

Professional MBA

Die approbierte Originalversion dieser Diplom-/Masterarbeit ist an der Hauptbibliothek der Technischen Universität Wien aufgestellt (<http://www.ub.tuwien.ac.at>).

The approved original version of this diploma or master thesis is available at the main library of the Vienna University of Technology (<http://www.ub.tuwien.ac.at/englweb/>).



Strategic Outsourcing Decision Model

A Master's Thesis submitted for the degree of
"Master of Business Administration"

supervised by
Univ.-Prof.Dr.Christopher Lettl

Ümit Güfte PEKÖZ

Student-ID: 0954468

Vienna, 21 July 2011

Affidavit

I, Ümit Güfte PEKÖZ, hereby declare

1. that I am the sole author of the present Master's Thesis, "Strategic Outsourcing Decision Model ", 116 pages, bound, and that I have not used any source or tool other than those referenced or any other illicit aid or tool, and
2. that I have not prior to this date submitted this Master's Thesis as an examination paper in any form in Austria or abroad.

Vienna, 21.07.2011

Signature

Acknowledgements

I would like to express my appreciation to all-important people, who took part in the existence of this work.

I would like to thank to my supervisor Prof Lettl, for his constructive feedback and continuous support in the idea forming and for his guidance to make this work possible to start and then to finalize.

I would like to thank my entire family. But especially to my wife for being always by me even in most frustrating moments and most challenging situations, where I almost lost my believing, but she always encouraged me to go forward. My mother and my mother in-law for their understandings and again for their great supports, with out them I could not even start this study. In addition, my sister to implement the MBA study idea years and years ago into my under mind that I could ever imagine to attempt to apply to this program. They are the most important people in my life.

I would like to thank also to my friends and my colleagues in the class, who showed always understandings to my “very personal opinions” on several world issues and for their friendships.

However, especially I would like to mention my appreciation to Dr. Ali Ihsan Koruk for introducing me this program and to Ing. Elena Skvrndova for her constructive help to form the study idea and Dipl.Ing Christoph Brandstätter for his strong argumentation and critics and to Rhiannon Thomas for her reviews of the work and Ing. Tomas Farkas and Ing. Katharina Erdogan for their help in interviews.

I am a lucky and a happy person to know all these wonderful people and to have a chance to attend to the program.

Abstract

The purpose of this paper is to identify the key elements in Strategic Outsourcing (SO) management that contribute significantly to the success of high performing SMEs. In this paper I shall clarify briefly what SO decision factors are affecting the success of high performing SMEs. After identifying these key factors, we can help SME managers and owners in their SO decisions, so through this approach they can better leverage external knowledge, technologies and innovation through correctly managed SO partnerships.

The main concern of this paper is to show the importance of knowledge creation and knowledge sharing through SO partnership to SME managers and owners. Organizational learning is identified as very important for companies to be innovative and to stay competitive (Elango 2008)(Harland et al. 2005)(Marques & Ferreira 2009)(Hamel et al. 1989).

I chose comparative case study as my methodology (Yin 2003), using primary data collected from seven SME companies located in Slovakia. They are to represent component suppliers in Business-to-Business (B2B) market, where end user data translates into product specification by OEM Company. This means that close relationships in the industry are very important, making it a good platform for knowledge sharing and for co-development activities.

I used a structured five-scale questionnaire in interviews to locate the differences between company approaches to each key SO decision element. These questions represent key elements of SO management, identified in the literature (Kelley & Jude 2005)(Lorber 2007)(Hamel et al. 1989)(Stanko et al. 2009)(Marques & Ferreira 2009). This paper surveys where the main differences appear between high performing and average SME companies towards SO understanding in real life context.

After analyzing the findings, this study concludes that the main differences between two groups of companies appear in SO activity identification, in project evaluation, in knowledge sharing and in monitoring market dynamics.

High-performing SMEs in general approach SO activity as an opportunity to partner with suppliers to generate and share organizational knowledge and accept it as a strategic partnership. On the other hand though, average performing SME generally understand the SO projects as a supplier-buyer relationship, they do so with short-term targets and without any focus on long-term knowledge generation.

This paper can contribute to the competitiveness of European SMEs by providing guidance in SO management by raising their awareness of key elements, which contribute significantly to the success of SO in the long run.

Table of Contents

ACKNOWLEDGEMENTS.....	I
ABSTRACT	II
LIST OF TABLES	VI
1 INTRODUCTION	1
1.1 Rationale behind the work	2
1.2 Theoretical Framework.....	4
1.3 Conceptual Framework and Assumptions	5
1.4 Statement of the Problem.....	6
1.5 Importance of the Study	8
2 LITERATURE REVIEW	9
2.1 Identified Steps in Strategic Outsourcing Management.....	12
2.2 SO Activity Identification.....	14
2.2.1 Management Functions in place to make SO decisions	15
2.2.2 Understanding Core Competencies	16
2.3 Evaluation of SO project. Go or No Go?.....	18
2.3.1 SO evaluation is more than a Fix Cost Calculation	19
2.3.2 Fix Cost and other Cost Elements to consider	22
2.4 Supplier Selection	25
2.5 Activity Transfer.....	30
2.6 SO Contract Management and Performance Monitoring.....	33
2.7 Learning from the SO Partnership and Knowledge transfer	34
2.8 Monitoring of Markets Dynamics	35
3 EMPIRICAL STUDY	37
3.1 Research Design	37
3.2 Sources of Data.....	40
3.3 Sampling and Selection of the cases	42
3.4 Instrumentation and Data Collection	44
3.4.1 A structured interview questionnaire	44
3.4.2 Interviews.....	45
3.5 Analysis of The Findings	47

4	CASE STUDY DETAILS AND FINDINGS.....	48
4.1	Structured Interview Findings	49
4.1.1	Most Significant Differences in Answers	50
4.1.2	Significant Differences in Answers	53
4.1.3	Differences in Answers	57
4.1.4	Similarities in Answers	66
4.2	SO Decision Elements contributing to SME Performance	72
4.2.1	How SMEs choose activities to outsource?	72
4.2.2	How SMEs evaluate SO opportunities	74
4.2.3	With whom do SMEs partner and how they choose them?.....	76
4.2.4	How do SMEs transfer activities and knowledge between parties?	77
4.2.5	How do SMEs control the SO contract and activities?	78
4.2.6	How do SMEs use the opportunity to learn from SO partnerships?	79
4.2.7	Monitoring of Markets Dynamics and Emerging Knowledge	80
5	CONCLUSION AND RECOMMENDATIONS.....	83
5.1	Summary of Findings.....	83
5.2	Implications and Significance	93
5.3	Limitations	94
5.4	Future Research.....	95
6	REFERENCE:.....	96
7	APPENDIX.....	101
7.1	APPENDIX A.....	101
7.2	APPENDIX B.....	104
7.3	APPENDIX C.....	107

List of Tables

Table 1.....14

Table 2.....101

Table 3.....46

Table 4A.....104

Table 4B.....105

Table 4C.....106

Table 5A.....107

Table 5B.....108

Table 5C.....109

Table 5D.....110

1 Introduction

Today's economy is driven by globalization and shorter product life cycles, which are pushing for faster time to market and resulting in a higher pressure on companies to secure a quicker Return on Investment (ROI) for their investors (Harland et al. 2005)(Quélin & Duhamel 2003)(Gonzalez et al. 2005).

As a result, an increasing number of European and Western companies are bringing outsourcing practices into their operations in order to stay competitive (Quélin & Duhamel 2003). Lewin and Peeters (2006) reported that 97% of companies find cost reduction to be the biggest motivation in their outsourcing decisions.

In the current quick changing business environment, almost everyone has access to the outsourcing activities necessary to gain a competitive advantage over a short period. Since a company's competitors will match its outsourcing activity, the competitive gap is reduced quickly, and so companies need to create unique values and differentiating factors. In this new business environment, the difference between winners and losers will be made through the correct selection of activities to be outsourced, the collaboration and networking maintained throughout the outsourcing activity and the use of strategic partnerships to create new knowledge and know-how (Hamel et al. 1989)(Porter 1996).

This thesis will illustrate how important it is for SMEs to choose the right activities to outsource if they wish to maintain their market position and stay competitive in the future. Further, the work will examine how SMEs should identify and manage their outsourcing activities by increasing and maintaining their competitive advantages through innovation in new products, in processes, in business models, in organizational structure, and in the services they provide.

In this paper, I seek to explore in detail key SO decision and management steps for success in long run. This paper is to contribute to the success of SMEs by providing a framework for SO management. With this framework, SME managers can better understand SO projects as an opportunity to collaborate and to partner, instead of as a buyer-supplier relationship.

1.1 Rationale behind the work

The importance of SO for companies is mentioned very clearly many times in the literature (Elango 2008)(Quélin & Duhamel 2003). In today's business environment, companies cannot compete without it (Harland et al. 2005). It is suggested that no one can do it all alone but only through partnerships (Hamel et al. 1989). Further we can see works explaining how companies can access external knowledge thorough SO, which can otherwise take years to accumulate (Baloh et al. 2008). Because of the general acceptance of these findings, SO partnerships are unavoidable.

When companies are pushed to practice SO, they are exposed to risks as well. These risks can lead to great problems for companies and cause them to disappear from the industry. Some risks are identified by Quelin (2003), such as becoming dependence on the supplier, loss of know-how and service providers' lack of capabilities to meet changing requirements. From my experience, I find the potential risk of losing one's knowledge base and know-how is the most threatening for companies.

Losing one's own knowledge base can trigger other problems in the long-term, as the company becomes more dependent on its supplier to meet changing market trends and customer needs. For sustainable competitiveness, we need to identify how far a company can go to hand over its activities to external partners who have better capabilities or better knowledge without losing control over these activities (Quélin & Duhamel 2003)(Becker & Zirpoli 2011).

Prior to my MBA study, I spent years in a service center for an IT company in Bratislava, where I was involved in many SO projects. I participated in many phases of those projects, from activity transfer to stable state or from change management to handing over the activities, in some cases, back to the Mother Company.

During these times, I faced many situations where a multinational IT company with billion of dollars in resources and enormous experience in SO practices faced serious problems in SO management, as a supplier and as an outsourcer. For example, when the company I worked for took over a new responsibility, we often faced problems on which the partner company had not briefed us in either procedure documents or training meetings. As we had no knowledge of how to resolve these issues, the problems usually escalated and affected both customer satisfaction and our solutions as a supplier, resulting in damage to the company reputation. In some cases, resources in real monetary terms were wasted to overcome obstacles.

If large corporations with great resources and broad knowledge bases face such problems and fail to overcome them in some instances, how do SMEs fare in this environment? SME companies are short in assets and capital and do not have a long history of SO management experience, but due to globalization, outsourcing becomes vital to maintaining price competitiveness, providing access to new products and new resources (Baloh et al. 2008)(Elango 2008)(Harland et al. 2005). However, although outsourcing increases competitiveness in the short term, inexperienced SMEs usually face the negative sides of outsourcing in the long term by losing their core knowledge and capabilities (Hamel et al. 1989).

After identifying the current situation through studies of existing literature and my own experience, I have focused my work on this question:

How can we develop a model to identify the differences in SME management between successful and average-performing SMEs to assist SMEs in their SO practices?

1.2 Theoretical Framework

Most researchers agree on several common steps used by companies in SO management, usually beginning with the identification of a niche to outsource.

Companies analyze their competitiveness and capabilities in the market and evaluate options for covering any gap found. If a company decides that it cannot cover the gap within the firm, strategic outsourcing is seen as a good option for reaching resources (Hamel et al. 1989)(Quélin & Duhamel 2003).

Previous researchers have identified the choice of outsourcing partner as a key step to success (Rundquist 2003) and have raised questions regarding the best approach to activity transfer, so that it does not affect performance or consumer satisfaction (Lorber 2007). Researchers highlight similar concerns about performance monitoring in SO activity (Kelley & Jude 2005). Once the activity has reached a stable state, what further collaboration activities are done between partners, and how can companies transfer the knowledge generated by outsourcing partners to create new products and new solutions? (Hamel et al. 1989)(Marques & Ferreira 2009).

I also question how companies are monitoring the market and changing customer preferences during and after outsourcing. They should remain aware of market dynamics and observe their surroundings to understand customer needs, regardless of existing solutions within the market, so they can identify emerging technologies that address these customer needs in a different way. If it does not continue to adapt itself to changing needs, a company might not be able to survive when new technologies become available in the market.

1.3 Conceptual Framework and Assumptions

I have chosen to use comparative case study as a methodology (Yin 2003). The paper will use primary data collected through structured interviews with SME owners and decision makers. The interviews will be conducted with 6 companies, divided into two groups: high performing SME companies and average performing companies in line with industry standards.

These interviews will use 5 scale-structured questionnaires with room for comments. Emphasis will be on qualitative rather than quantitative data, and the collected information will be assessed and evaluated through comparative analyses.

Using knowledge gained from previous studies of SO management and from my own experience, I have identified the 7 main stages in SO management. I am using this assumption to create a model around SO, so that I can in turn identify the differences between each company's approach to SO that result in variations in performance. Depending on the industry, some steps may be added or omitted, but I assume that the companies in my study generally utilize these 7 steps, but vary in strategy for each step's implementation.

This research assumes that all the companies involved practice outsourcing activities and that they are gaining short-term advantages from this arrangement. These companies mainly work in B2B markets, where decisions are based broadly on current financial ratios.

Finally, the research assumes that SMEs carry out their outsourcing activities in a variety of different ways and that some common approaches are causing competitive disadvantages for these SMEs in the long term.

1.4 Statement of the Problem

In the literature and in practice, outsourcing appears as an attractive option for companies, as it brings apparent financial advantages and can cover competitive gaps in a company's abilities. However, in the long term, companies can lose competitiveness and market shares as a result of outsourcing, as they do not add to their own knowledge base, and so become unable to respond to customer needs or markets needs using emerging technologies or considering changing customer preferences (Harland et al. 2005)(Quélin & Duhamel 2003)(Gonzalez et al. 2005)(Marques & Ferreira 2009). This work is intended to create a decision model for companies to help them avoid these pitfalls in SO management.

The companies included in this research are small with limited resources, but show high motivation to be competitive on a global level for Europe. Yet without knowledge of the most successful approaches to outsourcing, these companies risk facing severe long-term disadvantages as a result of SO activity, including the loss of the company's knowledge base, difficulties in following market trends, dependency on outsourcing supplies, and the loss of flexibility.

Coming from these identifications I have constructed the following thesis question.

How can SME owners and managers in their strategic outsourcing decisions identify and manage the right outsourcing activities and collaborate with their SO partners to generate new knowledge for increasing innovation and competitiveness?

In order to answer this question, I will look deeper into the decision-making about how and what to outsource with the focus on knowledge generation and innovative competitiveness.

In data collection from the field, I will find answers to the below SO decision stages, to be able to understand better the current practices around SO management.

1. How do SME's choose the activities to outsource?
2. What prior expectations do they have from the outsourcing activity?
3. With whom they partner and how they choose them?
4. How they transfer activities and knowledge between parties?
5. What they control during the activities?
6. How they use the opportunity to learn from the partnership?
7. How they do the Monitoring of Markets Dynamics and Emerging Knowledge?

Which of these stages in outsourcing management contributes most to a successful company?

Once we know how successful companies manage their outsourcing processes, we will be able to identify the key decision steps and make companies aware of these facts to help them to make better decisions and to see the consequences of outsourcing from a long-term perspective.

1.5 Importance of the Study

Although SO presents many short-term advantages, it also brings long-term risks. The top 3 risks identified by Quelin (2003) are: being dependent on SO supplier, loss of know-how, and reliability of supplier to evolve together with the outsourcer. Similar risks are identified as well on organization, sector and national levels by Harland (2005). I found the risks identified in both studies to be devastating to SME companies with limited resources, as they have no second chance to apply lessons learnt from previous unsuccessful SO practice.

Comparison of interview findings will identify activities and key decision points that contribute significantly to an SME's performance.

The results of the study will help us to assist SME companies to stay competitive in the long term by raising awareness of the risks of outsourcing and supporting decisions by identifying the key factors that contribute to top performance.

2 Literature Review

This section will summarize the existing theories on the advantages and risks of SO. Many studies discuss the importance of SO for companies, allowing them to become more competitive, focus on core competencies, and gain from cost benefits in the short term (Quélin & Duhamel 2003)(Elango 2008)(Hamel et al. 1989).

In a further study, Harland separately analyzes the benefits and risks of SO for organizations, sectors and nations (2005). In his work, the main motivations for SO are listed from other literature.

“Outsourcing can free up assets and reduce costs in the immediate financial period. Organizations outsourcing parts of their in-house operations report significant savings on operational and capital costs (Rimmer, 1991; Hendry, 1995; Uttley, 1993). Laugen et al. (2005) found a correlation between outsourcing best practice and high performing companies. This is explained by transaction cost economics (TCE) – the underpinning for make-or-buy decisions (Ellram and Billington, 2001)... Other benefits of outsourcing appear in literature on strategic management, operations management, purchasing and supply, and innovation. Teece’s (1986) notion of “complementary assets”, for example, reveals benefits of partnering with organizations whose resource bases complement one’s own (Mowery, 1988; Doz, 1988)... Others suggest that outsourcing improves flexibility to meet changing business conditions, demand for products, services and technologies (Greaver, 1999... Other outcomes, including improved credibility, image, greater workforce flexibility, and avoiding being locked into specific assets and technologies, are harder to measure. There is little research to guide managers on how to measure performance of outsourcing.” (Harland et al. 2005)

Similar motivations for SO are also identified in a work by Quélin & Duhamel (2003). They are listed here with the supporting literature identified in their work:

Companies practice SO to reduce operational costs (Lacity and Hirschheim (1993b); McFarlan and Nolan (1995); Barthe´lemy and Geyer (2000); Kakabadse and Kakabadse (2002) cited by (Quélin & Duhamel 2003)), to focus on core competencies (Quinn and Hilmer (1994); Saunders et al. (1997); Alexander and Young (1996b); Kakabadse and Kakabadse (2002) cited by (Quélin & Duhamel 2003)), to reduce capital invested (McFarlan and Nolan (1995); Kakabadse and Kakabadse (2002)), to improve measurability of costs (Barthe´lemy and Geyer (2000) cited by (Quélin & Duhamel 2003)), to gain access to external competencies and to improve quality (Quinn and Hilmer (1994); McFarlan and Nolan (1995); Kakabadse and Kakabadse (2002) cited by (Quélin & Duhamel 2003)), to transform fixed costs into variable costs (Alexander and Young (1996a) cited by (Quélin & Duhamel 2003)), and to regain control over internal departments (Lacity and Hirschheim (1993a); Alexander and Young (1996a) cited by (Quélin & Duhamel 2003)).

