UNIVERSITY OF GOTHENBURG
SCHOOL OF BUSINESS, ECONOMICS AND LAW

East or West, Home is Best?

A case study regarding backsourcing at Volvo Car Corporation

Bachelor Thesis, Business Administration
Management Control
Spring Semester 2010

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"In preparing for battle I have always found that plans are useless, but the planning indispensable"

Dwight Eisenhower

Summary

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Title: East or West, Home is Best? – A case study at Volvo Car Corporation

Key words: Backsourcing, Volvo Car Corporation, Make/Buy decisions, Cross-functional decisions

Background and Problem: For the last couple of decades, global competition have increased tremendously, forcing companies to find new ways to stay competitive. One way of doing this is to outsource functions to external suppliers. However, many outsourcing decisions have been ill-founded, sometimes leading to severe implications. As a consequence of this, the phenomenon backsourcing has emerged, i.e. bringing an outsourced function back in-house.

Purpose: To examine how financial- and non-financial aspects are taken into consideration when Volvo Car Corporation (VCC) considers backsourcing. What importance is put on financial aspects in comparison to non-financial aspects?

Method: The authors have taken an explorative research approach, where a qualitative case study has been performed. Six semi-structured in-depth interviews have been conducted at VCC, in order to gather the empirics. This method corresponds well to the purpose of this thesis, i.e. a purpose that tries to examine how and why certain aspects are considered.

Result and Conclusions: The conclusions that can be drawn based on this thesis are that backsourcing decisions are complex. Multiple aspects are considered in a cross-functional consensus context, where costs savings hold a superior position. What aspects that are contemplated in backsourcing decisions, depend on the nature of the industry and the complexity of the organization´s products. All backsourcing decisions should be based on the company´s long-term strategy.

Future Research: The authors have identified a number of areas where they find it interesting to conduct future research. For instance, the authors would find it interesting to perform a similar study on other production companies with a complex product. To examine whether the same aspects are taken into consideration, and if cost savings holds the same superior position?

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1. Introduction

In the first section of this thesis the authors will first introduce the background concerning backsourcing that will lead to the problem area of the thesis. Further the purpose, the research questions and the disposition of the thesis will be presented.

1.1 Background

In the post-war period, the world economy has grown tremendously, not only by size but also by complexity. Before world-war two, organizations were mostly competing in national markets. In the post-war period an incrementally integrated world has emerged, developing from mostly a transatlantic collaboration towards a world-wide flow of products and services. Although, these new market conditions have been an incredible opportunity for companies, they also present challenges. The more integrated world has lead to a fiercer competition; organizations are forced to find new ways to stay competitive. In order to survive, among many things companies have to cut costs, make continuous improvements and high degree of innovation.

One popular efficiency-strategy has been to outsource functions to external suppliers who are specializing in specific areas. Depending on the purpose for the outsourcing, the outsourcer could benefit from, for example, economy of scale, top-notch technology or innovations, accessed only through outsourcing. According to Veltri, Saunders and Kavan (2008) the outsourcing industry grew from 9 billion dollars in 1990, to 256 billion dollars in 2008. Outsourcing has become a phenomenon among all sizes of companies.

Interestingly enough, even though the outsourcing industry has grown tremendously the last couple of decades, the initially perceived benefits do not always occur. Therefore a counter emerging trend has started to gain more attention the last few years. This phenomenon is known as backsourcing, which means to bring an outsourced function back in-house.

Since the beginning of the 21st century there have been a number of backsourcing cases which have attracted a lot of media attention. Probably the most well-known case is JP Morgan Chase, who in 2001 entered a seven year outsourcing collaboration with IBM ; a deal worth an estimated 5 billion USD, which in financial terms was an unprecedented outsourcing deal. However, no more than 21 months in to the deal JP Morgan Chase terminated the collaboration. The termination has been estimated to cost JP Morgan Chase multimillion dollars in retribution to IBM. They also suffered severe costs for restructuring their organization; once during the outsourcing occasion and twice during the backsourcing transition. There were also substantial intangible costs during the sourcing process, referring to the deteriorating employee morale, and lack of trust for management decisions. This case clearly illustrates the consequences of how an erroneous outsourcing plan can incur extensive financial and non-financial problems to an organization (Overby, S., 2005).

Backsourcing is a fairly new phenomenon, lacking an extensive amount of research. This is explained by the fact that it first started to occur in the late nineties, due to malfunctioning outsourcing (Veltri et al., 2008).

1.2 Problem

According to a study about outsourcing by Deliotte consulting, (cited in Veltri et al., 2008) approximately 70 percent of the respondents had experienced negative outsourcing experiences and one fourth had backsourced a previously outsourced function.
Veltri et al. (2008), claims that one of the most common problems with outsourcing, evolve from the fact that the outsourcer´s preconceived expectations were not fulfilled. Common reasons for malfunctioning outsourcing deals are such as overestimated cost savings, loss of control, and/or dissatisfying product quality. When these kinds of problems are encountered, backsourcing could be a solution. Although, it should be noted that backsourcing decisions are not always derived from dissatisfactory situations, backsourcing can also be valid in situations where internal- or external changes have occurred. Chapman and Andrade (1998) claim that malfunctioning outsourcing deals could put great financial strain on an organization.

There is seldom just one single reason for an outsourcer to terminate an outsourcing deal; instead there is often a combination of several reasons for backsourcing. Mainly cost savings are mentioned as the prime reason, but not solely. Instead other variables as quality, and the ability to keep up with the rapidly changing technology play an important role (Veltri et al., 2008).

Backsourcing is a fairly novel phenomenon that recently has started to occur in a further extent, and thereby extensive research is lacking. Due to this situation the authors have found it interesting to examine how different aspects are taken into consideration in a backsourcing decision. Therefore we have chosen to study a company that consistently and systematically engage in sourcing decisions. Based on these prerequisites we have chosen to conduct a case study at Volvo Car Corporation (VCC).

In the late eighties, as a consequence of the global competition VCC started to question their traditional way of making cars. Traditionally the operations of VCC had been to produce as much of the car as possible within their own production plants. One strategy that emerged was; sequential deliveries from external suppliers in order to adjust to the trend “Just in Time” (JIT). From this period, and into the late nineties, VCC outsourced a higher degree of their in-house activities to external suppliers. Often it was activities where VCC considered their in-house production process inefficient. However, one problem was that some functions were outsourced without the creation of a profound business case; e.g. sometimes VCC outsourced a function on the perception that it was too much of a burden to remain in-house.
Due to the dubious outsourcing reasons, and flawed supplier selection process, the cost of outsourcing escalated at an unexpected rate.

Over the last couple of years, VCC has started to challenge many of their previous outsourcing decisions that were made on insufficient decision basis. Thus backsourcing

became a more prominent phenomenon within the organization. One reason for VCC to be more prone on backsourcing is that they have far more efficient in-house production. Today there is no single strategy that fiercely argues for either out- or backsourcing. Instead there is more of an ongoing process which evaluates each business case independently. Each year VCC handles approximately 40 cases concerning out- and backsourcing. The decision context and the complex dynamics within it will be the focus in this bachelor thesis.

