The return of the non-strategic material

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Abstract

Traditional procurement of MRO-products (Maintenance, Repair and Operating materials) consumes significant resources of the purchasers and others through negotiations, ordering, call-offs and administration of the procurement. In the mid 1990's electronic procurement was introduced, but it is not until recently that large Swedish companies have noticed the opportunities that the e-procurement development brings with it.

The purpose with this article is to discuss and report in what way the present trend, the use of electronic procurement, affects the way we purchase non-strategic material today. In the research we have conducted three case studies of how large Swedish companies intend to change and have changed the way they purchase MRO-products today by using e-procurement.

Our research indicate that electronic procurement is used as a tool by centralized purchasing organizations to control the purchasing of several company units, while at the same time call-offs are made at all levels in the companies. Due to better information that is gathered in one place the strategic purchasing becomes easier and it is possible to concentrate purchasing among fewer suppliers. Sometimes new actors (market places) change the power balance between buyer and supplier. This applies not only to the purchasing of strategic products and services but has also become a way to reduce the costs incurred when procuring non-strategic material. This indicates that the traditional way to classify material according to the work of Kraljic may have to be reconsidered.

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Introduction

"….no company can allow purchasing to lag behind other departments in acknowledging and adjusting to worldwide environmental and economic changes. Such an attitude is not only obsolete but also costly."

Quotation from the introduction of Peter Kraljic's article in Harvard Business Review in 1983

Procurement of non-strategic material has up till now been very time consuming and characterized by a large amount of maverick buying, many suppliers and costly administration (Wilson, 2001). Since Peter Krajic revolutionized the way purchasing executives look upon purchasing in 1983 the development in this area has been modest. With the electronic revolution we have entered a new era and it is time to once more revise the way we look upon large companies' procurement of non-strategic material.

In the mid 1990's the development of new business systems lead to solutions that enabled electronic procurement. The opportunities that the e-procurement development brings with it have recently caught the attention of large Swedish companies. Electronic purchasing has implications on the process which strengthen as well as weakens procurement aspects (Emiliani, 2000). Through the use of electronic procurement a centralized purchasing organization controls the purchasing of all company units, while at the same time call-offs are made at all levels in the companies. The procurement system also makes it possible to gather all purchasing information in one place. Thanks to better information and the opportunity to automate some of the administrative tasks, companies can reduce their purchasing costs and the strategic purchasing becomes easier (Morris and Morris, 2002). Another consequence that e-procurement has on purchasing is that it makes it possible to concentrate purchasing among fewer suppliers and to reduce the amount of maverick buying (Barratt and Rosdahl, 2002). Even if many advantages can be achieved through the use of e-procurement, companies also have to take into account the amount of time and money spent on the solution itself. If a company chooses to develop their own unique e-procurement solution it can place a strain on the collaborative nature of the buyer-supplier relationship (Barratt and Rosdahl, 2002) and become more difficult to switch suppliers. On the other hand, if they use an electronic marketplace they may loose both knowledge of the supplier market and the direct contact with their suppliers.

The outsourcing trend of recent years has contributed to make efficient and effective purchasing more and more important for companies. For many years though, procurement of direct material has been in focus for rationalization and development efforts. Major cost savings have already

been realized for the procurement of direct material, now its time to focus on the large costs related to purchasing of non-strategic material. According to Segev and Gebauer (1998) as much as 60% of the average procurement spending in the manufacturing industry can be related to indirect goods and services. The Aberdeen Group says that companies that have moved towards automated acquisitions and management of goods and services can expect to slash transaction costs by as much as 73 percent, incur a 70 to 80 percent reduction in purchase order processing cycles and a 5 to 10 percent drop in prices paid (Saliba, 2001).

The purpose with this article is to discuss and report in what way the present trend, the use of electronic procurement, affects the way we purchase non-strategic material today, for example office supplies. The result is restricted to apply only to large companies that presently are considering or evaluating the usage of e-procurement solutions.

Strategic Purchasing

Kraljic's portfolio model was first published in 1983 and is still widely used both in practice and as a reference by researchers (Dubois and Pedersen, 2002). In the article Peter Kraljic (1983) defines four stages of purchasing sophistication according to two dimensions, "Importance of purchasing" and "Complexity of supply market". The dimensions account for risk on one hand and buying power on the other hand (Gelderman and Van Weele, 2001). The four categories are supply management, sourcing management, materials management and purchasing management.