These studies generally agree that, because of the challenges created by globalization, knowledge division, and the wide spread of manufacturing capabilities, companies benefit from SO in the short term. However, these studies also identify several risks involved in outsourcing that can damage a company's competitiveness in the end.

Harland (2005) provided a broad analysis of identified risks of SO:

“Some organizations do not achieve the expected benefits from outsourcing. For example, a report quoted in Lonsdale (1999) and McIvor (2000) suggested only 5 per cent of companies surveyed achieved significant benefits from outsourcing. Lonsdale (1999) and Cox (1996) highlight reasons for this: focusing on achieving short-term benefits; lack of formal outsource decision-making processes, including medium and long-term cost-benefit analyses; increased complexity in the total supply network...Marshall (2001) concluded that insufficient attention had been paid in general to the management of the outsourced activity and that outsourcers do not receive guidance on how to approach the task.”

Again in their work Quélin & Duhamel (2003) showed the risks of SO as they had identified from the literature and previous studies.

Main risks identified in SO:

- a) Dependence on the supplier (Alexander and Young (1996b); Aubert et al. (1998) cited by (Quélin & Duhamel 2003)).
- b) Hidden costs (Earl (1996); Alexander and Young (1996b); Aubert et al. (1998); Lacity and Hirschheim (1993a); Barthe´lemy (2001) cited by (Quélin & Duhamel 2003)).
- c) Loss of know-how (Bettis et al. (1992); Martinsons (1993); Quinn and Hilmer (1994); Khosrowpour et al. (1995); Alexander and Young (1996b); Earl (1996); Aubert et al. (1998); Doig et al. (2001) cited by (Quélin & Duhamel 2003)).

- d) Service provider's lack of necessary capabilities (Earl (1996); Aubert et al. (1998) cited by (Quélin & Duhamel 2003)).
- e) Social risk (Lacity and Hirschheim (1993b); Barthe'lemy and Geyer (2000) cited by (Quélin & Duhamel 2003)).

All these findings match my experience in the SO practices of an IT company-outsourcing center in Bratislava and lead me to my thesis work question:

How can SME owners and managers identify and manage the right outsourcing activities and collaborate with their SO partners to generate new knowledge for increasing innovation and competitiveness?

2.1 Identified Steps in Strategic Outsourcing Management

As a methodology, I chose to run comparative case studies between successful and average-performing SMEs to identify key differences in SO practices. I constructed a SO decision model covering SO decision steps to do this comparison. My aim was to have a tool to compare companies' managerial approaches towards SO practices and to identify the key steps in outsourcing activity.

A review of the literature suggests that 7 steps are involved in a company's outsourcing management.

1. SO activity identification
2. Evaluation of SO activity
3. Supplier selection

4. Activity transfer
5. Control and management of SO contract
6. Learning effect and knowledge transfer
7. Monitoring of market dynamics and emerging innovations

This section will present a model based on these 7 steps to be used by SME managers/owners to analyze their SO practices. This model is to reflect broadly many aspects of SO decision-making, as mentioned in the literature.

First, companies must identify the activity to be outsourced and clearly define their goals in order to evaluate the SO project for approval. If the activity is approved, the company should then select the correct supplier.

Then follows a transition period, in which knowledge is partially transferred to the outsourcing partner and criteria are set to make the process smoother. Once the outsourced activities have been transferred, companies usually identify gaps in the supplier's ability to meet existing quality standards and generate new solutions that are integrated into existing products and business lines.

Once activities have been transferred, companies need to establish a process to control the outsourced activity. Studies suggest that setting the correct performance indicators is key to the success of SO (Kelley & Jude 2005)(Kathleen 1995)(Lorber 2007)(Michael A. Stanko et al. 2009).

Some studies also identify the need for outsourcing companies to learn from their partners and generate new knowledge in order to stay competitive (Hamel et al. 1989) (Porter 1996, cited by Marques 2009).

After SO reaches a stable state, it is vital that companies follow market trends and changing customer preferences to maintain their current customer base and access new market segments.

The following section will go into detail about each of these decision steps. This work aims to create a decision model, which it will then apply to companies to show the steps that contribute to the success of companies using SO.

2.2 SO Activity Identification

According to Elango (2008), the identification of activities to outsource is one of the key elements to competitiveness in today's world. As anyone can implement SO activities, the competitive gap between highly successful and average-performing companies can be easily covered by emulating the successful companies' approach to SO management and activity identification. Elango suggests that a company can find an activity to outsource to gain a competitive edge by identifying its core activity and the knowledge that cannot be documented and is considered to be core enhancing. Companies can do this identification through using an "outsourcing matrix".

This matrix can be seen in Table 1.

Table 1: Outsourcing Matrix, adopted from a work by B. Elango Competitiveness Review: An International Business Journal Vol. 18 No. 4, 2008 pp. 322-332			
		Strategic Importance	
		Non-Core	Core
Outsourcing Role	Supplementary	Cell 1 Efficiency (e.g., Record-Keeping, Web-Site Maintenance)	
	Complementary	Cell 2 Synergy & Legitimacy (e.g., Joint Marketing, Financial Reporting)	Cell 3 Core-Enhancing (e.g., Research)

The outsourcing matrix proposed by Elango separates business activity into one of four groups according to its role as supplementary or complimentary, core or noncore. If the activity is supplementary and non-core, internal work on this activity should be replaced by outsourcing. If it is a complimentary none-core, outsourcing should support a value activity performed internally, causing it to be done more effectively, for example accounting or marketing activities. After this classification, companies need to decide if the activity is strategically core or noncore. Core activities are the value add activities within core competence of the firm, and noncore activities are the ones outside of core competence.

Hamel et al. (1989) suggest that the misidentification of activities for outsourcing can damage a company's long-term competitiveness, even though at first this outsourcing can appear to be the only option to cover competitive gaps. Hamel et al's main concern relates to the transfer of knowledge to suppliers, which gives them access to the outsourcing companies' own markets. This is particularly problematic in companies with several departments with different yearly targets, each of which might utilize outsourcing practices without knowing the cumulative effect of SO activity (Hamel et al. 1989).

The section below will go through the process of SO identification and explore the question of which individuals in an organization are best suited to making selections for SO activity and how they should do this selection.

2.2.1 Management Functions in place to make SO decisions

It is well accepted that SMEs have thin management layers that allow for well-linked communication between decision makers. However, in some instances, the situation can be quite different, with line managers or remote plant managers authorized to make decisions on their daily operations without consulting other

individuals or departments. This is believed to simplify operations and raise productivity, but creates potential pitfalls in SO management.

If outsourcing is an individual and not a coordinated decision, the activities and knowledge given to other companies can accumulate and present a threat to the company (Hamel et al. 1989). Because of this, SMEs need a central SO decision unit, which is directly linked to the strategic decision committee to avoid such situations. This will help top management to see the forest and not to pull down trees one by one. It is also concluded that having a centralized SO decision unit is important. (Hamel et al. 1989)(Harland et al. 2005)

2.2.2 Understanding Core Competencies

As a first step, an SME can identify its core competencies to understand where it is in the market and what unique value it provides to customers, which helps to define its core strategic value. To do this, the SME has to run process mapping for some activities, which in return can help the company to see where improvements can be applied, even before starting the SO project. Through this process, the SME will have a chance to understand where it is lacking the skills or business abilities necessary to reach its strategic business goal.

Elango (2008) suggests that SMEs can see the value of potential SO activities within their company by applying an outsourcing matrix. This application helps the company to understand if an activity adds business value that cannot be performed elsewhere or if it is a core-enhancing activity involving technology or knowledge that is available to competitors that can therefore be outsourced. According to his work, using SO for those activities that fall into the core-enhancing activity category will help a company to reallocate its resources and allow it to become more strategically innovative.

Still high caution and care should be taken to analyze closely whether an activity is within the SME's core activity, where it resides, whether it is implicit or explicit knowledge (Szulanski 2003), if this knowledge is already available in public domain or to competitors, what technological components it involves, and whether these are emerging or mature technologies. Such in detail comparisons and benchmarking to industry standards will raise awareness around core competencies.

Stanko et al. (2009) also proposed situations where companies should consider SO in their operations. If it is not possible to differentiate products , since the technology is well know and mature, or to protect knowledge from quickly spreading around as the IP is not well protected, then those activities should be considered for SO.

SMEs need to link these two approaches. A combined crosscheck of activity and knowledge type with the outsourcing matrix can help an SME to understand its unique value propositions. For example, an SME can be in a mature industry with all its product knowledge widely available but have implicit organizational knowledge bounded to its potential SO activity. In such a case, even if the activity appears to be ideal for outsourcing from one perspective, the SME should reconsider the advantages and disadvantages of SO.

When SMEs define the decision elements for the identification of SO activities, variables for calculations should consider both the market situation of today and tomorrow. Here comes the importance of market dynamics monitoring and innovation filtering, so the SME can survive even if the industry in which the company operates faces a collapse due to new emerging technologies. An

external consulting firm can help here to provide macro level indicators for a given industry.

Kathleen (1995) also suggests that SMEs should consider the scope of the SO project and the functions that it will affect. Even if the company closes down a complete department and will never need it again, it should to stop and rethink how this will affect the rest of the organization in order to understand SO decision effects on the company team spirit and to keep the unique talents with the company.

Considering the overall effect can be especially critical in knowledge transfer or in activity transfer, as managers need to define the scope and effects of SO over the entire entity, and not limited to one department or production line. For instance, if the team responsible for transferring the knowledge knows that it is being made redundant, individuals have the tendency to ignore or even undermine the transfer. They might deliberately take actions like not mentioning certain practices in their process documentation or excluding important pieces of information from records, as they feel victimized by the company's decision to lay them off (Kathleen 1995)(Lorber 2007).

2.3 Evaluation of SO project. Go or No Go?

The works of Baloh et al. (2008), Elango (2008) and Hamel et al. (1989) suggest that companies must run benchmark analyses after identifying potential activities for outsourcing. These analyses allow companies to define the gaps in their current activity in relation to the competition and discover whether improvements can be made in house before outsourcing occurs. This process will help the company set realistic goals for the project. The correct identification of a company's goals in turn helps the company select a supplier for an outsourcing partnership that is capable of meeting the company's realistic performance targets.

2.3.1 SO evaluation is more than a Fix Cost Calculation

When evaluating activities for potential outsourcing, some companies tend to look mainly at the operational costs (Harland et al. 2005)(Quélin & Duhamel 2003)(Gonzalez et al. 2005). However, many other factors must be taken into consideration if a company is to gain a realistic understanding of the viability of this outsourcing activity (Hamel et al. 1989)(Elango 2008).

Today's business environment demands SO more than ever. Lifetime jobs are long gone together with much loved cash cow products. Shortened life cycles are threatening the existence of today's product lines, and companies can overcome these difficulties through SO. According to literature on the subject, companies can use economies of scale, rent resources that are capital demanding when a high ROI is needed in a short time period, reach out to gain external knowledge and expertise, and take advantage of tax shields or geographical differences through SO (Baloh et al. 2008)(Marques & Ferreira 2009) (Ohmae 1989). Some of these suggestions are in conflict with the concept of a socially responsible enterprise (Harland et al. 2005). However, although studies disagree on the advantages and disadvantages of SO decisions, most agree that in today's market flexibility is key, and companies gain this flexibility through SO (Quélin & Duhamel 2003)(Elango 2008)(Harland et al. 2005).

Stanko (2009) suggests an additional approach: if the technology within the industry is not mature and knowledge spreads too quickly, companies need to boost their competitiveness by tapping into new external knowledge through SO. However, he also points to cost elements related to management of SO contracts, writing that too much outsourcing can result in high costs if a company loses control of SO activities and becomes dependent on the SO supplier. The same threat is identified in several other works (Becker & Zirpoli 2011) (Harland et al. 2005)(Quélin & Duhamel 2003)(Gonzalez et al. 2005).

In his research, Rundquist (2003) suggests that, in knowledge-intensive activities, the gain of specialist knowledge is a main reason behind SO decisions for SMEs, while lower cost and workload peak handling are not present as motivating reasons. This work will expand upon this finding in the context of manufacturing firms, which see the benefits of years of knowledge accumulation, and where freeing limited sources for re-allocation into strategic innovation can be an important reason for an SME to consider SO.

According to the work of Hamel et al. (1989) the risks of SO are mainly related to knowledge management and knowledge generation. Companies mainly focus on cost benefit ratios and try to access new markets quickly and so neglect the need to generate new knowledge. Over time, the supplier in these outsourcing activities can build more knowledge than the outsourcing company itself, gaining information on market and customer preferences and moving into a position where it can take core knowledge from the company. Supplier companies can then enter the same market to compete against the outsourcing company.

It is also important to run the SO project centrally or at least in an organized way, so that the cumulative effect of SO does not damage the company's competitive advantage (Hamel et al. 1989).

Whitmore (2006) presents several risks that companies can face during a SO contract and the consequences of those risks to businesses. He lists for instance the transition risk, which includes the potential risks involved in activity transfer between companies or between suppliers, and how the company should avoid interruptions, if any activity is to be transferred from one supplier to another or back in-house. The SME should evaluate how modularized the activity is so that it can be transferred around easily without additional cost and time.

Companies cannot know what is next in business, but they can try to predict and be prepared for a coming change. SMEs should create an exit strategy, as mentioned in the journal article by Lorber (2007), in order to remain flexible during SO. This approach can be used to overcome dependence on supplier risks, as identified in several works (Harland et al. 2005)(Quélin & Duhamel 2003)(Gonzalez et al. 2005).

In order to overcome these problems, Kathleen (1995) suggests that companies should consider a number of steps to define the objective of SO before proceeding:

- a) What the company plans to achieve
- b) Where to go during SO project
- c) How these are linked to the activity being considered for SO.

An article by Kathleen (1995) suggests some further decision actions:

First, SMEs need to analyze the existing status of the potential SO activity and create a detailed map presenting where it is currently failing to meet targets and what can be done in-house to improve results. This point is raised by an executive as a way to avoid giving away money at later stages to the SO contractor.

Second, the company should compare current practices to benchmark practices so that any gap can be identified and an action plan can be deployed. However, if only fractional improvements are possible under the given conditions, the expenditure of cost and time might not pay off, and companies should then leave it as it is and move to next step.

Third, the company should quantify its improvement expectations: is it to bring cost down per unit, per year, per delivery, to increase customer satisfaction or to reduce complaints per quarter sales volume or by x percent from today's numbers? Depending on the activity chosen, this can be adopted to reflect the company's expectations quantitatively before going into SO agreements.

Finally, companies should create a contingency plan for those expectations in preparation for work with an SO partner. Is the company ready to call activity back in-house, for example in case a natural catastrophe disrupts the supplier factory, such as the tsunami in Japan (still an ongoing problem as this paper was being written in 2011)? An exit plan must be formed. At the very least, a quick scenario analysis can help the company to better understand the possibilities in such a scenario.

The list can expand depending on the activity chosen, but the basic concept is this: the SME must set a realistic scenario before SO begins to see where it has gaps to cover.

2.3.2 Fix Cost and other Cost Elements to consider

Since the evaluation of an SO project is the keystone of all SO activity management, this section will go into more detail about the process. This cannot be done without touching on cost calculation.

The reality of fix cost to variable cost conversion is very important in resource management, as it creates the possibility to free some assets and re-allocate them into strategic innovation (Elango 2008)(Harland et al. 2005)(Quélin & Duhamel 2003).

Taking into account all of the points mentioned previously, it is not complicated to calculate the costs, but the SME still needs imagination and in some way creativity to make the initial identification. The management needs to look at current production in great detail and possibly even reengineer or redesign the production line to see how its company could in reality switch some activities from fix cost to variable cost.

This cost conversion means flexibility for business in real terms. Again it is considered a key success factor and a key motivation in SO decisions (Harland et al. 2005)(Quélin & Duhamel 2003).

This work will not go into the classic details of unit pricing, fix pricing, performance based pricing or combinations. However, it will go into details about those elements which are not bound to classic pricing and evaluation techniques in order to bring different aspects of SO projects into the light. The SO of activities that are very close to an SME's core competencies will need wider evaluation than primary and secondary types of SO activities, where the company is not exposed to a threat to its competitive advantage (Elango 2008).

Kelley & Jude (2005) have created a quick checklist to bring companies' attention to unaccounted cost elements of SO contracts in this wider approach. They argue that 5 types of cost elements are usually missing in SO cost-benefit evaluations that later result in the SO contract's failure to meet financial targets:

1. Process-related cost elements.

Check if the activity process is already fully documented and if any hidden sub-processes exist, and compare the proposed or expected solution to existing processes to see if the proposed solution can fit into the existing environment. If not, additional costs can occur at later stages, which can lead SO project to fail.

2. Contracts-related cost elements.

Companies can write detailed and tight contract terms and so can reach perfect sounding contracts on paper. Difficulties arise when they need to implement those controls and when problems need to be solved. Who will handle escalations and conflicts during the SO contract?

As an example, an SME needs to calculate the cost of monitoring SO activity and the cost of conflict or escalation management during an SO contract.

3. Communication-related cost elements.

Good communication even before the SO decision is made is very important to company spirit. Appropriate time and resources should be deployed to make this practice possible. This is especially true when a company needs to outsource a knowledge-intensive activity to an external partner and so needs its employees' knowledge; they should feel themselves a part of this activity. They need to understand the cause and results so that they can own this change and contribute to its success.

The cost of effective communication at the beginning of the SO transfer and during the contract should be calculated into the evaluation.

4. Quality-related cost elements.

Kelley & Jude point out the unavoidability of transition difficulties. They write that companies should expect a decrease in quality level at the beginning of the SO contract and question what should be done to overcome the negative effect of those failures to company reputation and to customer satisfactions.

They suggest that companies plan for the costs associated with defects, reworks and complaint management.

5. Change-related cost elements.

Not every cost element of SO transfer can be correctly identified. Consider the cost of the side effects of SO activity transfer. For instance, how can a company calculate production losses in the SO project due to a decrease in moral and confidence in employees?

An SME might need to help employees to reorient themselves and gain new knowledge and qualifications, which is eventually a part of re-allocation to increase strategic innovation capabilities. As a conclusion, The cost of change management should be reviewed and added into calculations.

2.4 Supplier Selection

As recognized by many managers within my business network who are involved in SO activities, key words in this decision for SMEs are:

Cost, quality, flexibility, reliability, reputation, economy of scale, scalability, geographic location, time zone, data security and confidentiality.

