

Competitiveness in road transport: The market liberalized haulier

Benedikte Borgström and Britta Gammelgaard, CBS

Poul Bruun, Innovation center for Logistics and Transport

Abstract

Road transport is an important sector, connecting time and space of production and consumption. Its market conditions has changed. The EU single market implementation has increased price pressure due to supply of low cost road freight transport from countries with lower cost structures. Changes in the market also encourage strategic development of some road hauliers into providers of unique services. Such road haulier strategic development contributes to efficiency *and* effectiveness in basically all business sectors of EU. Little research is available of such strategic and operational management.

In this paper we will explore that knowledge gap and analyze what value proposition(s) and capabilities can transform potential cost disadvantages of acting in a market that includes both high- and low-cost-country actors? And in conceptual terminology, how are capabilities deployed and developed to construct a competitive value proposition?

We will illustrate the strategy-as-practice with two projects, and discuss implications in terms of capabilities needed to create an effective value proposition and hence competitiveness. The theoretical contribution is in theorizing haulier strategic development in which we take into account logistics service supplier strategic management. We also contribute with better understanding of value creation in order to escape commoditization and differentiate services through relationships (customers and/or other hauliers). Practical implications concern hauliers' strategy creation and to some extent road transport buyers in terms of more informed market knowledge.

Introduction

Liberalization of road freight transport increases price competition but not necessary the market efficiency (Sitran and Pastori, 2013). Strategic dimensions of logistics and road freight transport development has so far received little attention (European Commission, 2011). Research of strategic dimensions of road freight transport has focused on the phenomenon of outsourcing logistics and transport to professional service operators, because of the core competences trend and possibilities for better logistics performance (Bask, 2001). Liberalization is another change process that has other types of implications.

The institutional change of competitive conditions benefits actors from Eastern Europe that have substantial cost advantages. The advantages available for hauliers from Western Europe are most likely specialization and adaptation. The market of logistics and road freight transport is organized as a hierarchy of specialized third party logistics operators and general freight forwarders, these actors are huge and outsource often road freight transport to smaller actors (Cui and Hertz, 2011).

Haulier from west are pressured since transport firms from these “old” EU countries meet competitors that operate with a very different cost structure, especially labor costs are lower. In general, EU12, i.e. the Member States which joined the EU in 2004 and in 2007, offer lower prices than EU15, i.e. EU Member States before the 2004 enlargement. The difference in operating costs (EU15 and EU12) is about 25 euro per hour (AECOM, 2014). As the EU12 hauliers main competitive advantage is price, the EU15 hauliers develop other advantages. Road freight transport is inherently heterogeneous in character with different types of needs from different customers and potential to create value by customized or specialized services in combination with cost efficiency, in order to develop their value proposition and advantage at the market.

Competition is an unusual topic in logistics and transport research, it has been a topic for law and policy research and insights to the transport sector. Competitive advantages and strategic management is, however, a highly relevant topic for normative insights to hauliers on strategic opportunities and processes (Voss et al. 2011; Hertz 1996; Flint et al. 2005; Villarreal et al. 2016), also for insights on market processes to policy makers (Emmett 2009; European Commission 2011). Competition and advantages from different value propositions is a take on the subject that furthers value creation, e.g., by collaborations that might involve the customer as well as the competitor (note that subcontractors are competitors now and then), in order to deploy resources and capabilities effectively. An effective customer value proposition offers favorable points of difference in terms of quality, dependability, speed, flexibility and cost efficiency to customers (c.f. Anderson, Narus, & van Rossum, 2006).

Changes in market conditions in combination with new technology in road freight sector might be seen as a paradigm shift in logistics and road freight transportation, from provision of outsourced services to value creation based on logistics and transport.

Strategic aspects of logistics and road freight transport research regarding outsourcing and resource use is researched primarily with resource-based and capability-based approaches (Liu et al. 2010; Yew Wong and Karia 2010; Darkow, Weidmann, and Lorentz 2015; Allred et al. 2011). These perspectives are developed to understand firm performance and are less fruitful in order to understand success of specific value creating practices (Regnér 2008), and less suitable to explain the dynamics of how capabilities are deployed and developed to construct a competitive value proposition (Wong and Karia, 2010; Sirmon, Hitt, & Ireland, 2007). The strategy-as-practice approach facilitates understanding of strategy creation and change at heterogeneous markets driven by haulier’s dynamic developments, industry changes, and changes in buyer

preferences (Chia and Holt 2006; Johnson, Melin, and Whittington 2003; Løwendahl and Revang 2004), and complements resource-based approaches (Regnér 2008). The strategy-as-practice perspective supposes that strategy does not require purposeful goal-orientation but relies on organizational members to act in a manner congruent with past actions, experiences and mutual adaptations (Chia and Holt, 2006). Understanding the strategic value creating social processes and logistics practices is of especial importance in the logistics industry (Flint et al. 2005; da Mota Pedrosa, Blazevic, and Jasmand 2015).

The purpose of this paper is to introduce the strategy-as-practice perspective on strategic management of road freight transport operations and learn about what specific capabilities relate to value co-creation in heterogeneous road freight markets? Such haulier capabilities are likely to develop commodity services and hauliers' strategic role in value chains. In short, what value proposition(s) and capabilities are strategic options to manage, despite competitive cost disadvantages?

The empirical illustrations relate to innovation work in the sector of road transport. First, on how new technology, more specifically information system's data provision, is made use of to develop customer value propositions in line with strategic priorities. Then, on lead customers' strategic priorities for an understanding on how the value propositions might find a resonating focus among customers. Finally, a perspective of developments based on an industrial stakeholder, the Innovation Center for Logistics and Transport, ITD (trade association for the Danish international road transport of goods). In this paper, we aim to illustrate two projects, and discuss implications in terms of capabilities needed to (co-)create an effective transport and hence competitiveness. The parenthesis, (co-) illustrates that solutions are created for customers that are not readily integrating with hauliers to sustain long-term development projects.

