about the innovation potential of modularity of knowledge-intensive business services	Triggers
Mol, M.J.	2005	<ul style="list-style-type: none"> <li>▪ Under what conditions is a high R&amp;D intensity compatible with much outsourcing?</li> <li>▪ Will outsourcing levels be maintained in the face of discontinuous technological change?</li> </ul>	External environment

Mol, M.J., Pauwels, P., Matthyssens, P., Quintens, L.	2004	<ul style="list-style-type: none"> <li>▪ How do scope and depth of international outsourcing influence the performance of firms and how this relation itself may be modified by other variables</li> <li>▪ Replication elsewhere would be useful (outside of the Netherlands)</li> <li>▪ Study international outsourcing in relation to relevant contextual parameters to avoid empirical and conceptual simplification of the core object</li> </ul>	<ul style="list-style-type: none"> <li>▪ External environment</li> <li>▪ Performance measures &amp; Effects</li> </ul>
Mol, M.J., Tulder R.J.M van, Beije, P.R.	2005	<ul style="list-style-type: none"> <li>▪ Look at a form of performance that is more closely related to outsourcing, such as reliability, quality or innovation</li> <li>▪ Attempt to measure capability to outsource internationally more directly, for instance by documenting internal processes and practices firms use to outsource internationally</li> </ul>	Performance measures & Effects
Nam. K., Chaudhury, A., Rao H.R.	1995	<ul style="list-style-type: none"> <li>▪ Exploration of multi-period bidding behaviour</li> <li>▪ Consider outsourcing situations where there could be the possibility of low bailing and shortcuts by the vendor firms</li> </ul>	Assessment & Approval
Nicholson, L., Vakharia, A.J., Erenguc, S.S.	2004	<ul style="list-style-type: none"> <li>▪ Inclusion of positive lead-time between echelons, especially between the outside supplier and the warehouse/service centre</li> <li>▪ Extend models to incorporate the fact that single item demand may be correlated across departments within a hospital or departments across hospitals</li> <li>▪ Reflect multi-item demands and hence, looking at joint replenishment policies for these items</li> <li>▪ Investigate the trade-off of having a predetermined minimum system-wide service level compared to a predetermined minimum service level at the department level</li> <li>▪ Investigate the tradeoffs of basing the desired target inventory for the warehouse (or service centre) on incremental echelon cost, as against installation cost</li> </ul>	Performance measures & Effects
Parry, G., James-Moore, M., Graves, A.	2006	<ul style="list-style-type: none"> <li>▪ Focus on locating and capturing more case studies of companies' experience of outsourcing the engineering commodity procurement function</li> <li>▪ Practical application of examining processes for the identification and verification of core competence, based on the value provided to the business and customer</li> </ul>	<ul style="list-style-type: none"> <li>▪ Competence analysis</li> <li>▪ Performance measures &amp; Effects</li> </ul>
Pinnington, A., Woolcock, P.	1995	Investigate organisational structure and competences further by better understanding the role and contribution of the vendor companies	Competence analysis

Richmond, W.B., Seidmann A., Whinston, A.B.	1992	Richer models integrate the effects of contracting costs with market imperfection and technological economies, moral hazards, low bailing, the value of incumbency, and the potential pitfalls to outsourcing due to bilateral trading conditions and their resulting potential for opportunistic behaviour	Contract negotiation
Rothaermel, F.T., Hitt, M.A., Jobe, L.A.	2006	<ul style="list-style-type: none"> <li>▪ Test theoretical model in other industry settings</li> <li>▪ Study time periods characterised by both incremental and radical innovations</li> <li>▪ Examine performance of newly introduced products</li> </ul>	Performance measures & Effects
Samaddar, S., Kadiyala, S.	2006	<ul style="list-style-type: none"> <li>▪ Conduct longitudinal study while keeping the cultural context constant, in order to isolate the effect of time on the outsourcing practices</li> <li>▪ Introduce simultaneity in replication studies</li> <li>▪ Exploring the effect of culture in a situation where the client and the vendor organisations are located in geographically and hence culturally different contexts</li> </ul>	External environment
Shepherd, A.	1999	<ul style="list-style-type: none"> <li>▪ Revisit organisations subject of study in a few years' time</li> <li>▪ Examine a wider range of organisations in a similar way</li> <li>▪ Study whether organisations which have not outsourced their IT have been more or less successful in managing business and technical change than those which have</li> </ul>	External environment
Shi, Z., Kunnathur, A.S., Ragu-Nathan, T.S.	2005	Future research randomising measurement items and/or using different data gathering methods to reduce or eliminate the common method bias to further advance this stream of research	Outsourcing process general
Smith, J.A., Morris, J., Ezzamel, M.	2005	Future work might involve more detailed sectoral analysis	Performance measures & Effects
Yang, C., Huang, J.B.	2000	Further investigation include vendor selection, management and control of outsourcing process	<ul style="list-style-type: none"> <li>▪ Assessment &amp; Approval</li> <li>▪ Outsourcing process general</li> </ul>

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