1.3 Purpose

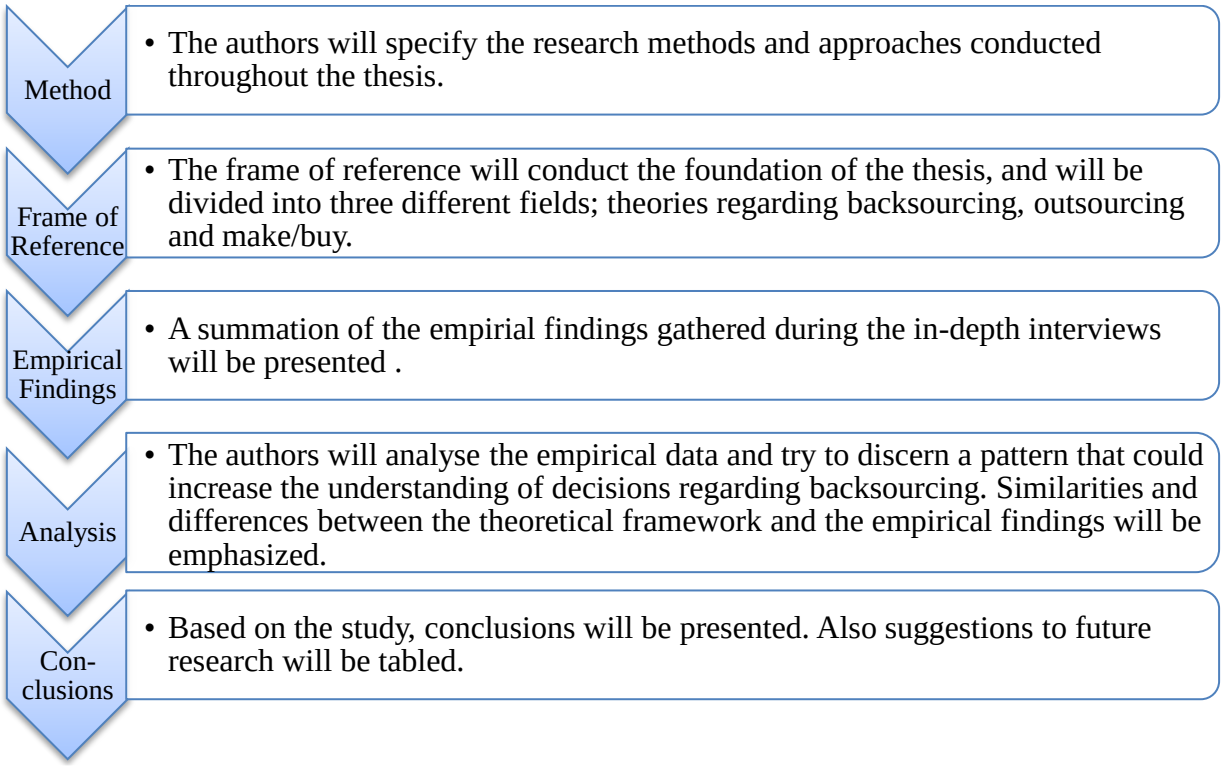
To examine how financial- and non-financial aspects are taken into consideration when VCC considers backsourcing. What importance is put on financial aspects in comparison to non-financial aspects?

1.4 Research questions

The following research question will be used to fulfil the purpose of the thesis, and also illuminate important considerations in a backsourcing decision.

- What does the decision context concerning backsourcing look like?
- What aspects are considered during a backsourcing process, and why?

1.5 Disposition



1.6 Glossary – Re-appearing concepts throughout the thesis

- Sourcing – A summarization concept comprehending both out- and backsourcing.
- Outsourcer – The outsourcing company that previously performed the activity.
- Outsourcee – The external supplier that currently is performing the outsourced function.

2. Method

2.1 Research approach

This thesis is based on an exploratory approach, which according to Patel and Davidson (2003) is suitable when extensive research is lacking within a specific topic. By using an exploratory approach the study will focus on understanding and describing the particular procedures for backsourcing within VCC. Therefore it might be discrepancies between the theoretical framework, and the empirical findings that we have gathered during the interviews at VCC. The theoretical framework is useful to create a general understanding for the research area where we have operated.

Further we have chosen a case study as the research approach for this thesis. According to Yin (2007), this approach is suitable when the research questions are focused on "how" and "why". A context was studied and the behaviour could not be controlled or manipulated.

2.2 Research method

An explorative way of looking at a problem often requires a method that digs deep, recognizes the unexpected and emotional variables. This requires a technique that is able to focus on a small number of research units, optimally this leads to a qualitative research method (Jacobsen, 2002). The purpose of the thesis is to examine the aspects taken into consideration when VCC chose to backsource. Hence, an understanding perspective is needed, including both financial and non-financial variables.

2.2.1 Qualitative research method

According to Wallén (1993) the qualitative methodology consists of in-depth interviews, field studies, intervention studies and participating observation. Unique situation- and personal dependent factors have large impact, when it comes to influence qualitative research.

The direct benefits of a qualitative approach are several according to Jacobsen (2002). Starting with openness; meaning the importance that is put on details and the uniqueness within every respondents answer. Since an explorative approach is being used, it is not clearly defined what the researcher is looking for. Instead the respondents' answers make up the understanding of the phenomenon, contributing to a high degree of internal validation. Based on the respondent´s interpretation and opinions, we can make more comprehensive conclusions, compared to a quantitative research.

Jacobsen (2002) also points out the benefits of responsiveness to new approach angels during the research phase. Thanks to the opportunity to find out more from the respondent, by for example, being able to ask attendant questions and absorb the respondent´s comprehension of the phenomenon. Since qualitative research method does not have any predefined answering alternatives, the interviewer can ingest unexpected approach angles resulting in a more nuanced study.

2.2.2 Research instrument

Semi-structured interviews

We have conducted semi-structured interviews, i.e. research areas and secondary questions have been constructed into an interview guide (appendix 1). This approach gave the respondent the opportunity to form their own answers, and the authors could use attendant questions to receive more in-depth answers (Kvale, 1997).

2.3 Refinement of the empirical data

All interviews have been documented through tape-recording. During the refinement of the tape-recordings, the authors have emanated from their research questions, and through sentence concentration and categorization compiled the empirical data.

2.4 Choice of research object

2.4.1 The case

For our case study we have chosen VCC, a company that has performed a number of complete backsourcing cases, i.e. that the decision has been taken and the transfer has been implemented. In order for our research to get a high degree of depth, we have interviewed six people within VCC, that all represent different branches of the organization.

During the selection process of an appropriate research object, we encountered several companies that denied backsourcing, although we had information that stated the opposite. This was probably the case because of their own perception of failure when they chose/had to backsource. Another problem that occurred was the disparity; between theory and practise regarding the definition of backsourcing.

VCC was the first company that we encountered, which had the same definition of backsourcing as the authors, and also had a developed process of handling backsourcing cases. In a smaller company the decision to backsource was probably made by a small number of persons, and most likely in an unstructured way. This approach differs substantially from the procedure exercised by VCC who has a dedicated board to sourcing decisions; Industrial Structural Board (ISB).

2.4.2 Respondents

In the process of selecting the respondents within VCC we strived for a sample of respondents, from different levels and branches within the organization. The most suitable respondents was selected in collaboration with our contact person, VCC´s Make vs. Buy Manager, dependent on how involved different branches and personnel are in decisions concerning sourcing. All respondents are part of VCC´s ISB, and therefore indeed key players in backsourcing decisions. The respondents were approached by the authors through telephone, in order to schedule an appointment for each interview. The interviews were then conducted in secluded areas within facilities at VCC in Torslanda, Sweden. The interviews

were approximately a little one hour each. Attendant questions were handled through telephone and e-mail.

During the selection phase of respondents, we requested to interview the Human Resource Manager (HRM), since backsourcing decisions affect large numbers of employees. Due to the fact that the manager was quite recently appointed and insufficiently familiar with decisions in a sourcing context, the perception was that such interview would not serve the purpose of this thesis.

The following interview respondents are employees who play a central part within specific branches of VCC. By interviewing these people we were able to go deeply, and thus obtain a more nuanced understanding of the aspects that VCC considers in the backsourcing process.

CFO Manufacturing

An essential part of this thesis will be to investigate what impact the financial aspects have had in the backsourcing process. Therefore we have interviewed the Chief Financial Officer (CFO) Manufacturing, who provided an understanding about the financial aspects that plays a prominent part in backsourcing decisions.

Director Product Creation

We have interviewed the Director Product creation from the Manufacturing Planning & Logistics office. This since they are the ones mainly responsible to coordinate production flows ones a function has been backsourced. During the implementation of backsourcing, the MP&L´s responsibility increases substantially, since multiple suppliers will deliver components into VCC, instead of one supplier delivering modules. Deliveries from multiple suppliers will bring a greater demand for coordination.

Chief Vehicle Engineer

The Chief Vehicle Engineer from Product Development (PD) was also interviewed, since his linkage to a certain function is shifted from an outsourcee to manufacturing when backsourcing is being implemented. PD is the department responsible for all preparations before a function is ready to be backsourced, so they collaborate very closely with the production function and thereby informed about the required qualifications.

Manager Operational Development & Cost Reduction

To get an even more micro oriented angle of the study, we have also interviewed the Manager Operational Development (OD) & Cost Reduction from Manufacturing Engineering (ME), who is the branch within VCC that is subjected for the most backsourcing. Throughout the interview we were able to distinguish the important aspects considered in a backsourcing decision out of a ME perspective.

Senior Purchase Manager Interior

During an outsourcing deal, the Purchase Department is responsible to make sure that the suppliers deliver consistent quality and on time. But this responsibility shifts to the

Manufacturing Department after the implementation of a backsourcing case, therefore it is interesting to interview the Senior Purchase Manager Interior. In order to get the department´s perspectives and opinions regarding backsourcing.

Make vs. Buy Manager

The most compelling interview to our thesis was the one with VCC´s Make vs. Buy Manager, part of the Industrial Business Office. His daily working tasks are dedicated to sourcing decisions, becoming an invaluable respondent to the thesis. The considerations made between different aspects in backsourcing decisions were business as usual for the respondent, making a great contribution to the understanding of how aspects are considered.

