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a strategic framework of understanding

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Sourcing excellence: A strategic framework of understanding

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Abstract

The increasing globalisation and concomitant trend towards outsourcing of more and more of the activities of the value chain gradually increase the importance of the supply chain. Therefore, it is important to explore sourcing activities thoroughly and specifically to determine what it means to be competent or even excellent at sourcing. Taking five Danish companies as our point of departure, the purpose of the article is to gain further insight into the concept of sourcing excellence. Thus, the article presents and discusses a sourcing excellence model that aspires to operationalise and enhance our understanding of the contents elements of the concept of Sourcing Excellence. Furthermore, the model may serve as a tool for practitioners seeking to enhance their sourcing competence.

1. Introduction

Danish industry is facing considerable challenges in these years. Danish wages have gradually increased relative to the countries we are usually compared with internationally (Hansen, 2010), which also increases the costs of own production of the components that go into the companies' core products. According to Arlbjørn et al. (2010), specialisation has increased as it is nearly impossible for any company to hold all the competencies needed to perform the activities of its value chain. Therefore, in recent years, many companies have outsourced many of the production activities that go into their products (Gereffi et al., 2005). Consequently, many resources are moved from the company to its subcontractors, and the supply chain becomes exceedingly important for the company's performance.

These challenges form a demanding environment for Danish production companies and also to the changes that the Danish society needs to undergo in the years to come in order to stay competitive. What is at play here is an increased global organisation of the activities that were previously performed in-house, and the changes are not limited to production activities, but also very much affect R&D, knowledge and in-

novation (Quinn, 2000). It is a global trend that causes even the largest international corporations to fundamentally renew the way they organise their production and innovation processes.

It is, however, far from unproblematic that an increasing share of the processes is being performed outside the companies' boundaries rather than in-house. As companies have placed production activities in low-cost countries (LCC), increasing concern has been expressed that Danish production companies are losing vital knowledge of industrial production (Arlbjørn et al., 2011). Consequently, in the future it will prove harder to develop new products due to lack of local in-house production which would otherwise have allowed us to realise the ideas and innovations. This concern intensifies as research and development activities are also outsourced. When the knowledge needed for development of products is spread across several global stakeholders, it becomes harder to handle the complexity of the innovation and collaborative processes in which external partners play an increasingly important role. Concurrently, dependence on subcontractors rise as more is invested in the relations to these subcontractors. Danish industry needs to face up to all of these challenges to survive the ever increasing international competition. This translates into considerable challenges at many organisational levels, particularly at the management level.

The changes have entailed that what was previously in-house production tasks have become sourcing tasks placed in the hands of external subcontractors. In a historical perspective, you can almost talk of a transformation of the company into a situation in which the majority of its activities take place externally rather than within the company. Therefore, sourcing is highlighted as an area of increasing importance, an area for which changes will be reflected directly in the company's financial results (Anderson & Katz, 1998; Quayle, 2002; Van Weele, 2010, Arlbjørn et al., 2010). The growing importance means that procurement as a phenomenon has increasingly become a focus area, in practice as well as academically (Chan & Chin, 2007; Freytag & Mikkelsen, 2007). Research contributions have focused on several different elements related to successful sourcing. Carr & Smeltzer (1997), for instance, demonstrated a correlation related to access to resources (including access to information and use of ICT), knowledge about and skills related to use of procurement-related tools and the status of the procurement department. Ellram & Carr (1994) also found that status in general and management commitment in particular were important for success. Chan et al. (2007) identified five core values for success in strategic sourcing: 1) management involvement, 2) focus on core competences and life-cycle costs, 3) development of sourcing strategies and 5) continual improvements. Trent & Monczka (2005) deduced seven key characteristics for (global) sourcing excellence: 1) management engagement/commitment, 2) well-established and -defined processes, 3) availability of the necessary resources, 4) integration via ICT, 5) a supportive organisational design, 6) structured

communication and 7) a structured method for measurement of cost reductions. Trent & Monczka (2005) point out that the right human resources is one of the primary factors, and Mohamad et al. (2009) therefore explicitly include qualified staff members as the eights characteristic.

By becoming better at sourcing, the companies can increase value creation, and it is therefore important to explore what it means to be competent or even excellent at sourcing. The objective of the present article, therefore, is to study this very question on the basis of empirical input from five Danish companies. Specifically, we aim to develop a model that illustrates what the companies understand by sourcing excellence, and this article also aspires to provide a real-world understanding and perception of the concept and its contents elements. Therefore, we have chosen an explorative approach.

The article is organised as follows. The next section describes the method used. In Section 3, we briefly present the concepts of procurement and sourcing. Next, in Section 4, we present an analysis of the empirical material. Section 5 holds a discussion that leads up to the conclusion in Section 6.