There are two main theoretical contributions. First, an understanding of strategic development of hauliers, based on capabilities contributes to literature on strategic management in complex and dynamic settings (the simple service firm that organizes across a network of customers and competitors). Second, we aim to contribute to logistics service and solutions literature with a theoretical perspective that make possible understanding of road transport market developments.

The paper is organized into five sections including this introduction. The next section discusses the relevant literature that informed the study of competitiveness in road transport. Section three describes the research method and section four presents empirical illustration of capability deployments for competitive advantage in road freight markets. Finally, the paper ends in a concluding discussion on road haulier strategizing and directions for future research.

Theoretical framing

An institutional context such as the single market of EU is not a perfectly competitive market but a source to dynamic and rapid changes and heterogeneous markets (Sornn-Friese 2001). Under such circumstances strategic development in terms of improved value-creation is driven by demanding customers and competent employees (Løwendahl and Revang 2004) in contextual everyday activities (Chia and Rasche 2010; Regnér 2003). This road freight service context is complex with processes of organizing that depends on available partners and temporary contracts with customers for value-creating operations.

The strategy-as-practice approach

Strategizing might be defined as processes and practices which constitute the day-to-day activities of organizational life and which relate to strategic outcomes (Johnson, Melin, and Whittington 2003:3). Strategizing in the road freight context depends on contact with customers in combination with a deep knowledge of own capabilities and resources (Sornn-Friese 2001). Strategy-as-practice might metaphorically be described as a wayfinding process in which formal plans play a role alongside emergent strategies of local actions and adaptations (Chia and Holt 2009). In practice, “To act strategically is to act knowledgeably” (Chia and Holt, 2009:55), which means that strategists at different positions in a firm recognize strategic processes and potentials to create value. Strategy is not only created by top managers, also by learning and opportunities recognized and enforced by other organizational members (Regnér 2003). Thus, strategy considered as a practice is “something that people do, rather than something organizations have” (Johnson et al. 2007:207).

Strategic development conditions in logistics service supply chain/network

At large, literature says little about TPL's (third-party logistics') and logistics intermediaries' strategic development (notable exceptions are Hertz & Alfredsson, 2003; Liu, Grant, McKinnon, & Feng, 2010; Yew Wong & Karia, 2010, Wagner & Sutter, 2012) knowledge on hauliers' strategic developments is practically non-existent (Wagner & Sutter, 2012). The difference in between these actors might be seen as a question of capabilities.

There are three distinct archetypes of road transport and logistics service firms, from a capability perspective (Cui & Hertz, 2011). TPL firms, logistics intermediaries and hauliers are making up a logistics service supply chain with complementary capabilities. Haulier core capability is in operations related to the transport in which efficiency is key. Logistics intermediary firm capability is foremost freight forwarding and related value-adding services, consolidating material flows of many diverse customers between different destinations. TPL firms are knowledgeable in solutions for specific supply chains' logistical problems. Cui and Hertz argue that the archetypes are not stuck in their role but that any strategic moves are costly and difficult. They explore the issues by two examples (Cui & Hertz, 2011), the first is the hurdles of one

logistics intermediary firm that take on TPL responsibilities (Dimerco Express Group) and the second is a TPL firm that initiates logistics intermediary services (Oriental Group). The distinct capabilities needed rely both on resources and competences. Dimerco grew into a TPL by gaining knowledge of the client's supply chain, visiting the client, its suppliers and its customers, and analyzing different flows. This role, as a coordinator in a client supply chain, demands employees with cross-functional knowledge and business logistics skills and ability. Oriental Group faced other types of problems related to their new role as a freight forwarder. Their main problem is lack of networks in geographical areas. While they are building a network of subsidiaries in local regions, they are cooperating with local partners.

In Cui and Hertz's study (2011), difficulties of the haulier archetype's strategic moves are not illustrated. Logically, hauliers might be expected to encounter similar problems as the other archetypes, i.e. for freight forwarding services, problems might be expected to coordinate flows based on a wide network of suppliers and customers and for customized TPL services problems to dedicate resources, develop analytical skills and business knowledge. Thus, hauliers have strategic options that demand different types of investments.

Capabilities come about as resources are deployed for a desired end result (Grant, 2013). Haulier main resources are used for efficient production of transport services, while logistics intermediary main resources are used for efficient coordination in the logistics service chain, and TPL main resources are used to co-create effective customer solutions. Most often, logistics intermediaries and TPLs are big firms while hauliers are relatively small. In Cui and Hertz's study the big logistics intermediary and TPL gradually developed their resources and capabilities before a focused business area was assigned to a new organizational unit. Hertz and Alfredsson (2003) argue that there is a balance of developing more general services to achieve economies of scale and scope and adapting to one customer and potentially co-create value. Sornn-Friese (2001) finds that also hauliers can be characterized by their strategies to increase internal efficiency and increase customer flexibility. Sornn-Friese analyzed two road hauliers' strategic and organizational development in the 1990s that illustrate that knowledge about existing customers is key. Knowledge about customer's troubles and plans comes via buyer-supplier interactions, e.g. a dispatcher in close contact with the customer and at the same time well aware of strengths and weaknesses of the own firm's technology, routines and operating conditions. Overall, strategic development is seen as an experimentation of opportunities partly from managerial ideas and partly of taking on productive possibilities that occurs from daily operations serving existing customers and by deploying existing resources and capabilities in new ways.

