

Paper title: Tasks of the purchasing function

Abstract:

The present study provides in-depth insights into how the purchasing function's tasks are defined, divided and performed. Through an in-depth single case study the results shed new light on the purchasing function's tasks when managing customer-supplier interfaces. By modifying Araujo et al's (1999) typology of customer-supplier interfaces as theoretical framing the case study reveals that the features of the task, the involvement of other actors, and the time horizon, all influence how the purchasing function's tasks are defined, divided and performed. The study's contributions are trifold regarding the theoretical implications. First, the study highlights new ways of defining the purchasing tasks through interaction. Second, the study contributes with the discussion of the moving boundaries between and within firms. The purchasing function needs to be capable of understanding and manage the boundaries between direct and indirect relationships through interaction with other actors. Finally, the study highlights the need for development of capabilities for managing interaction and balancing the strategic and operational tasks. The capabilities include understanding and managing the time horizon as the strategic tasks relates to having a long-term future outlook.

For firms, a new outlook on the purchasing function is required since the features of the tasks are being altered. Developing from primarily reactive and specific tasks to interactively developed and emergent tasks entails a new way to evaluate the performance of the purchasing function as well as a new understanding of the on-going alignment of internal roles and division of tasks.

Keywords:

Purchasing function, tasks, interfaces, resources, customer-supplier relationship

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INTRODUCTION

The purchasing function has gained an increasingly strategic role in firms (Schneider & Wallenburg 2013; Spina et al. 2013; Araujo et al. 2016) with the primary task of accessing supplier resources (Roseira et al. 2010; Roseira et al. 2013; Araujo et al. 2016; Gadde et al. 2010) through management of customer-supplier interfaces. Traditionally, the primary task of the purchasing function can be formulated as securing availability of products and services in a cost-effective way (Gadde et al. 2010) by gaining access to supplier resources. The purchasing function must therefore manage the supply base by selecting, coordinating, appraising the performance of, and developing the potential of suppliers (Lysons & Gillingham 2003) in order to gain, maintain and develop the resource access. The task of securing availability is performed through the design and management of inter-organizational relationships (Spring & Araujo 2014; Lintukangas et al. 2010; Lutz & Ellegaard 2015) at customer-supplier interfaces.

Due to business environment dynamics and the changing role of the purchasing function the skills needed for effective performance of tasks (Knight et al. 2014) at the level of the purchasing function become more important. The tasks have become more strategic and other actors, internal as well as external, are involved in the performance of the purchasing function which influences how the purchasing function's tasks are defined, divided and performed. Araujo et al (1999) have proposed a typology of four different customer-supplier interfaces which takes its departure in the different types of resource interfaces in the relationships between customers and suppliers. Emphasis in the typology is on how customer and supplier firms can combine resources and synchronize their activities through the four different interfaces at a firm-level. In this regard, the purchasing function has different roles and tasks at each of these interfaces.

The above mentioned factors all have implications for our understanding of the purchasing functions different tasks for managing the different interfaces. As it is the purchasing function which is the primary channel to access the supplier resources (Roseira et al. 2010; Roseira et al. 2013; Araujo et al. 2016; Gadde et al. 2010) we are interested in understanding how the purchasing function's tasks are defined, divided and performed when managing the different interfaces. The research question for the present study therefore sounds: *“How are the purchasing function's tasks defined, divided and performed?”*

The research question is answered by applying an in-depth case study design of the purchasing function at Hydac A/S, a Danish hydraulic solution firm. By analyzing a critical event affecting the purchasing functions management of customer-supplier interfaces the results shed new light on the way the purchasing function's tasks are being defined, divided and performed. The study's contributions are trifold regarding the theoretical implications. First, the study highlights new ways of defining the purchasing tasks through interaction. Second, the study contributes with the discussion of the moving boundaries between and within firms. The purchasing function needs to be capable of understanding and manage the boundaries between direct and indirect relationships through interaction with other actors. Finally, the study highlights the need for development of capabilities for managing interaction and balancing the strategic and operational tasks. The capabilities include understanding and managing the time horizon as the strategic tasks relates to having a long-term future outlook.

Despite its importance and an increasing academic interest the purchasing discipline is still immature as a research field (Spina et al. 2015) so the study provides theoretical and empirical discussions to enhance the field. The remainder of the paper is organized as follows: The second section outlines the theoretical framing for the study. In the third section the methodology is presented, while the fourth section presents the case study and the analysis hereof. In the fifth section the findings from the analysis are discussed, and finally, conclusions are drawn in the sixth section.

THEORETICAL FRAMING

The purchasing function develops continuously in a dynamic process in which tasks in relation to different partners are constantly changing (Araujo et al. 2003) and becoming more strategic. Other actors, internal as well as external, are involved in the performance of the purchasing function so the following section discusses the tasks of the purchasing function in relation to management of customer-supplier interfaces. .

THE TASKS OF THE PURCHASING FUNCTION

The basic task of the purchasing function can be formulated as to secure availability of products and services in a cost-effective way (Gadde et al. 2010) by gaining access to supplier resources. The connections among resources are identified as interfaces (Gadde 2014) and the features of these interfaces are contingent on the adaptations between resources. The use and value of a particular resource results from the combination and interaction with other resources in a business relationship (Mouzas & Ford 2012) and the purchasing function must therefore manage the supply base. This task is performed by selecting, coordinating, appraising the performance of, and developing the potential of suppliers (Lysons & Gillingham 2003) in order to gain, maintain and develop the resource access. The task of securing availability is performed through the design and management of inter-organizational relationships (Spring & Araujo 2014; Lintukangas et al. 2010; Lutz & Ellegaard 2015) at customer-supplier interfaces. The purchasing function has become increasingly responsible in researching the potential of suppliers and the development of this potential within complex relationships (Ford et al. 2011) so according to Schiele (2012), buying firms should strive to become preferred customers for their most important suppliers. In order to achieve a preferred customer status the purchasing function has two important tasks; to identify innovative suppliers and to generate supplier management strategies for innovation.

When managing the suppliers, tasks are to be defined, divided and performed at the interface between the buying firm and the supplying firm. According to Baraldi (2003) interfaces shall be understood as contact points. An example of contact points between a buying firm and a supplier is when resources are combined, like when components from the supplier are assembled by the buying firm, in order to create value for the buying firm's customer. Or when buying and supplying firm join activities to develop a new product. What a supplier can do for and/or with a customer depends on how both parties combine their resources and capabilities (Mota et al. 2015) so the definition and division of tasks between buyer and supplier is important. For example Schiele et al (2011) argue for advantages of dividing development-oriented tasks to suppliers during innovation processes as it deepens the suppliers' knowledge of the product/technology. Knowledgeable suppliers are valuable for the buying firm because as MacDonald et al (2016) argue, buying firms increasingly seek to buy customized solutions. The customization affects the fundamental issues of dividing tasks at the interfaces between buying and selling firm as the solutions are interactively developed. The solution is not given beforehand and therefore the tasks are also emergently developed accordingly.

Related to managing customer-supplier interfaces, buying firms must consider two important issues regarding access to resources. First, a classic make-or-buy decision (Welch & Nayak 1992) about what resources should be controlled internally and what resources should be accessed externally from suppliers? Second, how should the buyer access suppliers' resources

(Gadde & Håkansson 1994)? In addition to these two issues, Araujo et al (1999) argue that the buying firm's context and the context of the buying firm's customer (the user) need to be taken into consideration. For the supplier it can be important to know the context and the related conditions under which their product is to be used, for example if the buying firm sells its solutions to wind turbine producers (the user) where the wind turbines are placed in wind parks experiencing extreme weather conditions.

FOUR TYPES OF INTERFACES FOR GAINING ACCESS TO SUPPLIER RESOURCES

The task of gaining access to supplier resources has become increasingly important as no company can control all the resources it needs. Buying firms thus need a variety of supplier resources as the capabilities of suppliers are diverse. Araujo et al (1999) present a typology of four different categories of interfaces through which the buying firm can gain access to supplier resources. These interfaces differ in terms of the productivity and innovativity costs and benefits associated with the use of each respective resource interface. The productivity of firms is determined by the efficiency in the utilization of a given resource combination at any time, whereas innovativity is related to the development of new resource combinations over time.