2. Method

The study is based on qualitative case studies of five large Danish production companies from different lines of business. According to Yin (2009, p. 18), a case study is »... an empirical inquiry that investigates a contemporary phenomenon within its reallife context, especially when the boundaries between phenomenon and context are not clearly evident«. Case studies serve to study organisations in their actual contexts and to perform studies of an explorative character (Andersen, 1990). One of the advantages of case studies is that the method allows for the combination of various methods and knowledge sources. Often, data collection from various primary and secondary sources is used in combination, e.g. interviews, observations, questionnaires and archive material (Dubois & Gadde, 2002; Blumberg et al., 2008; Yin, 2009). The process employed for the present study was abductive (Dubois & Gadde, 2002; Kovács & Spens, 2005), i.e. the researcher iteratively frequented theory and practice. An abductive process of study is expedient for case studies (Dubois & Gadde, 2002). Case studies, however, also have limitations and carry inherent problems. Each case is typically unique and can only rarely be recreated or re-found in other contexts in the same form and with the same contents. Generalisation, therefore, is problematic. According to Yin (2009), cases can, nevertheless, be used as the basis for so-called analytical generalisations, as »... cases may be said to have general validity, by virtue of the conditions that were in place in a specific situation« (Arlbjørn & Freytag, 2011, p. 58).

A common denominator for the companies is that they all consider sourcing an important competitive parameter, which was the reason motivating their choice of sourcing.

That sourcing plays an important role for these companies is reflected in the number of staff employed in their procurement departments (30-320) and also in the share of procured goods relative to the company's turnover (50-85%). Additionally, all companies have expressed a wish to actively work with their level of sourcing competences, which underpins their commitment. Companies from different lines of business were chosen to provide a more comprehensive and varied image of what sourcing excellence means in Danish industry. The chosen companies belong to the following lines of business: Audio, video and multimedia, systems for materials handling, mobile hydraulics, wind energy and building materials.

Data collection was done by visiting the companies and interviewing stakeholders in leading positions within the procurement departments of the companies. The interviews focused on gaining an understanding of the elements that, according to the companies, characterise good sourcing. These elements were established through dialogue about the current sourcing setup and any future plans and foreseen changes to such setup. At the interviews, we discussed the companies' past, their organisation, including the procurement department's status and position in the organisation, the industry's characteristics, the company's sourcing strategy, its approach to providers and the sourcing-related challenges that the companies' were facing. The stakeholders were given plenty of leeway to present their sourcing situation, and therefore a wide range of topics were discussed during the interviews.

All conversations were subsequently transcribed to text to facilitate thorough analysis. The data were analysed using open and axial coding of the interviews based on the principles proposed by Glaser & Strauss (1967) and subsequently Corbin & Strauss (1990) as this technique provides researchers with an opportunity to generate new theory from observations, interviews and other empirical material (Denzin & Lincoln, 2003). The use of the techniques of this method allows for the construction of a well-documented and integrated set of concepts that provide a thorough explanation for the social phenomenon studied (Corbin & Strauss, 1990) – in this case the sourcing excellence concept.

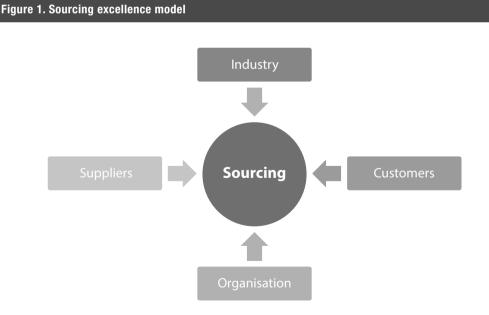
On the basis of the text material, a total of 72 topics were analysed, aggregated and grouped into 22 sourcing elements. During the analysis phase, it gradually became clear that these elements were divided between four overall areas, i.e. four different aspects of excellent sourcing; the organisational aspect, the supplier-related aspect, the industry aspect and the customer aspect. As a whole, the four aspects form *Sourcing Excellence*, as illustrated in Figure 1 – Sourcing excellence model. Only one of the four aspects, the organisational, is company internal. The remaining three aspects all contain elements that are directly related to the company's surroundings.

Before we can meaningfully discuss the concept of sourcing excellence, its main element – sourcing – should be defined. That is the objective of the below section.

3. Procurement concepts in extant literature

One of the challenges that characterise the management field is the abundance of definitions used, and these are frequently heavily influenced by the English literature. The research field that targets management of supply and procurement is no exception to the rule. This field is also characterised by a multitude of definitions, and invasive English terms are abundant, e.g. sourcing, procurement, purchasing and even outsourcing; terms that are often used synonymously (Chan & Chin, 2007; O'Brien, 2009; Stock & Lambert, 2001). This confusion of concepts and use of synonyms applies to the concepts of strategic purchasing, strategic sourcing and strategic procurement. These terms are also, at least in part, used synonymously; and frequently a concept is referred to by various terms when references are made in the literature, e.g. purchasing in the source may be changed to sourcing or procurement in the referring article (Mikkelsen, 2011). Thus, there is no generally accepted definition of sourcing (O'Brien, 2009). Herein, sourcing is defined in line with Van Weele (2010) and Monczka et al. (1998) as:

Sourcing is the process related to the procurement of resources including goods, services, competencies and knowledge that enable the company to add value and reduce costs while fulfilling the clients' needs.