2.5 Research credibility

2.5.1 Validity and reliability

Important concepts regarding research credibility are validity and reliability. Validity relate to if the authors actually examined the predefined research area. Reliability concerns if the study is implemented in a reliable way (Patel & Davidsson, 2003).

By using a semi-structured in-depth interview approach aimed towards multiple people with varying competence, and extensive experience regarding backsourcing. The authors aimed for a wide spectrum of different perspectives, and thoughts concerning backsourcing. Therefore, the authors claim that demand for validity has been satisfied.

In order to assure the reliability we have tried to describe our procedures in such a way that the study could be repeated, resulting in a similar outcome.

2.5.2 General application

Yin (2007) claims that it is possible to generalize based on a case study, in order to develop and generalize theories, i.e. analytical generalization. Our ambition has been to analyze the empirical findings related to our research questions in a way that the analysis can be presented as a foundation for future research development.

2.5.3 Frame of reference sources

The authors have used literature found in databases such as; GUNDA, Business Source Premier and Science Direct. Regarding articles, the authors have focused on Peer-reviewed articles in such a wide extent as possible.

The authors are well aware that some of the used references are not up-to-date. But in those cases the authors have done the consideration that this literature is fundamental research, and thereby applicable in today´s research.

3. Frame of Reference

In this part, we will present several theories that are pivotal to comprehend the dynamics of the decisions related to backsourcing. First, there will be a section on backsourcing, where its basic meaning will be discussed. It will then be followed by a number of reasons for backsourcing and its drawbacks. Subsequent to the backsourcing section there will be a similar part on outsourcing, that defines it and illuminate its pros and cons. In the last part of the theory section we will discuss the process of make/buy decisions. A lot of the out- and backsourcing theory derive from sources that have dealt with IT- and Information systems. However, since out - and backsourcing theory for manufacturing is a rather limited area, we have chosen to incorporate IT- and Information systems theory that we believe is relevant for this thesis.

3.1 Backsourcing

Finding a well established definition of backsourcing is even more troubling than for its sister-expression outsourcing, since the phenomena is quite new and yet unexploited. Even though the lack of a common way to express backsourcing, several different definitions exist. The most appealing definition to this thesis; is the one expressed by Chapman and Andrade (1997). They define backsourcing as outsourced functions brought back in-house.

In many cases, the reasons for backsourcing are the same as the one arguing to outsource. The two main reasons are to speed-up innovation and improve the efficiency level (Veltri et al., 2008). Despite this, several factors play an important part during the process whether to backsource or not. Companies can decide to backsource because of changes in circumstances, changes in the character of the outsourced service or perhaps discovery of shortcomings in the initial phase of the outsourcing decision. Veltri et al. (2008) continues with pointing out the importance of cost considerations, service and quality as important factors during a sourcing-decision.

3.1.1 The Backsourcing decision

In order to try to explain the process regarding whether to backsource or not, we have choosen to present Veltri et al. (2008) figure; Outsourcing Contract Re-Evaluation: Decision Tree. The article is lacking a description of the figure, but we have interpreted the figure as follows.

Step one is to evaluate the current outsourcing contract, determining whether the outsourcee has satisfied the outsourcer´s needs and fulfilled the contract. Suppose the collaboration has not developed the way it was expected, a problem exists and the outsourcer must decide whether the outsourcee has the capability to solve the problem or not. If the outsourcee has the ability to respond to the situation and correct the problem, the outsourcing deal should be extended. Still, it is not uncommon that when the outsourcing period has been re-evaluated, it is not a problem that has occured, instead it is an opportunity which the outsourcer wants to take advantage of. Then again, if the outsourcee is able to exploit the opportunity, the outsourcing deal should be adjusted and prolonged.

But if the outsourcee is neither able to correct the problem, or adjust to the new opportunity,

the outsourcer has to decide whether it is worth addressing or not. Because even if these problems/opportunities have materialized, the outsourcer can still choose not to respond to the situation, and by that ignore the possibilities and consequences of terminating the outsourcing deal. Suppose the outsourcer choose to respond to the situation, it must address the situation either by backsourcing, or re-outsource to another external supplier who is believed to be a better outsourcing partner.

According to Veltri et al. (2008) the reversal of an outsourcing contract can be either partial or complete. Meaning that the outsourcer might keep parts of the original outsourcing contract with the contractual partner, and re-outsource the rest to another third-part, or bring it back in-house. The authors continue with clarifying that a backsourcing decision can be made as a consequence of an expired or terminated outsourcing contract.

3.1.2 Reasons for backsourcing

Veltri et al. (2008) discusses potential reasons for bringing back an already outsourced function. The main three categories are; problems with the original outsourcing contract that cannot be solved, and internally generated opportunities and external opportunities for the outsourcer.

3.1.2.1 Contractual Problems

Higher than expected costs

Many outsourcers encounter substantially higher costs than expected during the transaction, but also during the entire contract period. The reason for this phenomenon is, according to Raiborn & Butler & Massoud (2009) that some costs are easily discovered by accounting systems, but others are more difficult to identify. The importance of trying to identify these hidden costs is incredibly high even if it is difficult and requires estimations. An outsourcing decision should only be made after a rigid cost-benefit analysis, but it is resource demanding and easily rushed through. Veltri et al. (2008) adds that the costs savings associated with outsourcing are often overestimated by the outsourcer. Sometimes the economy of scales never materializes and in some cases the outsourcing agreement initially decreases the cost for the outsourcer, but in the long run increases the cost compared to in-house production.

Even if the job-tasks are outsourced to the outsourcee, they still needs to be monitored by the outsourcer. Usually this requires managers to spend time making sure the outsourced function is running efficiently and satisfying. This is time consuming, resulting in increased costs for the outsourcer, thereby decreasing the planned cost savings (Raiborn et al., 2009).

Know-how mismatch

Both Veltri et al. (2008) and Raiborn et al (2009) discuss problems concerning know mismatch between the outsourcer and the outsourcee. Like when the outsourcee becomes too dependent of the outsourcer, because of lack of knowledge of doing business in the specific type of business. Another problem that might arise is the loss of innovation. One reason for this could be that the outsourcee is contracted to cut costs and therefore have to limit the

resources spent on the continuous development that is needed in a globalized world.

Poor service and quality

The overall service and product quality level delivered by the outsourcee is an important factor when evaluating the outsourcing relationship. Both the quality and punctuality of the service plays part during the benchmark between expected service level and delivered service level. According to Veltri et al. (2008) examples of dissatisfaction are lack of professionalism, poor responsiveness and service delays because of the provider. Even though service level is an important variable, sometimes it is omitted during decisions whether to backsource or not. The service level delivered by the outsourcee might be satisfying, but because of arising opportunities in the business it can be neglected to take advantage of the up-coming opportunities.

Lack of control

Veltri et al. (2008) means that; one reason to outsource is to focus on core functions, and let the non-core functions be handled by external specialists. By letting a third part take over the outsourced function, the outsourcer also loses part of the control. Companies should avoid to outsource functions that are needed for the company´s success. Raiborn et al (2009) points out the dilemma concerning different language- and cultural related differences between the outsourcer and outsourcee. The authors discuss the situation that can occur when the outsourcee is responsible for the customer relations.

3.1.2.2 Opportunities deriving from Internal Organizational Changes

Changes in Executive Management

Recruiting a new executive manager means bringing in new thoughts and perspectives, and this might lead to reversal of a previous decision. It also affects the internal organization, and can lead to shifts in the balance of power. Sometimes the motives for backsourcing are made based on economic factors, but the evaluation of the outsourced function´s performance is based on personal opinions and experiences among the corporate executives, rather than economic factors. Some executive managers might have negative experiences from outsourcing earlier in their career. Therefore they generally have negative attitude towards outsourcing, and prefer backsourcing no matter how successful the outsourced function has been (Veltri et al., 2008).

3.1.2.3 Opportunities externally generated

External Business Changes

A company going through some kind of merger, acquisition or divestitures, is often evaluating or being evaluated concerning all their business and activities. This could potentially lead to an outsourced function being re-evaluated by the new executive management. Both mergers and acquisition increase the size of the company, bringing greater financial resources to the organization, which can be used to bring outsourced functions back in-house to take advantage of economies of scale. Many backsourcing cases were reported because of economic considerations or contractual problems, even though in many cases the company had gone through some kind of external business change (Veltri et al., 2008).

External Pressure for Backsourcing

Sometimes companies are almost forced to either outsource or backsource, due to demands from external forces outside their own organization. These kinds of external forces can consist of trade groups, the government or perhaps parent organizations possessing significant influence. Since different organizations possess varying amount of power, some has to stay in line and proceed with the decision made by the organization with superior influence (Veltri et al., 2008).