The four interfaces are *standard*, *specified*, *translation*, and *interactive*. In a *standardized interface* the supplier does not need to know about the user context nor do they need to understand the producer context as the products exchanged are standardized. This type of interface corresponds to the classical arms' length market relationship so for the purchasing function the task is simple and is mainly related to price and requires only a simple sales-to-purchasing functional interface. In a *specified interface*, the supplier requires detailed specifications about the characteristics of the product and/or how it is to be manufactured. This will typically be customized product where the supplier needs certain directions, for example product characteristics, from the customer. In a *translation interfaces*, the supplier translates the functional description given by the customer into a product. Here the buyer allows the supplier to take important decisions on how to best meet the user requisites. Accordingly, the supplier needs knowledge of the producer and user context. Finally, both the buyer and supplier develop the specifications together in an *interactive interface*, based on their joint knowledge of user contexts. The interactive interface thus becomes a joint learning process for both customer and supplier. According to Araujo et al (1999) the most important distinction between the different resource interfaces is to what extent the customer and the supplier are aware of each other's contexts as the distinction helps define and divide the tasks between customer and supplier.

FEATURES OF THE PURCHASING FUNCTION'S TASKS

The four types of interfaces have consequences for the buying firm's access to, and exploitation of, the resources of their suppliers. Further, management of the supplier interfaces also influence the tasks of the purchasing function through *involvement of other actors*. In a standardized interface, the way tasks are defined, divided and performed is clear and aligned. The purchasing function shall just order the standard component from the lowest cost supplier and secure availability when needed. In other words, the task is commercially focused. For the purchasing function only an interface with the supplier's sales department is needed. In a specified interface, the tasks for the purchasing function are similar to the standardized though they might have to be aligned with the internal R&D-department regarding technical issues.

In a translation interface, the supplier plays a more proactive role. Here the purchasing function will typically have to align its tasks with the R&D-department about whether the proposed solution from the supplier can live up to the technicality demanded in the directions from the user. So the tasks for the purchasing function also get more relational-focused in the sense that internal as well as external relations have to be managed with regards to the definition and division of the tasks.

The features of the tasks become more emergent and complex in the interactive interface. The tasks are more loosely defined and have to be aligned together in a dynamic, interactive interplay with other actors – internal as well as external. The user, and sometimes even sub-suppliers, also has to be involved in defining the tasks to be performed. The involvement depends on the problem or project and how well-defined it is – whether the project comes from the user, customer or supplier. For the purchasing function, the features of the tasks are in flux as they are developed in interplay with other actors. Therefore, focus is to manage and align expectations and demands and meanwhile securing a commercial perspective.

The concept of *time* also plays a role at each interface as the time horizon regarding costs and benefits are different. Managing the time horizon for the purchasing function is a task of balancing between seeking short-term advantages, e.g. choosing the supplier with the cheapest unit prices, or long-term advantages, e.g. by investing time and resources on developing a supplier. The choice all depends on the wider network effects and is dependent on the resources which the supplier has developed over time and how these resources are being used. In the standard and to some degree also the specified interface the tasks are mainly related to securing availability in the short-term. The costs and benefits associated with these interfaces mainly relate to short-term productivity gains whereas managing the translation and interactive interfaces relates to both long-term productivity- and innovativity gains.

For the purchasing function the distinction between short-term and long-term costs and benefits requires a future outlook and an understanding of the features of the time concept. Time influence development processes (Håkansson et al. 2013, p.109; Halinen et al. 2012) as the current episode is impacted by previous interaction and expectations regarding future interaction (Gadde et al. 2010; Håkansson et al. 2009) and includes the factors what has happened, what is going on and what future possibilities look like. These time factors are less important at the standardized and specified interfaces but become increasingly important at the translation and interactive interfaces due to the interactive aspects of these interfaces. It is through interaction that firms learn how to specialize their activities in order to create mutual benefits. The actors position themselves as a means of specialization and any form of specialization is strongly dependent of how others specialize (Gadde et al. 2010, p.128) so specialization over time also implies the creation of interdependencies between the firms as they rely on access to each other's resources. Further, when buying and supplying firms combine their heterogeneous resources the firms enter a path together so these actors co-evolve over time. In the actor's small world, jointness and co-evolution are significant characteristics related to interaction in time and space.

Another important aspect related to time, as Araujo et al (1999) also conclude, is that the need for access changes over time. Customer demands might change or the relationship between customer and supplier may develop in a way which alters the way resources are accessed. Further, when managing these interfaces, it is also important for the purchasing function to be aware of the overall task of securing availability in a cost-effective way. The task is to find the right balance between the direct and indirect costs associated with resource access

at each respective interface. Interactive interfaces are more resource demanding and requires investments of time, money and/or resources from all involved actors and often involvement from several other functions than sales and purchasing - perhaps even from the user as well.

The typology proposed by Araujo et al (1999) takes its departure in the different types of resource interfaces in the relationships between customers and suppliers at a firm-level. Emphasis in the typology is on how customer and supplier firms can combine resources and synchronize their activities through the four different interfaces. In this regard, the purchasing function has different roles and tasks at each of these interfaces. As it is the purchasing function which is the primary channel to access the supplier resources (Roseira et al. 2010; Roseira et al. 2013; Araujo et al. 2016; Gadde et al. 2010) we are interested in understanding how the purchasing function's tasks are defined, divided and performed when managing the different interfaces.

THEORETICAL FRAMING

The theoretical framing in Table 1 presents the features of the tasks, the involvement of internal/external actors, as well as the time horizon, at each of the four interfaces. The purpose is to highlight the factors influencing the definition, division and performance of the tasks of the purchasing function.

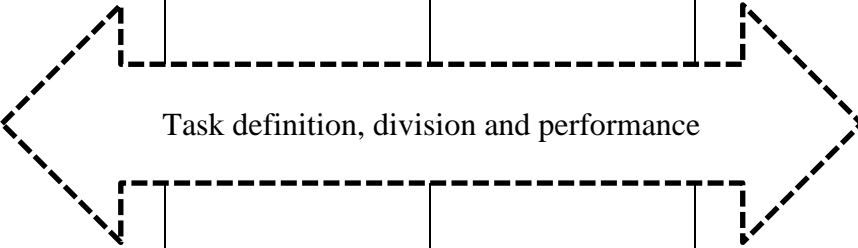
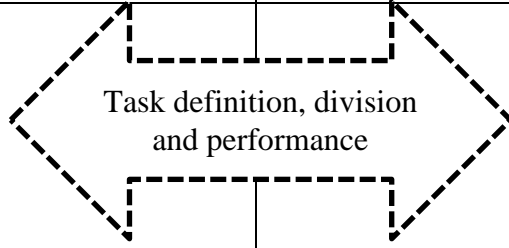
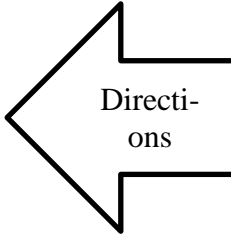
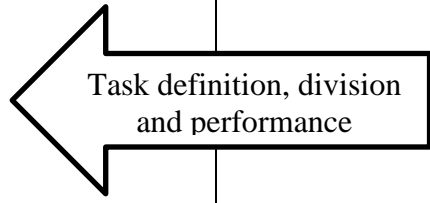
Table 1 - Theoretical framing