Taking this definition as our starting point, sourcing is an activity that cannot be left with a single function. Rather it is a process that continually involves the entire company in interaction with the various departments as opposed to the acquisition activity which may be handled by the procurement department independently of the remaining units (Arlbjørn et al., 2007; Freytag and Mikkelsen, 2007). In the following section, we present our empirical analysis of sourcing excellence.

4. Analysis

The analysis is based on the interviews made with the stakeholders; and in accordance with their self-understanding, it focuses on the elements that constitute the concept of sourcing excellence. The four elements or aspects are: customers, industry, suppliers and organisation.

The customer aspect

The customer aspect deals with those sourcing elements that are related to the company's target group: the customers' needs. Through their consumption choices, the customers decide what companies should produce. Ultimately, it is therefore the customers who indirectly define many of the end-product requirements, e.g. price, quality, design, technology, etc., and these requirements are passed backwards through the supply chain by sourcing of raw materials and components. According to Anderson & Katz (1998), the companies' sourcing activities add value to customers in two ways:

- 1. By reducing the costs of the product, allowing it to be marketed at a lower price.
- By adding value to the product itself, e.g. by sourcing new technologies, improving quality, adding extra features, allowing providers to provide better and more rapid services, etc.

In the interviewed companies, both of these options were mentioned, but it seems evident that reduction of costs is the primary focus point, much more so than adding value. This is hardly surprising as the objectives and KPIs that procurement departments typically face are related to the level of costs, possibly because it is far more difficult to measure the impact of value adding measures (Anderson & Wynstra, 2010). Over time, the customers and the competition in the market increase the pressure on prices, and therefore the companies are forced to constantly reduce their costs.

As cost reduction is the primary focal point, many companies have turned towards countries where the wages are low and labour-intensive production therefore is inexpensive. This applies to own production as well as to procurement, and the interest in these low-wage countries was also clear among the companies visited as part of the present study. However, the quality of the components was described as a clear issue related to sourcing from these countries. It is rarely easy to achieve the same qual-

ity in low-wage countries as in the more industrialised countries. This is the reason why all companies agree that costs should be measured using a Total-Cost approach including all costs associated with using a supplier – including the costs that are not immediately evident when the transaction is made. The challenge associated with this approach is that the companies only have rudimentary models for the calculation of such costs (Wouters et al., 2005).

According to the companies, value is rarely created because suppliers themselves provide new technologies or new components that may be used directly in the products. Generally, the companies themselves need to drive the development of new technology. Instead, value is added by using suppliers who possess specific competencies; and with the right mix of competencies and the ability to combine these in innovative ways, the company can develop end products that are unique and therefore add customer value. Consequently, excellent companies are those that are capable of finding and making use of suppliers that have the right set of competencies to underpin the development and production of end-products that add value and match the company's target group. As one case company puts it »... one thing is that you need to be capable of producing at minimal cost ..., but if you understand how to piece together correctly your image of the market, well, then you can build a knowledge base that is far superior to the competition, and that truly provides a competitive parameter that you cannot fight by producing in China or outsourcing to South Korea or North Korea for that matter«.

Furthermore, the excellent company is capable of sourcing components of a sufficient and correctly specified quality allowing the daily production to be upheld at minimal costs.

The procurement department also plays an important role in ensuring that the suppliers are involved in the company's product development phase, and in ensuring that this phase gains effectiveness by keeping in mind sourcing options from the onset, whereby costs remain a focal point. By cooperating with suppliers, companies can often differentiate themselves from the competition and thereby strengthen their position in the market (Freytag & Mikkelsen, 2007). It is, however, not sufficient that the companies involve their suppliers in the product development phase and ensure a focus on the price level as part of their sourcing efforts. The time it takes to introduce new products to a market (Time-To-Market) is of great importance for some of the interviewed companies' competitiveness, which is primarily due to the reduced product life cycle of many of the company's products. The short product life cycle is very challenging for the product development department as new products need to be developed rapidly. It is therefore important that the procurement department collaborates closely with the product de-

velopment department as this may shorten the company's product development phase. This is possible because the procurement department holds valuable information on providers and also about any potential issues related to the needed components.

Table 1. The elements of the customer aspect					
	Client aspect	Contents element	Explanation	Challenges	
K1	Costs	Employ total cost approach	 Work professionally with total cost minimisation and thereby underpin the company's opportunities to compete in the market 	Hard to do in practice as many of these costs are hidden	
K2	Added value	Select and control value adding suppliers	 Localise and exploit suppliers that have the right set of competencies to under- pin the development and production of end products that add value and match the company's target group. Requires a focus on quality levels, typi- cally performed by quality engineers 	Hard to strike a suitable balance between price and quality in relation to component specifications	
К3	Innovation	Support the develop- ment of products and technologies	 The procurement department serves as a liaison to the development department and involves the providers in the innovation phase to expedite the development process. The procurement department ensures a focus on component pricing to ensure that the developed products will be competitive in the market. 	Broad agreement that it is very challenging to stay ahead development- wise and to have the right technologies in place to ensure the ability to survive in the future.	

The organisational aspect

The organisational aspect harbours the identified sourcing elements that are associated with the company's organisation. These elements are company-internal and therefore amenable to company decisions. The elements are: the company's sourcing process, organisational structure, data overview, culture and management, strategy and competencies.