Cost is a key factor in supplier selection. However, there are other criteria to be considered, like product quality, reliability, time delivery, geographic location (including economic and political stability), openness and reliability in co-development of new products, and the supplier company's recognition within the industry and with other competitors. Strategic matching elements, IP co-sharing, licensing and confidentiality are also all generalized main touch points in the supplier-selection decision process (Harland et al. 2005)(Quélin & Duhamel 2003)(Lorber 2007)(Kathleen 1995)(Kelley & Jude 2005).

Trust and reliability are the most important factors for the SO partner selection decision (Elango 2008)(Hamel et al. 1989)(Marques & Ferreira 2009). In various articles and papers, these two factors are further analyzed in detail to consider if

a potential SO supplier can deliver on promises and can share confidentially in the business (Lorber 2007).

Kathleen (1995) strongly suggests that companies look for a long-term relationship and avoid outsourcing simply because of the price factor. Cheapest is not always the best decision criterion.

In this long-term relationship, data security is also important to provide confidentiality, especially if the companies share knowledge and IP for production. Here separate checks can be performed as audits, before or even during the contract, to see if the supplier shares the same standards as the SME and ensure that local rules and regulations are not in conflict with those in the remote location (Harland et al. 2005)(Hamel et al. 1989). For example, local or international IP protection can be considered invalid in remote countries, which can pose a threat to defending company patents.

On the same point of supplier evaluation, Elango (2008) suggests that companies should find firms that are well recognized within the industry and have an even better reputation for quality and standards for services and products and have better technological capabilities than the outsourcing company itself. This point is especially important for outsourcing knowledge-intensive activities, for instance when the SME is eventually seeking to benefit from the learning effects of SO activities and partnership. A reputable and successful SO partner can also help later with the SME's strategic growth if the partner is situated in different networks from those accessible to the SME.

Kelley presents another suggestion (2005): when an SME is looking for a reputable partner, it should also seek references from the partner. This can be especially important when firms are geographically placed at far distances or in far countries. Companies should also not forget time zones, so they do not end up running conference calls at 5 AM after closing the previous day's business last night just before 9 PM.

While considering geographical distances, this research should touch on the effect of distances on the learning effect to better justify the importance of this consideration for SO supplier selection. Rundquist (2003), in a case study of SME companies that outsource their product developments, found that companies should pay closer attention to real travel distances than to choosing the best partner in the world. He explains that tacit (implicit) knowledge that the supplier company gains during the project and product development is only transferable through regular meetings between partner companies. A real face-to-face meeting cannot be replaced, even if we possess advanced communication tools and systems. Geographical location is important, as companies will need to travel often at the beginning and even during the SO.

Several other studies mention additional points for the importance of the geographical location of the supplier, such as the risk involved. Whitmore (2006) argues for the importance of location in his list of key supplier decision points by exploring socio-economic and political risks, as well as natural catastrophic risks. His argument sounds quite valid after considering the examples we have seen in the past 2 years. Swiss Re (2011) reported “\$218 billion worldwide economic losses from natural and man-made catastrophes last year compared to \$68 billion incurred in 2009”. Even if SME operations are not on a large scale, the loss of a supplier can damage business continuity, resulting in the loss of reputation or product lines, which might put the SME out of business. Here again we can see the need for a contingency plan and an exit strategy.

An SME survives on its reputation and quality of services, and products are the main part of this intangible asset. Accordingly, SMEs should pay special attention to the quality of final solutions. The supplier's ability must be evaluated to see if it can deliver what is requested and promised (Whitmore 2006). This is a bit more than a reliability check, as the companies must agree on quality standards requested.

The idea of quality is very closely associated to the price and cost calculation of the offer. Whitmore (2006) further suggests that companies should understand the cost components of a supplier and how this can fluctuate. This is again more than just an offer price comparison, as it allows the company to see what contingencies could be involved in each offer. This eventually can affect end pricing and margins in uncontrollable situations, like a newly deployed import tax on raw materials or changes in social security payments making it impossible for the supplier to provide solutions at agreed price.

The duration of the contract and the commitment from both sides are also closely linked, but there is more to say here. Are both side looking for a long-term relationship or a short-term event? If the companies pursue quick wins for each side with no long-term goals, they cannot grow together. These relationships are known to fail, as the companies will not show mercy to one another and even a small issue will end up with escalations and with frustration, even if at the beginning both side benefited from the deal for a while. In her article, Kathleen (1995) suggests that companies should avoid the “married for money” syndrome and try to find the correct match, even if it takes longer to find.

When trust, reliability, pricing, location, and the reputation of supplier are well measured and companies can agree on the supplier, they need to consider further the question of real capabilities. The SME needs to see how flexible the firm is for scalability and for performance. Is it going to be able to provide new products and production levels within the company’s strategic targets or follow coming innovation trends? How innovative is this firm actually? SMEs need to consider not only the firm’s current capacities but also its future capacities together with its innovativeness in order to increase their competitiveness(Harland et al. 2005)(Quélin & Duhamel 2003).

The SME should also consider where it currently is in the market against competitors and where it is aiming to be in its strategic planning. It needs to monitor potential suppliers' reputations and market positions so it can identify if their strategies can be aligned. Is the supplier ready to be where the company is planning to be after 3-5 years? Are both sides' competitive strategies compatible? Strategic fit is considered to be the most important element in this decision (Kathleen 1995).

Another well-recognized criterion is the supplier's commitment to this partnership (Lorber 2007). The SME should also discuss whether the supplier would work exclusively with them on these products. Can the company guarantee that it will not end up with generic products by ensuring that the supplier will not supply the same products to competitors?

SME companies have limited resources and usually are in some way specialized in providing added value to their customers. Their customer relationships and reputation are based on providing inputs that are timely and up to preset standards at all times. Under these preset conditions, choosing a SO contractor is more than a one time shot, and failure in this relationship caused by choosing an unsuitable partner can lead to serious damage to the SME's reputation. This point confirms the importance of supplier reliability and reputation. SMEs need to find suppliers that can live up to their promises. (Kathleen 1995)(Quélin & Duhamel 2003)(Kelley & Jude 2005)(Hamel et al. 1989)

2.5 Activity Transfer

Madsen (2008) discusses the difficulties and uncertainties involved in manufacturing transfer, arguing that the transfer of manufacturing is more than a technological and physical move. This work refers to the difficulties inherent in the transfer of operational knowledge, as the translation of operational knowledge into an explicit form is problematic and is often ignored in transition management. This is the main argument for this section, showing the challenges involved in SO management for activity transfers and for the transition period (Madsen et al. 2008).

Kelly (2005) discusses the very same problem with an example:

“We've all known organizations where the individuals who run the business have the process for doing so stored only in their own minds. Picture one of these indispensable people suddenly unable to work-"indispensable" instantly translates into "single point of failure". The obvious antidote to this situation is to document the business process so that others can step in if needed-or so that an outsourcing firm can take over the work.”

The most significant factors in the failure of SO projects are knowledge transfer and the documentation of existing processes. Many find themselves at any stage of the SO project struggling with a situation that was never documented or mentioned before because it involves tacit knowledge that the mother company accumulated over long years and so is taken as business as usual. This can become especially problematic when the cultural differences in businesses' daily operation handling are considered.

Once process documentation is in place, the problem of how to run the transition period, with all its training and educational meetings, arises. The most common failure here is the failure to allow a realistic time period and to assign enough resources to run such a program. Usually SO Project managers set target

periods according to desktop calculations and are not exposed to the operational practices themselves. The on-hand experience of operation teams should be taken into account to set a realistic time frame to hand over the activities, considering not only the amount of time necessary to learn the process, but also the time to practice applying it and even to shadow the person who is responsible for the process in the mother firm (Kelley & Jude 2005).

If existing activity processes can be successfully documented, companies can see if they can make some improvements even before the activity transfer. This will save money and avoid future complications that might arise if the SO supplier makes the improvements themselves (Kathleen 1995). This process of documenting and making improvements also provides companies with an opportunity to consider the issue of compatibility with the supplier.

This is the best time to see if the solution offered by the supplier is compatible with the company's existing operations, or with its data handling systems for instance. This early check approach can help to make the management and control of the performance of SO activity much easier in later stages. For example, in today's IT environment where many big players are pushing for their platforms for data handling and management information systems, it cannot be a surprise to see suppliers from different regions of the world running their management systems on different platforms, causing data communication to become an instant SO management problem.

What happens to in-house teams and resources when a company is handing over the activity to its SO partner? SMEs need to stay on top of the knowledge at later stages of the process, even if it that knowledge comes from the supplier (Hamel et al. 1989). To make this possible, companies need to keep and reallocate their human resources into new departments and use their capabilities further. This helps to provide an exit strategy (Lorber 2007), allowing the company to remain a leader of the activity and developments and prevent the loss of competency and market shares (Becker & Zirpoli 2011).

Together with keeping resources in-house, SMEs need to conserve existing knowledge and enrich it further with SO partners. To conserve, SMEs need again to document the existing state and update it according to the desired state of SO activity processes. However, it can be the case that keeping resources is no longer feasible; in such cases it is suggested to keep them until the SO project reaches a stable state. This is to handle risks involved in SO management, such as damage to reputation and brand value due to failures in SO solution deliveries (Quélin & Duhamel 2003).

2.6 SO Contract Management and Performance Monitoring

The identification of key performance indicators is recognized as a key contributor to the successful control of SO activities (Kathleen 1995)(Kelley & Jude 2005)(Lorber 2007).

The coordination and integration of multiple outsourcing partners can become a serious problem if the SME loses track and control of those several activities. Different SO partners can develop different solutions, often contradicting one another and making integration impossible. The SME should place itself in the center of development activities within all parties in order to stay in control of the activity. This same approach should also be applied to learning and knowledge sharing, as a study by Whitmore suggests (2006). This study presents the issue as a complexity problem, since many different solutions created without effective coordination will result in complexity that SME cannot handle anymore.

Becker & Zirpoli (2011) recorded a very similar outcome in their study considering an example of an Italian automaker, which eventually lost control of outsourced development activities and ended up facing product failures and market share loss. In that study, they strongly recommend that companies keep coordination and leadership activities for product development in-house. This well-known company has now decided, after going to the extremes of outsourcing, to bring development works back in-house to protect company knowledge and resources that are above supplier capacities.

Regarding knowledge protection, SMEs are advised to pay special attention to data handling with suppliers. If SMEs outsource an activity that is close to or within its core competency area, institutional barriers should be formed to protect sensitive information, and extra rules should monitor data security to

protect competitive information from competitors (Elango 2008).

2.7 Learning from the SO Partnership and Knowledge transfer

Many studies suggest that communication and regular meetings are vital for successfully transferring knowledge between companies in partnerships (Rundquist 2003) (Lorber 2007).

This point can be linked with the difficulties of tacit (implicit) knowledge transfer. Tacit knowledge transfer is possible only through face-to-face interactions and by sharing on hand experience through direct involvement in operations (Szulanski 2003).

Face-to-face meetings with the supplier at an operational level become particularly important when attempting to overcome the difficulties of converting tacit knowledge into explicit information. This approach is not needed for all SO activity types, but this work focuses on SMEs that outsource knowledge-intensive activities. In such cases, meetings between operation teams can help knowledge transfer. This can help SMEs at later stage to transfer knowledge that has been newly generated by the supplier back to in-house. Many sources agree that reaching new knowledge (Hamel et al. 1989) and maintaining absorptive capacity should be the main purposes of SO activity (Cohen & Levinthal, 1990) (A Zahra & George, 2002).

I have found this to be true in my experience working with the activity transfers in a Bratislava service center. Throughout the projects, tacit knowledge transfer in both directions was only possible when both parties were directly involved in daily operations and both parties could learn from each other. Such learning could have not been possible through process documentations.

Rundquist (2003) mentions the very same point in his case study. He identifies 2 types of tacit knowledge created by the supplier team during the contract. One is the technological knowledge and the other is the managerial experience created. To make the transfer possible, he suggests that partners should be close geographically, so that regular physical meetings are possible. In this study, regular meetings are also identified as important for the control of SO activity, as well as helping to build better relationships between operational teams as well.

Sharing the best practices through a lesson learnt approach can help to facilitate knowledge accumulation. Shared cross-organizational knowledge data handling technologies can also be helpful but it is suggested to build a structure around the knowledge management. Such a structure can facilitate new knowledge creation and allow companies to build upon existing know-how (Hamel et al. 1989)(Shaker A. Zahra & Covin 1994).

2.8 Monitoring of Markets Dynamics

In order to maintain and develop their coverage of the market, companies need to follow the market and its dynamics. It is important to analyze new technologies and trends, which can give the company significant advantages against its competitors. It is also vital for companies to handle risks and changing requirements of markets effectively to stay competitive (Porter 1996, cited by Marques & Ferreira 2009).

Companies need strategies to cope with changes in the market place and plans to prepare themselves against competitors. It is not sufficient to have a market share; a company must also sustain this competitiveness (Hamel et al. 1989). According to Grant (2008), companies need to find the answers to two questions: where and how should business be done to be successful?

There are two types of strategy involved in answering these questions: a corporate strategy where the company chooses in which industry and in which markets to do business based on macro economical data, and a business strategy where the company chooses how to compete within this chosen industry.

The first step in creating a strategy to improve competitiveness is the ongoing monitoring of emerging technologies, changes in customer preferences, changes in legal requirements, and changes in socioeconomic or political variables. Apart from these monitoring activities, companies also need to watch out for existing and potential competitors. In some cases, competitors can come from unknown territories and unknown industries with unknown technologies, recalling the theory of creative destruction (Schumpeter 1934, cited by Aghion & Howitt 1990). This can be the most devastating if the company is not prepared to cope with such challenges.

SMEs need to take all of the above into consideration to see the whole picture in their SO project evaluations as it is definitely more than a fix cost calculation.

In this chapter, existing literature and studies were presented in groups according to the 7 SO management steps to support the proposed SO decision model. The motivations and risks of SO were presented and existing managerial knowledge and suggestions to overcome those risks of SO were also identified. This helped this study to form a framework against which SME companies will be measured to identify the differences between companies' approaches to SO management. This research will apply the SO decision model to compare these theoretical findings to the SO management of SMEs in practice.

3 Empirical Study

The research objective is to identify the differences between SMEs in their SO management practices. As the subject of SO is very broad, and there exist many variables that effect the SO process and SO outcomes, it is important to decide what should be measured and how it should be measured in this study.

Choosing the correct empirical study setting, design and tools was important to reach reliable and valid results in this work. In this the steps of this process are explained to show how the study was structured.

3.1 Research Design

Taking into account the requirements and difficulties inherent in running broad based research, an exploratory case study was chosen for this study's methodology. Although individual situations can bring exceptional results, this method will help us to understand how SME companies are reacting to the reality of SO and how they are managing SO in their own industry settings. This method allows us to understand how SMEs practice SO management in a real life context, helping to express practical findings in a constructed way and identify gaps and limitations in conclusions.

The study replicated the basic steps of a comparison case study suggested by Yin (2003):

1-Identify the research problem and the question

As discussed in previous chapters, European SMEs are under great pressure in today's market due to globalization and the quick spread of manufacturing knowledge. SO seems to be a way to overcome these problems in the short term. In the literature, researchers point out both benefits and risks involved in

SO activities. Companies need to build experience and benefit from the learning effects from previous SO attempts in order to overcome the disadvantages of SO, but SMEs often do not have these opportunities. Because of scarce resources and problems with capital, SMEs need to manage SO activity correctly from day one.

From this identified problem, the following research question is formulated:

How can SME owners and managers identify and manage the right outsourcing activities and collaborate with their SO partners to generate new knowledge for increasing innovation and competitiveness?

2-Create a theoretical framework

A review of existing studies reveals both the motivation behind SO choice for companies and the risks involved in SO management. Another part of the literature covers the approaches that companies should follow to overcome these risks.

Many papers explore the elements that companies should pay attention to before going into SO practices. Some examples include: How to make outsourcing decision with cost factors taken into account (Kelley & Jude 2005). 10 points to consider before outsourcing decision (Kathleen 1995). List of Dos and Don'ts for technology outsourcing (Lorber 2007). Collaboration during tough competition and how organizations should monitor their learning activities and protect their core knowledge in outsourcing partnerships (Hamel et al. 1989). In which situation outsourcing should be considered (Stanko et al. 2009) and company risk assessments (Whitmore 2006).

Based on the suggestions from the literature, discussion within my business network and from personal experience, 7 key steps in SO management were identified. If applied correctly, these steps should provide guidance to company managers in their SO decisions.

1. SO activity identification
2. Evaluation of SO activity
3. Supplier selection
4. Activity transfer
5. Control and management of SO contract
6. Learning effect and knowledge transfer
7. Monitoring of market dynamics and emerging innovations.

These further steps in Yin's framework are explained in detail later in this chapter.

3-Set the limitations

4-Select samples.

5-Prepare for data selection

6-Run interviews and collect data

7-Analyze the findings

3.2 Sources of Data

I chose to collect data from SMEs in Slovakia, as I have a close relationship with many of them that allowed me to reach out to them and involve them in open discussions of their approach to SO management.

The companies were mainly component manufacturing companies who faced significant difficulties after the regime change in the 1990s, which allowed them to compete in global markets for the first time.

I assumed these SMEs were representative of component suppliers and consider them as part of a moderately changing industry, as opposed to one with fast changes (high velocity industries) or slow changes (stable environment industries), in line with the research by Perezfreije & Enkel (2007).

This identification could be open for further discussion, as electronic component suppliers could be seen to be in a fast changing industry, while suppliers of mechanical or stamped metal components could be considered in a stable environment. However, the generalization that component suppliers are part of a moderately changing industry is assumed for this work.

In moderately changing industries, companies should focus on meeting customer needs (Perezfreije & Enkel 2007). This market is B2B, where the needs of the end-user customer are translated by OEM companies into product specification or, in some cases, into modularized product component specifications. The OEMs therefore set certain rules, and SMEs have little or no influence on these main limitations. Building a close relationship by participating in product co-development activities can therefore be key factor to benefit from the learning effect and stay on top of market requirements (Baloh et al. 2008). In these business-customer oriented markets, efficiency in financial terms is considered vital for competitiveness (Hertenstein & Platt 2000).

It is now 20 years since the regime change and the change from state-owned manufacturing capabilities into privately owned SMEs and some big enterprises in Slovakia. Before Slovakia entered the Euro zone, these Slovakian companies had an advantage over Western companies because of low wages paid. Many European investors therefore entered Slovakia, and some big automobile companies, such as Volkswagen, PSA and Kia, changed the landscape of Slovakian business, as companies could reach new technologies, know-how and close collaboration opportunities through these investors to increase their manufacturing capabilities.