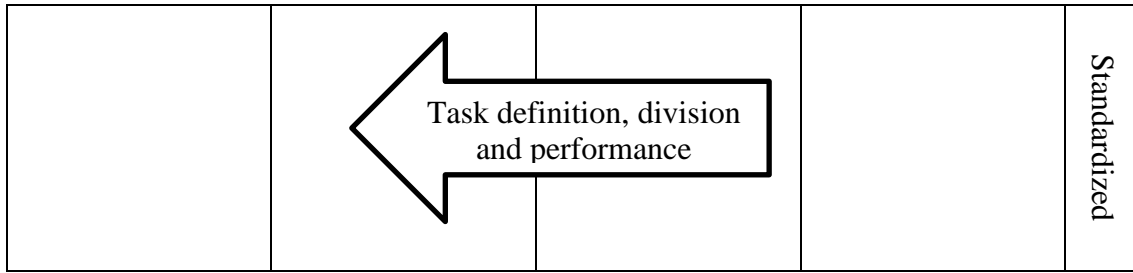
Customer - supplier interface	Characteristics (Araujo et al, 1999)	Customer-supplier relationship	Features of the tasks (definition, division, performance)	Involvement of internal actors (other department)	Involvement of external actors (users and suppliers)	Cost/benefit time horizon
Interactive	Joint development based on combined knowledge of use and production	High level of interdependences also towards other actors, close collaboration	Emergent and complex	High involvement	High involvement	Long-term future orientation
Translation	Directions given by customer based on user context and functionality required	Medium degree of interdependence, close collaboration	Clear to some degree	Medium to high involvement	Medium to high involvement	Long-term future orientation
Specified	Precise directions given by customer on how to produce	Low degree of interdependence	Clear and simple	Low	Low to none	Short-term future orientation
Standard-	No direc-	Arms-length	Clear mu-	Low to	Low to	Short-

ized	tions. No specific connection between user and producer contexts		tual understanding and simple	none	none	term future orientation
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The above presented factors lead to the following Table 2 which illustrates the task definition, division and performance at each of the four interfaces. The arrows shall illustrate the scope of the directions as well as the way tasks are defined, divided and performed. The lines are massive at the standardized and specified interfaces, as there is mutual understanding and simple definition, division and performance of tasks. Further, the user and sub-supplier context are not important at these two interfaces. At the translation interface the lines are massive between user and customer as the directions and tasks from the user are clearly defined. Whereas between customer and supplier, the lines are dotted as the definition, division and performance of tasks is more emergent and complex. The conditions similar at the interactive interface, yet here the user and sub-supplier contexts expand the scope of task definition, division and performance.

Table 2 - Task definition, division and performance

Sub-supplier	Supplier	Customer	User	
				Interactive
				Translation
				Specified



The scope of viewing the purchasing function's tasks is expanded by including the user context and since most purchasing research is related to the supply side (Spina et al. 2015) the present study has potential to discuss the wider network effects.

METHODOLOGY

The study aims at obtaining an in-depth understanding of the phenomenon of how the tasks of the purchasing function are defined, divided and performed. The case study method is applied (Dubois & Gadde 2002) with the purpose of illuminating new ways of thinking about the research problem in a specified context within a bounded period of time.

CASE STUDY METHOD

The study is based on a qualitative single case study of the interaction between the phenomenon of the purchasing functions tasks and its context. The study applies an abductive approach, which Dubois & Gadde (2002; 2014) coins systematic combining, to advance existing theories (Halinen & Törnroos 2005) and implies a continuous movement between an empirical world and model world (Dubois & Gadde 2002).

The research problem is studied at the case company Hydac A/S (www.hydac.com), a Danish hydraulic company founded in 2000 with around 80 employees and a turnover in 2017 of around 34 Mio. EURO. The company, a subsidiary to the worldwide German concern HYDAC International, develops and sells hydraulic solutions primarily for serial production in the wind turbine industry. The study will look at actors in action (La Rocca 2013), focusing on the purchasing functions management of tasks. The unit of analysis is thus the relationship and includes other actors who actually define the actor and will focus on critical processes in the relationships. The starting point is thus certain processes and/or practices and then investigating how actors work with these processes and/or practices. In order to capture changes over time the study follows the case of interaction events as it unfolds at different points in time. In sum, looking at actors from an interaction perspective requires a focus on actors in (re-)action. La Rocca suggest an open methodological approach of possibly multiple methods which allows for deep involvement in the research context in both time and space (2013).

DATA COLLECTION

The research has been carried out in the context of the purchasing function at Hydac A/S and the case centers round a critical event (Easton 2010) related to management of customer-supplier interfaces. The event is critical for the purchasing function as it alters the purchasing function's tasks related to managing its supplier interfaces, in this regard towards suppliers of motors. The data collection is divided into two phases where the first phase covers the critical event. Data for phase 1 has been collected between December 2015 and April 2016 in order to gain an understanding of what is characterizing the critical event using qualitative techniques like doing observations (Gold 1958), making field notes, read and analyze documents, and read and analyze written communication. The purpose is thus to learn, open up and identify dimensions of the problem (Carson et al. 2008) by focusing on the interactions between functions and firms. In order to investigate how actors change over time implies studies over time (La Rocca 2013) so retrospective interviews are conducted in phase 2 to gain an in-depth understanding of the how and why of the preliminary results. Further, this approach allows for matching between the theoretical framing, data sources and analysis (Dubois & Gadde 2002; Dubois & Gadde 2014) to possibly identify new interesting angles to the problem (La Rocca 2013; Berg 2009).

Taking a system view approach (Abnor & Bjerke 1997) interviews and observations are the main methods for gathering data in order to fulfill the purpose of revealing dimensions of the problem (Carson et al. 2008). The empirical data has been collected via observations by participating in both internal and external meetings with both customers and suppliers as a participant-as-observer (Gold 1958; Saldaña 2016), as well as in-depth interviews, and thereby collecting active data (Dubois & Gadde 2002). Observations and field notes were used in the beginning to gain an overview of the purchasing functions interactions. The interviews were carried out at Hydac A/S and involved key internal informants identified in phase 1. The interviewees were chosen based on their experience with and involvement in the case and consisted of the CEO and the Supply Chain Manager. The interviews took place at Hydac A/S August, 2016. The informants were informed beforehand about the purpose of the interviews and the overall themes. The semi-structured interview guide was based on overall themes about industry changes, actor roles and organization of the purchasing function. Further, a Sales Engineer, who has been working together with Hydac A/S since 2013, from one of the motor suppliers – Swedish Motors – was interviewed in February, 2018.

The following two tables show how primary (Table 3) and secondary data (Table 4) were collected:

Table 3 - Collection of primary data

Phase 1		
Method	Description	Data collection
Observations and field notes	Participating in both internal and external meetings with both customers and suppliers as a participant-as-observer, taking field notes and “stumble data” (Brinkmann 2014) from formal and informal discussions at Hydac A/S	Seven internal meetings - December 2015-April 2016 One external visit at Mid-German Motors with Alpha and Spanish Solutions – December 2015 One internal visit from Mid-German Motors – February 2016 One internal visit from Swedish Motor – December 2015 One telephone conference meeting with Alpha – March 2016 One business review meeting with Alpha - April 2016
Phase 2		
Method	Description	Data collection
In-depth interviews	Semi-structured interviews with key internal informants from Hydac A/S (recorded and transcribed)	Hydac A/S, CEO - August, 2016, 1.5 hour Hydac A/S, SCM - August, 2016, 1.0 hour
Supplier meeting	Meeting with supplier (recorded and transcribed)	Swedish Motors, Sales Engineer – February, 2018, 0.40 hour

Table 4 - Collection of secondary data

Method	Description	Data collection
Company documents	Customer specifications Supplier offers Internal files	Technical Purchasing Specifications from customer E-mails and concrete offers from suppliers Internal reports
Summary	Summaries and Master of Minutes (MoM) of meetings	Summaries and MoM's of meetings
Internal and external written communication	E-mail correspondences Industry reports	On-going e-mail threads, both Hydac A/S internal and between Hydac A/S and external actors Official MoM's from internal and external meetings Reports from the official Danish Wind Industry Association (www.windpower.org)

DATA CODING AND ANALYSIS

Analysis of the collected data followed Miles & Huberman's (1994) framework for analysis of qualitative data to secure transparency of the analysis through a systematic approach building on three phases; 1) data reduction, 2) data display, and 3) conclusion drawing and verification. The data reduction phase had the purpose of selecting, focusing, simplifying, abstracting and transforming the data (Miles & Huberman 1994). First, data was selected based upon its potential relevance for representing the case from multiple sources. A thorough description of the case is often necessary to reveal the complexities involved requiring access to in-depth and broad empirical data (Halinen & Törnroos 2005). The multiple sources of data enables cross-checking of information through triangulation, which Lincoln & Guba (1985) recommends for ensuring credibility in qualitative studies. Triangulation is about "*self-consciously setting out to collect and double check findings*" (Miles & Huberman 1994, p.226) in order to validate the findings. Further, multiple sources of information may also contribute to revealing new dimensions of the research problem (Gadde et al. 2012) and thereby redirecting the study.