The companies studied have very different approaches to the sourcing task. Some companies make use of a tightly structured sourcing process, whereas others have adopted a considerably looser approach to sourcing; and it is hard to assess if one approach is superior to others. In our opinion, what is essential is that the company considers carefully how procurement may be optimised in the company's context. We have, however, identified a number of characteristics that increase the importance of adopting a well-defined sourcing process.

1. In case sourcing is to take place in a more globalised context with considerable communicative and distance-related barriers.

- 2. In case staff turnover is high, as a high turnover will increase the importance of making silent knowledge of sourcing explicit by adopting a well-defined process2.
- 3. If the company has a high level of sourcing and if the sourced components are highly complex, this increases the value of adopting a structured process.

Preparing and implementing a well-defined sourcing process is challenging because it is resource-demanding and often takes longer time procuring the needed goods or services. Therefore, some companies prefer a looser sourcing setup. We argue that the companies that would benefit most from striving for Sourcing Excellence are those for which sourcing plays out on a global stage and in which sourcing is of great importance for the company's performance. We therefore assess that a well-defined sourcing process is a hallmark of good sourcing organisations.

In all of the companies that we visited, the organisation of procurement processes is approached using a category management mindset as the procurement departments are divided into separate categories in which staff handle the procurement of separate types of goods and services: This ensures both specialisation and a greater knowledge of the products than if companies had segmented procurement tasks according to organisational functions owing to the increased focus on the individual product categories. Another common feature shared by the companies is that their procurement organisations are all centralised. In one company, where until recently procurement was very decentralised, centralisation has served as a pivotal catalyst of cost reductions, both owing to the scale effect produced by a more centralised procurement process and owing to improved coordination and control of supplier contact. From a management perspective, the complexity associated with maintaining the overview of sourcing processes was quite simply reduced by introducing a centralised procurement organisation. Whether all decision-making competence should be centralised is a topic that has attracted considerable theoretical interest (Faes et al., 2000; Hartmann et al., 2008), but the present study indicates that Danish production companies seek some degree of centralised control and that this trend has yielded positive results. As one of the companies puts it: »through centralisation in this field we are closer to presenting 'one face to the supplier'. And that, naturally, yields certain advantages ... we speak with one voice ... The more aligned things can be, the more alike we can be perceived, the more effective it is«.

In addition to centralisation and organisation by product categories, there is a trend in the companies towards more and more cross-organisational collaboration between the departments, as departments such as strategic procurement, logistics, and quality and product development are very much brought together by procurement categories or on a project-to-project basis. The organisation of the companies, then, is becoming more and more project- and matrix-based, and cross-departmental collaboration

is becoming more and more common. Frequently, this will lead to the formation of project teams referring to a manager who forms part of the procurement organisation and has commercial interests and KPIs. In practice this means that the focus on the importance of procurement will be intensified in the company's other organisational functions. One considerable advantage of integrating other departments in the efforts to cut costs is that various departments will agree on the prioritisation of the proposed efforts. This is conducive to increasing "buy-in" from the involved departments as they themselves have helped designing the measures that are to be implemented.

Another important element within the organisational aspect is the company's overview of procurement-related data. A good overview of data provides the company with specific information of what is bought, from where it is bought and how often it is bought – and this overview is available exactly when it is needed (Madsen & Mikkelsen, 2002), or as a respondent put it: "Well, the more important point for us is that during this journey we have undertaken, we have been capable of presenting facts, some of which were chocking ... we have 3 times, no 2.5 times more providers than we said we had ... so that has helped change our focus." The primary advantage of a good overview of data is that the sourcing measures that are prepared can be based on data rather than gut feelings and that it becomes possible to document the actual value added to the company. Furthermore, this can be used as leverage in negotiations, as requirements that providers reduce their prices can be documented through actual numbers and calculations rather than attitudes and ideas about the right price level. Nevertheless, good overview of data is not easy to establish, as it takes time and resources to develop and implement (Madsen & Mikkelsen, 2002).

Culture and management is another important element of Sourcing Excellence. The entire company needs to embrace that sourcing needs to be prioritised; that it needs to be placed high up on the agenda. For this to be possible, culturally-rooted changes of attitudes are often needed, which has also been the case in the interviewed companies. There, the change of attitude has started at the management level through an increased focus on the importance of sourcing and efforts to improve sourcing processes. The change of attitude subsequently spreads throughout the organisation, but often it takes considerable time for the company to realise the importance of performing well in the sourcing field. One essential prerequisite to succeeding is that the company focuses intensely on internal communication concerning the reasons why changes are introduced. The management, then, serves as a culture bearer and as frontrunners for the change process that, over time, leads to better sourcing in the company.

From a strategic viewpoint, companies state that sourcing can be divided into two elements: 1) What needs to be sourced and 2) How sourcing should be performed. With regard to the first point, much seems to indicate that the choice of make or buy is

made on the basis of a strategic decision as to where the company wants to position itself. It is, however, not possible to provide a ready-made recipe for success. There is little doubt that a well-advised Make or Buy decision is of great importance to Sourcing Excellence, but such a decision can only be made on the basis of the company's overall perception of how the company will benefit from handling matters in-house (Fine & Whitney, 1996); Franceschini et al., 2003).