Capabilities role in effective value propositions

Increased customer value and competitive advantage relate to organizational capabilities and customer key success factors (Grant, 2013). Financial, physical, technological, reputational and human resources are not

necessarily productive in themselves but need to be coordinated either according to a value chain logic (cf. Cui and Hertz's (2011) logistics service chain) or based on a match to customer key success factors (c.f. Anderson et al., 2006).

Resource-based theory, especially the dynamic capability concept have been productive to understand the general set of resources and capabilities for logistics service provision. Factor analytical approaches to logistics firms' capabilities illustrate a huge amount of service capabilities that results of these service firm resources. Before we set aside the approach, because of its limitations to explain strategy in dynamic and complex contexts, we will review what capabilities are recognized in a haulier context.

Lai (2004) bundles service capabilities into three factors; value-added logistics services; technology-enabled logistics services; freight forwarding services. Lai's Hong Kong sample of 221 respondents are mostly small firms, whereof 67% employs fewer than 50 employees. Four types of actors are outlined according to their service capabilities. First group focus on operational efficiency through freight forwarding services, second group focus on specialization through value-added logistics services and technology-enabled logistics services. Third group also focus specialization through value-added logistics services and technology-enabled logistics services to niches of customers, such as other logistics providers. The fourth group focus on being a service leader, including own or sourced capabilities of all three factors, value-added logistics services; technology-enabled logistics services. The overall customer service, based on self-reports follows this order, thus it is highest in the fourth group, therefore Lai (2004) implies that service performance might be enhanced by many different capabilities to perform different logistics services.

Liu, et al.'s, (2010) factor analysis is based on a survey in China, 114 completed questionnaires out of 730 distributed ones in which the respondents outlined 13 capabilities that strongly impacted competitiveness. Service quality capability was the most important, followed by management capability in terms of strategy, operations costs and customer relationships. Liu et al., (2010) bundle the capabilities into three factors; the *strategic* factor including corporate culture, innovation, strategic management and HRM; *operational* factor including service quality, CRM, operations management, inventory management, BPM and cost management; and *networking* factor including IT, service network and marketing. Moreover, Liu et al., (2010) argue that under consideration that these capabilities are valuable, it is still diversified service activities that are required to support processes of value creation (p. 260). Thus, the capability's contribution to unique competitiveness depends on how they perform in the logistics setting.

Wong and Karia (2010:54) focus on and identifies strategic logistics resources role in logistics service providers competitive advantage. Wong and Karia's study is a document-based content analysis of company profiles of 15 large global logistics service providers. They identify common characteristics of financially successful logistics service providers:

- Medium to high levels of physical, human, information, knowledge and relational resources,
- firm-specific developed information resources,
- make use of unique human resources from other sectors,
- investments in knowledge creation (research) and management systems,
- long-term relationships with key customers and horizontal alliances with other logistics service providers,
- established organizational units to manage specific physical resources,
- competence to complement own resources with the resources of other functions or business partners.

However, these resources cannot explain long-term success, Wong and Karia (2010) criticize the resource-based view (in line with Sirmon, Hitt, & Ireland, 2007) for the missing link in the conceptualization to dynamic aspects of customer value. Resources are seen as static and it is in processes of bundling and deploying that they become dynamic capabilities for value creation. Also Liu, et al., (2010) say that their analysis of factor scores indicates that the *individual* logistics service provider firm competitiveness is built on *different* kinds of capabilities. Thus, few resources might be combined and recombined in multiple ways, based on either e.g. customer interactions (i.e. adaptation) or specialization (Borgström et al., 2015). Collaboration, internal and external is a dynamic capability needed to make use of resources in value creation (Allred et al., 2011).

In order to better understand competitive advantages the concept of value propositions is fruitful. A value proposition draw on capabilities to manage and to create favorable points of difference from a customer perspective in terms of quality, dependability, speed, flexibility and cost efficiency (c.f. Anderson et al., 2006). Thus, capabilities and resources need to match specific logistics settings, in order to create customer value. Based on the literature review we are able to propose that hauliers have general strategic options in specialization and in collaborative customer adaptation (Hertz & Alfredsson, 2003; Cui & Hertz, 2011; Liu et al., 2010; Lai, 2004). Options are to draw on capabilities, critical to logistics service providers' competitiveness, including ability to strategize based on customer demands and market changes, advantage based on an operation management ability, service quality ability, customer relating, information technology ability, capability to provide services over a wide area, managing business processes, ability to create, communicate and deliver value to customers, ability to manage customer's inventory, ability to develop by bringing in anything new to facilitate the ongoing business, operation and service offerings, ability to organize and develop human resources, ability to manage costs by controlling and improving processes, ability of culture to define business conduct. These capabilities are able to support customers' value creation.

Change and value propositions in a dynamic and complex context

Market liberalization implies e.g. new regulations, changes in supply and in demand. In the road transport sector the entry of new EU states to the single market in 2004 and 2007 increases complexity and dynamics in the supply and demand of transport services. Problems in supply relate to different EU Member States' tax and labor legislation, control, enforcement, and sanctions (Hilal 2008). There is a generally increased demand of transports, wider geographical coverage, possibilities for shorter delivery times, enhanced quality requirements, and new sourcing practices of both shippers and hauliers (Sornn-Friese, 2001:158). The nature and costs of services are influenced by road freight transport sector organizing and structuring. For example, the liberalization has not been accompanied by enough social harmonization in employment and working conditions which create overlap of different social systems with accompanied conflicts (Sitran and Pastori, 2013).

Danish, German, and Swedish hauliers, among others, are likely to develop strategies that relate to the institutional change of EU's enlargement, since they meet competitors that operate with a very different cost structure, especially lower labor costs (AECOM, 2014), and the value of their resources need to be adapted to the new market environments (Darkow et al., 2015). Domestic actors after market liberalization find themselves in an alien environment. Specific bundles of capabilities are likely to be formed, in order to create value in transformed market situations (Liu, et al., 2010; Darkow et al., 2015).