The data display phase provided an organized, compressed assembly of information (Miles & Huberman, 1994) as all the data files were coded in Nvivo based upon the theoretical framing. During the coding process, the coding categories were revised when new categories emerged or the initial codes did not work (Seuring & Gold 2012; Saldaña 2016) through cycles of category refinement. The initial first cycle of category building took its departure in Araujo et al's (1999) typology of customer-supplier interfaces coding for:

- *Characteristics* of interfaces
- *Directions* set by users

- *Tasks* associated with these directions

During the category refinement cycle the data coded in Nvivo were then extracted in order to refine the categories manually by discussing the interfaces and tasks with peers. The categories were refined and includes *involvement of other actors* and *time horizon* and Table 5 shows the final coding categories.

Table 5 - Coding categories

Category	Coding
Customer - supplier interface	Directions, specifications, tasks
Customer-supplier relationship	Relationship characteristics
Features of the tasks	Definition, division, performance
Involvement of other actors (internal/external)	Actors and actor roles: <ul style="list-style-type: none"> - Firm-level - Functional-level
Cost/benefit time horizon	Significant changes, (Potential) Outcomes

In the discussion of results phase the data from the empirical study were discussed against the theoretical framing for identification of contributing findings and conclusions.

CASE STUDY AND ANALYSIS

The following section presents and analyses the case of purchasing task definition, division and performance by studying the purchasing function at the company Hydac A/S (www.hydac.com), a Danish hydraulic company founded in 2000 with around 80 employees and a turnover in 2017 of around 34 Mio. EURO. The company, a subsidiary to the world-wide German concern HYDAC International, develops and sells hydraulic solutions primarily for serial production in the wind turbine industry. In recent years, Hydac A/S has been a preferred supplier of different hydraulic solutions towards its biggest and most important customer, the Danish wind turbine producer Alpha. In the present study, focus is on Hydac A/S as the buying firm (customer) and Hydac A/S' purchasing functions tasks. Specific attention for the purchasing function is towards managing supply for Hydac A/S to be able to deliver hydraulic solutions for the wind turbine producers (user). All companies appearing in the case, except Hydac A/S, have been anonymized.

TASKS OF THE PURCHASING FUNCTION AT HYDAC A/S

For the purchasing function at Hydac A/S the basic task is to secure availability of goods for serial assembly of hydraulic solutions for users in the wind turbine industry. Hydac A/S delivers its solutions by sourcing and assembling goods from suppliers of products like motors, steel tanks and hoses. The solutions are assembled at Hydac A/S' facilities and afterwards send to Alpha's production sites where the hydraulic solutions are assembled in the wind turbine nacelle, see Table 6.

Table 6 – Flow of material resources from sub-supplier to user

Sub-supplier	Supplier	Customer	User
Materials/components, like steel plates and copper	Commodity goods, like motors, steel tanks and hoses	Hydraulic solutions, like gear oil tanks	Wind turbines

The solutions have been developed in cooperation between Alpha and Hydac A/S. Alpha is a much larger firm and they are the primary drivers, meaning they sometimes bring in the expertise of the commodity suppliers. In the process of developing the solutions, it is mainly the R&D-department from Hydac A/S who collaborates with the R&D-department at Alpha about finding the right products. So the task of searching for potential suppliers is done by the R&D-department, as they have the technical knowledge.

Once the solutions can live up to the requirements from Alpha the technical specifications for the solutions are defined in a Technical Purchasing Specification (TPS) which defines the features of the resources required. For the purchasing function at Hydac A/S the features of the TPS defines the precise features of the products and therefore the interface towards the suppliers is standardized/specified. The majority of costs of sourcing and assembling these solutions are associated with the sourcing of external goods. Yet the purchasing function did not have a strong internal focus at Hydac A/S as the user focus was at the technical product solution. The features of the purchasing tasks are thus related to the directions from the user context: *"When we started having a close dialogue with the customer it was their R&D-*

function which had the power. It was technical solutions which the wind turbines was based on,” explains the CEO of Hydac A/S.

Alpha makes up a large part of the Danish market for hydraulic products and sells its wind turbines to huge, international energy companies through a bidding process. In order to win these bids, there is a high focus on having the lowest prices and continuously work on cost-out. Cost-out is achieved by optimizing the current solutions and by developing new solutions so the role of the purchasing function has become more and more important. As the CEO explains: *“We realized a couple of years ago that we could not earn the money in the sales department but we had to earn money through the purchasing function. So we have been forced to have a more strategic approach to purchasing than we had before.”* The Supply Chain Manager at Hydac A/S confirms an increased focus in the company on the purchasing function in general: *“I also see that we have a much bigger internal focus on purchasing. Earlier on there was a sales focus and purchasing was a service function. And now we experience that purchasing is actually essential in order to create value as the pressure from the customers implies that it is the supply chain function which creates the bottom line.”*

Hydac A/S has experienced exponential growth as a supplier to Alpha. But the user context is changing as the global wind turbine industry is maturing (Lorentzen et al. 2015) which also has an influence on the competition which Hydac A/S is experiencing. The CEO explains: *“3-5 years ago our competitors were primarily Danish. But the wind turbine industry has become so strong that the producers have started to look across borders and search for and upgrade foreign actors. So today our biggest competitors are Spanish.”* He adds that this development entails *“...that we cannot directly do the same – just better – but we actually have to do some significantly different things.”*

However, the features of the user context challenges the purchasing function’s ability to source the goods for assembly in a cost-effective way since the number of units is small. The small number of units entails buying commodity goods from the suppliers. *“That implies that we cannot be in control with the suppliers’ processes because the number of units is so small. So we have to find a balance between what the customer expects from us and what our suppliers are able to deliver,”* as the CEO explains. When buying commodity goods the interface towards the suppliers are thus standardized or to some extent specified. Thereby the tasks have already been defined and divided leaving the purchasing function with little room for shaping the performance of the tasks as most factors already have been specified.

DEFINING, DIVIDING AND PERFORMING THE TASKS OF THE PURCHASING FUNCTION AT HYDAC A/S

Among the solutions which Hydac A/S now delivers to Alpha is a Power-tank. Alpha developed the tank some years ago in cooperation with its suppliers and sub-suppliers. The tank needs back-up power from motors so Alpha makes direct contact to a Swedish motor-producer, Swedish Motors, requesting a motor which have to live up some specific demands regarding design and technical capability. Yet there is an issue regarding the space available for putting the motor on the tank so Swedish Motors must develop a special motor which both physically and technically can live up to the requirements set by Alpha: *“We were part of designing the motor you find on the Power-tank. They approached us, because we are quite big in the wind turbine industry. Yet Alpha came up with some requirements which we thought were unfair. So we had to design a special motor for the tank,”* explains the Sales Engineer from Swedish Motors. The specifications for the special-designed motor are then added to the TPS for the Power-tank. For Swedish Motors this means they now have a competitive advantage: *“We had a huge advantage for a long time, since there were no others who could take over,”* explains the Sales Engineer.

Since Alpha has a dual sourcing strategy regarding the tank Alpha refers their suppliers to buy the motor for the tank from Swedish Motors. Around 2013, Hydac A/S becomes second supplier of the Power-tank to Alpha while a Spanish competitor, Spanish Hydraulic Solutions, is selected as the primary supplier. As a consequence, Hydac A/S becomes customer at Swedish Motors. For the purchasing function, the interface is specified as the product features are specified and the tasks mainly relates to securing availability of the motors.

