

Planning for supplier base reduction

- understanding Supplier Base Reduction's role in purchasing

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This article is based upon the study with the same name that was conducted at Alfa Laval AB from September 2010 to February 2011. The purpose of the study is to increase the understanding of a successful supplier base reduction initiative and the activities that should be conducted prior to such a supplier base reduction initiative.

Introduction

Today individual businesses do not compete as isolated entities, but rather within supply chains. Lambert (2008) emphasizes the importance of relationship management in supply chain management which is also supported by Chen and Paulraj (2004) who argue that buyer-supplier relationships have a central part in supply chain management. Chen and Paulraj (2004) state that in the past companies commonly contracted with a large number of suppliers and that recently there has been a significant shift from the traditional adversarial buyer-seller relationships to the use of a limited number of qualified suppliers with deeper relationships. The shift when moving from a large number of suppliers to fewer is titled supplier base reduction. Supplier base reduction is one of five components in Chen and Paulraj's (2004) buyer-supplier concept. They conclude that supplier base reduction is a required element of contemporary supply chain management.

Purpose and objectives

Researchers have studied the implementation of supplier base reduction, but few have looked at the planning of a supplier base reduction initiative and activities that should be conducted prior to the implementation of supplier base reduction. Thus the purpose of the thesis, this article is based on, is to fill this

gap, thereby increase the understanding of supplier base reduction. In order to understand how to plan for supplier base reduction a company needs to know how supplier base reduction is connected to other areas related to purchasing.

To be able to meet the purpose the objectives of the thesis are:

- To analyze the conditions for a supplier base reduction initiative and identify activities that should be conducted prior to a supplier base reduction initiative.
- To develop a conceptual model that describes parts of purchasing that affect and are affected by supplier base reduction.

Methodology

The thesis has had an abductive approach with leaps back and forth between theory and practice. The main research strategy has been a qualitative case study with interviews as the main source for data. The study was initiated by the case company Alfa Laval and together with the authors the purpose and objectives were set. Since a major task in the study was to map the areas of purchasing that relate to supplier base reduction and understand how these areas affect and are affected by supplier

base reduction the systems approach was considered ideal. Two systems were considered, one in theory and one in practice. The theoretical system was the part of purchasing theory that was investigated. The empirical system was the purchasing department at the case company and its relations to other functions at the company. Based on the theoretical system together with findings from exploratory interviews, the conceptual model was created. The conceptual model was then used when analyzing the data gathered at the case company.

Theoretical framework

The theoretical framework of the thesis includes *purchasing organization, purchasing collaboration concepts, supplier relationship management, tools for supplier base reduction and previous studies on supplier base reduction.*

From the previous studies on supplier base reduction some key findings were gathered, see table 1.

Table 1: A summary of the key findings from previous studies on supplier base reduction

Findings
Supplier base reduction (SBR) should not be carried out in isolating instead it should be a part of a well thought plan or overarching purchasing strategy (Goffin et al. 1997; Ogden and Carter ,2008).
To be able to see the gains from the SBR initiative gains need to be measured, both quantitative and qualitative (Goffin et al., 2001; Cousins, 1999; Dubois, 2003).
Gains like improved communication and supplier relations will not come as a result of the SBR initiative it selves but rather as outcomes from supplier management programs made possible by SBR (Goffin et al., 2001).
It is important to manage the new conditions for buyer-supplier relationships that SBR implies (Cousins, 1999).

A well established supplier selection process developed based on the sourcing strategy is essential (Ogden, 2003; Ogden and Carter, 2008).

It is important to know when to use soul, dual or multiple sourcing depending on the commodity and the risks associated with the supply of the particular commodity (Goffin et al., 1997; Cousins, 1999; Ogden and Carter, 2008).

It is important to seek buy in from potential stakeholders to be able to identify problems and enable a smooth implementation process. It is also important to understand the organization's needs, goals and objectives prior to making changes (Ogden, 2003; Ogden and Carter, 2008).

The reduction process needs to be seen as continuous so that the supplier base will not get out of control again. Lessons learned from the reduction project (s), benchmarking and continuous improvements can be used to achieve this (Ogden and Carter, 2008).

The conceptual model

As depicted in figure 1 the conceptual model consists of eight areas with supplier base reduction as a bridge linking them together, creating a logical structure. The model starts with three areas; *purchasing strategy, degree of purchasing decentralization, and spend analysis and supplier performance analysis.* The area *purchasing strategy* describes the importance of identifying how supplier base reduction will support the purchasing strategy. The area *degree of purchasing decentralization* comprises how the organizational structure affects a supplier base reduction initiative. *Spend analysis and supplier performance analysis* stresses the importance of accurate data on the spend and supplier performance. These three areas must be taken into consideration when deciding the purpose and objectives of the initiative and how to realize these (represented by *SBR approach* in the model, see figure 1). Company's approach to implement a supplier base reduction initiative together with the desired outputs will affect who the main stakeholders are, desired supplier capabilities and how the output of the supplier base reduction project should be measured.