Market liberalization is accompanied by changes influenced by other political and social systems (Darkow, et al., 2015). Resources that the liberalized market actors might draw upon include physical, such as environmental-friendlier trucks, information systems for monitoring, human, such as more skilled employees, image based on, e.g., financial stability, network that facilitate frequent service to different places, knowledge, and relational resources, such as partnerships with customers and subcontractors (Darkow, et al., 2015).

On the one hand, there are logically cost disadvantages of being, e.g., a Danish haulier, on the other, there are resources and capabilities to draw on in a customer value proposition. Typical adapted operational capabilities are service reliability, flexibility, basic services, value-adding services, information integration and relationship building (Darkow, et al., 2015).

There is a lack of knowledge in effective value propositions of road freight hauliers acting at the liberalized market. The processes of bundling and deploying resources, and adapting static resources into capabilities that matters are of interest in order to understand strategic value propositions of liberalized hauliers.

Remaining questions after applying resource-based theories are on how capabilities work in value propositions? And how resources are deployed? Additional questions inspired by the value proposition concept are what is the value that is transparent to customers compared to the next best alternative offering? What is the customer's expectation of a "fair" price that is justifiable in the business, taking into consideration that customer knowledge on road freight might be superficial? (Anderson, Wouters, and Van

Rossum 2010:72). The competitive value proposition's resonating focus resides in the few elements that matters most to the customer (Anderson, Narus, and van Rossum 2006). Price matters, and we might expect that buyers that are willing to invest in relationships rather develop together with low-cost-EU12 suppliers unless other values can be communicated that make it worthwhile to work with EU15 suppliers. Based on the assumption that highest possible price is not the best for suppliers and that the lowest price is not the best for buyers, but a price that in a transparent manner is able to create values, we have theoretical ground to propose that market liberalized hauliers' strategic development often includes core strategic activities like planning and more importantly relies on exploratory strategic activities with customers and competitors for possibilities to combine own resources and capabilities in valuable ways through everyday practical coping (Regnér 2003; Sornn-Friese 2001; Chia and Holt 2009; Chia and Holt 2006).

Research method

Our exploratory research of strategic options to manage, despite competitive cost disadvantages, value proposition(s) and capabilities calls for a qualitative assessment. Prior studies has taken a static view of logistics service provider capabilities, and there is a lack of understanding of dynamics, how capabilities develop and are deployed to leverage resources (Liu, et al., 2010).

The study focus on two typical hauliers by governance, both are family-owned. Saddle Creek Logistics Services is a Florida-based (the US) integrated logistics provider with more than 500 trucks. H.P. Therkelsen is a Danish integrated logistics provider that operates about 200 trucks. Both firms started as typical firms with *low* general ability of problem solving (Hertz and Alfredsson, 2003), Saddle Creek Logistics Services started its growth from scratch by building a warehouse and initiating some logistics services, i.e. handling glass bottles and caps for the citrus industry. *“From there, the founders did whatever was necessary to grow the business – adding expert staff, new locations, advanced technology”* (<http://www.sclogistics.com/our-company/our-history>). H.P. Therkelsen started its growth from doing standard transport services. The development of these firms might be seen as developing into high general ability of problem solving and a high ability of customer adaptation (according to Hertz & Alfredsson's categorization, 2003). The classification according to abilities of general problem solving and customer adaptation might also be used to classify whether the TPL is developing TPL customers or whether the TPL is operating as a part of the customer's organization and adapt. Our study has not such data of customers.

The haulier data is collected from company visits with guided tours of managing directors, workshops where the firms' presented their strategic issues and un-structured interviews of the firms' business situations and futures. Secondary data is collected from web-pages, powerpoint-presentations, and case-study reports (CCJ Commercial Carrier Journal: Fleet Management, issue Innovators summit 2015 and Road Transport Council's report on *Success stories from the logistics and road transport sector*). This empirical material is

used for illustrating a neglected research area: the dynamic notion of haulier value proposition of its services. By definition services are intangible, perishable, produced as they are consumed and service-providers rely on different attempts to prove capabilities, e.g. via certifications and references.

The analysis process started in a general question on haulier competitive value propositions, based on the insights we have in the road transport sector. After an intertwined literature review and empirical study we decided to make use of value proposition and dynamic capability literature and therefore the within case analysis is based on codes “How customers choose”, in order to learn about key success factors, and “what resources and capabilities are needed” in order to learn about key strengths that are of strategic importance (Grant, 2013).

Basically, Grant (2013) outlines two approaches to identifying an organization’s critical resources and capabilities. The other approach is starting from the inside with, for example, a value chain analysis on organizational resources. The key success factor approach is starting from the outside (i.e. what resources matter from a customer perspective) in order to outline key success factors based on a) how customers choose? b) what do we need to survive competition? Thus, critical resources and capabilities are those needed to deliver these key success factors.

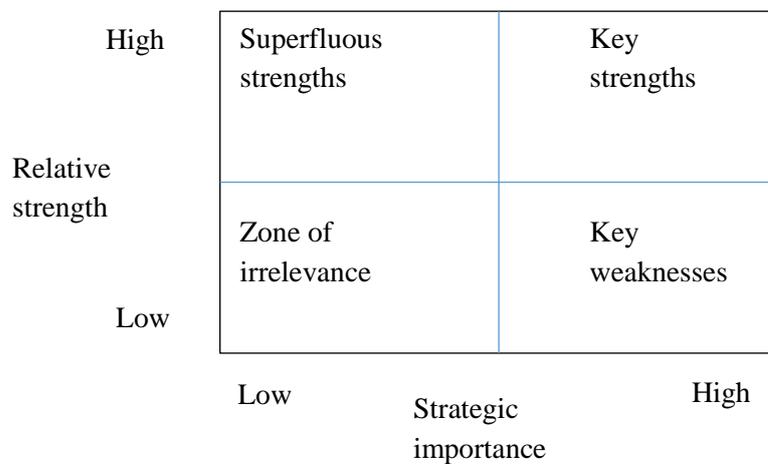


Figure 1 Grant's framework for assessing organizational resources and capabilities.