The focus of this article is procurement of non-strategic material, which fits into Kraljic's purchasing management segment. The procurement focus is non-critical items and both the importance of purchasing and the complexity of the supply market are low. According to the work of Kraljic (1983) typical sources are established local suppliers that are contracted for a limited time horizon. The supply is superabundant and the main performance criterion is functional efficiency. These purchasing decisions are made on a decentralized level in the buying organization.

The other three categories are applicable in other situations. For procurement of strategic items, where both the importance of purchasing and the complexity of the supply market is high, companies should use supply management. The main focus in these situations is that long-term availability should be secured because the supply is scarce. If companies are to purchase bottleneck items, the most important features are reliable short-term sourcing and cost management. Purchasing of these articles are often made on a decentralized level, but coordinated centrally. In this situation the importance of purchasing is low while the complexity of the supply market is high. Finally, materials management is to be used when procuring leverage items. Here the importance of purchasing is high and the complexity of supply markets is low. The supply is abundant and the key performance criteria are cost and materials flow management.

Electronic procurement

During the last five to ten years the use of electronic interchange has developed enormously. Different e-procurement solutions are used together with traditional EDI connections and e-procurement has become an important part of the purchasing strategy. Electronic business to business (B2B) sales has shown a tremendous growth in the last years, International Data Corporation estimates that B2B purchases will amount $331 billion by 2002 (Morris and Morris, 2002). Large companies mainly use two electronic solutions for e-procurement nowadays. A company can either develop a company unique solution based on an intranet/extranet system to which the suppliers are invited by the customer to participate. The other alternative is to use portals or electronic marketplaces owned and managed independently by a group of buyers, suppliers or an extensive part (Modig, 2001).

If a company chooses to develop their own e-procurement system they often impose a considerable amount of work on their suppliers (Gebauer and Zagler, 2000). Not only do the suppliers have to adjust their own computer system to the electronic procurement system of their customers, in most cases they also have to administer the electronic product catalogue. If a number of large customers develop their own e-procurement system, the situation will soon get out of control (Lewan and Franzén, 2002). Through the use of a marketplace the customer becomes easy access to a large number of suppliers and the suppliers can reach many customers but only have to adapt to one marketplace solution.

A recent survey by Purchasing Online Magazine shows that buyers believe the power of the Internet can best be deployed to obtain technical information about suppliers' products, to email suppliers, to search for parts and to check prices. Most Internet-based procurement solutions remains focused on automating the order and payment cycles for acquisition of non-strategic goods and services according to established corporate contracts.

Empirical Context

This study is mainly based on material that was collected for a study regarding electronic procurement and its consequences for purchasing and logistics.

Employees at three large Swedish companies were interviewed about their company’s procurement and how they intended to develop this function within the near future with the aid of electronic procurement. To be able to compare the ways that the companies procured material in, we chose to limit our study to the procurement of office supplies. Other participants in the procurement system, for example suppliers, distributors and intermediaries that are influenced by changes in their customer’s procurement system were also interviewed as well as some experts in the field.

The interviews were conducted either in person or over the telephone. Before the interviews took place we sent a document containing 5-10 questions that we wanted to discuss during the interview by e-mail to the interviewee. When an interview was concluded a summary of what had been discussed was sent to the interviewee. The three companies are here briefly described.

Company A:

Company A, a large producer of vehicles, purchases non-strategic material for the amount of € 400-500 Million a year from 6000 suppliers. Procurement of non-strategic material is largely carried out at a decentralized level and maverick buying (purchasing of goods where a centrally negotiated contract is at hand but is not used) is common.

The company has developed a company-unique electronic procurement solution where their suppliers are responsible for displaying the assortment of goods and services that company A wants to make available for their staff to buy. Company A has so far approximately 20 of their former suppliers connected to their e-procurement solutions. The company has reorganized its purchasing and the new, central purchasing department has a staff of 280 persons, 55 of these procure only non-strategic material. The main responsibility for the central purchasing department is to negotiate contracts with suitable suppliers, evaluate their performance and the procurement needs of their own company. On the other hand, call-offs are to be made at all levels in the company according to the centrally negotiated contracts. Company A has reached a stage in their development where they now consider using an external marketplace instead of their own e-procurement solution. This is due to the fact that it takes a large amount of time and money to maintain and develop a company unique e-procurement solution.