However, companies faced an increase in wages after Slovakia entered the EURO zone, and this affected their competitiveness against Western rivals. Under these conditions, companies have been forced to practice SO to regain competitiveness in the short term, but average-performing SMEs are missing vital experience with SO practices and so are exposing themselves to the risks of SO. In the long run, they may lose their competitive capabilities, if they fail to create new knowledge and new capabilities (Hamel et al. 1989). This can especially be the case if they fail to invest in their human resources and employees, which is the main driver of innovation and new knowledge as mentioned in a work by Baloh et al. (2008).

In this environment, SO seems to be the solution to allow companies to meet the requirements of their business customers. However, as industry knowledge on a global level is relatively young, companies need to gain more experience in SO in order to be successful. Often, these companies lack the resources that would allow them to make errors in decision making in order to learn from their mistakes. I therefore find this group of companies to be ideal to benefit from the research findings of this study

3.3 Sampling and Selection of the cases

The study was originally intended to focus only on manufacturing SMEs in Slovakia, which were to be selected using my own business network. I had collected more than 20 company names for SMEs in Slovakia and visited some of them in 2 exhibitions, the first in Brno in the Czech Republic in October 2010, and the second in Nitra in Slovakia in May 2011.

Successful, high-performing companies were identified out of those 20 companies during these visits in exhibitions. As financial information was unavailable at this stage, companies were selected based on a demonstration of innovativeness and the presentation of new products in exhibitions, and general recognition as a successful company within the sector. 2 of the high performing companies were present and able to show new products on their stands at both exhibitions.

7 companies were selected and placed into two groups: 3 aforementioned high-performing companies, and 4 average-performing companies. From these 7 companies, 10 interviews were conducted with 10 different interviewees who were company owners, partners or decision makers involved in SO management.

The 3 high-performing companies were selected based on the criteria that they are regarded as highly successful, having seen growth in the last five years. These companies have brought out new products during this period and are recognized by the industry as innovative companies with the ability to provide new solutions to business customers. They are all involved in manufacturing. 2 of them produce plastic components, and 1 is involved in providing welding solutions within the automotive manufacturing industry.

Although I initially intended to only consider manufacturing companies, 2 of the companies I studied are now more involved in retail, and outsource their manufacturing capabilities completely. It is interesting to see what these companies identify as their core business knowledge, how they coordinate several suppliers in their operations, and how they have managed to survive. It is unsurprising to see that the companies with complete outsourcing are located in the average-performing company group.

4 companies with average performance were selected based on the criteria that these companies have not been reaching new markets or growing their market shares over the last five years. The companies have seen revenues declining slightly over this time period, and so are facing financial problems that make them unable to reach new customers or meet new requirements from business partners due to a decrease in capabilities and an inability to meet competition on prices and deliverables.

2 other average-performing SMEs are involved in component manufacturing. 1 of the companies is an electronic equipment manufacturer, and the other provides maintenance for vending machines with partial manufacturing of spare parts on its own.

Once I identified successful companies to study based on the set criteria, I had the opportunity to confirm my findings by reviewing the financial data of each company for the past 5 years in interviews.

However, company names and financial data must remain confidential. For high-performing companies, this falls in line with concerns expressed by interviewees regarding the knowledge held by their competition. For average-performing companies, it would be unacceptable on moral grounds to show openly that companies are losing their performance over the years.

3.4 Instrumentation and Data Collection

A multiple comparative case study requires the use of the correct tools in studies to assure reliability in data collection and in data analyzing. Consequently, it was important to create the correct settings for this data collection, namely a theoretical framework, which helped to design the SO management model. This model is used as a tool to measure current practices around SO. By defining such a model, it was possible to /to have a standardized measurement scale in place.

The next section presents the further steps taken to study the selected SMEs in this observation platform.

3.4.1 A structured interview questionnaire

As explained previously, a review of the literature suggested 7 steps in SO management that represent key focus areas that could help companies to overcome difficulties inherent in the practice of SO.

I went into the details of what decision-making elements are involved in these steps. Once I identified these elements as suggested in previous studies, I constructed a questionnaire to investigate how SO managers use these ideas in practice in their decision making.

This study intended to measure SME companies' approaches to and their understanding of those key elements. The main intention was to clearly define the differences in management approaches towards SO using a 5-scale questionnaire.

The following 5-step questionnaire was used to allow company owners, partners and SO decision makers to express their opinions on each of the decision elements. The questionnaire features 55 questions in 7 sections, each reflecting on the key elements in the SO management steps.

Scaling of the questionnaire was constructed as below.

1. Strongly Disagree
2. Disagree
3. Neither Disagree nor Agree
4. Agree
5. Strongly Agree

The questionnaire can be seen in Appendix A. Table 2

3.4.2 Interviews

Interviews were run in May and June of 2011. 4 of these interviews were run in person in a company environment and 6 were run through telephone conferences and using an online survey provider.

The interviews strictly followed the preset questions, as the SO subject is broad and could lead to long conversations irrelevant to the current research.

The use of the structured questionnaire helped to keep the interviews well focused on the question of SO in daily business and clearly identified companies' thoughts on each of these key elements.

These questionnaires were given to SO decision makers in companies to get a realistic picture of current outsourcing practices and to better understand the importance of SO within a company.

During the interviews, interviewees had the opportunity to rate the importance of each decision element and show clearly their understanding of these elements. When a point was found to be unclear, the background of the question was explained so that the interviewees could better evaluate its use in their SO practice.

In these interviews, companies also presented their financial status to confirm the previous assumptions that they were either high-performing and successful or that they had concerns over losing their market share. Some companies experienced the replacement of their products by new technology or new solutions provided by competitors and they were in a search for a solution. SO was often considered to be solution to compete with the competitors.

General characteristics of companies studied can be seen in Table 3.

Company names and financial data were kept confidential to secure openness and reliability in the companies' answers to the questions.

Table 3: Company Codings used in Interview Analyzing

Foreign Subsidiary	Performanc e	Code Used in calculations	Interviewed Persons Role	Industry	Employee Size	Years in Business
No	Average	A	Partner and Share Holder	Plastic components	4	6
No	Average	B	Development Manager	Injection Molding solutions	5	9
No	Average	C	Owner	Injection Molding solutions	5	9
No	Average	D	Partner	Maintenance for wending	6	13
Yes	Average	E	Partner	Elektronik component	4	15
No	Average	G	Partner and Share Holder	Plastic components	4	6
No	High	H1	Investment and Planning	Plastic components	50	42
Yes	High	H2	Project Control Officer	Plastic components	25	7
No	High	H4	Technical Ingineer	Welding solutions	23	9
No	High	H3	CEO	Welding solutions	23	9

3.5 Analysis of The Findings

After interviews were run, the data was coded into Excel to calculate the average weighted means for both groups in each decision element to see whether the groups had a similar or differing approach to different elements.

This allowed the differences between the 2 groups of companies to be visualized. The findings were grouped into 4 main sections: the elements on which the practices of the two groups were similar, areas where they differed slightly, areas where they disagreed significantly, and areas where they differed most significantly.

This four-scale classification based on weighted means of the answers from each group of companies is presented below.

0.00-----0.49 representing similar approaches in SO decision steps

0.50-----0.99 representing different approaches in SO decision steps

1.00-----1.49 representing significant differences in SO decision steps

1.50-----2.00 and more representing the most significant differences in SO decision steps

This findings are presented in Appendix B table 4A, 4B and 4C under these four groupings, and these findings can be also seen in Appendix C tables 5A, 5B, 5C and 5D, where the results are divided into each of the 7 SO decision steps.

Findings from interviews are further presented in the coming chapter in more detail, taking into consideration the comments given by interviewees. This was necessary to give greater meaning to the findings, so to better interpret data presented.

4 Case Study Details and Findings

In this chapter, the findings from interviews are presented and analyzed. Based on this analysis, the findings are further interpreted to show the connection between existing theory around SO management and the results of this research.

This thesis work aimed to clarify how SME owners and managers can identify and manage the right outsourcing activities and collaborate with their SO partners to generate new knowledge and increase their innovation competitiveness.

To be able to answer to that question, this work considered the assumption that high-performing SMEs are better at managing their SO activities and partnerships than average-performing SMEs, and as a result are gaining much more from SO practices. This assumption is supported by the findings in the work by Laugen et al. 2005, cited by Harland et al. 2005, who found a correlation between outsourcing practices and performance.

The later part of this chapter will present an analysis of the findings, broken down into seven SO management steps. This analysis will show where the most significant differences appear in SO management practices between high-performing and average-performing SMEs. These differences are calculated from each company's answers to the five-scale questionnaire presented in interviews.

The outcomes of these interviews can be found in Appendix C, Tables 5A, 5B, 5C and 5D. Results show the weighted average of the answers of each group of companies to each question in the SO stages using the following scale:

1. Strongly Disagree
2. Disagree
3. Neither Disagree nor Agree
4. Agree
5. Strongly Agree

By calculating the weighted average scores, we have identified each SME group's understandings, approaches, agreements and disagreements towards those SO decisions elements.

Using the results of these interviews, this study aims to identify the main differences in outsourcing management for SME companies that are contribute significantly to an SME's competitiveness and innovativeness.

4.1 Structured Interview Findings

The results of the structured interview questionnaire can be seen in Appendix B Tables 4A, 4B and 4C under 4 categories: Most Significant Differences, Significant Differences, Differences and Similarities better each group's answers.

Each SME's understanding and acceptance of key SO decisions elements was identified by calculating weighted averages of their answers to interview questionnaire.

For instance, how important do SMEs consider the supplier's geographical location in the supplier selection step of SO management? By identifying the differences or similarities in each company's approach to this key element, presented in numbers, this study can show where the main differences are located in SO management and SO partnership practices.

The last column of this table presents the differences in absolute numbers. There were slight differences and similarities between the practices of high-performing SMEs and average-performing SMEs in almost half of the questions in the questionnaire. These findings need further discussion to see why such similarities are not resulting in similar performance outcomes. This is discussed further in the last chapter of this work.

4.1.1 Most Significant Differences in Answers

This section presents the findings of all questions that showed most significant differences between high performing and average performing SME Groups.

Q1 Only central unit can take SO (STRATEGIC OUTSOURCING) decisions, separate business units cannot decide on SO contracts

Surprisingly, while average-performing SMEs have tight control around decision making for SO, keeping decisions top-down, high-performing SMEs allow their departments to make decisions for SO independently. This seems to contradict previous research, which suggests that such democratic approaches can bring some risks to companies, as the cumulative effect of independent outsourcing can create a dependency on suppliers (Hamel et al. 1989).

Q4 Tacit (implicit) organizational core knowledge can be transferred to supplier

It is interesting to see that average-performing SMEs are more protective of core knowledge, while high-performing SMEs agree to transfer some tacit core knowledge to suppliers, arguing that knowledge sharing is important within trusted partnerships.

The purpose of this question was to find out if SMEs can recognize the importance of core knowledge and that they can risk losing their core competencies by transferring such knowledge to external parties.

Q5 Overall impact of SO to all organization is well calculated

Average-performing SMEs find it difficult to see the real effect of SO on the organization as a whole before starting an SO project. In high-performing SMEs, however, this impact is considered as part of the evaluation process for the SO decision.

This can contribute significantly to the successful evaluation of SO projects, and companies should therefore be able to run this calculation as precisely as possible (Kathleen 1995).

Q7 Through SO we can bring in the change, in the organization and in processes

Change in organizational structure and culture is possible through SO and by transforming business processes (Harland et al. 2005)(Quélin & Duhamel 2003). High-performing SMEs are aware of this effect and use this side of SO activity in their management. Average-performing SMEs are not aware of this effect.

Q9 SO project's effect on business core competitiveness is well identified.

Companies need to end product-pricing wars eventually and that they need to get additional resources and knowledge, so to sustain their competitiveness. These both can be achieved through successful SO activity and collaboration (Elango 2008)(Baloh et al. 2008) (Hamel et al. 1989).

High-performing SMEs can identify this link clearly and use it in their SO decision calculations. By freeing resources through SO, a company can reallocate them in different activities and can gain substantial competitive advantages (Elango 2008). However, this is not very clear to average-performing SMEs, as they see this point as irrelevant to SO activity.

Q46 We share lessons learnt and in both directions

This is purely collaboration management, and it can show how companies understand their SO partnerships.

High-performing SMEs see collaboration as part of the SO relationship and take the opportunity to gain knowledge through it. However, average-performing SMEs consider this point irrelevant to SO management as they try to keep barriers between suppliers and their organizations to protect their knowledge. Through such practices, they can successfully protect their own knowledge, but they will miss the opportunity to learn more from other partners. This approach can be effective in regulated industries but is not applicable to today's fast changing economies (Baloh et al. 2008)(Hamel et al. 1989).

4.1.2 Significant Differences in Answers

Q2 SO activities can come from core activities domain as well, but a core competency areas off limit

Here high-performing SMEs are more open to the idea of choosing some activities for SO from areas that are close to the company's core activities, even if this can be risky for core competencies. They believe this can be advantageous with correct SO management. Average-performing SMEs choose not to consider this in their SO decisions.

Q10 Technology management can allow company to be flexible

High-performing SMEs find technology management very important to their flexibility and comment on the importance of knowledge generation to competitiveness (to be understood here as innovation competitiveness). Average-performing SMEs do not show strong agreement with this point. The reason for this finding might be that this question was not clear in context to interviewees.

This question was proposed to counter check how SMEs see flexibility in business, if they only based their decision on financial means with fix cost calculations or process efficiencies or if they see also consider technological advantages.

Q12 Shorter time to markets for new products brings in Flexibility

It is generally accepted that time to market should be short and that quick reactions to market changes can bring flexibility, which is identified in literature as the most significant contributor to business competitiveness. (M. A Stanko & Calantone 2011)(Harland et al. 2005)(Quélin & Duhamel 2003).

High-performing SMEs strongly agree with this point, while average-performing SMEs show slight disagreement with this decision element.

Q15 If emerging technologies is taking over company's market, than SO is considered

Some average-performing SMEs are practicing SO to gain new products and new technologies, but not all of them. It is a good approach in understanding the idea of SO apart from cost calculations. High-performing SMEs strongly agree with this point.

Q16 Future orientations are aligned with the SO project

High-performing SMEs find this difficult and do not agree with the possibility of including future trends and future goals in SO management.

One high-performing SME commented that, from their experience, they find that this is not always possible as they operate in a changing dynamic environment. They therefore try to construct their SO contracts to accommodate unexpected developments throughout the contract duration, so they can stay flexible and adopt SO projects according to changing needs.

Average-performing SMEs seem to agree to this point rather than disagree. This finding will be interpreted with other findings in a later section.

Q19 SO performance indicators are identified with measurable target values

High-performing SMEs agree that setting out their expectations with clear targets is an important element of SO activity evaluation. Average-performing SMEs see meeting price and technical specification requirements in a SO contract as the most important performance indicators. They agree to control SO contract with these two main criteria.

Q34 Transition period is set realistically with worst-case scenario

High-performing SMEs show high care for this activity transfer period and link the success of SO activity to this. They use their past experience in this stage, and always expect to have unplanned breakages in activity transfer phase,

which can have a negative effect on delivering solutions to customer at the accepted quality level. Average-performing SMEs are not fully aware of the importance of this stage.

This point is also important in setting SO management standards and showing consistency in SO handling. This can in the long run bring better scalability for SO management.

Q35 Resource planning is done according to activity needs for knowledge transfer (trainings, technical specifications etc.).

When SO activity is considered as a supplier-buyer relation ship, average-performing SMEs fail to recognize the relevance of resource planning, cross trainings or knowledge transfer. A main decision criterion for them is the issue of pricing. High-performing SMEs address this question within their SO management processes and keep it in calculations.

Q36 Activity knowledge is conserved within the company to support the exit strategy

Average-performing SMEs react to this point without great concern, but such approaches in practice can cause many complications if the company ever tries to bring the activity back in-house and can even be problematic when changing suppliers (Lorber 2007).

It was good to see that high-performing SMEs strongly agreed with this point, commenting that they try to keep process procedures fully documented and updated, even though this is far from common practice even within large multinational companies.

Q44 Barrier to business sensitive information and IP sharing is expressed in SO contract with legal binding. Process ownership stays with our company, and we monitor changes to solutions

When average-performing SMEs see an SO project as a supplier-buyer relationship, they simply communicate solution specifications to the supplier and seek a competitive price without sharing business information or IP in a way. High-performing SMEs, on the other hand, are involved in more details and share knowledge with the supplier for solution creation. They are aware of limitations in sharing knowledge for core business knowledge and company IP rights.

High-performing SMEs seem to be more aware of potential benefits and risks of close collaboration and partnership, and because of this, show more involvement in solution generation and knowledge cross sharing.

Q51 External consultant firm provide us reports for emerging technologies

The intention with this question was to see how SMEs are reaching out to market information apart from listening to their customers or business partners (active or passive, with a systematic approach or adhoc approaches), so that we can evaluate each SME's capacity to understand markets trends and dynamics.

High-performing SMEs use additional research to monitor their industries and see events from other angles, even though they also use systematic market analyzing within the company. Average-performing SMEs do not use external consultants, as they believe they have the capability to monitor their market themselves, according to comments in the interviews.

Q53 We translate customer needs into explicit knowledge and communicate this to SO partner

This point was identified to show how customer and market knowledge is shared between the SO partners, as it is believed to help in learning effects for both sides. Result for this question showed significant difference in the questionnaire.

Top players did not find customer knowledge sharing harmful and considered it a good way to collaborate. However, average SMEs expressed disagreement, saying that they found this information unshareable, as they consider customer data to be part of their core business knowledge and so believe that sharing it with suppliers can later cause a threat to them.

4.1.3 Differences in Answers

Q18 Contingency plan is in place and Exit strategy is formulated

High-performing SME's agree on the importance of an exit strategy and expressed in their comments that developing a contingency plan is always part of the SO planning phase. Average-performing SMEs are not sure of this approach, since they expressed in their comments that they formulate the exit strategy once the need is identified.

Lorber (2007) identified the importance of exit strategy very clearly in their work.

Q41 Scope of approval for exceptions and for conflict handling is defined

Top SMEs consider this as an important element in SO contract management. They also commented that they learnt the importance of this from their past experiences. Average-performing SMEs need better understanding of the significance of this element in SO contract management.

Q3 In risky markets, SO can provide mitigation

Top players strongly agree that they see SO as a way to cope with market risks, like emerging technologies, new trends and drops in pricings. SO is for them a tool to reach other market segments by reaching out to new technologies without taking high capital risks.