Small- and-medium-sized haulier key success factors are expected to be specialization and customer adaptation driven by continuous development of competences (Hertz & Alfredsson, 2003; Sornn-Friese, 2001). The framework for appraising resources and capabilities facilitates our analysis of the resource/capability relative strength in relation to strategic importance (profit-earning potential of the resource or capability). By outlining a key strength of strategic importance, we achieve insights to short-term success. Thus, the analysis follows Grant’s (2013) advice to take into account industry key success factors, by learning of strategic direction of customers.

The empirical material of industry key success factors is substantiated from reports, interviews and secondary data (not only statistics but also public statements such as the jury's motivation to choose Danfoss as a winner of the Danish logistics and supply chain price). It is used in the analysis to explore the customer side strategizing, their priorities and how road hauliers might fit into buyer's value scheme (Chia & Holt, 2009). Customer perceptions are changing and the case descriptions are illustrating the direction which is likely to influence haulier strategizing.

These findings are related and contrasted to contemporary research on haulier competitiveness from a strategizing perspective.

Findings are time-specific, as customers as well as road haulier competitive situations are dynamic. The value of the findings might not be by verification but by validity of how dynamic capability operates and contributes to road haulier competitiveness.

Empirical illustrations

Saddle Creek Logistics Services key success factors

How customers choose

“Overall, the new innovations have increased operating performance and improved our ability to deliver on our promises to our drivers and to our customers” Kristen Lowers, Director of transportation systems, Saddle Creek (CCJ, 2015:58). In more general terms, Michael DelBovo, President, says: “Our concept is to be flexible, fast and keep overhead costs low”.

Professionalism is seen in the firm's drivers. There is generally a lack of drivers in sector and road hauliers' ability to attract drivers is of strategic importance. The strategic move of Saddle Creek Logistics Services is to raise driver pay without increased costs for customers, i.e. to increase operational efficiency and thereby better servicing customers by improved and maintained resources (drivers and skills). The good driver is able not only to improve safety and accuracy, but also saving company money by improved fuel efficiency.

What resources and capabilities may be needed?

The specific resources to deliver the key success factor *fuel efficiency* is bonus money that relate to and capabilities of drivers and of firm routines in managing driver capacity and fuel. Drivers make in average 2 cents per mile each week based on skills in operations that improve fuel efficiency, safety and accuracy. The bonus system is basically an information systems, one of many in order to improve operations.

Saddle Creek Logistics Services operates several projects in order to raise driver pay and increase transparency and accuracy of driver earnings. The drivers sign-in their trips every day and one part of that system gives driver access to registration of their work. “They are paid weekly, but their pay is resolved

every day of the week,” Michael DelBovo, President, explains. In this way there shall be no unresolved issues of payments. A technical aspect of fuel efficiency, weight and cost of trucks is the firm’s choice of a smaller tank system. Saddle Creek worked with its fuel partner to redesign its fueling stations and experimented in-house to optimize the fueling operational procedure.

H.P. Therkelsen key success factors

How customers choose

“We do groupage, especially of frozen and chilled goods to regions in Western Europe”, Peter Therkelsen says. Groupage, especially of sensitive goods means a huge coordination problem in consolidation of compatible shipments into a truck load of cargo going to one area at a specific time. A critical mass of customers is needed. Truck utilization is increased by H.P. Therkelsen deliberate strategy to find customers for free capacity on some routes.

“About 7-8 people is involved on each order, so we rely on our employees care regarding data. Employee focus on quality and information quality is the basics for our promises to our customers. Also that the employees are adaptable to customers’ changes. The customers need not only delivery security but also reliable documentation of it. In this way data management and information technology becomes more and more important. Our business is based on information”, Peter Therkelsen says.

Much strategic development work is in dialogue with customers; especially specific solutions that customers want to outsource.

What resources and capabilities may be needed?

Information is a key resource and H.P. Therkelsen has increased number of employees with information technology competences. Several employees work exclusively with analysis and statistics of deliveries, which are needed for performance targets as well as for customer documentations.

An important new resource is the IT solution for truck control. In contrast to the old system that measured fuel efficiency per truck this system enable fuel efficiency per driver. Regardless of which truck a driver uses the system track driving behavior, such as speeding. Based on the data the drivers are educated. The result is better fuel economy, less stress for the driver, and less damages on the truck and on the goods. The training and improved performance is not related to salary, “it is a cultural thing, if one connects fuel efficiency to payments, then there will be fast improvements the first year and thereafter a lot of struggles in order to do get routes that easier pay off in the bonus system”, Therkelsen says. IT systems are important, we have also a system to control empty pallets that actually have importance for our efficiency, another system that monitor temperature in trailers, of huge importance to our customer promises.

Industry key success factors as appreciated by lead customers

A competitive advantage is achieved if the road haulier strategy emerges from industry key success factors and organizational capabilities (Grant, 2013). The road freight sector services a huge number of sectors and a price-based value proposition might work across segments of buyers. However, there are other values and supply-chain specific priorities that the transport buyer takes into consideration in its justification when choosing among different supplier capabilities. We will illustrate two cases of transport buyer evaluations. Over time these customers' procurement practices will influence road haulier competitiveness either as a customer or as a customer's customer that values their services, because of their prominent role in the sector.