3.1.3 Issues during Backsourcing

After the final decision to backsource, an implementation plan must be launched. Only after all other options have been evaluated and neglected should a decision to backsource be made. To successfully transfer back to in-house, the previously outsourcer needs a detailed transition plan (Veltri et al., 2008). The transition plan should be as thorough as possible, considering every aspect encountered during the outsourcing process. The backsourcing process is much more internally demanding and costly than even closely to the period that followed the outsourcing process. It is preferable to transfer smaller parts of the outsourcing contract back one at a time, and not everything at the same time. The benefit of this tactic is that the arising problems can be solved easier, and prevented before the up-coming transfer to in-house production. The problem that can occur during the transition period is that the former outsourcer gets double costs during this period; still using the outsourcee´s expertise while employing new internal staff. Therefore the outsourcer is eager to shorten the transition period as much as possible (Chapman & Andrade, 1998).

Veltri et al. (2008) claims that there is seldom just one single reason to terminate an outsourcing deal, often there a combination of multiple reasons for backsourcing. In many cases cost savings are the primary reason. However, other variables as quality, and the ability to keep up with the rapidly changing technology play an important role (Veltri et al., 2008)

3.1.3.1 Staffing

During the outsourcing process the outsourcer´s staff was either transferred to the outsourcee, or got resigned from the organization. This means that the wanted competence do not exist among the current staff in the organization. This composes a huge problem during the

development of the transition plan, and it becomes even more obvious the day when the implementation plan is being launched. One possibility is to transfer the personnel from the outsourcee to the outsourcer. This might lead to the employees having a second employer without even changing job tasks, or perhaps not even workplace. Backsourcing which requires employment of staff is both complicated and costly, and leaves no guaranties of satisfaction (Chapman & Andrade, 1998). The authors still claim that backsourcing can be a huge opportunity, since a company is able to hire anyone they want. The old personalities are gone, and management has the chance to build its new team with the absolute best staff that is available, assuming the company has the financial resources required.

> *"Backsourcing is an opportunity to create the best, to start over with a clean sheet and to do it right "*
>
> From Chapman & Andrade (1998) p. 77

3.1.3.2 Resupply needed technology

Depending how long it was since the outsourcing agreement was settled, the technology used before the transfer to the outsourcee might be in a bad condition. Perhaps one of the reasons for outsourcing might have been outdated technology and equipment, and unwillingness to invest in new technology. In other cases the equipment is operational, but instead there is a lack of operating specifications. Acquiring the needed technology will be a costly process for the former outsourcer, and the start-up phase will be troublesome and probably require temporary shut-downs of the new function before it runs as aspected (Chapman & Andrade, 1998).

3.2 Outsourcing

Backsourcing is a topic where an extensive amount of research does not exist. Therefore we will also use outsourcing theory that we believe can be relevant in backsourcing decisions, as a complement to the previously presented backsourcing theory. We believe that this approach is valid since in many cases an argument against outsourcing, could be seen as a reason for backsourcing and vice-versa. First, outsourcing will be defined, this in order to avoid misinterpretations with other concepts that are similar. The passage then states several benefits that are associated with engaging in outsourcing. The section will be rounded off with the negative aspects that could result from an outsourcing decision. Some aspects of outsourcing will be presented as both an advantage and a disadvantage, which might come out as somewhat contradicting, but whether it is an advantage or not depends on the unique situation.

3.2.1 What is outsourcing?

Augustson and Bergstedt Sten (1999) recognize that there are three different types of outsourcing that an organization can undertake. There authors clearly state that there are no right or wrong definition of the concept, instead the definition is more dependent on the particular context. The definition that the authors have chosen to use in their book is defined as follows; an activity that used to be performed within the organization and then is moved to

an external contractor, who is being reimbursed for the provision of the service. The above stated definition is also the definition that will be used for outsourcing in this thesis.

3.2.2 Reasons for outsourcing and the perceived benefits

Duarte, Sackett and Evans (2004) argues strongly in favour for having a performance system designed before an outsourcing decision is being implemented. The performance system enables the outsourcer to measure how effectively the outsourcing is working. The performance system should not solely orbit around operational and financial measures, but also focus on more qualitative aspects of the outsourcing deal. For the outsourcer to be able to make relevant comparisons, the system must be in place before the outsourcing starts, so there are relevant data to compare to. This part of an outsourcing system is important for its success, but is often being neglected.

Focusing on core competence

A common reason for a company to outsource is to focus on their core competence. By doing so, the organization can free resources, such as management time, that instead can be directed towards functions that is pivotal for the organization and thus leads to profit maximization. The outsourcee will as a result of their specialization be able to focus on innovation, in an extent that previously has not been possible for the outsourcer (Augustson & Bergstedt Sten, 1999). Mukherji and Ramachandran (2007) talk about core competence as critical- and non-critical functions. When an organization outsources its non-critical functions it takes a risk averting strategy. In case that the outsourcee malfunctions in their deliveries, the outcome will not have a significant impact on the organization´s overall performance.

Higher degree of flexibility

Augustson and Bergstedt Sten (1999) mean that when an organization outsource, they increase flexibility within the organization. They exemplify by IT-companies who make large initial investment in advanced technology. But in the IT-industry, technology is constantly developing and thus acquired resources are constantly becoming obsolete. The outsourcee can make the necessary investments in innovation and then divide the fixed cost over several customers. Raiborn et al. (2009) claims that by averting capitalization in areas that could be outsourced, the organization can focus these resources towards areas that will generate a higher profit. Kakumanu and Portanova (2006) also add that using outside vendors when it comes to personnel, makes an organization more flexible in time of fluctuations in the economy. The outsourcer will not have to deal with an expensive recruiting process to find the right personnel in a booming economy, nor does it have to deal with the layoffs in a receding economy. The authors also add that situations can arise when it is hard to rapidly find adequate personnel for in-house employment.

Access to resources and knowledge

Outsourcing is also an efficient way to gain access to leading edge technology. The outsourcer can acquire technology more rapidly from an outsourcee, who already has the technology in their possession. For an outsourcer it might take a substantial amount of time and effort to setup an in-house version of the technology **(**Prashant, 1995). Raiborn et al. (2009) also

confirms this view and adds that organizations that can get access to the latest technologies and best practices etc. while avoiding capitalization of resources. In a research study by Jae-Nam (2001) the author found that knowledge sharing between outsourcing partners determines how successful the outsourcing contract will become, i.e. a higher degree of information sharing leads to a more successful relationship.

3.2.3 Risks with engaging in outsourcing

Dilution of core competence

Knowing the organization´s core competence is important in order to create success. However, it is not always a simple matter to identify the core competence. This means that organizations sometimes unconsciously outsource a function that actually is a part of their core competence. If a core competence is outsourced, the outsourcer exposes themselves to a potentially harmful situation. If the outsourcee is in charge of innovation and development of the outsourced function, it creates a conundrum for the outsourcer. If there was to arise a dispute between the outsourcee and the outsourcer, the outsourcee will then hold the knowledge of the outsourcer´s core competence. This is especially harmful when there are few or no other suppliers of the function. Therefore it is important to avoid outsourcing core competence, and also to only outsource functions where there are several providers available (Augustson & Bergstedt Sten, 1999).

Inhibited innovation and acquisition of knowledge

Augustson & Bergstedt Sten (1999) identifies flows of information as an important aspect for innovation to thrive. The authors talk about two different types of information flows, official and unofficial flows of information. The outsourcee will have access to the official flows of information, but will be cut out of the loop, when it comes to unofficial information flows. The broken link in the unofficial information flow chain might hamper innovation in a way that would not have taken place in the case of one consolidated entity. Augustson & Bergstedt Sten (1999) identifies a situation where the outsourcing organization might fail to secure knowledge that incrementally has been acquired through the outsourcing contract. Certain knowledge is of the kind that it can be documented on paper or in databases. However, there is another source of knowledge that is harder to put on paper. This knowledge is known as tacit knowledge and exists within the mind of workers. When an outsourcing contract is ended, either by maturity or disagreements, the tacit knowledge stays with the outsourcee and its employees. The tacit knowledge is not impossible to transfer, but it requires an effective organization that knows how captivate this knowledge.

Cultural differences

When entering an outsourcing agreement one must also be aware of the many cultural differences that might exist between the origin of the outsourcer and the outsourcee. One of the primary barriers is language, where not only the verbal languages have differences. Social and business behaviours are other cultural differences that could affect the outsourcing relationship. Not knowing or understanding differences in culture could lead to frustration that will have a bad effect on the perception of the other party of the outsourcing deal. For

example, in some cultures it would be seen as totally in appropriate to question authority, something that in the western parts of Europe is not seen as an act of disrespect, but more a vital part of a constructive dialogue (Sparrow, 2004).