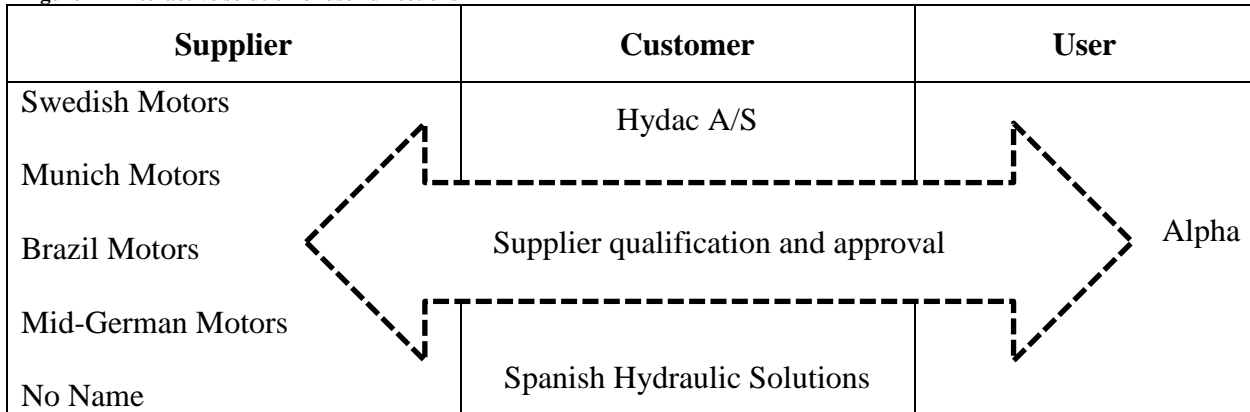
FROM SPECIFIED TO INTERACTIVE INTERFACES

In 2014 Swedish Motors moves their production from Sweden to Poland in order to save costs. Labor costs accounts for more than 50 % of the total costs of a motor so from there on, 98 % of the motors which Swedish Motors sells to Hydac A/S and their competitors are produced in Poland. Yet the shift in production site has some consequences in the user context as Alpha experience recurring problems with abnormal noises from the motor. According to Alpha’s Quality and Safety (QS)-department they experience these problems at around 50 % of the tanks they receive from Spanish Hydraulic Solutions. Hydac A/S has only registered 2-3 deviations about the problem. Alpha becomes worried about the performance of the motor and Alpha therefore requires a fast solution from Hydac A/S and Spanish Hydraulic Solutions: Solve the current problem experienced with the current motor supplier and qualify a second motor supplier.

Alpha strongly urges Hydac A/S and Spanish Hydraulic Solutions to approve a second alternative in order to accommodate for any potential future risks. As these approvals have not been done properly in the past regarding Swedish Motors, Alpha expects evidence for both Swedish Motors and the second alternative motor supplier which Hydac A/S chooses. Alpha appoints three potential, alternative motor suppliers which they then encourage Hydac A/S and Spanish Hydraulic Solutions to assess. The first of them is Munich Motors from Germany, the second is Brazil Motors from Brazil and the third potential supplier is a German motor producer, Mid-German Motors. Further, Hydac A/S and Spanish Hydraulic Solutions are encouraged to search for and assess a possible fourth potential, alternative motor supplier - No Name.

The following Figure 1 shows the task of interactively solve the problem with the suppliers by taking the directions from the user context into consideration:

Figure 1 – Interactive solution of user directions

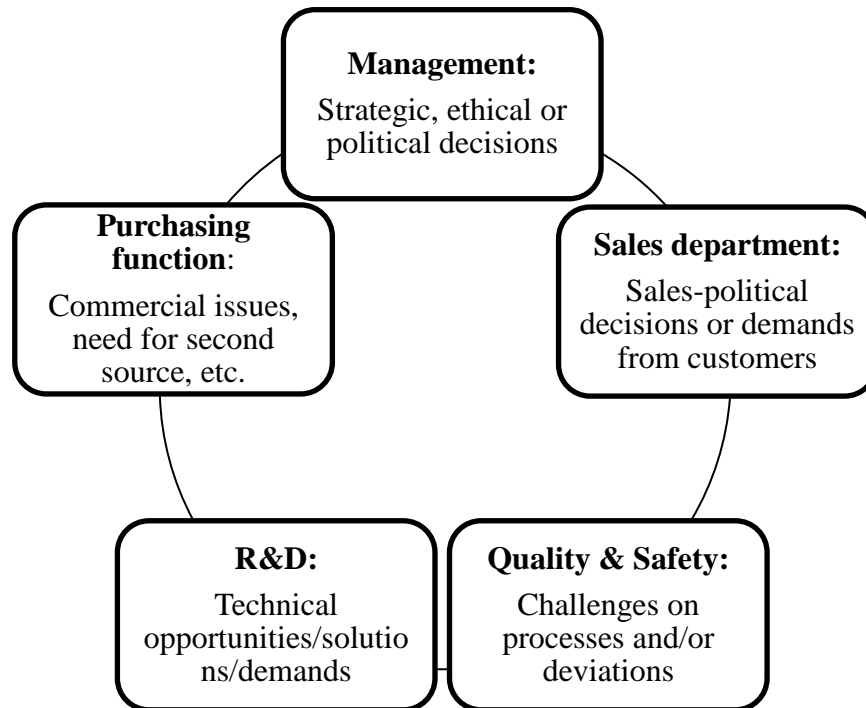


ASSESSMENT OF QUALIFICATION AND APPROVAL OF SUPPLIERS AT THE CUSTOMER-SUPPLIER
INTERFACE

The assessment task includes whether the supplier can be qualified as a potential supplier and if so, whether the supplier then can be approved according to the requirements set by Hydac A/S and Alpha. The qualification and approval relates to commercial (e.g. price of motor, price of prototype, etc.), technical (e.g. motor features) and process (e.g. production standards) issues. An important aspect of the qualification and approval of the suppliers are the additional costs associated with the test and approval of motor prototypes as well as to prepare for process approval and implementation afterwards. So apart from the cost of the motor these additional costs must be included in the assessment of each of the suppliers.

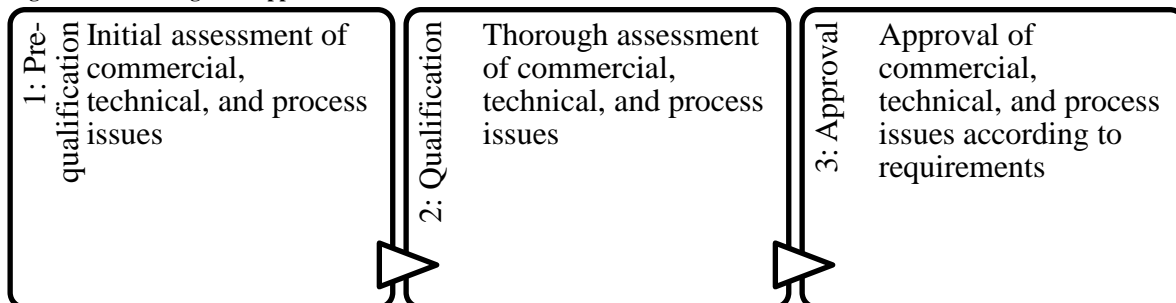
At this stage, the dialog with Alpha about directions for supplier approval goes through the sales department and management team at Hydac A/S. The management team then defines and divides the tasks based on the information received from Alpha internally in Hydac A/S. According to internal procedures, it is Hydac A/S' purchasing function which is responsible for driving the decision process when there is recognized a need for a change in the supplier relationships. For the purchasing function, the capabilities to assess the suppliers mainly relates to the commercial issues. In order to be able to assess the suppliers for qualification and approval, technical- and process-oriented capabilities are needed as well. Therefore, Hydac A/S' purchasing function, R&D- and QS-department work together in a cross-functional assessment team, with management and the sales department as support, to assess the suppliers. Internally, the tasks are defined and divided between the functions as shown in Figure 2:

Figure 2 - Internal task definition and division



The assessment is done in three stages, a pre-qualification, qualification, and approval stage, see Figure 3:

Figure 3 - Three stages of supplier assessment



Pre-qualification of suppliers

Two suppliers are de-selected at this stage: Brazil Motors and No Name. The CEO makes a request to the Central Purchasing Department at HYDAC in order to investigate whether they know of/purchase from the suppliers suggested by Alpha and if so then how they assess the suppliers. The input received from the Central Purchasing Department at HYDAC is that they do not have any good experiences with Brazil Motors in Europe and compared to European suppliers, the prices are too high. Based on this input Hydac A/S decides quite early on not to take further action towards this potential supplier. Further, Hydac A/S' purchasing function decides not to look for a fourth alternative (No Name) since the quantities are small to spend time, money and resources on prototypes.