Average-performing SMEs neither agree nor disagree with this point, which can be understood as a preference to avoid entering those risky markets, instead staying within their own domains.

Q17 Potential SO risks are identified

High performing SMEs are more aware of the potential risks SO can create and prepare themselves better to handle those risks. This question can clearly draw a conclusion about both groups of SME's understanding of SO management and their capabilities to evaluate SO projects.

Q22 Goals and purpose of SO project is clearly communicated to company employees

High-performing SMEs believe that their employees provide a real competitive advantage and agree on the importance of sharing knowledge to ensure common goals between them. On the other side, average-performing SMEs are reluctant to run open policies with their employees, since they are concerned about the management of this open knowledge sharing policy. They therefore try to manage knowledge on a need to know basis.

Some studies agree that companies should protect strategic data as sensitive business information, but others argue that companies can achieve more through the involvement of their employees in knowledge management (Szulanski 2003)(Hamel et al. 1989).

Q26 We seek price competitiveness in SO supplier selection

This question again confirms that average-performing SMEs see SO as a supplier-buyer relationship and are therefore interested strongly in price competitiveness. High-performing SMEs do not consider price competitiveness to be the most important factor in SO partner selection, showing other interests in supplier selection.

High-performing SMEs also find reputation and quality level assurance in solution delivery important, as well as geographical location and sharing the same ethics and values.

Q27 Supplier must operate under same ethical and legal standards as our organization

This question addresses how a SME can consider social responsibility while seeking competitiveness; it is definitely a long-term vision and a difficult strategic choice to make.

Average-performing SMEs find this point irrelevant in supplier selection while high-performing SMEs strongly agree with the importance of this point. This confirms that high-performing SMEs consider social responsibilities and care about their surroundings.

This question aims to show that SO activity is a more than a business transaction and that it has much stronger effect on socio economical standards and norms(Harland et al. 2005).

Q28 Reputation is important element in supplier selection

Average-performing SMEs are interested in cost calculation and find reputation somewhat relevant, depending on the solution decision. But, as in question 27, here I intended to show what other factors companies should be considering in their SO decisions apart from financial calculations, and I find the reputation of a

supplier can help brand value to increase if correctly communicated to the consumer.

High-performing SMEs agree and expressed the importance of reputation in supplier selection. They commented that through suppliers they can also increase their brand value and enter new business networks.

Q20 SO solution can fit into existing business line and organization

The high-performing group agreed with the importance of solution integration and average SMEs show some agreement.

Further observation and surveys can be deployed to see how this is done in reality and if both groups of SMEs understand this fit in the same way. I tried to measure here if the SO solution can fit (harmonize or integrate) into existing business lines and organizations, meaning it can support continuously changing business variables.

Q21 Deviations from SO project plan are considered in the contract creation

Average-performing SMEs usually do not handle SO contract creation and in practice use ready made contracts from suppliers.

High-performing SMEs are fully aware of the importance of well-constructed contracts in successful SO management. In their practice, they try to build flexibility into contracts for both sides. They usually manage contract creation and use their experience to achieve this.

Q25 Trust can be reached through well prepared SO contract

This question tries to see how companies understand trust and how they achieve it in SO relationships.

Average-performing SMEs see SO more like a supplier relationship, and their answers to this question confirm this approach. They find trust achievable through a well-formulated contract.

High-performing SMEs are fully aware of fact that trust cannot be secured or achieved with contract terms, as one needs to build it through a long-term business relationship.

Trust can contribute significantly to the success of knowledge sharing during SO partnerships and should be placed between the top priorities of SO partnership (Hamel et al. 1989)(Ohmae 1989).

Q29 Geographical location is not the key factor in supplier selection

This question addresses an important element in supplier selection, even though it may seem unimportant as today's global logistics, transportation and telecommunication advancements are beyond our expectations 20 or 30 years ago.

High-performing SMEs identified this as an important considering in their decision making while average-performing SMEs did not consider this a key point in supplier selection. As a conclusion, high-performing SMEs seem to be sensitive about being socially responsible enterprises and at the same time consider geographical location important for travel arrangements and onsite visits.

Still, it is worth considering for other factors, like the socio-political stability of the production site, alignment of social norms and sharing same ethical value and believes.

Consider for example the case of NIKE, who faced serious problems and accusation of having suppliers that used child labor and not providing acceptable work conditions to their employees. These resulted in negative customer reactions around the globe, and they had to deal with these accusations separately by adopting company run audits for instance.

Companies should ask in supplier selection where supplier is located geographically and if they can reach this place easily if they ever need to have an on-sight view of supplier operations. The same point is also important for regular meetings for knowledge transfer (Rundquist 2003).

Q31 Supplier share with us their cost components and transparent pricing is in place

Average-performing SMEs do not show significant interest in transparent pricing as long as they supply solutions at a bargain price. High-performing SMEs regard the SO partnership as a long term commitment and thus are interested in understanding the cost components.

Average-performing SMEs focus on providing today's customers with products in order to be competitive but miss the potential threat of changing market characteristics by expecting that they will always be able to find the right suppliers to stay competitive. They will therefore only stay competitive until their competitors catch up and do the same SO for similar products (Elango 2008).

Q32 Supplier can locate its manufacturing and services operations where ever they find competitive

Average-performing SMEs are not willing to involve themselves in such details and strongly agree that suppliers can be located wherever they find suitable. However, high performers consider location in SO negotiations and are willing to involve themselves in such decisions.

High-performing SMEs are more aware of the potential risks. For instance, if a company has a supplier that moves its operations to the far end of the world to increase its price and resource competitiveness, and if such a move will have effects on delivery schedules, then such changes are expected to be consulted with the firm.

This question is very closely related to the question of geographical location but from the supplier's perspective. The idea here is to see how close a relationship SO partners have, so that they can discuss such issues and seek solutions together. This comes into question when a supplier changes its operation sites if such a clause is included within the contract.

Q33 Supplier only provide the solution to us and not to competitors;
strategically they are aligned with us.

A producer has a great many opportunities to present the same solution in many shapes and forms (Hamel et al. 1989), and while SME companies seek economy of scales and price competency by pushing their suppliers to be loyal to them and to produce only for them, this cannot always be a realistic goal.

High-performing SMEs recognize this and so apply different policies with each supplier and under each condition.

Q42 Key Performance Indicators are well identified and communicated to
supplier

Average-performing SMEs are interested in the goods delivered in accordance with agreed criteria and focus on quality checks, again run by their own operations. High-performing SMEs recognize the importance of preset and clearly communicated performance indicators, as they believe that with such identifications, they can handle SO contracts effectively, and so they scale their management systems around several SO contracts.

Q45 Process ownership stays with our company, and we monitor changes to solutions

High-performing SMEs aim to have continuous ownership of the solutions generated during SO, to maintain their positions in the market and lead further product developments. These companies also seek knowledge transfer even after the transition is complete and the SO project has reached a stable state. This is very important in later stages to secure knowledge transition between supplier and the company to make tacit (implicit) knowledge transfer possible.

Q47 Modifications and technological improvements always consulted with our company

This is one of the main differences between the 2 groups, as average-performing SMEs try to closely control solution creation, but fail to realize the full value that can be gained from their SO partner. They place too tight controls around the partnership and in a way create obstacles for the supplier.

By adopting loose control over solution creation, high-performing SMEs create a better environment for knowledge sharing and new knowledge generation. They expect to bring this new knowledge back in-house during the contract in order to stay competitive in knowledge management.

Q48 R&D teams works in cooperation for various projects

Average-performing SMEs keep their own R&D and marketing research activities and do not seek to collaborate in development activities. This could be due to fear of losing their markets and technology knowledge to external parties, and it is possible if one organization is unable to learn from others in collaborations, eventually it will give out more than it can take in (Hamel et al. 1989)(Cohen; & Levinthal 1990).

However, high-performing SMEs support their teams to run co-development projects with their suppliers to generate new ideas and knowledge.

Q55 Money spent for R&D is a cost, if it does not end with in-house production

High-performing SMEs show high interest in staying on top of solution creation and development and so find R&D necessary, even if it does not always lead to in-house production. They are ready to share knowledge and IP through an SO partnership as long as it leads to common profits. Average-performing SMEs see this differently and express concerns over R&D spending. For them, if R&D cannot come up with a unique production, money spent is a cost. They fail to realize the knowledge benefits gained from such activities.

This question brings together the theories of absorptive capacity, learning effect and organization knowledge to see how SMEs see their R&D activity expenditures (Cohen; & Levinthal 1990)(S. A Zahra & George 2002)(Madsen et al. 2008)(Hamel et al. 1989).

As in these works, companies should be involved in new solution development even if it does not lead to final products. Through these activities, organizations can learn from experience and become more perceptive to new knowledge. They can do this by absorbing distant knowledge into the organization; in other words, they are able to be selective in information filtering.

4.1.4 Similarities in Answers

The below points are accepted as standard knowledge for SO management within the companies involved in the study, since similar answers were given by all SMEs to these points.

Q24 Cost of change management is calculated into SO evaluation

High-performing SMEs seem to better understand the meaning of change management, but they did not show clear agreement to this question. This question addresses how companies handle SO project transition, and if they include supporting activities, which are necessary to apply the changes brought in by SO projects brings, in their calculations. These might include moving departments around, training people to requalify them, forming new departments or laying people off. Average-performing SMEs neither agree nor disagree with this point

Q40 Data management systems compatibility is checked and achieved before contact start

Both groups of companies neither agreed nor disagreed , but 2 of high-performing companies expressed in their comments that they actually apply this criteria in some of the SO practices. Such integration helps in managing SO contracts that have stable direct data flow from suppliers, making data reliable and allowing it to be integrated into existing data processing systems of the company.

Q6 Flexibility means to us reducing our fix cost of operations

Both groups of SMEs strongly agreed that this is the first driver of SO activity, since they find this as a means to be flexible. High-performing SMEs, according to their comments, consider this in their SO decisions but it is not the main driver, as they find technological and operational competitiveness to also be significant contributors to business flexibility.

Q8 SO is a tool to access external knowledge

Average-performing SMEs understand the benefits of SO activity for accessing external knowledge, but this knowledge is expressed as products and solutions, not the transfer of knowledge or the ability to learn from the partnerships.

Successful companies view each alliance and partnership as an opportunity to access the knowledge of partners even outside of the formal agreements.

Q11 Flexibility can be achieved through SO partnerships

High-performing SMEs agree on the strategic importance of SO for flexibility, and these SMEs better interpret the benefits gained from an SO partnership. Other SMEs also agree but on financial terms and missing the importance of long-term collaboration to reach flexibility, as identified in their comments.

Q13 Ability to adapt to external driving forces (Global economical and political changes) is considered in SO evaluation

Both groups of companies agree on this question. SO management, taking into account broad considerations including global events, is a realistic way of thinking.

Today, we are exposed to all events taking place in the world, no matter where it occurs. We need to react to events accordingly. Scenario analysis and market monitoring are important parts of these practices (Ohmae 1989).

Q14 Market and customer characteristics dominate SO decisions

Both groups agreed with this point. High-performing SMEs understand the importance of market dynamics in SO decisions, and average-performing SMEs focus on cost calculation to be competitive. This very same point is mentioned in several resources as an SO activity initiator (Lorber 2007)(Kathleen 1995)(Michael A. Stanko et al. 2009).

Q30 We always contact with more than one supplier

High-performing SMEs agree that they contact with more than 1 supplier and are in discussions even when SO contracts are running. Lorber (Lorber 2007) even suggests that companies inform their suppliers that they have other negotiations going on so that they can pay closer attention to requirements.

Average-performing SMEs showed partial disagreement here, as they did not consider this applicable to all situations found in SO.

Q37 We keep the existing resources available until SO activity reaches stable state.

This question tries to identify how companies handle activity transfer and what precautions they take to make this transition as smooth as possible.

Both groups of companies commented on this question. They found this point disputable, depending on the project and activity.

In practice, this point in the project timeline can be wrongly set and that under financial pressure, they can wrongly believe that a stable state has been reached.

Companies can overcome this problem if they link this state of project transition to some preset performance indicators. During the project, this can then prevent financial teams from intervening and pushing for shortened transition times and eventually for the liquidation of those idle departments.

Q38 Solution compatibility is secured at transition period.

Compatibility is understood by all SMEs as involving technical specification requirements rather than strategic compatibility. Even though they agree on the importance of this point, their approach tended to focus on technical specifications for components.

Q39 Aligned reporting line from supplier and we can access operation data of Supplier

This points address the compatibility and reliability of reporting systems, together with the easiness of SO management. When companies run SO projects, they become dependent on the suppliers providing them with correct performance indicators apart from our own measurements. Accessing the core data coming from suppliers and some standardized reporting can help companies greatly in SO control and management.

Both groups of companies have found this point applicable, depending on the SO project type.

Q43 We can scale our SO management capabilities to handle many SO contracts in harmony

Both groups believe in their abilities to scale SO management to handle many SO projects at the same efficiency rate. Separate research should be run to see if their understanding of successful SO management is accurate and can be measured. This point would be worth studying to see especially how learning effects improved though several SO projects.

Q49 Regular Face-to-face meetings with supplier at operation level are planned (for implicit knowledge transfer) during the contract

Again, this point is important to secure tacit (implicit) knowledge transfer and to share lessons learnt by both sides (Szulanski 2003)(Rundquist 2003).

For high-performing SMEs, this point is important but varies according to the SO activity and solution type. Average-performing SMEs have found these meetings partially necessary, as such meetings can be expensive to run and might not bring additional value, according to their comments.

Q50 Cultural differences are considered for effective knowledge transfer

This point can have a direct impact in collaboration and in organizational learning from each other. Hamel et al. (Hamel et al. 1989) mention this cultural and behavioral difference between western and far eastern countries with the example of how some Japanese companies could over take western partners after decades of partnerships as western companies failed to understand learning opportunities from these far eastern companies.

According to Hamel's study and interviews, western companies always approached Japanese companies with the attitude of a teacher and the master of all processes, and Japanese companies took the opportunity to realize the full benefits of competitive collaboration.

Both groups of SMEs show sensitivity to this point and agree to consider cultural differences in knowledge collaboration. It is a good sign that these SMEs will learn from each SO collaboration.

Q52 Annual review of running SO projects help to identify new potential SO partners with advantages.

Here, both groups of SMEs show similar perspectives with their comments that they run continuous programs to monitor SO contracts and to evaluate other suppliers for the same SO solutions. This approach, on a continuous cycle, can help to make SO management a standardized tool to reach scalability by creating a continuous learning effect. Once stabilized, such supplier monitoring activity can be integrated into SO management system.

Q54 Emerging technologies/trends take part in in-house solution developments

Both groups of companies were neutral towards this element as they commented that it depends on the industry they are in.

4.2 SO Decision Elements contributing to SME Performance

This part of the chapter will analyze and interpret the findings from the questionnaire to show how SMEs practice the pre-identified SO decision steps in their daily business.

The ultimate goal is to clarify where significant differences and similarities appear in the approaches of SMEs towards these SO decisions steps.

This work's main assumption is that better performing companies have better SO practices (Laugen et al. 2005, cited by Harland et al. 2005). Once we have identified the main differences in these SO decision steps, we can therefore make suggestions to average-performing SMEs to allow them to emulate the SO management steps of high-performing SMEs.

This interpretation aims to show the gaps in SO management practices to average-performing SMEs to raise their awareness of those significant differences.

The goal of this work is to help SME owners, managers and decision makers to choose the right activities to outsource and to manage SO partnerships correctly so that they can generate new knowledge from SO practices.

4.2.1 How SMEs choose activities to outsource?

Overall the most significant differences in the results from interviews are found in the SO activity identification phase. This phase is found to be one of the critical elements for success in SO practices (Michael A. Stanko et al. 2009)(Lorber 2007).

In this identification phase, the two groups of SMEs showed different approaches in decision making, in assigning who in the organization is powered to make a decision, in understanding the core knowledge and core competitiveness of the company and what effects SO activity can bring and in understanding what to expect from SO.

Average-performing SMEs showed here overall an understanding that SO is a supplier relationship that is limited to product and services outsourcing only. In SO activity identification, they refrain from analyzing core activities to find areas where new knowledge, new technologies or improvements are needed, even though these improvements could potentially be better achieved by external partnerships through external capacities, like new technologies or intelligence located in other companies (Hamel et al. 1989)(Marques & Ferreira 2009)(Harland et al. 2005).

These findings confirm the importance of correct SO activity identification at the beginning as suggested in work by Elango (2008). In his work, Elango suggests that companies use an outsourcing activity matrix to identify whether an activity is supplementary or complimentary according to its outsourcing role, and whether it falls into the core or noncore activity group according to its strategic importance. This matrix can be seen in Table 1 page 14.

According to Elango's argument, companies need to explore SO opportunities in the core enhancing square, i.e. activities that are complementary and located in core activity category. Those are activities very close to the core knowledge and the core competitiveness of the companies.

High-performing companies are partially applying Elango's approach in SO activity identification.

A note should be made here about the risks of wrong identification. Hamel et al. (1989) conclude that these risks pose a significant danger to companies, potentially exposing their core knowledge and competencies to external

partners. Companies should pay great attention to these concerns, but should not ignore the opportunities that SO partnerships can bring in this frame.

Average-performing SMEs are also unable to see the importance of calculating the overall impact of SO activities on their organizations in both the short and the long run. This can be understood to come from their overall reactionary approach to SO, i.e. they practice SO in reaction to the problems as they appear. Average-performing SMEs seem unable to calculate the future effects of SO practices.

Some slight differences between answers in this area can point to some serious concerns even if the answers fairly similar. The main differences in the approaches of SMEs lie in their understanding of flexibility.

Average-performing SMEs see flexibility in terms of financial numbers using pure fix cost calculations. However, high-performing SMEs consider other criteria when understanding the company's flexibility, and these affect their decision making when identifying SO activities to be outsourced. These other criteria include the ability to configure resources, ability to meet market needs and new ideas and creativity (Harland et al. 2005).

These differences in the SO decision process split the road in the beginning as the two groups of companies identify activities in two different ways. A conclusion can be reached here that understanding the fundamentals of SO activity identification can contribute significantly to the success of SO management practices and can lead to better results and benefits from SO partnerships.

4.2.2 How SMEs evaluate SO opportunities

In this SO decision step, the most significant difference appeared in the companies' understanding of the effects of SO on business core

competitiveness. Average-performing SMEs have some mental barriers that prevent them from discussing the possibilities of identifying core-enhancing activities (Elango 2008). This can be linked to their experience level in SO practices. High-performing SMEs agree that they clearly link SO effects to their core competitiveness to identify the potential benefits of SO for those activities.