Once the company has decided what should be sourced, the next step for the management is to decide how sourcing should be approached. In addition to establishing and driving the before-mentioned cultural change process, in which the importance of sourcing is made clear, the management faces another major challenge; that of developing and implementing sourcing strategies that can underpin this process. These strategies need to be in line with the company's overall strategy and with client requirements to the company, e.g. price, quality, etc. (Watts et al. 1992). According to the companies, the development and implementation of sourcing strategies are pivotal elements of excellent sourcing, a viewpoint that the authors share. In this connection, it is important to be aware that a detailed sourcing strategy is not of much use if it is not accompanied by the resources needed for its implementation. Therefore, the company should also carefully consider how many resources are needed to implement the strategy prepared. Once the strategy is in place, the next step is to operationalise it by defining specific objectives or KPIs. The objective of KPIs is to ensure that the strategy gains a footing at all levels of the organisation and that it serves as a motivational factor and support in relation to day-to-day tasks (Axelsson et al., 2005).

Staff competencies was the resource on which companies focused most, and it was simultaneously the area within procurement that holds the greatest untapped potential. Despite of the importance of maintaining a high level of sourcing competence, qualified staff is generally in short supply in the companies. It is hard for the companies to acquire the necessary competencies both through new hires and through training of the current staff. There is little tradition for training in the field of procurement in Denmark, and the pool of potential procurement staff is therefore typically characterised by a large number of autodidact procurement staff and, furthermore, competence improvement is a demanding process for staff who are used to handling procurement more traditionally. The first challenge in this context has to do with the attractiveness of procurement work. Until recently, the trend among many companies has been to perceive procurement as a »dumping ground for failed employees« (Philippart et al., 2005). The second challenge is that the knowledge needed is becoming ever more specialised and therefore harder to find. This is so, among others, because organisation according to product categories leads to increasing demands to technical competences related to the products. While globalisation has given rise to large, international corporations, the processes have been divided so that any procurement employee is

specialised in a limited part of the overall sourcing process. Elements such as contact with suppliers, quality control, security of supply, order registration, etc., are therefore handled by a multitude of staff members located at various places in the company. Conversely, in smaller companies, a single procurement employee needs to embrace the width of the company and know something about everything. In sum, the competencies needed to hold a position in a procurement department are very different in these two types of organisations.

The trend is clear: the companies' procurement budgets are rising, and evermore products and services are bought from external national suppliers, and – in particular – from global suppliers. As a direct consequence hereof, both the complexity and the dependence increase, and that translates into great demands on the procurement employee's competencies. Therefore, level of staff competence is one of the primary elements in the efforts to achieve Sourcing Excellence.

Table 2. The elements of the organisational aspect				
	Organi- sational aspect	Contents element	Explanation	Challenges
01	Sourcing process	Well-defined sourcing process	 Important, particularly for global corporations as this eases collaboration and communication between countries. Helps maintain sourcing knowledge in the organisation despite high staff turnover 	Resource-demanding to develop and follow a well- defined sourcing process
02	Structure	Implementation of organisation by product categories	Improved control of and collaboration with suppliers owing to streamlined interface Greater specialisation and product knowledge	 Harder to achieve same competencies and profes- sional knowledge like in functional structure
03		Centrally con- trolled procure- ment function	 Scale effect owing to coordinated procurement Ensures that persons with a commercial background handle the provider relations 	
04		Cross-organisa- tional Project-oriented organisational structure	Greater focus on the importance of procure- ment in the company's other functions Facilitates buy-in from other departments ow- ing to their participation in the process	Hard to practice for major global corporations due to physically spread-out departments
05	Data overview	Good overview of the company's spending	Sourcing measures may be based on data rather than gut feelings	Requires time and resources to develop and implement
06	Culture & management	Focus on the importance of sourcing from the management	Means that the entire company embraces the idea that sourcing is to be prioritised The management drives the change process	 Time-consuming and hard to change the organisational culture Requires a focus on internal communication
07	Strategy	Deliberate make or buy decision	 The choice between in-company production and sourcing is made on the basis of a strate- gic decision about where the company wants to position itself in the supply chain. 	

08		Development and implementation of sourcing strategy	 Serves as a guiding star that sharpens the company's commercial focus Contributes to driving the cultural change process 	 Alignment with the company's overall strategy Important that the allocated resources are sufficient to reach strategic objectives Hard to assess the quality of the strategy in the future
09		Development of KPIs aligned with the strategic objectives	Development of KPIs contributes much to making clear the path to the company's objectives at various levels of the company Can be implemented as both departmental and cross-department KPIs	
10	Competencies	Focus on resources	Through development of competencies, the basis for a high sourcing performance is created	Low current procurement competence level Hard to find as well as to train staff

The supplier aspect

The provider aspect contains elements related to the company's interaction with its suppliers and any tasks related to such interaction. The analysis of the empirical material revealed four overall topics: global supplier base, supplier relations, contracts and supplier competencies.