Qualification of suppliers

Swedish Motors:

The current motor producer Swedish Motors has also approached Hydac A/S in order to present a Root Cause Analysis of how they will accommodate for the claims about the noisy motors both in the short and in the long run. Both Hydac A/S and indirectly Alpha are im-

portant reference customers for Swedish Motors since 70-80 % of all motors sold to Hydac A/S are for production to Alpha. So the cooperation between Swedish Motors and Hydac A/S is highly dependent on the cooperation between Hydac A/S and Alpha and therefore Swedish Motors put together a team of technicians to solve the issue. The Root Cause Analysis is presented and discussed with assessment team from Hydac A/S. Since Swedish Motors are already supplier of the motor they get qualified for approval.

Munich Motors:

Interestingly, however, it is the CEO who takes over some of the task of qualifying and approving suppliers. According to the dialog between Alpha and the KAM from Hydac A/S Alpha view Munich Motors as the best potential. Munich Motors have being working directly with Alpha regarding the development of a new motor prototype. The CEO therefore initiates negotiations with Munich Motors. Yet the negotiations do not go smooth and the CEO reports to the assessment team that there are some concerns regarding Munich Motors' agility and attitude. In their approach to Hydac A/S, Munich Motors' sales department acts in what the CEO calls "...an arrogant way" and they seem difficult to manage. Munich Motors is therefore not qualified for approval.

Mid-German Motors:

Regarding Mid-German Motors, the assessment from HYDAC Central Purchasing Department shows that the motor quality is good, but their pricing is not, as Mid-German Motors seek price increases every year. Based on the input from Alpha and the HYDAC Central Purchasing Department, Hydac A/S decides to make their own assessments of Mid-German Motors. Alpha arranges a meeting at Mid-German Motors, where the strategic purchaser responsible for the Power-tank at Alpha facilitates the meeting and makes the agenda which includes a company presentation, a guided tour through the factory and a discussion regarding the proposed motor solution. The strategic purchaser lets Hydac A/S know that Hydac A/S' Spanish competitor will attend the meeting as well. In order to be able to assess Mid-German Motors both commercially, technically and quality-wise Hydac A/S is represented by the assessment team.

Approval of suppliers

Swedish Motors:

Hydac A/S' assessment team is invited to Poland to visit and inspect their production facilities and see how the root cause analysis has changed their processes to accommodate for the problems. The problems were related to a change in sub-suppliers and the know-how which disappeared when moving the production from Sweden to Poland. The solution is to set up a "firewall" to secure that all incoming goods are inspected and all motors are tested at a test station before they are supplied to Hydac A/S. The assessment team is satisfied with the solution as the issue seems to be solved and therefore Swedish Motors get approved as a future supplier of motors.

Mid-German Motors:

Based on input from the meeting and factory tour the assessment team at Hydac A/S initiates a dialog with the potential German sub-supplier and invites them to a meeting to have separate discussions and negotiations about the potential for future business.

Assessment of the suppliers

The results from the supplier assessments are presented in an evaluation report for Alpha. From a commercial perspective, when comparing the three qualified suppliers it is the as-

assessment from the purchasing function that Swedish Motors shall continue as the preferred supplier. First, when analyzing the total costs they are cheaper than the others. Second, Hydac A/S does not have to spend time, money and resources on prototypes, which is an additional cost. Finally, there is no need to prepare a new supplier for production approval and implementation afterwards, where all the indirect costs also shall be taken into account. From a technical- and process-perspective, the R&D- and QS-department also recommends that Hydac A/S continue to work with Swedish Motors as the primary supplier. The recommendation is due to the low level of errors registered at Hydac A/S, and seeing the initiatives which Swedish Motors have implemented in their production, there are no technical or process-oriented reasons to stop using Swedish Motors. Mid-German Motors is recommended as a possible second supplier as their solution seems more completed and as a company seems more flexible and agile than Munich Motors. Hydac A/S therefore informs Alpha about the decision to continue with Swedish Motors as primary motor supplier while qualifying Mid-German Motors as a second supplier.

After the process of assessing the suppliers Alpha and Hydac A/S have a cross-functional business review meeting regarding status and future direction for the relationship. At the meeting Alpha emphasizes that they are under pressure from their customers and competitors and the demands keep on increasing. Alpha therefore expects Hydac A/S to proactively contribute with thorough and detailed suggestions for how Hydac A/S can add value to the existing supply chain and to continuously present cost-competitive ideas, exploiting Hydac A/S's competitive advantage(s) and to take ownership of and spearhead new technological advancements as well as general supply chain efficiency improvements. Alpha thus expects Hydac A/S to having constant attention to the tasks of enhance the products and perform cost-out initiatives. These directions highlight the purchasing functions increasingly important role with regards to perform these tasks.

ANALYSIS - HOW ARE THE TASKS OF THE PURCHASING FUNCTION DEFINED, DIVIDED AND PERFORMED AT HYDAC A/S?

Features of the customer-supplier interface

The interface between Hydac A/S and Swedish Motors changes from specified to become interactive as changes in the user context has shifted focus from a specified product to an interactive search for solutions. Hydac A/S' CEO reflects upon the process: *“Actually, Hydac A/S did not have an issue with Swedish Motors but Alpha panicked a bit. So we did it to please the customer and because of that, once we have a second source, we are able to negotiate the price. And it showed because once we found an alternative, then Swedish Motors were able to lower the price. Further, they got better control over their quality so we actually won in both instances. So now we are mature to find a dual source.”* In the process, Hydac A/S acknowledges Swedish Motors for their openness and their approach as they have shown the right attitude towards solving the problems. The joint solution also entails stronger interdependences between the firms. Before the motor problems, Hydac A/S was highly dependent on Swedish Motors as the motor could only be purchased from them. By qualifying Mid-German Motors Hydac A/S now have an alternative to Swedish Motors. Therefore Swedish Motors depend on whom the purchasing function at Hydac A/S chooses as the preferred supplier. The Sales Engineer from Swedish Motors reflects on the consequences: *“We did everything we everything we could to solve this problem. But it also meant that we went from having monopoly to competition. And though it is a pity for us it is actually also healthy.”* Further he states that Hydac A/S and Swedish Motors have become closer collaborators in the wake of the motor issues: *“Because before we just supplied these motors at a certain price*

whereas in this case we had to join forces in order to find the best solution for both parties." The relationship between the firms has become stronger and now focus is on finding joint solutions.

Features of the tasks

The features of the tasks also shifts from being clearly defined to become emergently defined, divided and performed in interaction with other actors, internally as well as externally. These features thus have an influence on the purchasing functions task of accessing the supplier resources. At Hydac A/S the purchasing function has thereby got a new role. Attention has shifted from mainly technical issues related to the solutions sold to Alpha to have a more commercial focus. Yet the Supply Chain Manager of Hydac A/S claims that it will be a challenge to move the internal perception of the purchasing function: *"Still a lot of other functions in our company view purchasing as dispatchers. When people say 'purchasing' they think of disposition. To obtain goods. And this is something which has to be moved. Whereas I see the negotiations and the agreements as the most important tasks."* So it can be challenging to implement a more interactive approach to the purchasing function's tasks as the Supply Chain Manager explains: *"...the purchasers themselves play an important role in releasing themselves from the operational tasks and roles."* This can for example be seen when the CEO takes over some of the purchasing functions tasks by conducting negotiations with potential suppliers.

Involvement of other actors

Moving towards an interactive interface implies that several actors, both internally and externally, are involved in finding a solution to the problem. Both between and within the firms the process is characterized by constant alignment of how tasks are defined, divided and performed. The relationship towards the user has become more important for the purchasing function as the collaboration with the user during the process had some positive learning effects for Hydac A/S as the Supply Chain Manager points out: *"Actually it was quite beneficial. It spawned some things and we discovered some holes. I am confident that we could perform a similar project in a better way on the basis of what we learned from this process. We will appear more professional towards the customer."* These are new features for the purchasing function at Hydac A/S as the interface towards the supplier only was related to their sales department. Whereas now there are several departments from both Hydac A/S and the two qualified suppliers involved.