Overall, average-performing SMEs conduct less risk calculation in comparison to the more successful group. The same is also observed in their organizational approach to SO. Average-performing SME prefer to make decisions on the higher level and do not communicate openly with their employees about SO decisions. This can be interpreted differently depending on the SO activity type, but no SMEs commented on this issue in interviews.

Average-performing SMEs do not have the business analysis capabilities to run scenario analysis or to include market variables into calculations to see how SO projects will evolve during their contract time or to calculate the overall effects of SO projects on the organization. Setting the correct expectations from SO projects can contribute a lot to end results and to the success of the SO partnership.

Top SMEs see opportunities in SO apart from cost savings or fix cost calculations. They recognize other benefits from SO including learning effects, finding opportunities for the co-development of new products with successful collaboration with external suppliers, and reaching other markets through SO partnerships. These differences in SO expectations can significantly contribute to the results of SO management practices.

In light of the answers to questions in this section, it can be concluded that SMEs evaluate SO projects in different ways due to different understandings of flexibility, which result from different expectations from SO activity. Expectations are set differently by SMEs.

Such differences also have a significant effect on the execution of SO projects, as faulty decisions might be made and resources might be assigned to the wrong projects. Since resource allocation is key to an SME's existence, this step needs closer attention from decision makers in practice.

4.2.3 With whom do SMEs partner and how they choose them?

Here the most significant difference is that average-performing SMEs base their decision on price competitiveness.

Pricing is the main focus for average-performing SMEs in their supplier selection, while other factors, such as supplier reputation, geographical location, strategic fit analysis, and relationship management are not fully considered in calculations.

However, high-performing SMEs take into consideration not only the price competitiveness but also all other factors, which are ignored by average-performing SMEs. High-performing SMEs find supplier reputation, the ethical and legal standards under which the supplier operates and the supplier's geographical location to be important factors in their supplier decision steps. Again, they do not consider price competitiveness to be the key criteria in their decision-making.

Both groups of SMEs also value trust differently in their SO partnerships. High-performing SMEs understand that trust can only be built through a long-term relationship, where all parties involved see the SO partnership as a long-term collaboration opportunity where the companies can grow together. Average-performing SMEs try to build trust through SO contracts, even though they can only reach it through collaboration and experience built together.

Companies are suggested to consider all these decision elements in supplier selection as this selection affects the future of sectors, nations and companies (Harland et al. 2005)(Hamel et al. 1989)(Ohmae 1989), as well as affecting the company itself in terms of learning and knowledge sharing (Rundquist 2003).

These findings confirm that successful companies are more socially responsible, that they take into consideration the environment they are operating in, and that they intend to have a long-term partnerships, where all parties can gain from the collaboration. They are ready to share the knowledge and the winnings, as through such approach they can generate more success.

4.2.4 How do SMEs transfer activities and knowledge between parties?

For the successful transfer of activities, realistic projections and plans must be in place. Appropriate resources and time allocations for knowledge, technology and assets transfers can also be a success factor in SO activity transitions (Kelley & Jude 2005).

Average-performing SMEs are interested in getting solutions that meet their product specifications and have a competitive price tag. They try not to share knowledge in any way in order to protect their place within the market. This could be due to findings that they are not able to cooperate. It can be concluded that they do not have the necessary experience and the management knowledge for leading such SO partnerships.

Realistically set targets for the transition period can contribute significantly to the success of SO project. As the work done and the time spent by companies will significantly contribute to the success of the SO project at a later stage, well-planned activity transfer will help the supplier to cover the performance gaps after the handover period and to deliver a high performance to the customer in a shorter time. As this affects customer satisfaction, all parties will benefit from this.

4.2.5 How do SMEs control the SO contract and activities?

Significant differences appear in each group's approach to raising barriers for core knowledge and IP sharing. Average-performing SMEs expressed that such barriers are not defined in their SO contracts. This finding suggests that they might not have enough experience with contract preparation or the contracts are usually provided ready-to-sign by supplier companies. Whichever is the case, average-performing companies need to better understand the importance of contract preparation.

Another important element in SO contract management is the establishment of key performance indicators (Kathleen 1995)(Kelley & Jude 2005)(Lorber 2007). High-performing SMEs strongly agree that they identify key performance indicators before activity transfer and rely on them during SO management. That means they can connect expectations with outcomes to see if the work meets requirements. They run their SO practices on a performance-based management system.

The importance of reporting in SO management is also well accepted but not every organization has the ability to have such a reporting-based management system. Average-performing SMEs rely on their own reporting and data readings and do not take advantage of data that can be provided by the SO partner.

Differences in this SO management step are closely linked to activity identification and evaluation and this should be kept in account when analyzing the results for the SO contract control step.

Overall, high-performing SMEs can handle several SO projects with better capabilities than average-performing SMEs. This finding can be linked to well prepared SO contracts and preset performance indicators for SO outcomes. It is also possible to link this to correctly selected SO activities with clearly defined expectations.

This result is supported by Stanko (2009), who showed that the costs and benefits of outsourcing are better calculated by experienced firms and that these firms can therefore better manage SO contracts.

4.2.6 How do SMEs use the opportunity to learn from SO partnerships?

In this SO management step, the most significant differences are identified in companies' approaches towards sharing the lessons learned from the experience of SO.

Average-performing SMEs fail here to see possible opportunities for sharing knowledge. Rundquist (2003) identified access to specialist knowledge as a key motivation for SME companies involved in SO. In his work, he also points out the difficulties in sharing tacit knowledge. Two types of knowledge were identified in this research as created during SO activity: technological knowledge and managerial experience.

By following such an approach, average-performing SMEs may lose their competitiveness in the long run. They need to understand the difference between product competitiveness and organizational competitiveness. Companies cannot access external knowledge if they fail to have collaborative platforms and fail to facilitate knowledge sharing between SO partners (Hamel et al. 1989).

Coming from this point, close cooperation on operational levels can facilitate knowledge transfer between parties and organizations can build new knowledge around this collaboration. This will lead eventually to building better absorptive capacities (Cohen; & Levinthal 1990) (S. A Zahra & George 2002) and to increasing innovation capabilities, which are well accepted to lead to competitive advantages for companies (Elango 2008)(Hamel et al. 1989) (Shaker A. Zahra & Covin 1994).

Another difference appears in the partner relationship. Average-performing SMEs do not conduct regular face-to-face meetings for operation teams or to share lessons learnt. Tacit (implicit) knowledge transfer is also difficult for organizations, and with on-hand practices, one can share this knowledge as mentioned by (Szulanski 2003).

High-performing SMEs strongly agree that they keep the ownership of solutions and lead developments and improvements. All modifications to the solution are to be consulted with them, and close collaboration is the main motivation of SO.

Companies need to keep themselves on top of SO activities to stay competitive. It is therefore suggested that they lead product development and the development of new technologies (Becker & Zirpoli 2011).

Overall there is a serious gap between the managerial approaches of both groups towards the learning opportunities which SO partnerships can create. Such differences can lead to performance gaps over the long term. Average-performing SMEs fail to build new capabilities and new organizational knowledge from SO, and so they will be not able to meet changing market trends and customers needs in the future (Hamel et al. 1989)(Cohen; & Levinthal 1990).

4.2.7 Monitoring of Markets Dynamics and Emerging Knowledge

In the answers to this SO management step for monitoring market developments, we can see average-performing SMEs are not fully aware of the benefits available from external consultants, who can run market analysis for them, or the benefits of periodically reviewing SO contracts and potential suppliers during the SO contract life time. This points to gaps in dealing with the external environment and in managerial data analysis for strategy development.

Here high-performing SMEs agree that it is important to collaborate with a consultancy company, but average-performing SMEs deny the importance of having one. High-performing SMEs commented on this point that they prefer to have extra knowledge on the market to see other perspectives on developments, apart from their own market knowledge management practices.

Average-performing SMEs do not consider translating customer requirements into explicit information to communicate to SO solution suppliers but keep data for themselves and so in a way isolate suppliers from their market data. (Hamel et al. 1989) discusses the advantages of keeping market knowledge private and having core knowledge and information off limits, but companies also need to keep their SO partners informed so that they can develop some solutions for the requirements.

As long as companies manage the relationship based on trust and equal opportunity for both parties, they can save their position in the relationship, but they need to place themselves above the partnership. As long as they have something to offer, they can gain from the relationship (Hamel et al. 1989)(Ohmae 1989).

Another important part of knowledge development is to have R&D for all activities. The findings of this study point out that average-performing SMEs consider R&D expenditures as an unwarranted cost unless R&D projects deliver products that are produced in-house.

Average-performing SMEs are not aware of the findings from studies that suggest that companies need to be actively involved in product development and in collaborations so that they can maintain and grow their absorptive capacities (Cohen; & Levinthal 1990) and develop organizational knowledge (Szulanski 2003).

Overall, average-performing SMEs are behind in reaching out for market data through consultancies and through external data sources. This work has not recorded in interviews whether they are using some other tools or if they are practicing some activities to do this market monitoring themselves, but failing to observe market trends and analyze industry data can lead to serious risks as those companies will be not able to meet developing and changing market requirements (Hamel et al. 1989).

5 Conclusion and Recommendations

5.1 Summary of Findings

The main purpose of this research was to find out how high-performing SMEs identify, evaluate, manage and control their SO activities and how they learn from these partnerships in order to outperform competitors in the long term. This research also intended to explore how these successful companies monitor their markets and changing technologies and customer needs to prepare themselves to overcome challenges that might emerge in the future. By identifying the ways in which high-performing and average-performing SMEs differ in their approach to SO, this paper intends to present the best practices of SO to company owners, managers and decision makers to help average-performing companies with their SO management practices.

This aim was quite ambitious, and could not be achieved through this one study alone, as the subject of SO management is quite broad and must be observed and studied differently in each industry and under each set of market conditions. However, this research contributes partly to this goal to help average-performing SMEs by raising their awareness of the significant differences in SO management between them and high-performing SMEs under the context of manufacturing firms in Slovakia.

This paper, assuming that high-performing SMEs are more experienced in SO and can better manage SO activities, intended to make the lessons learned by more experienced firms available to these average-performing SMEs.

This section will present the proposed answers to the questions that represent the SO management stages, based on the results of a comparative case study.

1) SO activity identification by SME

In this first step of SO management, the results suggest that high-performing SMEs are more adept at SO decision making than their average-performing counterparts.

The importance of the selection of activities to outsource is well accepted by previous research (Elango 2008)(Kathleen 1995)(Michael A. Stanko et al. 2009). This research found that high-performing SMEs apply their identification practices more openly and have better capabilities to analyze the expected effects of outsourcing their activities than average-performing SMEs.

The most significant difference lies in the companies' decision making structures, i.e. who or what departments are empowered to make decisions. High-performing SMEs are more democratic and open in this process, with departments able to make their own decisions independently. This practice may be linked to other differences in company management, for example having better structure management layers that eliminate the need for a central place to make decisions, but further research is needed in this area.

Significant differences were also identified in the capabilities of each group to understand the effect of outsourcing on other departments and on the organization as a whole. Average-performing SMEs are not as good as high-performing SMEs in data processing and in using this data in strategic decision making. This same finding was also seen in later steps of SO management, such as in the control of SO contracts.

It is also interesting to note that high-performing SMEs are more aware of the opportunities they can gain through SO partnerships. These companies very clearly stated that they recognized the opportunities identified in other studies, such as access to external knowledge, the opportunity to regain control over internal departments, and the chance to bring change within the organization. Average-performing SMEs failed to grasp the importance of all these other

motives in SO and chose their outsourcing by looking into flexibility in terms of cost only.

To conclude, in this management step, high-performing SMEs have the ability to understand the importance of SO activities and conduct their identifications by considering not only cost calculations but also by looking at the whole picture of outsourcing.

Proposition 1:

A better understanding of the opportunities of SO can lead to better identification of potential SO activities.

2) SO project evaluation by SMEs

Previous research identified the importance of setting the correct goals and expectations for SO projects (Elango 2008)(Kelley & Jude 2005). This requirement is limited by each company's capability to analyze its business processes and practices to find performance gaps and places for improvement in-house (Kelley & Jude 2005)(Lorber 2007).

This research shows that SMEs have similar approaches in evaluation of SO projects. These similarities were mainly identified in areas that are commonly accepted to be motivations for SO, such as expectations for business flexibility and cost management (Harland et al. 2005)(Quélin & Duhamel 2003)(Gonzalez et al. 2005).

However, real differences were identified in other elements used to evaluate SO projects, namely in understanding the effects of SO to the companies' core competencies, flexibility with technology management, which can be accessed through SO, and the importance of calculating future orientations and variables into SO evaluation.

Average-performing SMEs seem to be aware of the generally known characteristics of SO, but they are behind high-performing SMEs in their capabilities to calculate all potential benefits and risks of SO. As it was previously shown in the activity identification step, high-performing companies have better capabilities for data processing and data management, giving them an advantage in evaluating the potential benefits and risks in the SO activity under evaluation.

The findings from interviews suggest that, in the evaluation step, high-performing companies are able to see the widespread effects of SO practices and are able to link this evaluation to their company's strategic decision-making structure.

Proposition 2:

Better abilities to analyze long-term effects of SO can lead to better evaluation of potential SO projects.

3) SO Partner selection by SME

The literature identifies supplier selection as an important part of SO activities. It has been suggested repeatedly that supplier selection should be based on trust and should be aligned with both companies' future goals (Baloh et al. 2008)(Lorber 2007)(Ohmae 1989).

The findings of this research show that the two groups of companies differ in almost all decision elements in the supplier selection step. Again, it is suggested that companies take into consideration all elements in their selection of suppliers, and companies are advised to see this as a long-term relationship, like a marriage, considering the partnership not in terms of short-term gains but

in terms of how it can develop in the future (Hamel et al. 1989)(Kathleen 1995)(Ohmae 1989).

We can interpret from the findings that average-performing SMEs do not correctly consider all the elements in their decision-making and tend to focus on the solution itself and on cost elements in their supplier selection.

High-performing SMEs, meanwhile, also pay attention to the potential supplier's approach towards ethical and social norms and expect their partners to share similar values and ethics with themselves. They are able to take into consideration elements like geographical location, understanding the cost structure of suppliers, and the importance of building trust and a long-term relationship. They do not focus only on the price comparison in their SO partner selection

In general, high-performing SMEs took this selection process more seriously than average-performing SMEs and tried to base their decisions on several elements, including the expected effect of such partnerships in the long-term.

Proposition 3:

Considering long-term development of SO partnership can lead to better supplier selection.

4) SO activity transfer to solution provider

The research showed fundamental differences between the two groups' approaches to activity transfer. Average-performing companies find this step easier to practice than high-performing companies, but they do not consider all the elements necessary for smooth and effective activity transfer.

Average-performing SMEs fail to consider worst-case scenarios and so do not put exit strategies into place. This might be because they only think in terms of solutions and end products and so think they are easily able to find a new partner to provide the same product.

In contrast, the findings suggest that high-performing SMEs consider these risks and spend more time on this phase in the SO contract, trying to conserve knowledge in-house even after the company has outsourced the related activities. High-performing SMEs link these activities with the learning effect. During interviews, they expressed their understanding that, by conserving knowledge in-house, they can later absorb new knowledge generated by the partnership. This can significantly contribute to their future competitiveness (Cohen; & Levinthal 1990)(Hamel et al. 1989).

Overall findings show that high-performing SMEs consider activity transfer as the start of a journey with the SO partner. They prepare themselves for this journey so that they can better handle potential difficulties in later stages easier. They take into consideration scenario analysis in the activity transfer phase, which contributes to the successful handling of SO contract at later stage.

Proposition 4:

Expecting a longer partnership in SO leads to better preparation for the activity transfer.

5) SO contract management by SMEs

This step of SO management is very closely tied to the evaluation of SO projects, as setting the correct performance indicators and realistic expectations for the SO activity is important for the management and control of ongoing projects (Kathleen 1995)(Lorber 2007)(Michael A. Stanko et al. 2009).

This research found that high-performing SMEs are better positioned to control and manage SO activity and more capable of running several SO projects parallel to each other with the utmost care and attention. In other words, their management systems are better structured, and they have a more standardized approach to SO contract management.

The ability to set correct performance indicators and evaluate SO contracts is linked to experience (Kathleen 1995)(Michael A. Stanko et al. 2009). Although both high-performing SMEs and average-performing SMEs aim to have tightly structured contracts, only high-performing SMEs design and write their own SO contracts, while average-performing companies work with contracts provided by their SO suppliers. As a consequence, average-performing SMEs accept the conditions and regulations set by SO suppliers. They are not in a position to lead acceptance criteria for SO contracts apart from price negotiation and technical specifications for the product.

The findings also suggest that high-performing SMEs approach their suppliers with a more collaborative approach. Once they have set the correct performance indicators, they rely on suppliers to measure those indicators and provide management reports.

Proposition 5:

Better set expectations of SO leads to identifying correct performance indicators

6) Learning and new knowledge gained through SO

Although previous research suggests that the first motivation for SO decisions is based on cost elements (Harland et al. 2005)(Quélin & Duhamel 2003), other research has suggested that SMEs are motivated by the drive to gain external knowledge through SO (Rundquist 2003).

The importance of generating new knowledge and know-how was made clear in many studies and business articles. If companies fail to gain more than what they are giving away through SO partnerships, they are going to lose their competitiveness over time (Hamel et al. 1989)(Ohmae 1989). They should lead new product developments and innovations, otherwise they will become dependant on suppliers and lose control over SO (Becker & Zirpoli 2011).

This research therefore tried to see how high-performing SMEs and average-performing SMEs consider the importance of the learning effect and of new knowledge generation through SO. The findings show that average-performing SMEs fail to understand the importance of knowledge sharing and collaboration in new idea creation.

In their comments, these companies clarified that they are not seeking close collaboration with suppliers at the product development stage, but are more interested in receiving the products with specifications set by themselves. They are more product and solution oriented than focused on knowledge and new knowledge generation.

According to these findings, average-performing SMEs try to monitor solution creation and try to stay on top of these activities, but fail to show real collaboration with partners by building barriers for information protection. These findings can be further developed through future research.

Proposition 6:

Closer collaboration with SO partners leads to more knowledge generation in SO practices.

7) Monitoring of markets by SMEs

This step examined how companies use external data and external input to understand and monitor changes in their industry and their markets. Two main differences were identified between high-performing SMEs and average-performing SMEs.

First, average-performing SMEs do not use external consultancies to gain market data, while this option features strongly in the strategic decision plans of high-performing SMEs.