The first interesting observation in relation to the companies' suppliers is that they move further and further away from the immediate vicinity of the company. This occurs as local suppliers expand to other countries and as local suppliers are replaced by other suppliers that have a more expedient geographical situation. In a word, the supply chain becomes more global and one of the companies describes their primary future challenge as "handling local, regional and global supply chains". The specific issue addressed by the above wording is that some types of subcomponents are sourced more inexpensively from a single location globally. This is so owing partly to economies of scale, partly to low costs for, e.g., wages, transport, customs duties and other costs. For components for which transport and logistics costs comprise a large proportion of the total costs, it is typically more expedient to select a regional or local provider as this will minimise costs. It is not simply a question of sourcing everything from one place globally to reap economies of scale - the situation of the supply chain needs to be aligned according to characteristics of the mentioned costs and the logistical challenges associated herewith. Note that a local supply chain in this context should not be perceived as a series of suppliers situated close to the company's home country, but rather as suppliers that have a local presence near the companies' production or markets. Due to the increased geographical distance between buyer and supplier, communication also becomes an issue to consider. Communication is increasingly in English language rather than in Danish; and the companies, their employees and the suppliers therefore need language skills.

According to the interviews, as the supply chain becomes increasingly more important for the company's competitiveness and concurrently grows more and more global, the complexity of sourcing, including how a company chooses to handle its supplier relations becomes more important. Many different opinions were voiced on the issue of supplier relations in the course of the six interviews, and overall we assess that it is not possible to recommend one as superior to the others. The company should not employ a single strategy simply because it is preferred, but should rather segment suppliers and subsequently pursue expedient relations with its suppliers based on their segmentation (Kraljic, 1983; Olsen & Ellram, 1997; Day et al., 2010). The way in which suppliers are addressed depends heavily on the company's attractiveness seen from the point of view of the supplier. The more attractive you are as a business partner:

- the higher priority you will be given by the supplier, including any ensuing advantages,
- the greater the will on the part of the supplier to assist if a situation arises that calls for rapid delivery,
- the greater the leverage at the negotiation table, when prices and delivery terms are to be agreed.

Attractiveness may, among others, be increased through consolidation of the supplier base, and by making clear and visible efforts to develop or cooperate in partnership with the supplier (Olsen & Ellram, 1997). Value-adding collaboration may subsequently be initiated with the remaining suppliers, focussing on cost reduction in the entire supply chain through product design changes. This type of development collaboration is becoming ever more important for the optimisation of the companies' products, as internal improvements have typically already been reaped to a relatively large extent. In relation to such collaborations, procurement contracts are an important tool to reduce the inherent risk that the supplier or sourcing company exploits the information gained during the development work. However, procurement contracts are important not only in connection with development cooperation. Previously, when the procurement department's task was of a more administrative nature, contracts were less important than they are today. If the contracts entered into are not sufficient, the company risks receiving unusable subcomponents, at incorrect delivery times and may be facing various issues related to guarantee cases. Despite the importance of contracts, these remain a partly overlooked element. Precisely how contracts should be drafted to place the companies in an advantageous position in relation to the above-mentioned points was not elucidated in any definitive way. However, the companies did feel that much may be learned from the car manufacturing industry, where back-toback agreements and long-term agreements with built-in annual cost reductions are standard elements of procurement contracts.

The general trend is that more and more responsibility for the products passes to the supply chain, which means that the suppliers' competencies are of great importance for the companies' competitiveness. Suppliers hold an ever larger responsibility for the products, among others, for the following three reasons: (1) because the company does not have the capacity or actively decides not to maintain the capacity needed to handle all processes related to its production and development of products, The decision reflects a strategic choice as the company's competence is to combine procured components expediently, rather than manufacturing these. (2) Because the companies decide to exploit that suppliers can add value to the product by way of their technical knowledge and (3) because own production is abandoned for risk-minimisation reasons.

For many companies, there are often considerable costs involved when a new supplier is needed (Richardson, 1993), or as one company puts it: "Well, we have spent a considerable amount of time finding the suppliers, and then we have spent a large amount time training them,; and after all of that, we would prefer to pass on more responsibility to them and improve their position than firing them because the partnership has proven to be disappointing. Because it costs money to find them, and it bloody well also costs money to find a replacement, so that is how we try to make everything add up«. This means that large professional suppliers with high capacities and high levels of competence are, to an extent, preferred to smaller, local suppliers as these will generally not have the capacity for large-scale production. The suppliers' competencies are important to the company's competitiveness, and therefore it also becomes the company's problem if the suppliers are not at a par with the company's objectives. Therefore, the companies need to have the capacity and the tools to assess their suppliers' level of competence before an agreement is made. These considerations do not only apply to current competencies, but also to the suppliers' future potential. Some of the companies we visited are actively engaged in supplier development. The development of the supplier contributes, among others, to cost reduction in the supply chain because suppliers are given assistance for process optimisation. Additionally, it is important in relation to ensuring the quality of the components procured by the company. One of the primary challenges in connection with the development of suppliers is that the development work may require many resources and there may be a long lag before usable results are achieved. Therefore, there is a risk that the work that goes into the development tasks will prove unprofitable because the market has changed or because a competitor launches a new technology before the company can. Furthermore, the interviewed companies believe that it is essential to develop supplier-related KPIs that can be used to assess how the supplier is performing, and if the development is in line with the established objectives for quality, ability to supply products and price levels, for instance.