Time horizon

Regarding the time horizon, the shift in interface characteristics imposes a different way to look at the future. Before, the relationship with Swedish Motors was mainly related to securing availability of the motor. For the purchasing function at Hydac A/S the qualification of an alternative supplier means they are now in a better position to negotiate deals for the future business with Swedish Motors. Also because the scope and scales of doing business has increased which make Hydac A/S appear as a more attractive customer. For Swedish Motors, the investment in solving the motor issues and strengthen the relationship with Hydac A/S means they have kept their business and now they also supply other motors for Hydac A/S towards other users and projects. For Swedish Motors the relationship with Hydac A/S is now more long-term future-oriented: *"The future perspective primarily depends on the production split which Hydac A/S can get from Alpha. But Hydac A/S is also approaching other markets so it looks promising. There are some good opportunities, for example a global contract with all HYDAC-firms."* The situation is similar in the relationship with Mid-German Motors who now also sell motors to projects for Hydac A/S.

DISCUSSION

The purpose of the present study was to gain an understanding how the purchasing function's tasks are defined, divided and performed when managing different customer-supplier interfaces. The insights gained from analyzing the purchasing function at Hydac A/S reveal the following implications regarding the tasks of the purchasing function with regards to managing different types of interfaces.

DEVELOPMENT OF THE TASKS OF THE PURCHASING FUNCTION

The purchasing functions tasks, in the case securing availability of goods for serial assembly of hydraulic solutions in a cost-effective way, are being challenged by the directions set by the user. Requiring Hydac A/S to also take ownership of and spearhead new technological advancements as well as general supply chain efficiency improvements impose new demands for the development of the purchasing function's tasks. These directions highlight the purchasing functions increasingly important role by performing the more strategic and collaborative tasks of identifying innovative suppliers and generating supplier management strategies for innovation. For Hydac A/S, changes in directions in the user context highly influence the interface towards the suppliers. What started as a specified interface between the customer Hydac A/S and the supplier Swedish Motors evolved to involve other actors like the user and other suppliers to solve issues in the user context interactively.

MANAGEMENT OF THE DIFFERENT TYPES OF INTERFACES

In the start of the relationship, Hydac A/S was highly dependent on Swedish Motors as the motor could only be purchased from them at a specified interface. Yet, by qualifying Mid-German Motors Hydac A/S now have an alternative to Swedish Motors. Therefore Swedish Motors depend on whom the purchasing function at Hydac A/S chooses as the preferred supplier. The relationship between the two firms has become stronger as they are now interdependent and focus is on finding joint solutions as they rely on access to each other's resources. For the purchasing function, the same supplier must thus now be managed in new ways.

DEFINITION, DIVISION AND PERFORMANCE OF PURCHASING TASKS

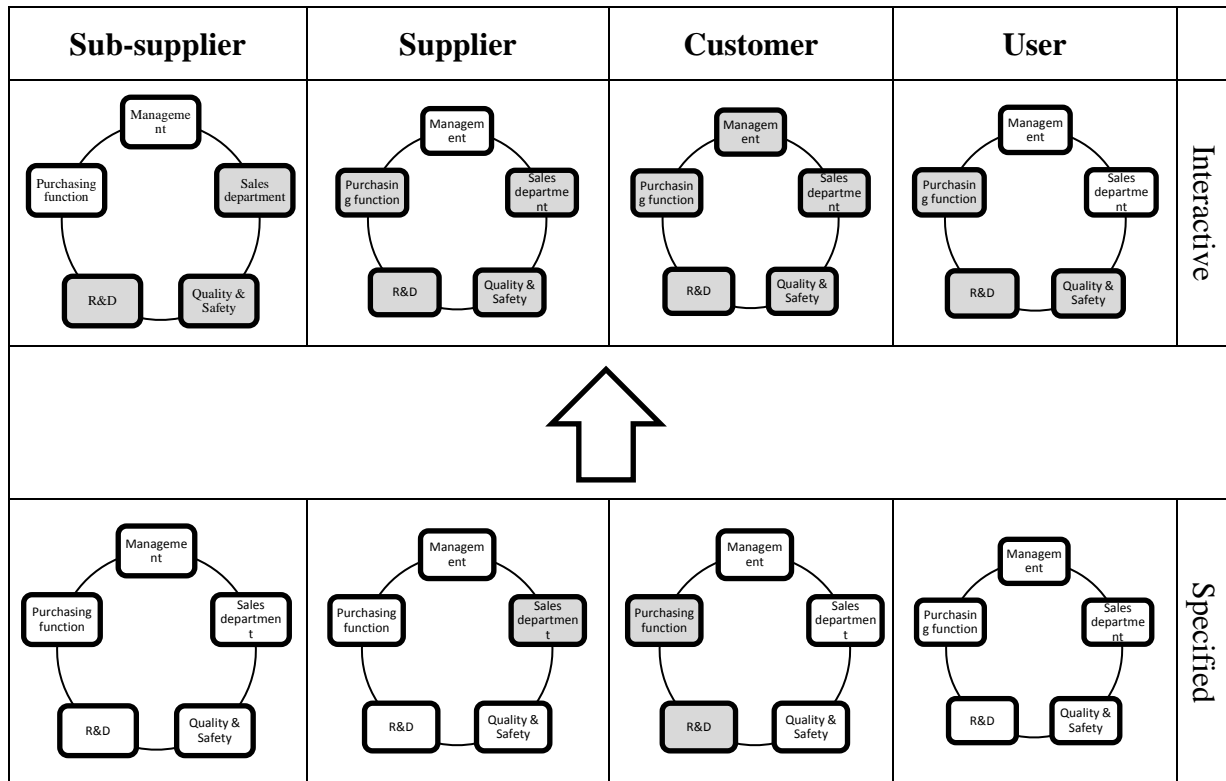
Features of the tasks

For the purchasing function at firms like Hydac A/S specifically the development of tasks means new ways of managing both the interfaces with suppliers and other internal functions. Interface management demands a new role internally in the company and the perception of the purchasing function must also change in order to be able to perform these more strategic and collaborative tasks. In the case it is clearly also challenging that start of the cooperation between Hydac A/S and the suppliers was initiated by the user and thus how late in the process the purchasing function at Hydac A/S gets involved as it limits the possibilities to strategize and influence the supplier due to the specifications already set by the user. In order to understand the user needs requires new tools and understanding as to how to manage these tasks. Thus, a new outlook from the purchasing function is needed. Both related to gathering and acting upon internal and external information about the different contexts and related to using and dispersing this knowledge towards the supplier base. Applying this understanding requires some unlearning of existing processes and routines.

Involvement of internal and external actors

In the following Table 7 illustrates how the scope of the involved actors from the case increased when moving from a specified to an interactive interface. Direct involved actors are highlighted by the dark-grey color.

Table 7 - Involvement of internal and external actors from the case



The main challenge for the purchasing function is thus to develop and coordinate a firm's internal resources and activities in order to support their different interactions. Path dependencies are important for understanding how the purchasing function and its' tasks develop. Not only in the relationships to the suppliers but also internally as the change of the role requires unlearning of existing processes and routines are required and new collaborations will have to form. For example, the assessment of suppliers has to be coordinated with other departments where it is important to align commercial, technical and processual aspects of assessing suppliers for approval. In the case, the CEO of Hydac A/S takes over some of the purchasing tasks in the assessment process but would the result have been the same with regards to qualifying Mid-German Motors rather than Munich Motors if it had been the purchasing function and not the CEO who did the negotiations with Munich Motors? It shows that the purchasing function internally is still held in an operational and reactive role. So despite the recognition of the purchasing function's increasingly important role there can still be some internal barriers to overcome with regards to the performance of tasks. The way the actors perceive each other is important as, essentially, it is the actions and tasks performed which attribute the identity of an actor.