Second, significant differences were identified in the communication of changing customer preferences and needs to the supplier. Average-performing companies express that they are not communicating their customer needs to SO suppliers, as they are trying to avoid passing market knowledge to their suppliers and thus allowing those suppliers to enter the market in the future to compete against them.

This is one of the identified risks of SO (Harland et al. 2005)(Quélin & Duhamel 2003), but this approach limits the supplier's ability to come up with better solutions for customer needs. This problem could be explored in future research.

To conclude, high-performing companies are able to read market dynamics better than average-performing companies. Through this approach, they can better identify the gaps in technological and organizational performance and for product performance.

After this gap has been identified, they are able to see and evaluate what activities need improvement or redesign in-house, or if these activities should be outsourced, as external resources are more beneficial to use.

We have seen in findings that they are then able to apply the SO decision model in their SO management practices and that a continuous usage of the model in a loop seems to lead to better learning from SO contracts.

Proposition 7:

Better capabilities for strategic data management leads to better identification of potential activities of SO.

Further hypothesis proposed.

From the results analyzed, in general we can also create the follow hypothesis for further research:

Average-performing SMEs can become more competitive by following SO management steps that contribute to the competitiveness of top performing SMEs.

Greater experience in SO management leads to better relationships with suppliers, which in turn leads to a more productive partnership.

5.2 Implications and Significance

Through the analysis and interpretation of the findings, it was concluded that the application of this SO decision model on a continuous loop can help companies in their SO management.

This conclusion is drawn from the findings that high-performing SMEs practicing similar steps in their SO practices as in the proposed model.

It is believed that by applying such model in their SO management, average-performing SMEs can increase their effectiveness in SO practices and might reach better results. The knowledge generation element might have a particularly significant effect on their approaches towards SO partnerships.

In this study, it was important to show clearly what high-performing SMEs do differently in their SO practices so that the study findings might help average-performing SMEs in their SO decisions, by allowing them to imitate high-performing SMEs' understandings in their SO management practices.

This study's aim was to assist SMEs in their SO practices by pointing out the best practices of high-performing SMEs. This was to contribute to their competitiveness in the long run, allowing them to better handle the risks of SO by applying these best practices.

This work is significant because it brings together extensive literature and previous study knowledge around SO to form a decision model for SO management. This study also applies this model in a real life context to measure clearly the differences between best practice and average performance.

From this point of view, this study met the expectations and its goal.

5.3 Limitations

Although every effort was given to maximize the reliability of this research, some limitations remained. At the beginning, the research aimed to consider only manufacturing SMEs, but it eventually included 3 companies that, although they were component suppliers, had outsourced their manufacturing capabilities completely. However, as these companies were previously involved in manufacturing, they were considered to have knowledge of outsourcing from the perspective of manufacturing companies.

The study was only conducted in Slovakia to see how companies in this country are reacting to the challenges faced after the Euro zone entry. However, this restriction limits the extent to which the results of this study can be generalized. The same research conducted in other settings, such as Western countries or other developing countries, could bring different results. 2 of the companies participating in this research were foreign subsidiaries of Western companies, and this might have affected their approach to SO and so the results of their interviews. It might be argued that these answers do not necessarily represent those of Slovakian SMEs.

The interviews used a structured 5-scale questionnaire. These same interviews could be run by changing these into open-ended questions in order to better capture each company's approach to SO in broad terms. However, as the intention of this work was to clearly identify the differences between high-performing and average-performing SMEs, a 5-scale questionnaire was necessary to give structure to the interviews and to the results. A 5-scale questionnaire could also lead to misrepresentation in answers.

The interviews also suggested that some questions were unclear to respondents, and some clarifications had to be made. It may be beneficial to review the questionnaire and rephrase the questions so that their meaning is clear. However, as the questionnaire used elements that were clearly identified

by previous research, this confusion helped identify whether a person was well informed about existing studies on SO management.

No pilot testing of the questions was conducted to identify possible issues in the questionnaire. Pilot testing would help to improve the consistency of questions throughout in each step and would improve the reliability of findings as well. This is another challenge for future research on the same subject area.

As business conditions are changing rapidly, what was held true for SO for 20 or 30 years is no longer given the same understanding today. Therefore, research outcomes should be analyzed only under today's business conditions in Slovakia, as perceptions and preferences are changing, especially from the political point of view. Due to the risks of SO for nations and sectors (Harland et al. 2005), SO practices might bring different consequences in ten to twenty years, especially if when considering the problems we are facing in Europe like high unemployment rate and the debt crises.

5.4 Future Research

Taking these limitations into account, running the same research with an open questionnaire might bring findings that go into more detail about how SO management is conducted by SMEs. Applying such research on a broader basis might increase the reliability of this research.

It might also be worth investigating the causes of these differences between companies. Such a study could be conducted separately for each SO management step to understand the reasoning behind those differences.

To conclude, further research will help improve the ability to generalize the results of this study, providing more samples and supporting findings with more quantitative results to increase the credibility and so the ability to provide a solid platform for SO management practices. Through extended research, we will be in a better position to assist SMEs in their SO practice so that they can gain more out of SO activities and better protect themselves against the risks of SO.

6 Reference:

- Aghion, P. & Howitt, P., 1990. A Model of Growth Through Creative Destruction. National Bureau of Economic Research Working Paper Series, No. 3223. Available at: <http://www.nber.org/papers/w3223> [Accessed July 15, 2011].
- Alexander, M. and Young, D. (1996b) Strategic outsourcing. *Long Range Planning* 29, 116–119.
- Alexander, M. and Young, D. (1996b), “Outsourcing: where’s the value?”, *Long Range Planning*, Vol. 29 No. 5, pp. 728- 0.
- Arnold, U. (2000), “New dimensions of outsourcing: a combination of transaction cost economics and the core competencies concept”, *European Journal of Purchasing and Supply Management*, Vol. 6 No. 1, pp. 23-9.
- Aubert, B.A., Patry, M. and Rivard, S. (1998) Assessing the risk of IT outsourcing, Working paper, 98s-16, May 1998, Cirano, Montréal.
- Baines, T., Kay, G., Adelos, S. and Higson, M. (2005), “Strategic positioning: an integrated decision process for manufacturers”, *International Journal of Operations & Production Management*, Vol. 25 No. 2, pp. 180-201.
- Baloh, P., Jha, S. & Awazu, Y., 2008. Building strategic partnerships for managing innovation outsourcing. *Strategic Outsourcing: An International Journal*, 1(2), pp.100-121.
- Barthe´lemy, J. (2001) The hidden costs of IT outsourcing. *Sloan Management Review* 42(3), 60–69.
- Barthe´lemy, J. and Geyer, D. (2000) IT outsourcing: findings from an empirical survey in France and Germany. *European Management Journal* 19(2), 195–202.
- Becker, M. & Zirpoli, F., 2011. What happens when you outsource too much. *MIT Sloan Management Review*, 52(2), pp.59–64.
- Becker, M. and Zirpoli, F. (2003), “Organising new product development knowledge hollowing-out and knowledge integration – the FIAT autcase”, *International Journal of Operations & Production Management*, Vol. 23 No. 9, pp. 1033-61.
- Cohen, W.M. & Levinthal, D.A., 1990. Absorptive Capacity: A New Perspective on Learning and Innovation, *Administrative Science Quarterly*, March, Vol. 35, No. 1, pp. 128-152.

- Cox, A. (1996), "Relational competence and strategic procurement management", *European Journal of Purchasing and Supply Management*, vol. 2 No. 1, pp. 57-70.
- Doig, S.J., Ritter, R.C., Speckhals, K. and Woolson, D. (2001) Has outsourcing gone too far? *McKinsey Quarterly* 4, 24–37.
- Doz, Y. (1988), "Technology partnerships between larger and smaller firms: some critical issues", in Contractor, F. and Loragge, P. (Eds), *Co-operative Strategies in International Business*, Lexington Books, Lexington, MA.
- Dulmin, R. and Mininno, V. (2003), "Supplier selection using a multi-criteria decision aid method", *Journal of Purchasing and Supply Management*, Vol. 9 No. 4, pp. 177-87.
- Earl, M. (1996) The risks of outsourcing IT. *Sloan Management Review* Spring, 26–32.
- Elango, B., 2008. Using outsourcing for strategic competitiveness in small and medium-sized firms. *An International Business Journal incorporating Journal of Global Competitiveness*, 18(4), pp.322-332.
- Ellram, L. and Billington, C. (2001), "Purchasing leveraging decisions in the outsourcing decision", *European Journal of Purchasing and Supply Management*, Vol. 7 No. 1, pp. 15-27.
- Gilley, K.M. and Rasheed, A. (2000), "Making more by doing less: an analysis of outsourcing and its effects on firm performance", *Journal of Management*, Vol. 26 No. 4, pp. 763-90.
- Grant, R.M., 2008. *Contemporary Strategy Analysis* sixth edition., Wiley page 19.
- Greaver, M.F. (1999), *Strategic Outsourcing: A Structured Approach to Outsourcing Decisions and Initiatives*, American Management Association, New York, NY.
- Hendry, J. (1995), "Culture, community and networks: the hidden cost of outsourcing", *European Journal of Management*, Vol. 13 No. 2, pp. 193-200.
- Hertenstein, J.H. & Platt, M.B., 2000. Performance measures and management control in new product development. *Accounting Horizons*, 14(3), pp.303–323.
- Kakabadse, A. and Kakabadse, N. (2002) Trends in outsourcing. *European Management Journal* 20(2), 189–198.

- Kathleen, K., 1995. 10 things to consider before making an outsourcing decision. *Insurance & Technology*, 20(2), p.38.
- Kelley, M. & Jude, M., 2005. Making The Outsourcing Decision. *Business Communications Review*, 35(12), p.28.
- Khosrowpour, M., Subramanian, G. and Gunterman, J. (1995) Outsourcing organizational benefits and potential problems. In *Managing Information Technology Investments with Outsourcing*, ed. M. Khosrowpour, pp. 244–268. Idea Group Publishing,
- Knight, L.A. and Harland, C.M. (2000), “Outsourcing: a national and sector level perspective on policy and practice”, in Erridge, A., Fee, R. and McIlroy, J. (Eds), *Best Practice Procurement: Public and Private Sector Perspectives*, Chapter 6, Gower, Aldershot, pp 55-62
- Lacity, M. and Hirschheim, R. (1993a) The information systems outsourcing bandwagon. *Sloan Management Review* Fall, 73–86.
- Lacity, M. and Hirschheim, R. (1993b) *Information systems outsourcing*. Wiley, New York.
- Lamming, R.C. (1993), *Beyond Partnership: Strategies for Innovation and Lean Supply*, Prentice-Hall, Englewood Cliffs, NJ.
- Laugen, B., Acur, N., Boer, H. and Frick, J. (2005), “Best manufacturing practices: what do the best performing companies do?”, *International Journal of Operations & Production Management*, Vol. 25 No. 2, pp. 131-50.
- Lei, D. and Hitt, M. (1995), “Strategic restructuring and outsourcing: the effect of mergers and acquisitions and LBOs on building firm skills and capabilities”, *Journal of Management*, Vol. 21 No. 5, pp. 835-59.
- Lewin, A.Y. & Peeters, C., 2006. The Top-Line Allure of Offshoring. *Harvard Business Review*, 84(3), p.22.
- Lonsdale, C. (1999), “Effectively managing vertical supply relationships: a risk management model for outsourcing”, *Supply Chain Management: An International Journal*, Vol. 4 No. 4, pp. 176-83.
- Lorber, L., 2007. Small Business Link: An Expert’s Do’s and Don’ts For Outsourcing Technology. *Wall Street Journal*, p.B.8.
- Madsen, E.S., Riis, J.O. & Waehrens, B.V., 2008. The knowledge dimension of manufacturing transfers. A method for identifying hidden knowledge. *Strategic Outsourcing: an International Journal*, 1(3), p.198.

- Marques, C.S. & Ferreira, J., 2009. SME Innovative Capacity, Competitive Advantage and Performance in a "Traditional" Industrial Region of Portugal. *J. Technol. Manag. Innovation*, 4(4).
- Marshall, D.J. (2001), "The outsourcing process: from decision to relationship management", unpublished PhD thesis, School of Management, University of Bath, Bath.
- Martinsons, M. (1993) Outsourcing information systems: a strategic partnership with risks. *Long Range Planning* 26(3), 18–25.
- McFarlan, F.W. and Nolan, R.L. (1995) How to manage an IT outsourcing alliance. *Sloan Management Review* Winter, 9–22.
- McIvor, R. (2000), "A practical framework for understanding the outsourcing process", *Supply Chain Management: An International Journal*, Vol. 5 No. 1, pp. 22-36.
- Mowery, D.C. (Ed.) (1988), *International Collaborative Ventures in US Manufacturing*, Ballinger, Cambridge, MA.
- Ohmae, K., 1989. The Global Logic of Strategic Alliances. *Harvard Business Review*, 67(2), pp.143-152.
- Perezfreije, J. & Enkel, E., 2007. Creative Tension in the Innovation Process: How to Support the Right Capabilities. *European Management Journal*, 25(1), pp.11-24.
- Porter, M. (1996). What is strategy? *Harvard Business Review*, Nov./Dec., 60-80.
- Prahalad, C. and Hamel, G. (1990), "The core competences of the corporation", *Harvard Business Review*, No. 3, pp. 79-91.
- Prahalad, C.K., Hamel, G. & Doz, Y.L., 1989. Collaborate with Your Competitors -- and Win. *Harvard Business Review*, 67(1), p.133.
- Quinn, J. and Hilmer, F. (1994) Strategic outsourcing. *Sloan Management Review* Summer, 43–55.
- Rimmer, S. (1991), "Competitive tendering, contracting out and franchising: key concepts and issues", *Australian Journal of Public Administration*, Vol. 50 No. 3, pp. 292-302.
- Rundquist, J., 2003. Outsourcing of New Product Development-More than supplier involvement. In *10th International Product Development Management Conference: Brussels, Belgium, June 10-11, 2003*.

- Saunders, C.S., Gebelt, M. and Hu, Q. (1997) Achieving success in information systems outsourcing. *California Management Review* 39(2),63–79
- Schumpeter, J.A., 1934. *The Theory of Economic Development*. New York: Oxford University Press.,,
- Sharpe, M. (1997), “Outsourcing, organizational competitiveness, and work”, *Journal of Labour Research*, Vol. XVIII No. 4, pp. 535-49.
- Stanko, M.A., Jonathan D. Bohlmann & Roger J. Calantone, 2009. *Business Insight (A Special Report): Innovation --- Outsourcing Innovation*. Wall Street Journal, p.R.6.
- Stein, H. (1997), “Death imagery and the experience of organizational downsizing”, *Administration and Society*, Vol. 29 No. 2, pp. 222-47.
- Swiss Re, 2011. Cost of disasters tripled in 2010: Swiss Re. Available at: http://www.terraily.com/reports/Cost_of_disasters_tripled_in_2010_Swiss_Re_999.html [Accessed May 18, 2011].
- Szulanski, G., 2003. *Sticky knowledge : barriers to knowing in the firm*, London ; Thousand Oaks: Sage Publications.
- Teece, D.J. (1986), “Profiting from technological innovation: implications for integration, collaboration, licensing and public policy”, *Research Policy*, Vol. 15, pp. 285-305.
- Uttley, M. (1993), “Contracting-out and market-testing in the UK defence sector: theory, evidence and issues”, *Public Money and Management*, January-March, pp. 55-60.
- Whitmore, H.B., 2006. You’ve outsourced the operation, but have you outsourced the risk? *Financial Executive*,. Available at: <http://www.thefreelibrary.com> [Accessed May 7, 2011].
- Zahra, S. A & George, G., 2002. Absorptive capacity: A review, reconceptualization, and extension. *The Academy of Management Review*, 27(2), pp.185–203.
- Zahra, Shaker A. & Covin, J.G., 1994. The financial implications of fit between competitive strategy and innovation types and sources. *The Journal of High Technology Management Research*, 5(2), pp.183-211.

7 Appendix

7.1 APPENDIX A

Table 2

INTERVIEW GUIDELINE AND THE QUESTIONNAIRE

SO Activity Identification

1. Only central unit can take SO (STRATEGIC OUTSOURCING) decisions, separate business units can not decide on SO contracts
2. SO activities can come from core activities domain as well, but a core competency areas off limit
3. In risky markets, SO can provide mitigation
4. Tacit (implicit) organizational core knowledge can be transferred to supplier
5. Overall impact of SO to all organization is well calculated
6. Flexibility means to us reducing our fix cost of operations
7. Through SO we can bring in the change, in the organization and in processes
8. SO is a tool to access external knowledge

Evaluation of SO Project to reach Go or No Go Decision

9. SO project's effect on business core competitiveness is well identified.
10. Technology management can allow company to be flexible
11. Flexibility can be achieved through SO partnerships
12. Shorter time to markets for new products brings in Flexibility
13. Ability to adapt to external driving forces (Global economical and political changes) is considered in SO evaluation
14. Market and customer characteristics dominate SO decisions
15. If emerging technologies is taking over company's market, than SO is considered
16. Future orientations are aligned with the SO project
17. Potential SO risks are identified
18. Contingency plan is in place and Exit strategy is formulated

19. SO performance indicators are identified with measurable target values
20. SO solution can fit into existing business line and organization
21. Deviations from SO project plan are considered in the contract creation
22. Goals and purpose of SO project is clearly communicated to company employees
23. Cost of handling performance and quality gaps at the beginning of SO project is accounted.
24. Cost of change management is calculated into SO evaluation

Supplier Selection

25. Trust can be reached through well prepared SO contract
26. We seek price competitiveness in SO supplier selection
27. Supplier must operate under same ethical and legal standards as our organization
28. Reputation is important element in supplier selection
29. Geographical location is not the key factor in supplier selection
30. We always contact with more than one supplier
31. Supplier share with us their cost components and transparent pricing is in place
32. Supplier can locate its manufacturing and services operations where ever they find competitive
33. They only provide the solution to us and not to competitors; strategically they are aligned with us.

Activity Transfer

34. Transition period is set realistically with worst case scenario
35. Resource planning is done according to activity needs for knowledge transfer (trainings, technical specifications etc.).
36. Activity knowledge is conserved within the company to support the exit strategy
37. We keep existing resources available until SO activity reaches stable state.
38. Solution compatibility is secured at transition period.

Control and Management of SO Contract

- 39. Aligned reporting line from supplier and we can access operation data of Supplier
- 40. Data management systems compatibility is checked and achieved before contact start
- 41. Scope of approval for exceptions and for conflict handling is defined
- 42. Key Performance Indicators are well identified and communicated to supplier
- 43. We can scale our SO management capabilities to handle many SO contracts in harmony
- 44. Barrier to business sensitive information and IP sharing is expressed in SO contract with legal binding.