US transport buyer

Danfoss transport buyer

Danfoss is based in Denmark. It is a leading supplier of technologies for different industries. Danfoss employ about 24.000 people and serve customers in about 100 countries. The procurement organization is organized as a global centralized category management team and segment operational purchasing units, in order to support their strategies and key performance indicators of triple-bottom line objectives. Transportation is one of these areas, the indirect materials area.

Danfoss won the Danish logistics and supply chain prize, 2014, based on professional logistics and supply chain developments. Their cost savings accounted to more than ten per cent logistics on a two-year period. The strategic priorities of procurement are to increase value creation potential. They argue that they have moved from focusing on "only reducing prices" when they initiated category management procurement to volumes consolidation. As category managers, the procurers use a structured routine to certify that suppliers meet Danfoss' standards in business practices, environment requirements and labor welfare (a must condition).

Based on knowledge from categories, the ambition is to consolidate and work closer with fewer suppliers in order to leverage supplier knowledge, to contribute to cost reductions through lean thinking and value chain work, and to improve quality with a zero defect mindset. While focus of category management are savings made through synergies, the next step is to get a grip on total costs. The vision is to increase integration for a holistic evaluation of costs in which suppliers are responsible to supply in accordance with performance-based contracts for the value chain.

Danfoss might be seen as a trend setter among professional road freight buyers.

Industry key success factors as appreciated by stakeholders

Among Danish manufacturers an obvious trend is to buy road haulage rather than employ drivers themselves (Poul Bruun, M.D., at ILT, an innovation center that is initiated and funded by ITD, International Transport Denmark). The reason is organizations' focus on the core and high demands on effective logistics and road haulage. There are many advantages for manufacturer doing so, instead of having few vehicles and few drivers, they get access to a network of transport resources with appropriate specialization of drivers and vehicles and a higher frequency in routes that shorten delivery time.

Another important stakeholder is the Danish road transport council with 11 members from the professional Danish haulage sector, the representatives is appointed by the transport minister. Its role is to develop issues concerning logistics and road haulage. In their state-of-the-art analysis of road haulage the market heterogeneity is highlighted. The council argues that there are many stories to be told in order to cover ground of the road freight markets. The markets are illustrated on a scale of competitive pressure. One endpoint is "the commodity service such as transporting containers to and from ports" that became a business performed by international hauliers, which in turn made Danish hauliers to establish international subsidiaries. The other endpoint is waste transport and for construction projects, mainly performed by national hauliers. Across these markets are those dependent on specific resources, such as vehicles with cranes, most often performed by national hauliers. Among Danish hauliers a trend is development from operating only goods transport between two locations to managing more complex processes including activities of inventory management, packaging, order management that are managed in collaboration with customers in order to improve customer business processes and reduce costs of their operations and increase haulier margins.

The council states that some challenges for road freight transport call for attention in order to improve competitive conditions:

- Fair competition and control and enforcement of e.g., driving and rest regulations and tax duties
- Infrastructural conditions, in terms of decreasing congestions that increase cost of fuel, salaries and mess with driving times, breaks and rest periods
- Challenge to keep and recruit professional drivers based on downward trend in sector's salary and working conditions
- Main competitive parameters relates to value creation with precision, overview of flows and competence. One example is hauliers' customer adaptation based on collaboration between haulier-customer, another example is to make use of IT, in order to improve customer service and most importantly, to reduce costs by better capacity utilization and reduced energy consumption. Technology enables access to data and improved control of operations

Concluding discussion

The within case analysis is pointing towards some key strengths that are strongly supported in literature; operational efficiency and customer adaptation. The case illustrations are of asset-based service-providers and capacity utilization is an important performance.

Haulier strategic development

Despite operational efficiency, costs of West-European EU15 hauliers are much higher than costs of low cost country operators. Prices are an industrial key success factor of high strategic importance for customers of the road transport and logistics sector and the strategy of individual operators needs to outweigh this strategic weakness (Grant, 2013; Anderson et al., 2006; Anderson et al., 2010). The organizational capabilities needed in the strategy is based on resources, tangible (warehouses and trucks), intangible (use of information technology, relationships and culture of payment schemes), and human (skills in monitoring and documentation, capacity to collaborate for improved efficiency and new business opportunities by a recognized opportunity in truck utilization).

While the strategic management literature has stressed that organizational capabilities are a result not only of resources, but of how resources become capabilities by organizational processes, organizational structure, motivation and organizational alignment (see e.g. Grant, 2013) there are knowledge gaps on strategizing that exploit the own firm's capabilities to create value for customers (Sirmon et al., 2007). The logistics and road transport literature on strategy development list and describe the capabilities omitting links to resources (but see Darkow, Weidmann, & Lorentz, 2015). It is problematic because the intertwined development in specialization and customer adaptation becomes black boxed. Our simple illustrations of contextualized value propositions point out that operational efficiency related to fuel efficiency has implications to relations to customers as well as to drivers, but in different ways. In addition to Darkow et al.'s (2015) findings about implications of the institutional environment the fuel efficiency programs was productive in two different ways. In the US context bonus payment was seen as capability that improved operational fuel efficiency but in the Danish context driver skills was a capability that was supported by information management and training.

An insight of road transport market developments market liberalization processes is that the market is emerging, in structure, organization and types of opportunities. Extreme low cost hauliers offer their services to logistics service operators and shippers, which contributes to a structure where hauliers with knowledge of political and social institutions further develop their problem solving capability and ability of customer adaptation. The strategic development might involve an increase in one or both dimensions (Hertz & Alfredsson, 2003; Wagner & Sutter, 2012). When it comes to drivers and fuel efficiency we have illustrated individual ways of service development that improves service levels, increase efficiency and lower costs. Both operators developed processes and software solutions (in line with Wagner & Sutter, 2012). An

evaluation of haulier positioning would probably result in a move in the *service developer* direction (Hertz & Alfredsson, 2003; Wagner & Sutter, 2012).