Time horizon

In the case, the critical event causes the time factors of past, present and future to play an important role for the purchasing function. Before the event, the purchasing function could mainly focus on the relationship with the suppliers in the present whereas subsequently the

scope of understanding and manage time in past and future has become much more important. For example, in the short term there were no isolated incentives based on the supplier assessment to qualify a second alternative supplier. Yet in order to secure future business with Alpha due to the directions set Hydac A/S decided to do so anyway. So for the purchasing function, the tasks associated with managing interactive interfaces are constantly in flux requiring different capabilities to perform these tasks and a different role understanding over time.

IMPLICATIONS OF HOW PURCHASING TASKS ARE DEFINED, DIVIDED AND PERFORMED:

Based on the above discussions three important factors can be identified as having implications for how the purchasing function's tasks are defined, divided and performed.

The first factor is related to the *interactive way of defining purchasing tasks*. For the purchasing function, managing supplier interfaces affects and is affected by how the firm manage its user interface. Not only are the interfaces interdependent towards the suppliers but the interfaces are also interdependent between supplier(s) and user(s) in a wider network. In interaction the actors are constantly faced with trade-offs between short term and long term costs and benefits as well as balancing own cost and benefit to those of the counterparts (Håkansson & Ford, 2016) meaning that the way of managing the supplier interface requires another outlook from an internal focus on costs and benefits to an interactive focus. So it is not enough with knowledge about the user context but the user can also play an active role with regards to specifying directions and tasks and the user interface must thus be managed simultaneously.

The second factor is related to the *boundaries between and within firms*. Gadde (2014) has discussed the role of corporate boundaries between firms and he states that boundaries define what is considered functions and capabilities inside the company and the boundaries set the conditions for division of labor in relation to other companies. Corporate boundaries define what is considered functions and capabilities inside the company and they set the conditions for division of labor in relation to other companies. The features of a relationship with a business partner at the outside of the boundaries strongly affect what the individual firm is able to achieve internally and in other relations. Although Alpha and Hydac A/S are somewhat interdependent, perceived power still plays an important role as to who decides which tasks are being performed by whom? Power asymmetry is influential in determining the direction of relationships and the positioning of a customer and supplier in a long-term relationship (Johnsen & Ford 2008). Exercising power can be done without direct ownership of resources and Gadde (2014) therefore argues for widening the scope of viewing boundaries to include two additional types of boundaries:

1. Influence: mutual dependency leads to mutual influence among companies. The influence happens through interaction and exercise of power
2. Awareness: what does the company know about activities and resources of other companies in the network?

Alpha uses their awareness of activities and resources of the suppliers and to remain in control without direct ownership. By requiring the customers to keep Alpha informed, while also setting requirements for how to qualify the suppliers, Alpha can use this awareness to influence the relationships between the customers and the suppliers. The two boundary types can also be translated to the internal relationships between the purchasing function and other departments. As the case study suggests it is important for the purchasing function to simultaneously be aware of and manage both the inter-organizational contexts of the suppliers, directly, and the user as well, indirectly, as the intra-organizational network of other functions.

Directly, because the purchasing function becomes involved in finding solutions and solving problems with other departments, internal as well as external. And indirectly, because there is a simultaneous interplay between other departments which the purchasing function are in direct contact with. The purchasing function's relationships often have certain proximity, both internally and externally. Externally, the interface is typically towards the sales department of the supplier and to some extent also the supplier's R&D and/or QS-departments. Internally the picture is the same as technical and/or process-oriented issues are aligned with R&D and/or QS whereas commercial issues are discussed with the sales department and to some degree management. But the indirect relationships are highly important to manage as well in order to gather knowledge. For example it is the sales department who manages the interface with the user's purchasing function and technical issues are cleared between the R&D-departments. The boundaries between and within firms thus become more fluent as the definition, division and performance of tasks have to be coordinated and aligned in a dynamic interplay between external and internal actors and interfaces.

The third factor is related to the features of the *capabilities* residing in the purchasing function to perform the more strategic and collaborative tasks. Managing interactive interfaces (Forkmann et al. 2016) requires relational capabilities in managing internal and external relations - ranging from simple market transactions to intense strategic partnerships. The diversity requires the purchasing function to develop capabilities for managing these different types of interaction. The networking capability of the purchasing function is at stake (Ritter & Gemünden 2003; Ritter et al. 2002) as an integrated effort of the entire firm. For the purchasing function the distinction between short-term and long-term costs and benefits requires a future outlook and an understanding of the features of the time concept. The capabilities must include understanding and managing the time horizon as the strategic tasks relates to having a long-term future outlook.

CONCLUSIONS

SUMMARY OF RESULTS

The present study provides in-depth insights into how the purchasing function tasks are defined, divided and performed. Through an in-depth case study of a critical event affecting the purchasing function at Hydac A/S, a Danish hydraulic solution firm, the study sheds new light on the important task of managing customer-supplier interfaces. The purchasing function must gain, maintain and develop access to supplier resources through the design and management of inter- and intra-organizational relationships. The case study revealed that the features of the task, the involvement of other actors and the time horizon all influence how the purchasing function tasks are defined, divided and performed. Regarding features of the tasks, then managing interfaces demands a new role internally in the company and as the tasks become more strategic and collaborative. The main challenge for the purchasing function related to the involvement of internal/external actors is to develop and coordinate a firm's internal resources and activities in order to support their different interactions. Not only in the relationships to the suppliers but also internally as the change of the role requires unlearning of existing processes and routines are required and new collaborations will have to form. Finally, in relation to the time horizon the results highlight the importance for the purchasing function to understand that the tasks are constantly in flux requiring different capabilities to perform these tasks and different role understanding.

CONTRIBUTION

The study's contributions are trifold regarding the theoretical implications. First, the study highlights new ways of defining the purchasing tasks through interaction. In some instances it is clearly directions from the user clearly defining what is required and in other instances the tasks have to be aligned in internal networks with other departments.

Second, the study contributes with the discussion of the consequences of the moving boundaries between and within firms. The types of boundaries, ownership, awareness, and influence, between firms affect the purchasing functions tasks, for example when larger user exercises power to influence decisions. Internally, there is also the challenge of balancing direct and indirect relationships so the purchasing function thus needs to be capable of understanding and manage the boundaries between these direct and indirect relationships through interaction with other actors.

Finally, the study highlights the need for development of capabilities for managing interaction and balancing the strategic and operational tasks. The capabilities include understanding and managing the time horizon as the strategic tasks relates to having a long-term future outlook.

LIMITATIONS & FUTURE RESEARCH

The research design as a single case study also limits to the results. The basis for drawing strong conclusions are limited and the study shall be seen as an early attempt to understand the dynamic interplay between interfaces and the purchasing functions tasks. Another limitation is that the outside-in data has been collected at meetings and through written communication. Though it provides the opportunity to observe the actors in action additional reflections from outside actors might provide nuances and new angles to the current case. Finally,

the question is whether the results are generalizable to other contexts (Welch et al. 2011) or not. Generalization was not the aim of this study; rather it was to gain an in-depth understanding. Further, the challenges associated for the purchasing function at a smaller firm, compared to the user firm, is a common issue in many industries. Therefore, applying and testing the framing in other contexts could be an avenue for future research to provide further insights into the phenomena of the development of the purchasing functions tasks.

MANAGERIAL IMPLICATIONS

For firms the study highlights the factors and features of *how* to manage customer-supplier interfaces. A new outlook on the purchasing function is thus required since its tasks are being altered. The tasks for the purchasing function are not only about managing the supplier interfaces. It is also about managing the internal network of other functions, adding to the basic task of securing availability in a cost-effective way. A new understanding of the internal and external networks is required especially in relation to the way the tasks are defined, divided and performed. It is therefore important with on-going alignment of internal roles and division of tasks. Developing from primarily reactive and specific purchasing tasks to interactive-developed and emergent tasks entails a new way to evaluate the performance of the purchasing function. For management, expanding the scope from focusing only on purchasing as pure commercial sourcing to include aspects of relationship management and interactive capabilities is thus needed. Here it can be challenging if the purchasing function is kept in a reactive, administrative role. Finally, understanding and taking into consideration the aspect of time is also important an important task.

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