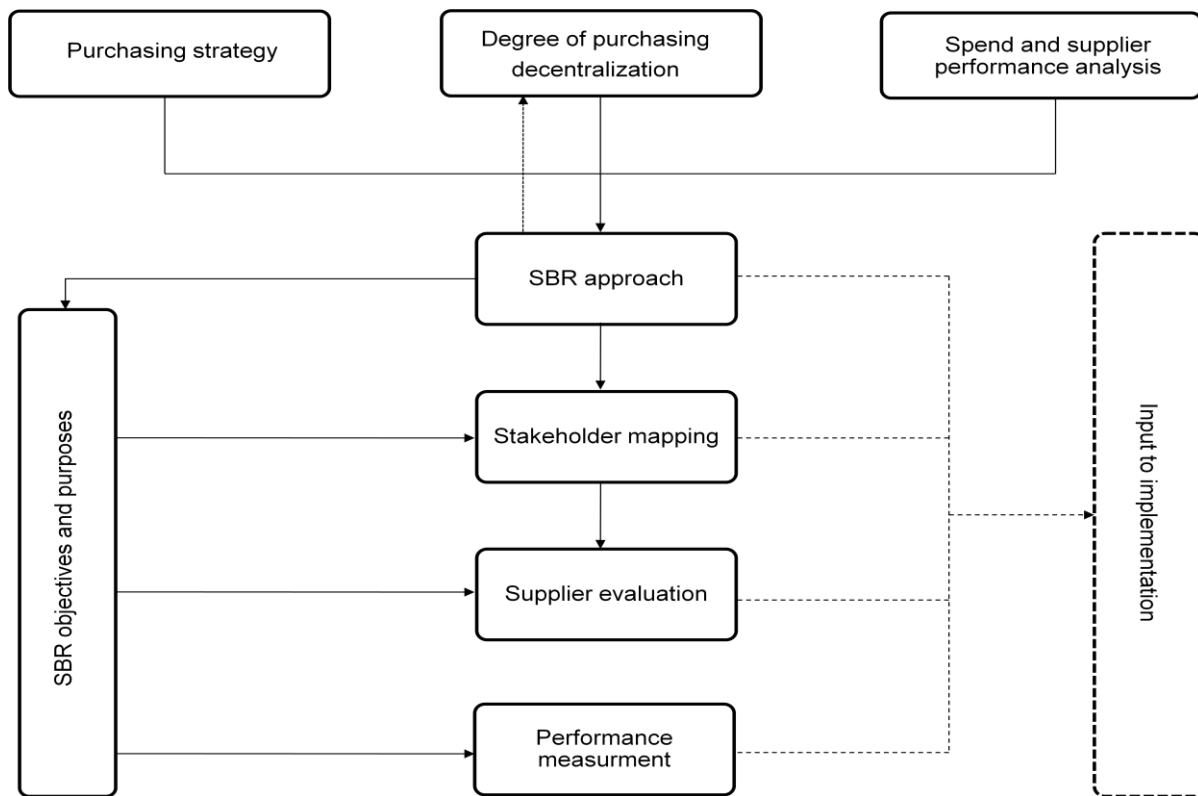


Figure 1: A conceptual model connecting relevant purchasing functions with SBR

The objectives and purposes should pervade all the activities in the supplier base reduction to ensure that all involved parts strive towards the same goals.

The case company

Alfa Laval is a company that is looking to reduce its supplier base. Alfa Laval is a global company with manufacturing sites spread all over the world. The company has a product portfolio with a wide range of products that are based on different technologies. These technologies are heat transfer, separation and fluid handling. Alfa Laval has divided its product groups after product characteristic and manufacturing technique. Each manufacturing site has its own local purchasing. Consequently, unofficial sub supplier bases have been developed; each product group has its sub supplier base and each site within the product group has its own local supplier base. Alfa Laval created a global purchasing department in 2002 with the purpose to leverage buying power. As a result, the supplier base has been reduced since 2002 but

there has not been any major projects focusing on strategically reducing the supplier base. Alfa Laval has estimated their supplier base to 2700 suppliers today, and 2200 of these are local (supplying only one manufacturing site) and delivering 2 % of the total purchasing volume. The large supplier base has caught Alfa Laval's attention and the company believes that there are benefits in reducing it.