The main reasons for the development of an e-procurement system is that Company A wants to concentrate purchasing among fewer suppliers, govern the purchasing centrally, decrease the amount of maverick buying and reduce the administrative costs related to purchasing.

Company B:

Company B, a large producer of paper products, has an organization where much of the material is bought on a local basis. The joint concern contracts that the central purchasing department negotiates are available to be viewed on the Internet but they are rarely used.

In the future company B wants to negotiate all contracts centrally for the purchase of non-strategic material but the different paper mills will continue to use other suppliers to cover for unique local needs. Most of the e-procurement that is conducted today is of raw material and important components for the production that can be bought in large volumes and are being used in a number of the company's facilities.

The prime reason for company B to use an electronic procurement solution is to get more efficient procurement and to lessen the amount of costly administration that is related to procurement.

Company C:

Company C, a large construction company, purchase non-strategic material for approximately € 200 Million a year from 8000 suppliers. A small part of the suppliers deliver the majority of the goods. The purchasing of non-strategic material has up till now been carried out on an adhoc basis. Some supplier contracts are available on the intranet to be viewed by the personnel responsible for purchasing material, but there has been little, if any, following up on who procures what from which supplier. A major part of the purchasing is decentralized.

The company is just about to separate the strategic purchasing from the non-strategic. The company has also started to develop an e-procurement system of their own, an intranet solution with linkages to external marketplaces. The e-procurement system makes it possible for the personnel to buy non-strategic material according to contracts that have been negotiated by the central department for procurement of non-strategic material.

The company's main reasons to develop the electronic purchasing solution are to restrict the number of suppliers and to make it easier for the staff to procure non-strategic material in a cost-effective way.

The stepwise e-volution and its implications on the purchasing strategy

According to Wilson (2001) most companies are cautious in their approach to Internet buying. Companies start their e-procurement development with easy changes like buying from online catalogs instead of paper catalogs. Most companies also restrict the buying to a single set of commodities or a particular geographic area in the beginning (Wilson, 2001; Kaprinski, 2001).

In our research we found that the development of e-procurement in large companies, located in a region where up till then the use of e-procurement has been rare, can be divided into three steps. The first thing that happens (step 1) is that the company begins to use electronic procurement solutions to buy direct material. Companies usually start of with buying raw material and standardized goods, this was true for both company B and C. The companies then become aware of the advantages that procurement of indirect material through the use of electronic procurement solutions can bring with it and enters into the second step.

In step 2 the companies often start to develop an e-procurement system of their own and reorganize their purchasing departments so that purchasing is governed centrally. This could be observed for all case companies. After the systems have been taken into use the third e-procurement development step is taken.

In step 3 the solution is evaluated and choices regarding the future are made, when the study was conducted only company A had reached this step. The great amount of time spent with developing a company unique e-procurement solution and the large costs incurred due to this now gets attention. Companies start looking for suitable partners to share an e-procurement solution with so as to make it more cost effective through large-scale usage. This is true for company A. Depending on the amount of available and suitable market places, the companies can either become trading members of an existing market place solution or invite other companies to participate in their e-procurement solution. Examples of companies that have reached this step are DaimlerChrysler, Ford Motor Company and General Motors who combined their B2B-efforts and formed the marketplace Covisint;

"Each company brought together its individual e-business initiatives to avoid the burdens suppliers would endure if asked to interact with redundant proprietary systems. The goal was integration and collaboration, promising lower cost, easier business practices and a marked increase in efficiencies for the entire industry."

Covisint history from the Covisint Homepage

The first quarter of year 2002 showed that B2B efforts slowed down in the USA by the economic downturn even if large-volume purchasers still rate Internet-based purchasing as very important (ISM/Forrester Research, 2002). We suspect that the economic recess may have taken many companies in the USA to step 3, the evaluation phase, a bit quicker than normal due to diminished resources. These companies are now considering how to continue while they are waiting for better times to come. Independent of which solution the company prefers there are a number of ways in which electronic procurement influences the purchasing strategy, each discussed in the following section:

- Closer relationships with fewer suppliers.
- Suppliers are contracted for a longer period of time.
- The call-offs are still made at a decentralized level but coordinated centrally.