Learning Effect and Knowledge transfer

- 45. Process ownership stays with our company, and we monitor changes to solutions
- 46. We share lessons learnt and in both directions
- 47. Modifications and technological improvements always consulted with our company
- 48. R&D teams works in cooperation for various projects
- 49. Regular Face-to-face meetings with supplier at operation level are planned (for implicit knowledge transfer) during the contract
- 50. Cultural differences are considered for effective knowledge transfer

Monitoring of Markets Dynamics and Emerging Innovations

- 51. External consultant firm provide us reports for emerging technologies
- 52. Annual review of running SO projects helps to identify new potential SO partners with advantages.
- 53. We translate customer needs into explicit knowledge and communicate this to SO partner
- 54. Emerging technologies/trends take part in in-house solution developments
- 55. Money spent for R&D is a cost, if it does not end with in-house production.

7.2 APPENDIX B

Table 4A: Results in groupings for the Most and Significant Differences

The Most Significant Differences	Strongly Disagree (1)	Disagree (2)	Neither Disagree nor Agree (3)	Agree (4)	Strongly Agree (5)	Weighted average scores for High performing SME's	Weighted average scores for Average performing SME's	Identified Difference
46. We share lessons learnt and in both directions		BDEG	C	H3	AH1H2H4	4.8	2.7	2.08
4. Tacit (implicit) organizational core knowledge can be transferred to supplier		ABCEG	H1D	H3H4	H2	4.0	2.2	1.83
1. Only central unit can take SO (STRATEGIC OUTSOURCING) decisions, separate business units can not decide on SO contracts		H1H2	H3H4	ACDG	BE	2.5	4.3	1.83
5. Overall impact of SO to all organization is well calculated		BCE	AH1DG	H3	H2H4	4.3	2.5	1.75
7. Through SO we can bring in the change, in the organization and in processes	EG	AD	H1BC	H2H3H4		3.8	2.0	1.75
9. SO project's effect on business core competitiveness is well identified.		ADG	H1BCE	H3H4	H2	4.0	2.5	1.50
Significant Differences								
15. If emerging technologies is taking over company's market, than SO is considered		BE	AH1DG	CH3	H2H4	4.3	2.8	1.42
12. Shorter time to markets for new products brings in Flexibility		AEG	H1BC	H3H4D	H2	4.0	2.7	1.33
2. SO activities can come from core activities domain as well, but a core competency areas off limit		H2	H1BH3H4	CDEG	A	2.8	4.0	1.25
34. Transition period is set realistically with worst case scenario	EG	H1	BCD	AH2H4	H3	3.8	2.5	1.25
51. External consultant firm provide us reports for emerging technologies	E	CG	H2BH4D	AH3	H1	3.8	2.5	1.25
35. Resource planning is done according to activity needs for knowledge transfer (trainings, technical specifications etc.).		ABG	H1C	H3H4DE	H2	4.0	2.8	1.17
44. Barrier to business sensitive information and IP sharing is expressed in SO contract with legal binding.		H1DEG	BC	AH2H4	H3	3.8	2.7	1.08
10. Technology management can allow company to be flexible			H1BDG	ACE	H2H3H4	4.5	3.5	1.00
16. Future orientations are aligned with the SO project		CH3H4	H1H2B	ADEG		2.5	3.5	1.00
19. SO performance indicators are identified with measurable target values		EG	H1BD	ACH3H4	H2	4.0	3.0	1.00
36. Activity knowledge is conserved within the company to support the exit strategy		E	AH1BH4DG	C	H2H3	4.0	3.0	1.00
53. We translate customer needs into explicit knowledge and communicate this to SO partner	C	H1BE	DG	AH2H3H4		3.5	2.5	1.00

Table 4B: Results in groupings for Differences in Answers

Differences in Answers	Strongly Disagree (1)	Disagree (2)	Neither Disagree nor Agree (3)	Agree (4)	Strongly Agree (5)	Weighted average scores for High performing SME's	Weighted average scores for Average performing SME's	Identified Difference
26. We seek price competitiveness in SO supplier selection			H2H3H4	AH1BDEG	C	3.3	4.2	0.92
17. Potential SO risks are identified		BCH3EG	AH1D	H2H4		3.3	2.3	0.92
18. Contingency plan is in place and Exit strategy is formulated		AH1	BCDEG	H3H4	H2	3.8	2.8	0.92
22. Goals and purpose of SO project is clearly communicated to company employees	H1B	CG	AH4DE	H3	H2	3.3	2.3	0.92
27. Supplier must operate under same ethical and legal standards as our organization		EG	H1BC	H2	AH3H4D	4.3	3.3	0.92
28. Reputation is important element in supplier selection		H1DEG	C	ABH3H4	H2	3.8	2.8	0.92
3. In risky markets, SO can provide mitigation		BE	H1CG	AH2H4	H3D	4.0	3.2	0.83
41. Scope of approval for exceptions and for conflict handling is defined		H1BD	CG	AH3H4E	H2	3.8	3.0	0.75
42. Key Performance Indicators are well identified and communicated to supplier		H1B	CE	DG	AH2H3H4	4.3	3.5	0.75
47. Modifications and technological improvements always consulted with our company		H2	H1B	ACH3H4EG	D	3.3	4.0	0.75
55. Money spent for R&D is a cost, if it does not end with in-house production.		AH2H4	H3DE	H1BG	C	2.8	3.5	0.75
33. They only provide the solution to us and not to competitors; strategically they are aligned with us.		AH2BH4	H1H3G	CDE		2.5	3.2	0.67
48. R&D teams works in cooperation for various projects		G	AH1H2BCDE	H3H4		3.5	2.8	0.67
20. SO solution can fit into existing business line and organization		D	H1	AH2BCEG	H3H4	4.3	3.7	0.58
21. Deviations are considered in SO contract creation		H1BEG	CH4D	AH2H3		3.3	2.7	0.58
32. Supplier can locate its manufacturing and services operations where ever they find competitive		AH2H4	BH3DE	H1G	C	2.8	3.3	0.58
25. Trust can be reached through well prepared SO contract		H3	H2BH4EG	AH1CD		3.0	3.5	0.50
29. Geographical location is not the key factor in supplier selection		AH3H4EG	H1H2	BCD		2.5	3.0	0.50
31. Supplier share with us their cost components and transparent pricing is in place	C	H1BEG	H3H4	AH2D		3.0	2.5	0.50
45. Process ownership stays with our company, and we monitor changes to solutions		AH1H2B	CG	DE	H3H4	3.5	3.0	0.50

Table 4C: Results for Similarities in Answers

Similarities in Answers	Strongly Disagree (1)	Disagree (2)	Neither Disagree nor Agree (3)	Agree (4)	Strongly Agree (5)	Weighted average scores for High performing SME's	Weighted average scores for Average performing SME's	Identified Difference
8. SO is a tool to access external knowledge	B	C	H1	AH2H3H4DG	E	3.8	3.3	0.42
24. Cost of change management is calculated into SO evaluation		H1DG	BCH4E	AH2H3		3.3	2.8	0.42
30. We always contact with more than one supplier		H1	AH2CG	H3H4DE		3.3	2.8	0.42
39. Aligned reporting line from supplier and we can access operation data of Supplier	C	H1B	H3DEG	H2H4	A	3.3	2.8	0.42
43. We can scale our SO management capabilities to handle many SO contracts in harmony			AH1BH4EG	CH3D	H2	3.8	3.3	0.42
6. Flexibility means to us reducing our fix cost of operations		D	B	AH1H2H3H4EG	C	4.0	3.7	0.33
11. Flexibility can be achieved through SO partnerships		H1	BC	AH2DEG	H3H4	4.0	3.7	0.33
40. Data management systems compatibility is checked and achieved before contact start		BCD	H1H3	H2H4EG	A	3.5	3.2	0.33
52. Annual review of running SO projects helps to identify new potential SO partners with advantages.		H1C	H2BH4E	AH3DG		3.0	3.3	0.33
13. Ability to adapt to external driving forces (Global economical and political changes) is considered in SO evaluation		H1	BCDG	H3H4E	AH2	3.8	3.5	0.25
14. Market and customer characteristics dominate SO decisions		B	H1CE	H2H3H4DG	A	3.8	3.5	0.25
supplier at operation level are planned (for implicit knowledge transfer) during the	C	H1B	H3G	AH2H4DE		3.3	3.0	0.25
23. Cost of handling performance and quality gaps at the beginning of SO project is accounted.		H1B	AH3H4DEG	H2		3.0	2.8	0.17
38. Solution compatibility is secured at transition period.		H1B	H2EG	AH3H4D		3.3	3.3	0.08
50. Cultural differences are considered for effective knowledge transfer		H1	BC	AH2H3DEG	H4	3.8	3.7	0.08
54. Emerging technologies/trends take part in in-house solution developments		CH3	H2BG	AH1H4DE		3.3	3.3	0.08
37. We keep existing resources available until SO activity reaches stable state.		AH1	H2BCH4DG	H3E		3.0	3.0	0.00

7.3 APPENDIX C

Table 5A: Interview Results with calculated weighted Averages

1.SO Activity Identification Please rate below findings, how do you see it in your organization	Strongly Disagree (1)	Disagree (2)	Neither Disagree nor Agree (3)	Agree (4)	Strongly Agree (5)	Weighted average scores for	Weighted average scores for	Identified Difference
1. Only central unit can take SO (STRATEGIC OUTSOURCING) decisions, separate business units can not decide on SO contracts		H1H2	H3H4	ACDG	BE	2.5	4.3	1.83
2. SO activities can come from core activities domain as well, but a core competency areas off limit		H2	H1BH3H4	CDEG	A	2.8	4.0	1.25
3. In risky markets, SO can provide mitigation		BE	H1CG	AH2H4	H3D	4.0	3.2	0.83
4. Tacit (implicit) organizational core knowledge can be transferred to supplier		ABCEG	H1D	H3H4	H2	4.0	2.2	1.83
5. Overall impact of SO to all organization is well calculated		BCE	AH1DG	H3	H2H4	4.3	2.5	1.75
6. Flexibility means to us reducing our fix cost of operations		D	B	AH1H2H3H4EG	C	4.0	3.7	0.33
7. Through SO we can bring in the change, in the organization and in processes	EG	AD	H1BC	H2H3H4		3.8	2.0	1.75
8. SO is a tool to access external knowledge	B	C	H1	AH2H3H4DG	E	3.8	3.3	0.42

Table 5B: Interview Results with calculated weighted Averages

2. Evaluation of SO Project to reach Go or No Go Decision` Please rate below findings, how do you see it in your organization	Strongly Disagree (1)	Disagree (2)	Neither Disagree nor Agree (3)	Agree (4)	Strongly Agree (5)	Weighted average scores for High performing SME's	Weighted average scores for Average performing SME's	Identified Difference
9. SO project's effect on business core competitiveness is well identified.		ADG	H1BCE	H3H4	H2	4.0	2.5	1.50
10. Technology management can allow company to be flexible			H1BDG	ACE	H2H3H4	4.5	3.5	1.00
11. Flexibility can be achieved through SO partnerships		H1	BC	AH2DEG	H3H4	4.0	3.7	0.33
12. Shorter time to markets for new products brings in Flexibility		AEG	H1BC	H3H4D	H2	4.0	2.7	1.33
13. Ability to adapt to external driving forces (Global economical and political changes) is considered in SO evaluation		H1	BCDG	H3H4E	AH2	3.8	3.5	0.25
14. Market and customer characteristics dominate SO decisions		B	H1CE	H2H3H4DG	A	3.8	3.5	0.25
15. If emerging technologies is taking over company's market, than SO is considered		BE	AH1DG	CH3	H2H4	4.3	2.8	1.42
16. Future orientations are aligned with the SO project		CH3H4	H1H2B	ADEG		2.5	3.5	1.00
17. Potential SO risks are identified		BCH3EG	AH1D	H2H4		3.3	2.3	0.92
18. Contingency plan is in place and Exit strategy is formulated		AH1	BCDEG	H3H4	H2	3.8	2.8	0.92
19. SO performance indicators are identified with measurable target values		EG	H1BD	ACH3H4	H2	4.0	3.0	1.00
20. SO solution can fit into existing business line and organization		D	H1	AH2BCEG	H3H4	4.3	3.7	0.58
21. Deviations are considered in SO contract creation		H1BEG	CH4D	AH2H3		3.3	2.7	0.58
22. Goals and purpose of SO project is clearly communicated to company employees	H1B	CG	AH4DE	H3	H2	3.3	2.3	0.92
23. Cost of handling performance and quality gaps at the beginning of SO project is accounted.		H1B	ACH3H4DEG	H2		3.0	2.8	0.17
24. Cost of change management is calculated into SO evaluation		H1DG	BCH4E	AH2H3		3.3	2.8	0.42

Table 5C: Interview Results with calculated weighted Averages

3. Supplier Selection Please rate below findings, how do you see it in your organization	Strongly Disagree (1)	Disagree (2)	Neither Disagree nor Agree (3)	Agree (4)	Strongly Agree (5)	Weighted average scores for High performing SME's	Weighted average scores for Average performing SME's	Identified Difference
25. Trust can be reached through well prepared SO contract		H3	H2BH4EG	AH1CD		3.0	3.5	0.50
26. We seek price competitiveness in SO supplier selection			H2H3H4	AH1BDEG	C	3.3	4.2	0.92
27. Supplier must operate under same ethical and legal standards as our organization		EG	H1BC	H2	AH3H4D	4.3	3.3	0.92
28. Reputation is important element in supplier selection		H1DEG	C	ABH3H4	H2	3.8	2.8	0.92
29. Geographical location is not the key factor in supplier selection		AH3H4EG	H1H2	BCD		2.5	3.0	0.50
30. We always contact with more than one supplier		H1	AH2CG	H3H4DE		3.3	2.8	0.42
31. Supplier share with us their cost components and transparent pricing is in place	C	H1BEG	H3H4	AH2D		3.0	2.5	0.50
32. Supplier can locate its manufacturing and services operations where ever they find competitive		AH2H4	BH3DE	H1G	C	2.8	3.3	0.58
33. They only provide the solution to us and not to competitors; strategically they are aligned with us.		AH2BH4	H1H3G	CDE		2.5	3.2	0.67
4. Activity Transfer Please rate below findings, how do you see it in your organization	Strongly Disagree (1)	Disagree (2)	Neither Disagree nor Agree (3)	Agree (4)	Strongly Agree (5)	Weighted average scores for High performing SME's	Weighted average scores for Average performing SME's	Identified Difference
34. Transition period is set realistically with worst case scenario	EG	H1	BCD	AH2H4	H3	3.8	2.5	1.25
35. Resource planning is done according to activity needs for knowledge transfer (trainings, technical specifications etc.).		ABG	H1C	H3H4DE	H2	4.0	2.8	1.17
36. Activity knowledge is conserved within the company to support the exit strategy		E	AH1BH4DG	C	H2H3	4.0	3.0	1.00
37. We keep existing resources available until SO activity reaches stable state.		AH1	H2BCH4DG	H3E		3.0	3.0	0.00
38. Solution compatibility is secured at transition period.		H1B	H2EG	ACH3H4D		3.3	3.3	0.08

Table 5D: Interview Results with calculated weighted Averages

5. Control and Management of SO Contract. Please rate below findings, how do you see it in your organization	Strongly Disagree (1)	Disagree (2)	Neither Disagree nor Agree (3)	Agree (4)	Strongly Agree (5)	Weighted average scores for High performing SME's	Weighted average scores for Average performing SME's	Identified Difference
39. Aligned reporting line from supplier and we can access operation data of Supplier	C	H1B	H3DEG	H2H4	A	3.3	2.8	0.42
40. Data management systems compatibility is checked and achieved before contact start		BCD	H1H3	H2H4EG	A	3.5	3.2	0.33
41. Scope of approval for exceptions and for conflict handling is defined		H1BD	CG	AH3H4E	H2	3.8	3.0	0.75
42. Key Performance Indicators are well identified and communicated to supplier		H1B	CE	DG	AH2H3H4	4.3	3.5	0.75
43. We can scale our SO management capabilities to handle many SO contracts in harmony			AH1BH4EG	CH3D	H2	3.8	3.3	0.42
44. Barrier to business sensitive information and IP sharing is expressed in SO contract with legal binding.		H1DEG	BC	AH2H4	H3	3.8	2.7	1.08
6. Learning Effect and Knowledge transfer. Please rate below findings, how do you see it in your organization	Strongly Disagree (1)	Disagree (2)	Neither Disagree nor Agree (3)	Agree (4)	Strongly Agree (5)	Weighted average scores for High performing SME's	Weighted average scores for Average performing SME's	Identified Difference
45. Process ownership stays with our company, and we monitor changes to solutions		AH1H2B	CG	DE	H3H4	3.5	3.0	0.50
46. We share lessons learnt and in both directions		BDEG	C	H3	AH1H2H4	4.8	2.7	2.08
47. Modifications and technological improvements always consulted with our company		H2	H1B	ACH3H4EG	D	3.3	4.0	0.75
48. R&D teams works in cooperation for various projects		G	AH1H2BCDE	H3H4		3.5	2.8	0.67
49. Regular Face-to-face meetings with supplier at operation level are planned (for implicit knowledge transfer) during the contract	C	H1B	H3G	AH2H4DE		3.3	3.0	0.25
50. Cultural differences are considered for effective knowledge transfer		H1	BC	AH2H3DEG	H4	3.8	3.7	0.08
7. Monitoring of Markets Dynamics and Emerging Innovations. Please rate below findings, how do you see it in your organization	Strongly Disagree (1)	Disagree (2)	Neither Disagree nor Agree (3)	Agree (4)	Strongly Agree (5)	Weighted average scores for High performing SME's	Weighted average scores for Average performing SME's	Identified Difference
51. External consultant firm provide us reports for emerging technologies	E	CG	H2BH4D	AH3	H1	3.8	2.5	1.25
52. Annual review of running SO projects helps to identify new potential SO partners with advantages.		H1C	H2BH4E	AH3DG		3.0	3.3	0.33
53. We translate customer needs into explicit knowledge and communicate this to SO partner	C	H1BE	DG	AH2H3H4		3.5	2.5	1.00
54. Emerging technologies/trends take part in in-house solution developments		CH3	H2BG	AH1H4DE		3.3	3.3	0.08
55. Money spent for R&D is a cost, if it does not end with in-house production.		AH2H4	H3DE	H1BG	C	2.8	3.5	0.75