Findings

Alfa Laval has during 2010 launched a new purchasing strategy where quality is one of the focused areas. Today there is no clear connection between supplier base reduction and the purchasing strategy at the case company. The thesis suggests that pro-active purchasing with a focus on supplier development to improve inbound quality should be one of the main purposes with supplier base reduction for Alfa Laval. Supplier base reduction will support supplier development since when reducing the number of utilized suppliers resources can be freed and more resources can be spent on each supplier.

A reduction of the supplier base will result in more shared suppliers (two or more manufacturing sites use the same supplier) which will increase the effect a supplier development project will have since it can target a larger part of the total purchasing volume.

A part of Alfa Laval's new purchasing strategy is to develop a commodity strategy. But it has not been seen as a necessity to succeed with supplier base reduction. The conceptual model suggests that a commodity strategy should be in place before launching supplier base reduction. A commodity strategy will give guidelines on; the number of suppliers that should be used for each bought component, which criteria each supplier should be evaluated on and desired buyer-supplier relationship.

Alfa Laval has a semi-decentralized purchasing organization with a local purchasing department at each production site responsible for local purchasing activities and local suppliers, and the central purchasing department responsible for global suppliers (supplier that supplies more than one production site). The decentralized structure has resulted in that the demands towards the suppliers (labeling, wrapping, pallet size etc) differ between sites. This forces the supplier to work with different production sites in different ways. The supplier will lose some economies of scale due to the need for individual solutions for individual production sites, thus losing incentives to prioritize and engage closer collaboration with Alfa Laval. The thesis suggests that Alfa Laval should reduce the supplier base by sharing more suppliers between sites thus lowering the share of local suppliers. The differing demands will obstruct this approach since it makes it harder to share suppliers. Hence it is important to create more uniform demands if supplier base reduction should be successful for Alfa Laval. Another problem regarding the purchasing organization is the collaboration between the

central purchasing department and the production sites. Today it is unclear who owns the supplier base and what criteria to prioritize when choosing suppliers. To successfully implement supplier base reduction these issues need to be resolved before launching a supplier base reduction initiative. It will be hard to choose suppliers if the different stakeholders cannot agree on what type of suppliers are needed. Creating a commodity strategy will be one way to overcome the problem with supplier evaluating criteria since the parts need to agree to be able to create the strategies.

The visibility regarding spend and supplier performance data is today low at Alfa Laval. Some people in the organization argue that the visibility is good enough to start a reduction, but if doing so some problems could arise. Today updated information about spend and supplier performance only exists at the local sites. There are no processes for information sharing between the sites and the central purchasing function. This means that if a supplier base reduction initiative were launched in the near future the sites would get much of the responsibility for the reduction. This could lead to sub optimizing and obstruct sharing of suppliers since the central function will have a hard time coordinating the sites without correct and updated data. Right now a new business intelligence tool is being implemented at Alfa Laval. The thesis suggests that the company should wait with supplier base reduction until the tool is fully implemented since the tool will provide the data visibility needed for supplier base reduction.

Conclusion

To be able to successfully plan a supplier base reduction initiative a company needs to understand the conditions for supplier base reduction at the company. To do this the company needs to identify the factors that will facilitate an initiative as well as factors that will obstruct it. The conceptual model was created to enable an analysis that will identify

these factors. The model shows that it is important to understand why a supplier base reduction initiative should be launched, how it will support the overall purchasing strategy. The degree of purchasing decentralization will affect the complexity of the implementation and how the company can leverage from an initiative. If the company has a decentralized or semi decentralized purchasing organization it is especially important to have good collaboration between business units to facilitate sharing of suppliers. It is also important to have uniform demands towards the supplier to be able leverage from having fewer suppliers. The model also shows the importance of having updated spend and supplier performance data, both to be able to identify opportunities for reduction and to be able to track the progress of the initiative.

The conceptual models shows that the reasons for supplier base reduction, the support from the organization and the data should be analyzed together to plan the actual doing. Different commodities might need different approaches. Dependent on the characteristics of the commodity and the supplier market the appropriate approach should be chosen. Dependent on the chosen approaches and the objectives and purposes with a supplier base reduction initiative, different stakeholders in the organization will be affected. These need to be identified, to create willingness and compliance as well as to be able to identify the need for acquiring new competences. How suppliers should be evaluated is affected by the overall objectives with the initiative and need to be agreed on by the different stakeholders. Finally it needs to be decided how the supplier base reduction initiative should be measured and evaluated.

Many of the issues raised in the conceptual model proved to be relevant in practice. With the help of the conceptual model important issues to consider before entering a supplier base reduction initiative were identified at the case company.

However, to be able to generalize the findings of this study they need to be further investigated. For example to be able to “prove” the importance of having updated correct data available to every stakeholder an actual implementation of supplier base reduction needs to be studied.

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