Closer relationship with fewer suppliers

If companies succeed in restricting their buying to fewer suppliers through the use of e-procurement solutions, like Company A and C whishes to, the relationships with some of the suppliers will probably become closer and more intense due to larger purchasing volumes. With a central purchasing department, like all the case companies have, the purchasing volumes become even more significant.

The amount of work that company unique e-procurement solutions crave makes a decrease in the amount of suppliers plausible. This is the case for company A that has approximately 20 of their

former 6000 suppliers connected to their e-procurement system at the moment. Closer relationships with these suppliers are necessary due to the amount of cooperation and coordination that is needed to set up a working and accurate e-procurement solution. If the customer chooses to use a marketplace instead they will get a powerful intermediate between them and their suppliers. A new and intense relationship with one big supplier, the marketplace, will affect the purchasing strategy.

Suppliers contracted for a longer period of time

It takes great efforts and investments to set up a functioning e-procurement solution regardless of which solution a company chooses (Gebauer and Zagler, 2000). These investments make it more difficult for suppliers (producers or electronic marketplaces) and customers to switch partners along the way. If a customer uses an electronic marketplace it can be easy to switch actual suppliers. Hence, the essential question here is whether the relationship between the marketplace and the customer/supplier or the direct customer-supplier relationship is of strategic importance in the specific situation. A consequence that is likely to appear, due to the fact that it takes time to make an e-procurement solution work, is that companies negotiate contracts with their suppliers or the marketplace of their choice for a longer period of time.

Decentralized call-offs and central coordination

The use of and the effects from e-procurement solutions is depending how the organizations use it for strategic and operational development. In our three cases the purchasing work carried out at the departments, i.e. the call-off from preferred suppliers, have not considerably changed the decentralized purchasing process even if new administrative routines have been introduced. However, the introduction has enabled the development of a central purchasing process focused on the control and management of your own organizations purchasing and the supply base. This is in alignment with how Kraljic propose that bottleneck products are to be handled, which is a new way to strategically manage the purchasing management segment.

Theoretical implications

As mentioned before, Peter Kraljic (1983) defined four different purchasing situations according to the dimensions “Importance of purchasing” and “Complexity of supply market”. We will now look a bit closer on how the changes in purchasing behavior as discussed above affects these dimensions.

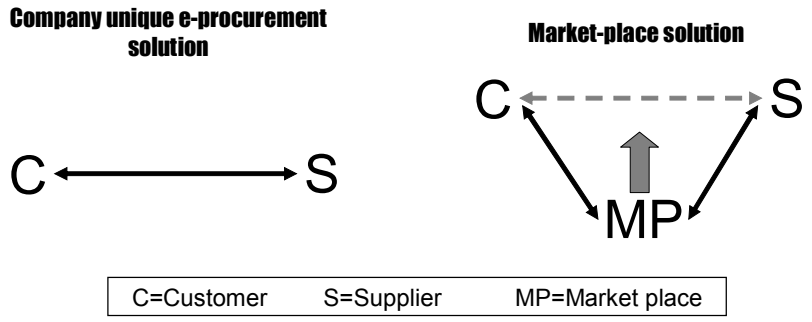
“Importance of purchasing”

With the use of e-procurement solutions the procurement of non-strategic material becomes strategically important to the buyer because the importance of the contracts negotiated (large volumes and longer periods of time) and the large potential cost-savings.

The equilibrium of power or “The complexity of the supply market”

If a company chooses to develop a company unique e-procurement solution the bond that they have to their suppliers will increase according to the discussion above. The consequence for the supplier will be that the customer dictates the rules for the bonding at the start. This is because in most cases the customer company is bigger and has several suppliers to pick from.

The relationship between the customer and their preferred marketplace becomes very important due to the fact that the electronic marketplace act as an intermediary between the customer and their suppliers. This may affect the relationships that the customer has with their real suppliers, the producers. The risk is that they will not only loose their direct contact with their real suppliers but their knowledge of the supplier market may also be diminished.



However, if the supplier or marketplace gets invited to participate in the e-procurement solution they will probably be assured to get larger purchasing volumes than otherwise. This is all due to the fact that it is harder for both customers and suppliers to switch partners because the major investments that are made in the development of the e-procurement solution, fewer suppliers share the same purchasing volume as before and the contracting time increases.

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