Table 3.	The ele	ments of	the sup	oblier ası	pect

	Supplier aspect	Contents element	Explanation	Challenges
L1	Global pro- vider base	Control of global supply chain	Optimisation of global, regional and local supply chains in view of market conditions	Communication with providers becomes harder Pressure on delivery time
L3	Relations	Effective supplier relationship management	 Provider segmentation Consolidation of provider base Proactive with regard to providers to identify opportunities for collaboration 	 Delicate balance between collaboration and use of force Ensuring rights in connection with product development Data overview and transparency are necessary
L4		Attractiveness from provider's viewpoint	 The more attractive you are as a busi- ness partner, the stronger the will of the provider to assist and the more power at the negotiation table when prices and terms of delivery are to be agreed 	 Challenges associated with attractiveness seen from the provider's viewpoint if the procurement budget is small
L5		Collaboration with the provider to reduce costs	 Focus on reducing costs from the whole supply chain through product design changes and supply chain process optimisation 	
L2	Contracts	Professional procurement contracts	Back-to-back agreements and long-term agreements with built-in annual cost reductions	 A lack of focus entails a risk of ending up with incorrect sub-com- ponents, provided to the company at the wrong time or guarantee issues.
L6	Provider competen- cies	Focus on the level of competence	 Focus on the level of competence when selecting providers Development of providers and follow-up using KPIs. 	 Delicate line between a high level of competence and an attractive price Development of providers is resource-demanding and time-consuming

The industry aspect

The industry aspect comprises the elements related to the industry or line of business within which the company is situated. Some of these elements are hard for companies to influence because they are situated beyond the range or influence of the company. The analysis identified three elements: turbulence and competition, risk, and benchmarking.

There are several indications that the companies' approach to sourcing and, to some degree, to the level of sourcing depends on the conditions that characterise the industry within which the company is situated. One important factor that separates the industries is the degree of turbulence and competition observed. The greater the competition in an industry, the more intense the pricing war to win market shares. This affects the profit negatively. A low profit margin presses the company to become effective in relation to sourcing as procurement cost reductions translate directly to the company's bottom line. Therefore, we also observed that the companies situated in industries that are characterised by a high level of turbulence and competitiveness have

gone further in the field of procurement than the remaining companies. Their high level of procurement competence is quite simply necessary for them to survive. In contrast, the remaining companies will often be of a more reactive nature, and therefore they will not have advanced quite as far with regard to new sourcing measures.

Another industry-related element that affects Sourcing Excellence is risk and the handling of risk. Due to globalisation, companies need to be aware of far more risk factors than previously, e.g. financial crises and volatile raw material markets. Some industries are subject to greater risks than others, just like some companies are better geared for crisis handling than others. To take an example, one of the companies was affected particularly hard by the financial crisis because its turnover was halved overnight while its fixed costs remained unchanged, an incident that came close to threatening the company's survival. The reason why this company was affected so intensely was, quite simply, that it was not sufficiently flexible in relation to the "new world order". In direct consequence of the crisis, the company has now decided to outsource far more extensively in the future. Thereby, the company aims to reduce its fixed costs and become more agile and, in turn, be prepared if a similar situation should arise in the future.

The final element under the industry aspect is benchmarking, where companies assess their own level by comparing themselves to other similar companies. Naturally, the hope is to spot what can be learned and transferred to ones own organisation. Benchmarking may either be performed by comparing the company to another company within the same industry or to a company in another industry. Through benchmarking,

Tab	Table 4. The elements of the industry aspect					
	Industry aspect	Contents element	Explanation	Challenges		
B1	Turbulence & competition	Handling of high turbulence and competition in the industry	These companies are often at a higher sourcing level as this is needed to survive due to low profit margins			
B2	Risks	Focus on and active handling of risks	 As globalisation pervades, many risk factors surface, including the finance crisis, volatile raw material markets and component allocation situations Excellent companies develop an active strategy for the handling of these sourcing risks 			
В3	Benchmarking	Benchmarking in relation to others	 Through benchmarking, an understanding is gained of the company's strengths and weaknesses Takes place in relation to the competition and in relation to other good companies in other industries Companies are excellent compared with their competition or compared with companies in other industries 	 An excellent sourcing organisation would not work equally well if it was duplicated and inserted into another context, as excellent sourcing is context embedded. 		

an understanding is gained of the company's strengths and weaknesses. This gives the company valuable information that will allow it to improve its sourcing ability further. Every industry has its peculiarities, and therefore it is not certain that a company can perform at the same level as a good company from another industry. Keeping this in mind, benchmarking with other industries is, indeed, a powerful tool that may be used to render visible advantages and drawbacks associated with different ways of handling the sourcing task. This provides a good starting point for achieving sourcing improvements (Carr & Smeltzer, 1999).