Decreased flexibility

Decreased flexibility can result by the fact that in an outsourcing deal, the outsourcer ties itself down to one supplier. This means that the outsourcer is indirectly forced to utilize the technique that the particular outsourcee provides. If the outsourcee lacks the resources or the ambition to procure new equipment, the consequences might be that the outsourcer indirectly could be stuck with obsolete technology. Another way that flexibility could be hampered is that an outsourcing deal leads to a more bureaucratic communication process. Situations that need to be dealt with immediately, might have to go through upper management levels of the organizations (Augustson & Bergstedt Sten, 1999).

3.3 Make/Buy decisions with both financial and non-financial aspects

In a make/buy decision, the primary objective is to compare the cost received from the outsourcee, to the cost of producing in-house. When assessing the cost for in-house production, it is important to not just identify the most obvious costs. Instead a more complete study should be made, that include costs more indirectly associated with the function being backsourced, such as overhead (Paton, 1966).

> *"The result is at best an estimate"*
>
> From Paton (1966) p.28

The cost identification needs to be done individually on a case-by-case basis because it is hard to use a generalized assessment. Costs that need to be identified are such as; plant facilities, equipment and changes in supply management. Paton also states that it is the total cost of in-house production that has to be identified, not just the incremental costs.

A make/buy case study should not just yield a positive net cost saving, but it should also be contrasted to the amount that it enables to reduce the cost. A company should see if the costs savings give a net saving that is considered attractive from their point of view (Paton, 1966).

Padillo and Diaby (1999) state that a vast majority of make/buy theory just focus on the financial aspects. However, even though financial aspects are important in these kinds of decisions, there are also other aspects that might play a prominent role in a make/buy decision. According to Welch and Ranganathan (1992) quality is one important factor to incorporate in a make/buy decision. Neglecting quality can create large costs that can affect the overall business. Quality is something that can and should be quantified, so it can be incorporated into make/buy decisions. Padillo and Diaby (1999) writes that issues concerning quality problems, can become far more severe than the ones related to cost analysis.

Welch and Ranganathan (1992) also claim that even though cost is of great importance in a make/buy decision, other aspects as strategically and technological issues should also be taken into consideration. What could be considered as a strategical aspect is when an organization undertakes a new product line, and that this could be a good interface to shift production back to in-house (Paton, 1966). Bradley (1994) concurs in Welch and Ranganathan´s view, and ads that make/buy decisions have shifted away from mainly focusing on financial aspects. Besides the above mentioned qualitative aspects, other ones such as flexibility, serviceability etc. should be included. In order to achieve this, it requires established processes that make sure that make/buy decisions are made to serve the organization on an overall perspective. In order to do so; cross-boundary decisions are to be implemented. These decisions should involve representatives from different branches of the organization. The authors identify that it is especially important to include marketing and sales.

Decisions like "cross-boundary decisions" are a form of what Schwartz (1990) call consensus decisions. Consensus decisions are used to nurture open communication and allow the members to feel that they have been a part of the decision, and had the opportunity to influence the discussion. The important thing is to make all the participant of the decision to understand and support the final decision, even though they were not the proponents of it. The drawbacks of consensus decisions are that the process is very time consuming.

Since non-financial aspects are not easily quantified into financial terms, there will have to be subjectivity involved when considering these aspects. To be able to make these subjective evaluations, the persons involved in the decision making should have proper experience and knowledge (Padillo and Diaby,1999).

This literature presented in this section will help us to identify the aspects contemplated in backsourcing decisions within VCC. It will also help us to understand how make/buy decisions are made within VCC.

4. Empirical Findings

The empirical part of the thesis is structured around the two research questions that are contributing to answer the overall purpose of the thesis. The empirics are presented in a descriptive form that is based on our perception of the answers from the in-depth interviews that we have conducted.

4.1 *What does the decision context concerning backsourcing look like?*

Decision Forum

Within VCC there is a forum called Industrial Structural Board (ISB), dedicated to make/buy decisions. The board consists of people from several branches within the organization, which are Manufacturing Engineering, Product Development, Industrial Business Office, Manufacturing Planning & Logistics, Purchase and Human Resource. A great number of the board members hold an extensive experience, both from within the organization and decisions related to sourcing. This dual experience is stated as crucial, in order to make decisions that serve the greater good of the organization, i.e. the bottom-line result. The composition of the professional roles of ISB has not changed significantly over the years. However, the way that a business case is handled has evolved. Data and thoughts etc. are questioned in a larger extent than before, both in- and between different branches, thus not always accepting the first proposal. ISB is constantly reviewing internal- and external processes, always aiming to optimize the organization.

> *"Today we are working with more correct decision basis than we did when we started out"*
>
> Director Product Creation

From a hierarchical perspective, ISB is not situated on the organizational chart, but instead it is a cross-collaboration between all branches subordinated to Operations, plus Human Resource. ISB is endowed with a high degree of autonomy. It has mandate to make decisions in almost all business cases, except the ones with great financial magnitude. The origin of a backsourcing case can be derived from several situations; the most common is when the contemporary and future product structure is audited. By reviewing the up-coming cars within two to three years, VCC examines and determines the optimal production- and supplier constellation. The outcome of this process might lead to backsourcing of a previously outsourced function. These audits can range up to six months, before a decision is reached.

> *"Sometimes it takes a little bit too long to reach a decision"*
>
> Director Product Creation

The Make vs. Buy Manager concludes that, it is the gathering of data that is time consuming, and not the actual decision making. This since; a great number of the persons connected to ISB got other primary duties, than the ones related to ISB. Bringing more attention to the data collection phase would result in shorter decision processes.

Working process

All cases handled by the ISB starts with a pre-study phase, where the overall consequences of the business case is evaluated, in order to establish whether to backsource, or continue to outsource. The pre-study phase inhibits a cross-functional character, requiring participation from every branch that is affected by the decision. The pre-study phase contains a procedure containing six gates (G), before it is brought to ISB´s attention. Phase number one, Gate 0, is the launch of the project. During the G1-phase; a team is being selected, and a plan is developed. G2 requires the team to gather all information concerning the case, for instance the cost of producing a certain component in-house. When the G3-phase is reached, the managers of each department affected by the case have to sign a verification that their data is accurate. In G4, the business case is approved in a Prep-meeting, and then the data is sufficient enough to be presented at the next ISB-meeting. In the final phase, G5, a decision is reached by ISB.

If the pre-study phase concludes that backsourcing is favourable, then the second overall phase, known as Industrialization is implemented. The purpose of the industrialization phase is to make sure that the required prerequisites, identified in the pre-study phase, are available for in-house production. These could be such as; production lay-out, liquidity, logistic flows, staff know-how and administration.

The final phase is the so called Launch-phase, the actual set-up of the production line. This phase is extremely complex and can range from six months up to three years, depending on the specific business case. In situations where only a single component is up for backsourcing, the process will most likely be implemented in a short period of time, whereas a module (A compound of multiple components) requires substantially more time.

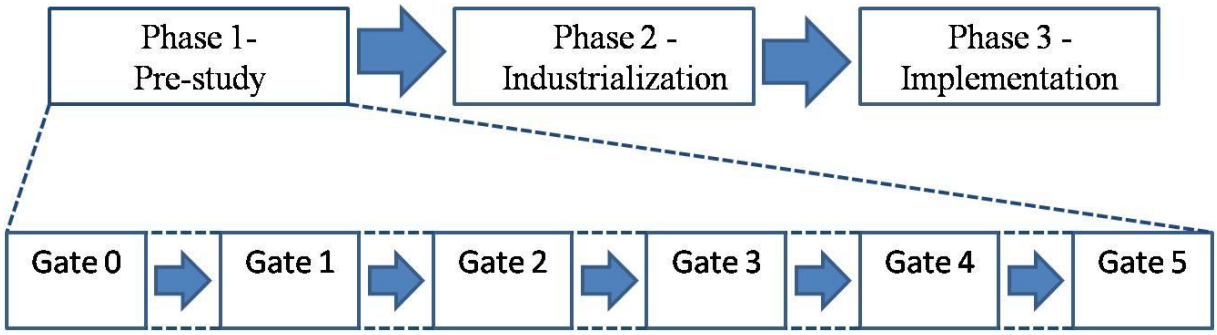


Figure 1. The authors' interpretation derived from the interviews.

Consensus

To be able to make as adequate decisions as possible, VCC strives for consensus within the decision process. The executive ISB-meeting is preceded by a preparation meeting, where the backsourcing decision basis has been processed and prepared. Through multiple loops, the information has been discussed back-and-forth within- and between different branches.