RBV is used to outline specific capabilities and resources in logistics and road transportation strategic management literature, but might not be a productive theoretical tool in order to understand logistic providers' value propositions of unique value? In-depth studies are able to demonstrate that standardized and customized solutions draw on the same set of capabilities but in different ways (da Mota Pedrosa, Blazevic, & Jasmand, 2015). In line with RBV criticism in strategic logistics literature (Liu et al., 2010; Yew Wong & Karia, 2010), the strategic management literature pose similar concerns. Løwendahl and Revang (2004) argue that RBV assumptions on market homogeneity is of little use in markets with dynamic and rapid changes that lead to increased heterogeneity:

“We see dynamic and rapid changes more likely to lead to increased heterogeneity and more and more difficulties for those who wish to compare suppliers on price as well as the value of deliverables. Firm-level dynamic developments, industry changes, and in particular changes in buyer preferences are likely to drive such changes, and even if firms continue to attempt to copy the ‘best practice’, the speed of the changes is likely to give us heterogeneity at any given point in time.” (Løwendahl & Revang, 2004:51)

They argue that two sets of resources, *competent employees and demanding customers*, need to be combined in ways that make use of heterogeneity in enabling firms to deliver more services and customization. Resource advantages per se is likely to create value for customers only in the short term in a dynamic environment in which market opportunities produce a series of temporary competitive advantages (Sirmon et al., 2007). The possibilities of value creation are through processes of strategizing and organizing, in order to manage and to create favorable points of difference in terms of quality, dependability, speed, flexibility and cost efficiency (c.f. Anderson et al., 2006). Strategizing and organizing is to be seen as two sides of the same coin in a strategy-as-practice perspective (Johnson, Melin, & Whittington, 2003; Johnson, Langley, Melin, & Whittington, 2007). Strategizing through the day-to-day activities of organizational life accomplishes strategic outcomes in terms of lower costs and other value creations. Organizing relates to mutual adjustment in the organization, such as keeping track of operations, and between different organizations as a consequence of service development and customization. Thus, in a road transportation context, competent employees draw on value-added logistics, technology-enabled logistics services and freight-forwarding services, in order to develop strategic outcomes. Often a cost focus is driving developments since monetary values always communicates well with customers. Road haulier strategizing is, if possible in collaboration with demanding customers as an intertwined development of strategic, operational and networking abilities.

Our empirical examples do not explicitly include EU12 hauliers' price-based value proposition. The conceptual value argument do, however, offer insights on customer expectations. Bargains are valuable and

give short term success, especially as firms such as Danfoss have difficulties to control suppliers' suppliers. In the longer run institutional pressures of social and political norms might influence more buyers to change priorities. Then a question is on differential value to other road hauliers' value proposition, not only in terms of price but also in terms of terms of quality, dependability, speed, flexibility and cost efficiency. In that case, either buyers develop EU12 supplier's key weaknesses or collaborate with hauliers that possess key strengths based on capabilities that resonate with triple-bottom-line values.

Theoretical implications

Strategy-as-practice is a perspective offering a number of advantages in order to understand strategy in a dynamic and complex context such as provision of services in EU (and other market liberalized contexts e.g., the US and China). The market heterogeneity related to road haulier strategic development undermine the relevance of static resource- and capability-based perspectives. Allred et al., (2011) combined the resource-based view with organizational learning and supply chain collaboration theory, in order to learn about collaboration capability. Our findings on road haulier strategy-as-practice contribute to that literature by outlining a processual explanation to deploying capabilities and resources for strategic development by complementing knowledge of essential haulier capabilities with strategy-as-practice conceptualization.

The strategy-as-practice perspective complements resource and capability based approaches by informing how strategic outcomes are reached and what capabilities are deployed in different situations. the contextual grounding of the strategy-as-practice approach focus on performance of practices, and assumes that strategizing is bounded by social and cultural context, and performed by multiple strategists, compared to the dynamic-capabilities focus on aggregated firm performances, and assumes that strategizing is rational behavior in an evolutionary economic context performed by top management.

References

- AECOM. (2014). *Task A: Collection and analysis of data on the structure of the road haulage sector in the European Union*. Retrieved from <http://ec.europa.eu/transport/modes/road/studies/doc/2014-02-03-state-of-the-eu-road-haulage-market-task-a-report.pdf>
- Allred, Chad R., Stanley E. Fawcett, Cynthia Wallin, and Gregory M. Magnan. 2011. "A dynamic collaboration capability as a source of competitive advantage." *Decision Sciences* 42 (1):129-61. doi: 10.1111/j.1540-5915.2010.00304.x.
- Anderson, James C., James A. Narus, and Wouter van Rossum. 2006. "Customer value propositions in business markets." *Harvard Business Review* 84 (3):90-9.
- Anderson, James C., Marc Wouters, and Wouter Van Rossum. 2010. "Why the highest price isn't the best price." *MIT Sloan Management Review* 51 (2):69-76.
- Bask, Anu H. (2001). Relationships among TPL providers and members of supply chains - a strategic perspective. *Journal of Business &*