The result of the analysis phase is a sourcing excellence model that comprises 22 contents element divided across four aspects, i.e. the organisational aspect, the supplier aspect, the industry aspect and the customer aspect. As a whole, the four aspects form *Sourcing Excellence*, as illustrated in Figure 2 – Sourcing Excellence model.

Industry
- Turbulence & competition
- Risks
- Benchmarking

Suppliers
- Global supply base
- Professional contracts
- Supplier relations
- Supplier competencies

Organisation
- Sourcing process
- Organisational structure
- Data overview
- Culture & management
- Strategy
- Competencies

Figure 2. Sourcing Excellence model

5. Summary and conclusion

The objective of this study was to explore what it means to be excellent at sourcing. This was done on the basis of an explorative study performed in five major indus-

trial companies where procurement plays an important role. A range of factors were identified, explored and then grouped into four aspects, (1) the customer aspect, (2) the organisational aspect, (3) the supplier aspect and, finally, (4) the industry aspect. The four aspects of Sourcing Excellence contribute with an overview of the contents elements that you need to consider to fully understand what Sourcing Excellence is. In this sense, then, sourcing is a cross-organisational discipline in the company. The most expedient way to work effectively with this discipline is by understanding the four presented contents elements on the basis of the current situation and conditions.

The four aspects and the 22 contents elements also illustrate the complexity of the sourcing situation and demonstrate that there is no "quick solutions" and that no "one size fits all models" can be used to describe or achieve Sourcing Excellence, as it is context embedded. In line herewith, the context stands out in the data material as the most important perspective on achieving excellence. Thus, there are many indications that the companies that excel in sourcing are those that have outsourced extensively or in which a high degree of sourcing exists relative to in-house activities and which are under pressure from the market to maintain and defend their profit margins. To put it differently: "necessity is the mother of invention" and the companies that are "forced" to being effective and efficient are seemingly also the companies who have advanced more with regard to sourcing. However, the data material is explorative and limited to only five companies, why this hypothesis needs to be analysed further before it may be verified.

In addition to indicating that excellence in sourcing is context-embedded, two observations pervade across the five companies. The first observation that comes to mind is the dominance of the cost reduction argument across the studied companies. The term COST was the most used word in the interview transcriptions and it was a recurring topic in all interviews. The financial crisis and the following pressure on the companies' earning potential has very much contributed to this. The fact that over the past 10-20 years, companies have outsourced activities to external partners (Arlbjørn et al., 2013) has only added more focus to the opportunities of achieving cost reductions by reducing the cost of the goods. Procurement has thereby become more important for companies than was previously the case which, in turn, has added further focus to what it means to be excellent at sourcing. The customer aspect focuses extensively on this question as it is the market that provides the pressure that makes it essential to use sourcing to ensure stronger competitiveness for the companies.

The second pervading dimension in the data material is the challenges associated with the organisation of the procurement function under the organisational aspect.

A particularly high number of the sub-elements under the organisational aspect were perceived as problem areas by the companies. In this context, the competence level in the procurement department should be mentioned. The competence level has not developed at a par with the explosive development through which sourcing »suddenly« has become a strategically important activity and process in the companies. Additionally, all the companies are »struggling« to make the cross-organisational process work within a functionally divided company structure where silo-thinking is pervading. Companies attempt to solve their issues with the cross-organisational sourcing process by adopting well-defined procurement processes, but the various departments that should take ownership to this process probably do not feel a sense of ownership of these processes. Procurement is frequently made to spearhead the transformation that the companies undergo in relation to sourcing processes, but is not up to (read: does not hold the competences needed to) solve this task adequately. Due to the increased importance of sourcing, the lack of dedicated training programmes in the field and the generally sparse experiences with the management and leadership of an extended company in which the majority of activities take place externally remains an area riddled with problems for many of the companies. The area and the function are therefore characterised by a high staff turnover and frequent re-structuring as companies engage in trial-and-error attempts to find the best possible organisation of these activities This approach will put procurement functions under increased pressure in the future. A new study has recently demonstrated and discussed an increased dynamic in the companies' globalisation strategies and business models (outsourcing, insourcing, offshoring and backshoring) (Arlbjørn et al., 2013). This dynamic will affect the function and responsibility of the procurement function and will translate into increased requirements on the competence profiles of future procurement staff.

There are thus a number of unsolved issues which impede sourcing from actively contributing to the companies' achievement of competitive advantages. Specifically, two issues were observed in the companies, which cause problems; the focus on cost reductions as identified in the customer aspect and the organisation of the procurement function described under the organisational aspect.

This study complements previous studies. These studies, have, among others, explored the prerequisites to and the characteristics related to excellent (global) sourcing (Trent & Monczka 2005; Mohamad et al., 2009), and core values for success with strategic sourcing (Chan et al., 2007). The present study complements these studies and contributes with further insights by identifying and exploring four aspects and 22 contents elements of the sourcing excellence concept. This article thus paves the way for further studies into the individual aspects' and content elements' importance for sourcing excellence.

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Notes

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- 2. The interviews made it clear that a high staff turnover within the procurement departments of many of the companies was one of the primary issues.