> *"I do not believe that we would make the right decision if we did not do it like this, without the cross-functional cross-fertilization with different opinions and inputs. "*
>
> CFO Manufacturing

Although VCC is a subsidiary of an American company, the company in itself has strong roots in Swedish core values, thus consensus is innate. The Manager OD & Cost Reduction states that the way we do it in Sweden is in no way superior to operating procedures in other countries. However, by taking the consensus approach; VCC attains a broader understanding, and the decision is more consolidated within the organization. Although the respondent claims that in comparison to top-down decisions, consensus decisions require substantially more time, which might lead to the loss of the once strived opportunity.

One pivotal aspect of the decisions that are reached by ISB is that they aim to be holistic, basically maximizing the bottom-line result. Even though, the different branches have different parameters to measure performance, it is important to avoid sub-optimizing behaviour.

> *"If you do not have the holistic view and the comprehensive understanding, there is a risk that you make the wrong decision.*"
>
> Manager OD & Cost Reduction

Financial aspects

One important guidance tool whether to backsource or not, is VCC´s so called Time Adjusted Rate of Return (TARR). When using TARR, VCC discounts the net cost savings of bringing a function back in-house, to its net present value. This net present value is then compared to the sum of the initial investment necessary to perform in-house production. Today VCC has a TARR that is set to a very high level, meaning that investments need to be paid back in a remarkably short period of time. It should be noted that the ratio that is used could vary depending on VCC's financial situation. The Senior Purchase Manager Interior claims that VCC regularly neglect business cases that does not reach their TARR, even though they might be strategically right for the organization in the long run. The reason for this is that VCC often lacks the sufficient liquidity to engage in investments that have a longer payback time.

If a business case does not have the right TARR, it will not be eligible for backsourcing, even if non-financial aspects are in favour for backsourcing. By using TARR, ISB evaluates

business cases from a strictly financial perspective. Something remarkable is that during the interviews with ISB members, we have encountered respondents that were not familiar the correct meaning of TARR, i.e. the definition presented above.

Non-financial aspects

The respondents within VCC state that there are no quantification of non-financial aspects, such as flexibility, quality and innovation, into monetary terms. The reason for this is that a car is such a complex and dynamic product. Hence, there are too many uncertain predictions that have to be made, thus the outcome might have insufficient credibility. The CFO Manufacturing said; that if there had been a simple method for quantifying non-financial aspect into monetary terms it would have been highly appreciated. However, there would still be differences due to specific circumstances from case to case, depending on the complex nature of VCC's products.

As mentioned, a business case is not solely based on financial figures. In addition to the financial aspects, non-financial aspects are consolidated to the decision basis. For those aspects where there are no facts and figures, ISB will have to rely on experience and gut feeling, and are inevitably forced to a higher degree of endangerment.

Intrinsic learning

Both the Manager OD & Cost Reduction and Senior Purchase Manager Interior claim that VCC is generally not examining the actual results of how backsourcing decisions turn out. The costs of doing so, many times exceeds the benefit of such an examination. When bringing something in-house it can be hard to track what costs that are related to the backsourced function, and which costs that are related to the original in-house production. The Senior Purchase Manager Interior suggests that when a backsourcing case of a greater magnitude has been implemented, the case should be evaluated after one year by ISB, to obtain knowledge that could be useful in future backsourcing processes. This view that backsourcing cases are not thoroughly evaluated afterwards is not shared by the Make vs. Buy Manager, who states that he himself is ultimate responsible for the evaluation. He further claims that processes for evaluating backsourcing results exists, but that his time is scarce and thus, there have been backsourcing cases that have not been evaluated.

4.2 *What aspects are considered during a backsourcing process, and why?*

4.2.1 Primary aspects

Cost reduction

According to all respondents cost reduction is cited as the primary reason for backsourcing. The costs associated with an outsourcing deal are contrasted against the costs associated with a reciprocal in-house production. As every company in the world, VCC has limited financial resources that have to be used wisely. The CFO Manufacturing states that; cost is a key factor since the financial resources are constrained. Cost therefore holds a superior position compared to all other aspects.

"What matters is money"

Senior Purchase Manager Interior

This has been especially evident during the latest financial crisis, where the focus has orbited around cost reduction in a further extent. In the shadow of this financial crisis, VCC has had a very short-term perspective concerning cost reductions, with focus on finding cases where changes could be implemented instantly. However, almost every business case that was examined subsequent to the aftermath of the financial crisis showed great exit-costs, which undermined the initially perceived cost reduction.

In some outsourcing cases at VCC it has occurred hidden costs, beside the preconceived costs.

"You do not possess all the information in advance, there will always be things occurring along the way that initially were disregarded"

Make vs. Buy Manager

Several respondents claim that some mistakes have to be made, and that vital lessons have been learned. To diminish the risk for hidden costs to occur, VCC has developed a check-list, which enables them to identify hidden costs in a more systematic way. Although, this check-list is not in any way a safeguard, that guarantees identification of all hidden costs. The check-list is a working process, meaning its content is constantly refined. In decisions related to sourcing it is important to be humble and possess the ability to admit an inaccurate decision.

A situation that has occurred several times during backsourcing processes at VCC, is what they refer to as "black work", defined as an activity performed by the outsourcee, unknown to VCC. When VCC backsource a function subjected to black work, they will encounter an initially uncalculated cost for the black work, which the outsourcee performed without reimbursement.

Quality

Quality is identified as the second most important variable in a backsourcing decision process. Due to the nature of the automobile industry, and VCC´s repute as a quality brand, it is pivotal that quality can be consolidated in every production step.

"If we want to be a premium brand, we must have quality in everything we do"

CFO Manufacturing

Although VCC expects high quality, there has never been a case where quality has been a single reason to backsource an outsourced function. However, in some cases quality has been

one of several aspects taken into consideration. The Make vs. Buy Manager clarifies that quality is seldom an issue during outsourcing for VCC, and if a problem would occur they are resolved in 99 cases of 100 in collaboration with the supplier. But if severe quality issues exist and they are unsolvable, the outsourcee disqualifies itself for future outsourcing deals.

> *"If the prerequisites are not met, the door is open, just put your keys down and leave"*
>
> Make vs. Buy Manager

All the suppliers that are in collaboration with VCC have to be certified with the so-called Q1-cerification, which guarantees "VCC-standard". A withdrawn Q1-certificate will most likely result in a permanent ban from future outsourcing deals.

Delivery precision

VCC´s production is to a high degree based on Just In Time (JIT), mostly through sequential deliveries from external suppliers. A discontinuance within the production leads to severe financial costs, and also deteriorating goodwill. Goodwill is affected since VCC has a customer demand oriented production system, instead of a batch oriented production. Therefore it is crucial that deliveries of components and modules are precise and reliable. The Director Product Creation states that delivery precision is rarely an issue with VCC´s external suppliers.

VCC has processes that assure that the prerequisites established by VCC are fulfilled, both prior to- and during the outsourcing deal. They collaborate closely with their suppliers, for instance they can support them both financially and with adequate know-how if required.

4.2.2 Secondary aspects

Core competence

Senior Purchase Manager Interior as well as all the other respondents identifies cost, quality and delivery precision as primary aspects in a backsourcing decision. However, he also point out core competence as a primary aspect, an aspect that was not mentioned by any of the other respondents as a backsourcing aspect. He claims that VCC´s core competence should always be considered in backsourcing decisions.

Leverage

A great benefit of outsourcing a function is that VCC can put a substantial higher level of demands towards an outsourcee, compared to in-house production. Towards an external supplier more formalized measures could be taken in order to correct the discrepancies between the predefined outcomes and the actual outcomes. Two areas where this leverage is particular prominent are quality and delivery precision.

Production space

Production space is an always present variable in backsourcing decisions, since it is a scarce resource for VCC. VCC is a relatively small automobile manufacturer, but despite this they offer a wide variety of their products. This product differentiation requires substantial space in the production, which puts a strain on the limited amount of space. Some business cases have been financially justified for backsourcing, but have been rejected due to constrained production space.

> *"We hold no ambition to build any new brick houses, instead we must use the current space"*
>
> CFO Manufacturing

The Senior Purchase Manager Interior holds the opinion that both out- and backsourcing decisions should never be implemented on the decision basis that there currently is scarce- or idle production space. Instead, it should be implemented as a part of the long-term strategy.

> *"If there has been a decision to backsource, it should be based on other premises than production space"*
>
> Senior Purchase Manager Interior

Production cycle

A backsourcing reason that usually is not related to a malfunctioning outsourcing contract, is when a new model is taken into production. This is usually a good interface to consider the future structure of the production lay-out, i.e. what should be done in-house contra out-house? The Director Product Creation claims that such an interface could also be a good opportunity to explore internal synergies, due to increased in-house production.