- Industrial Marketing*, 16(6), 470-486.
doi:doi:10.1108/EUM0000000006021
- Borgström, Benedikte, Agndal, Henrik, Cui, Lianguang, Jensen, Leif-Magnus, Hertz, Susanne, & Pereseina, Veronika. (2015). *Business model value paradigms in road transport service sector and truck market*. Paper presented at the 27th annual NOFOMA Conference, Molde.
- Chia, Robert C. H., and Robin Holt. 2009. *Strategy without design: The silent efficacy of indirect action*. Cambridge: Cambridge University Press.
- Chia, Robert, and Robin Holt. 2006. "Strategy as practical coping: A Heideggerian perspective." *Organization Studies* 27 (5):635-55. doi: 10.1177/0170840606064102.
- Chia, Robert, and Andreas Rasche. 2010. "Epistemological alternatives for researching Strategy as Practice: building and dwelling worldviews." In *Cambridge handbook of strategy as practice*, edited by Damon Golsorkhi, Linda Rouleau, David Seidl and Eero Vaara. Cambridge Cambridge University Press.
- Cui, Lianguang, & Hertz, Susanne. (2011). Networks and capabilities as characteristics of logistics firms. *Industrial Marketing Management*, 40(6), 1004-1011.
- da Mota Pedrosa, Alex, Vera Blazevic, and Claudia Jasmand. 2015. "Logistics innovation development: a micro-level perspective." *International Journal of Physical Distribution & logistics Management* 45 (4):313-32. doi: doi:10.1108/IJPDLM-12-2014-0289.
- Darkow, Inga-Lena, Markus Weidmann, and Harri Lorentz. 2015. "Adaptation of foreign logistics service providers' resources and capabilities to a new institutional environment." *Journal of Supply Chain Management* 51 (1):27-51. doi: 10.1111/jscm.12068.
- Emmett, Stuart. 2009. *Excellence in freight transport: How to better manage domestic and international logistics transport*. Cambridge: Cambridge academic.
- European Commission. 2011. "White Paper: Roadmap to a single european transport area: Towards a competitive and resource efficient transport system." In.: COM(2011)144 final of 28 March 2011.
- Flint, Daniel J, Everth Larsson, Britta Gammelgaard, and John T Mentzer. 2005. "Logistics innovation: A customer value-oriented social process." *Journal of Business Logistics* 26 (1):113-48.
- Hilal, Nadia. 2008. "Unintended effects of deregulation in the European Union: The case of road freight transport." *Sociologie du Travail* 50, Supplement 1:e19-e29. doi: <http://dx.doi.org/10.1016/j.soctra.2008.07.002>.
- Hertz, Susanne. . 1996. "The dynamics of international strategic alliances: A study of freight transport companies." *International Studies of Management & Organization* 26 (2):104-30.
- Hertz, Susanne, & Alfredsson, Monica. (2003). Strategic development of third party logistics providers. *Industrial Marketing Management*, 32(2), 139-149.
- Johnson, Gerry, Langley, Ann, Melin, Leif, & Whittington, Richard. (2007). *Strategy as practice: Research directions and resources*. Cambridge: Cambridge University Press.

- Johnson, Gerry, Melin, Leif, & Whittington, Richard. (2003). Guest editor's introduction: Micro strategy and strategizing: Towards an activity-based view. *Journal of Management Studies*, 40(1), 3-22.
- Lai, Kee-hung. (2004). Service capability and performance of logistics service providers. *Transportation Research Part E: Logistics and Transportation Review*, 40(5), 385-399.
- Liu, Xiaohong, David B. Grant, Alan C. McKinnon, and Yuanhua Feng. 2010. "An empirical examination of the contribution of capabilities to the competitiveness of logistics service providers: A perspective from China." *International Journal of Physical Distribution & Logistics Management* 40 (10):847-66. doi:10.1108/09600031011093232.
- Løwendahl, Bente R, & Revang, Øivind. (2004). Achieving results in an after modern context: Thoughts on the role of strategizing and organizing. *European Management Review*, 1(1), 49-54.
- Regnér, Patrick. 2003. "Strategy creation in the periphery: Inductive versus deductive strategy making." *Journal of Management Studies* 40 (1):57-82.
- . 2008. "Strategy-as-practice and dynamic capabilities: Steps towards a dynamic view of strategy." *Human Relations* 61 (4):565-88.
- Sirmon, David G., Hitt, Michael A., & Ireland, R. Duane. (2007). Managing firm resources in dynamic environments to create value: Looking inside the black box. *Academy of Management Review*, 32(1), 273-292.
- Sitran, Alessio, & Pastori, Enrico. (2013). *Social and working conditions of road transport hauliers: Study*. Retrieved from European Parliament. Policy Department Structural and Cohesion Policies: <http://www.europarl.europa.eu/studies>
- Sornn-Friese, Henrik. (2001). *Learning in firms and markets: organizational adaptations and industry dynamics in the Road Haulage Industry in Denmark in the 1990s*. (Ph.D.), Copenhagen Business School, København.
- Villarreal, Bernardo, Jose Arturo Garza-Reyes, Vikas Kumar, and Ming K. Lim. 2016. "Improving road transport operations through lean thinking: a case study." *International Journal of Logistics Research and Applications*:1-18. doi: 10.1080/13675567.2016.1170773.
- Voss, M. Douglas, Jr Joseph D. Cangelosi, Michael Rubach, and S. Scott Nadler. 2011. "An examination of small motor carrier survival techniques." *The International Journal of Logistics Management* 22 (1):87-103. doi: doi:10.1108/09574091111127561.
- Wagner, Stephan M., & Sutter, Reto. (2012). A qualitative investigation of innovation between third-party logistics providers and customers. *International Journal of Production Economics*, 140(2), 944-958.
- Yew Wong, Chee, and Noorliza Karia. 2010. "Explaining the competitive advantage of logistics service providers: A resource-based view approach." *International Journal of Production Economics* 128 (1):51-67. doi: <http://dx.doi.org/10.1016/j.ijpe.2009.08.026>.