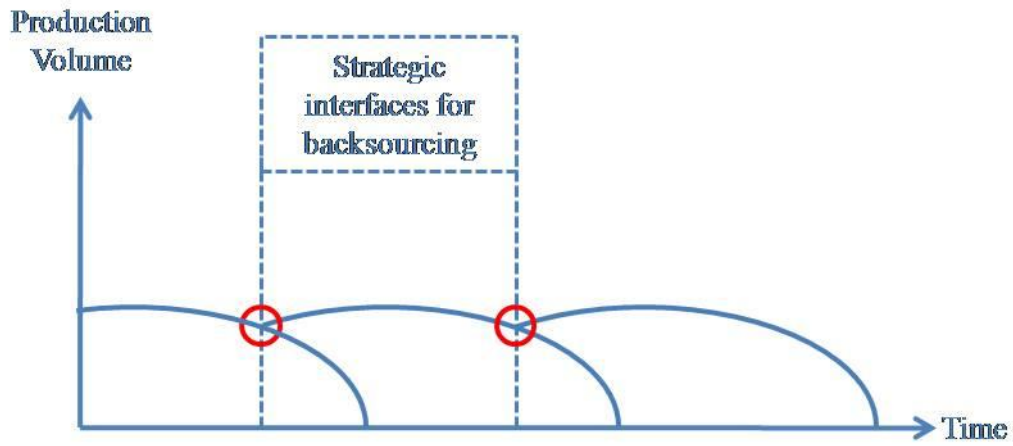


Figure 2. The authors' interpretation regarding production cycle derived from the interviews.

Lack of financial means

In some situations the business case itself is valid for backsourcing since it corresponds to the overall strategy, but the financial means for the initial investments in order to backsource are lacking.

> "*It is expensive to be poor"*
>
> Chief Vehicle Engineer

Due to this, VCC is sometimes forced to pay higher product cost to the supplier, than the in-house production costs would have been.

Improved productivity

In the mid-nineties the respondents perceived VCC as rather unproductive, and lacking focus in the production, and sometimes did not have the adequate knowledge required for certain types of production. Due to this situation VCC had to outsource some functions to external suppliers.

> "*Many of our suppliers have been more than reasonably paid for their outsourcing deals"*
>
> Manager OD & Cost Reduction

Over the last five years, VCC has improved their productivity, focus in the production and knowledge. For instant, over the last years, there have been two digit improvements in efficiency, creating an internal competitiveness, thus increasing the opportunity for backsourcing.

Loss of know-how

One aspect that VCC has to take into consideration in a business case, is the loss of know-how and knowledge about the product after the outsourcing, for instance problems related to

quality. In situations like these, VCC tries to make sure that the required know-how can be obtained relatively fast; otherwise they have to rely on external consultants. If VCC must rely on expensive consultants in a long term perspective, the initially perceived cost reduction will diminish.

Flexibility

VCC operates in an industry characterized by high fixed costs and large numbers of employees. Organizations within this industry are therefore sensitive to fluctuations in the world economy. In times of recession they have a rather rigid organizational structure, thus it is harder to adjust to the economic climate. In a backsourcing decision, VCC therefore bear in mind that backsourcing of a function will increase the fixed costs and number of employees, thus making the organization less flexible. Although, we perceived there were difference of opinion whether it is justifiable to solely backsource, due to currently excessive staff, or not.

Insolvency

Another aspect that could lead to backsourcing is if the outsourcee becomes insolvent. One of the reasons for this situation to occur; is that the outsourcee deliberately created an offer for VCC that was unsustainable in the long run.

This since they wanted to obtain the contract no matter what; and thereby entering the horde of VCC´s suppliers. In those cases where VCC assesses that insolvency could materialize, backsourcing might be the remedy. Due to this impending risk, VCC has internal functions that constantly review the outsourcees´ financial situations.

5. Analysis

In the analysis section of the thesis the authors will analyze the empirical findings with assistants of the theoretical framework. The authors' personal thoughts and opinions will also be presented.

5.1 *What does the decision context concerning backsourcing look like?*

Cross-functional decision making

As presented in the empirical part in the thesis, ISB is the primary forum for backsourcing decisions within VCC. Its main purpose is to contemplate financial- and non-financial aspects in multiple loops within and between different branches, in order to achieve well reasoned and firmly established decisions. This approach of cross-functional decisions corresponds well to Bradleys (1994) thoughts about cross-boundary decisions. Although, the constellation of branches that are involved is slightly different between the theory and the actual case, the purpose of attaining solutions that serve the whole organizations is present in both cases. Bradley (1994) identified the marketing and sales function as two pivotal branches that should be included in make/buy decisions. These two branches have been neglected by VCC when constructing ISB. We believe that make/buy decisions are not contemplated through a marketing- and sales perspective, since the respondents is of the belief that individual consumers are indifferent to the origin of single components. We consider that the cross-functional approach by VCC is a core concept for VCC´s backsourcing decisions. Without this consensus, the risk of suboptimized decisions would be more likely, thus undermining VCCs CC long term prosperity.

Systematic approach

A backsourcing decision is extremely complex, where meticulous planning and evaluation could determine the outcome of a business case. Planning and evaluation phase is described by Duarte et.al (2004) as a key factor in an outsourcing decision, and we believe that this phase is equally critical for success in a backsourcing case. We believe that in a society with high employee turnover, it is important to have predefined routines for how the planning- and analysing phase should executed. As mentioned in the empirical findings, VCC has the six gates that have to be outpaced sequentially, i.e. in order to move to the next gate, all the prerequisites of the current gate has to be fulfilled. Our opinion is that this system is a safeguard that makes sure that backsourcing processes are always dealt with in a systematic way. If this process is not dealt with in a systematic way, the consequences could be that backsourcing processes become subjective, thus reflecting the opinions of the employees currently involved in the process. A process that is systematic will more likely respond to the long-term strategy of the organization.

We believe that it is pivotal to bear in mind that backsourcing decision is based on a holistic evaluation of both financial- and non-financial aspects. However, these two areas of aspects are dealt with in different ways.

Financial considerations

We conclude that financial aspects are only taken into consideration through a net cost saving perspective, whose net present value is compared to the initial investment. This approach is fairly similar to the one described by Paton (1966). Paton says that not only should the net present value be positive for a business case, but it should also be at a satisfying level. The problem with the level sat by VCC is that it is more determined by financial constrains, than the optimal long term strategy. We believe that in a company that holds a stronger liquidity, strategic investments should be allowed to have a substantially longer pay back period, than the ones used by VCC. We further believe that the advantage of contemplating TARR as the only financial key ratio in a backsourcing decisions, is that it avoids the ambiguity that multiple key ratios might implicate.

Non-financial considerations

ISB does not quantify any non-financial aspects into financial terms when contemplating them in the backsourcing decision. This partly contradicts the view of Welch and Ranganthan (1992), who claims that quality can and should be quantified, so it can be incorporated into a make/buy decision. When we started to write this thesis we had a notion that some non-financial aspects were transformed into financial terms. However, along the road we have learned that is not the case, due to the complexity in VCC´s production process. Instead they are relying on the cross-functional decision process that ISB offers to contemplate the more qualitative aspects. As was mentioned in the empirical findings, a simple method to quantify non-financial aspects into monetary would be a useful tool. However, our interpretation is that the perceived benefits of such a method are less than the cost associated with its creation. We have come to realise that a cross-functional consensus approach is the suitable way to incorporate non-financial aspects into a backsourcing case. Schwartz (1990) writes that consensus decisions are a good way for different people to influence the decision, because it will make it easier for them to accept the decision. The fact that many of the members on ISB hold extensive experience from VCC and make/buy decisions, are something that we believe is crucial to make these kinds of subjective decisions. Padillo and Diaby (1999) concur in this view that subjective decision should be made by people who holds an extensive amount of experience.

Lack of evaluation system?

Duarte et al (2004) claims that a performance system related to outsourcing is something that is important in order to evaluate its outcome. Our opinion is that a reciprocal system should be used to evaluate backsourcing. As was presented in the empirical findings, there is a certain degree of ambiguity concerning evaluations of backsourcing at VCC. Whether or not they have an evaluation system, the obtained information is obviously not communicated to all the members of ISB. Since the results of the evaluation system are not communicated, much of its benefits are lost, i.e. learning from previous decisions. When results are not communicated, it will be hard to learn from ones mistake, in order to refine the decision process regarding backsourcing. We believe that VCC would benefit from creating a system that supports cross-functional learning of the backsourcing results.

5.2 *What aspects are considered during a backsourcing process, and why?*

5.2.1 Primary aspects

Costs savings

As was presented in the theoretical framework by Paton (1966), cost holds a superior position to all other aspects in make/buy decisions. Throughout the conducted interviews, all the respondents have concurred in the view that cost saving is the most primal aspect in a backsourcing decision. We believe that this approach from VCC is reasonable, since financial prosperity is the most fundamental aspect for any organization.

A reason that the perceived benefit of outsourcing does not always materialise, is due to the so called hidden costs. Raiborn et al. (2009) wrote that these costs can both occur during the transition phase and during the contract period. This is something that has occurred at VCC a number of times. As cited in the empirical findings, all the information is not always known from the beginning. VCC has become better to identify these costs over the years, from erroneous decisions that they have made. Our opinion is that VCC has learned a lot from their previous mistakes; a lot of this could be attributed to the creation of ISB and the check-lists that have developed over time. An obvious example of hidden costs is the ones associated with the "black-work" conducted by VCC's suppliers.

Quality and Delivery Precision

Veltri et al. (2008) identifies a number of issues concerning poor product- and service quality. For instance, lacking punctuality can be a reason for a company to consider backsourcing. For VCC, quality and delivery precision are two of the most important aspects considered in a backsourcing case. However, backsourcing decisions are almost never implemented due to problems with either of these two aspects. We believe that the reason for this is that VCC works proactively with their suppliers to ensure that problems with these aspects never materialize. VCC is a quality brand, and therefore it is extremely pivotal that they deliver quality products. Previously in the analysis, we have written that both the theoretical framework and the respondent's hold cost reduction as the most prominent aspect in a backsourcing decisions. However, during our interviews we have come to believe that if there were to arise an impending problem concerning quality with one of VCC´s supplier, quality might then hold a superior position even to cost savings during this particular case.

5.2.2 Secondary aspects

Lacking competence

Sometimes there are situations where the financial aspects are in favor for a backsourcing case. But the problem could be that, since VCC has had the function outsourced, they lack skilled personnel that are up-to-date with knowledge and know-how about the specific product´s production process. According to Chapman and Andrade (1988) this is one of the risks associated with outsourcing. Due to several outsourcing decisions that have been ill-founded, we believe that it is inevitable that they now suffer some of the consequences from

these decisions. We believe that they need to acquire the personnel with adequate knowledge and know-how for those activities that they consider to be of strategic importance for the organization. This might mean that they will have to acquire these personnel externally in the beginning, in order to establish the knowledge and know-how within VCC. Acquiring this competence might initially be expensive, and this is something that could put a further strain on VCC's already constrained financial situation.

Core Competence

Most of the sourcing theory that we have encountered during this thesis have pointed out core competence as one critical aspect in backsourcing decisions, e.g. Augustsson and Bergstedt Sten (1999). However, throughout the interviews only one respondent illuminated core competence as an aspect that is considered during a backsourcing decision, it is worth noticing that he held it as one of the most important aspects. Therefore we have found it hard to decide to what extent it is actually being considered or not.

Shift in Flexibility

As was stated in the empirical findings; VCC is aware of the decreased flexibility that backsourcing means, through incremental staff and fixed costs. This corresponds to the views of Augustsson and Bergstedt Sten (1999), and Kakumanu and Portanova (2006). We believe that VCC needs to formulate a policy regarding the guidelines on what foundation, sourcing decisions should be made. In order avoid the existing difference of opinion related to this issue, discouraging suboptimization.

Production Cycle

Something that VCC is always reviewing is their structure of suppliers and in-house production. When a product reaches the end of its life cycle, VCC then audit whether to outsource or use in-house production for the subsequent model. This is a good breakpoint to implement backsourcing if favorable, and thus minimizing the exit costs.

Lack of financial means

Due to VCC´s financial situation, primary constrained liquidity, ISB is forced to discourage backsourcing cases that are strategically adequate. We believe that this constrain, limits the full potential of ISB, since its objective is to minimize the long term production costs. Our opinion is that this constrain could create frustration among the members of ISB. If prolonged, it might lead to deteriorating morale towards ISB duties.

Improved productivity

Veltri et al. (2008) identifies internal opportunities as one of three overall reasons for backsourcing. One internal opportunity that has arisen is their increased internal productivity over the last couple of years, increasing the attractiveness for backsourcing. Due to the internal changes, the possibility for more favourable TARRs has emerged. Our opinion is that VCC´s has strengthened their leverage in negotiations regarding future outsourcing deals, through the possibilities to produce equally or perhaps even more cost effective in-house. The

leverage could further be used in order to set an example towards VCC´s suppliers, due to an unsatisfying price level in an outsourcing negotiation.

Insolvency

Even though VCC sometimes feel obligated to support their suppliers financially, due to the fact that VCC in some cases are too dependent on this collaboration. But it can still occur situations when VCC feel that it is inevitable to withdraw the outsourcing deal, and thus backsource the function. We believe that it is pivotal to meticulously scrutinize the suppliers´ financial situation and questioning outsourcing offers that are suspiciously low, in order to minimize future insolvency situations.

5.3 Summarizing analysis

The purpose of this thesis is:

To examine how financial- and non-financial aspects are taken into consideration when VCC considers backsourcing. What importance is put on financial aspects in comparison to non-financial aspects?

We conclude that VCC considers a large number of aspects in a backsourcing decision. These decisions are extremely complex, and therefore VCC strives to incorporate all concerned branches into a cross-functional forum, in order to make consensus decisions that are holistic.

As previously discussed, VCC works proactively with product quality and delivery precision, and that the remaining aspects seldom hold a decisive position. Therefore, in the end in a backsourcing decision, it all comes down to money.

6. Conclusions

In this section of the thesis the authors will present a number of conclusions that are derived from the theoretical framework, empirical findings and the subsequent analysis. The authors will also present ideas for future research.

The purpose of this thesis was to examine how financial- and non-financial aspects are taken into consideration when VCC considers backsourcing, and what importance was put on financial aspects in comparison to non-financial aspects?

In order to clearly visualize the authors' conclusions, they will be presented in bullet points:

- When backsourcing decisions are taken within a large organization that produces a complex product, it is important to make cross-functional consensus decisions. This is beneficial, even though it is time consuming.

- The aspects that are taken into consideration during a backsourcing process, depends on the nature of the product and industry that the organization is operating within.

- The specifications of the upcoming products influences the structure between future outsourcing and backsourcing.

- Backsourcing decision shall be based on long-term strategy, and not on the current situation or short-term economical incentives.

- Cost savings are superior to all other aspects in backsourcing decisions.

- Every backsourcing case is unique, and therefore it is hard to create an exact and generalized model that determines a hierarchy of all aspects considered.

Future research areas

We have had an explorative approach, due to the fact that there is lacking of research on backsourcing. Therefore, we have not been able to draw an extensive amount of conclusions derived from this single case, which could be used in a more general context. On the other hand, our thesis has generated a number of areas in which we find it interesting to conduct future research; the ones that we find especially interesting are presented below.

Since we have only conducted interviews within one company, we find it interesting to conduct research on other production companies with complex products. To examine whether the same aspects are taken into consideration, and if cost savings holds the same superior position?

It would also be interesting to examine a particular backsourcing case, to see the discrepancies in the perceptions regarding the reasons for backsourcing, between the outsourcer and the outsourcee. A study like this would not be biased towards just the outsourcer´s perception. By

illuminating these differences, both the outsourcer and the outsourcee could possibly get insight in how to avoid future malfunctioning outsourcing deals.

The research objective within this thesis strived for cross-functional consensus decisions. Therefore it would be interesting to examine how backsourcing decisions are handled in a more straightforward top-down decision making organization.

We have received indications that backsourcing performance systems are not as fully developed as the ones related to outsourcing. Therefore we find it interesting to examine how evaluation systems for backsourcing cases are constructed and utilized in comparison to outsourcing performance systems?

Contribution of the study

With this study the authors believe a foundation for how and which aspects that are contemplated in backsourcing decisions for large manufacturing companies has been created. The authors further hope that this study will create awareness about the complexity associated with backsourcing decisions. By being aware of the complexity regarding backsourcing, more pro-found backsourcing decisions can be made.

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Interview guide

The under mentioned questions was a sample of frequently asked questions during the semi-structured interviews.

- Can you shortly describe your working tasks within VCC?
- Can you shortly describe your position within ISB?
- How are backsourcing decisions made within VCC?
- What does the working process concerning backsourcing look like within VCC?
- How has the outcome of backsourcing cases affected future backsourcing decisions?
- Which aspects are considered in a backsourcing case, and why?
- How is the consideration made between financial and non-financial aspects?
- Is there any kind of subjectivity embedded in backsourcing decisions?
- Are, for instance, cultural differences an aspect contemplated in backsourcing decisions?