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Designing contract logistics service bundles

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—
An exploratory analysis

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1 Contract logistics – a challenging business area

The research at hand addresses the design of contract logistics service bundles. Specific design prerequisites and activities fundamentally contributing to a stable, long-term partnership are selected and discussed based on empirical data in order to provide guidance for practitioners from both logistics service providers (LSPs) and shipping companies – so-called shippers. Chapter 1 is dedicated to the relevance of contract logistics, particularly the design phase (Chapter 1.1). It also outlines the objectives of this research and the respective research questions (Chapter 1.2).

1.1 Background and relevance of the research

Contract logistics has received growing attention during the last decades not only in practice but also in academia. Recent developments in economics have contributed to the increased attention. Ongoing globalisation and the continuing focus on core competencies have led to a rising demand for outsourcing of logistics and logistics-related services (Gunasekaran *et al.*, 2008; Lewin & Peeters, 2006; Prahalad & Hamel, 1990; Rao & Young, 1994). Accordingly, the professionalisation of processes and the range of services outsourced to LSPs has increased significantly over the past years (Bjurstrom, 2008; Kim *et al.*, 2008; Sink *et al.*, 1996). This applies in particular to the novel and somewhat indistinct area of contract logistics, also referred to as third-party logistics. Contract logistics has developed rapidly in recent years in almost all industries, yet has potential for further development (Klaus & Kille, 2008; Langley & Capgemini, 2007; Langley & Capgemini, 2009). Market estimates assume 15-20% growth rates in the United States and Western Europe for the years 2009 to 2010 (Deepen *et al.*, 2008).

In order to avoid costly efforts for the coordination of multiple partners, the shippers tend to limit their outsourcing ambitions to a restricted number of providers, resulting in the outsourcing of a large number of services to a particular LSP who, based on the customer's requirements, designs service bundles that are uniquely tailored to the customer's needs. These service bundles comprise all services the LSP performs for a given shipper. A growing scope of outsourcing activities also caters to LSPs as value-added steps in addition to the frequently outsourced but low-margin transportation business may be undertaken by the LSP (Stein, 2008). In order to take advantage of these opportunities, close collaboration in an intense relationship between both parties

is essential (Bolumole, 2001). Relationship orientation is also considered a means by which to overcome shipper risks attached to contract logistics, including their dependency on a limited number of service providers, hidden costs, evaluation and monitoring problems, cultural challenges, information asymmetry or inefficient management (Wang & Regan, 2003). A long-term, stable partnership therefore seems a significant lever for successful contract logistics in general.

The augmented number of individual services in contract logistics leads to more complex outsourcing projects with more comprehensive, customised contract logistics service bundles (Klaus, 2008; Langley & Capgemini, 2007). These service bundles require a structured ramp-up (Schmidt *et al.*, 2007). The positive effects of contract logistics arrangements can thus rarely be achieved without difficulties (House & Stank, 2001) and "[i]mpediments are likely to be encountered in all the different phases of relationship development" (Marasco, 2008, p. 136). One major challenge in establishing long-term, stable relationships as a basis for successful contract logistics is the design of customised bundles of services, often characterised as a specific phase in the establishment of contract logistics service bundles. In the design phase a concept for the dedicated service bundles and their contract details is developed. LSPs, often in collaboration with the shipper, have to design an appropriate service bundle concept by identifying, composing and providing the right set of services tailored to the shipper's requirements and needs. In the past, these demands have not always been met. The survey by Langley and Capgemini (2007) concluded that many shippers are not fully satisfied with the provider's service. LSPs seem to fail especially in delivering the expected cost reduction, establishing trustworthy relationships and meeting the increased need for advanced IT capabilities, as well as in their project-management skills (Langley & Capgemini, 2007; Langley & Capgemini, 2009). This often leads to dissolutions, as reported by trade and academic publications (Ackerman, 1996; Foster, 1999). One potential cause of dissatisfaction is the design of contract logistics service bundles, as in this phase the basis for the future success of the contract logistics relationship is laid. Within this stage all relevant content of the service bundle concept is specified. LSPs that fail to meet the distinct demands of the shipper have to cope with unsatisfactory relationship outcomes as the consequence.

Though the design of contract logistics service bundles strongly influences the evolving relationship between LSP and shipper and thus contract logistics success, neither practice nor academia have addressed this issue to a satisfactory degree. In the past, research barely touched the design of contract logistics service bundles and

primarily focused on topics like the phenomenon of contract logistics as a whole or the outsourcing decision in general (e.g. Daugherty & Dröge, 1997; Daugherty *et al.*, 1996; Rao & Young, 1994; van Damme & van Amstel, 1996), the selection of an appropriate LSP (e.g. Bagchi & Virum, 1996; LaLonde & Maltz, 1992; McGinnis *et al.*, 1995; van Laarhoven & Sharman, 1994), the marketing of contract logistics services (e.g. Berglund *et al.*, 1999; Engelsleben, 1999; Large, 2008; Zimmermann, 2004), service offerings and their application (e.g. Ashenbaum *et al.*, 2005; Bhatnagar *et al.*, 1999; Lieb & Kendrick, 2003; Lieb *et al.*, 1993; Murphy & Poist, 2000; Sankaran *et al.*, 2002; Sohail & Sohal; Wilding & Juriado, 2004)¹ and the strategic positioning of LSPs in contract logistics (e.g. Bagchi & Virum, 1996; Baofeng *et al.*, 2008; Bask, 2001; Frohn, 2006; Hertz & Alfredsson, 2003).² Although the literature mainly discusses the shipper's perspective, an increasing number of publications have shifted their focus to the relationship perspective of the shipper and LSP (e.g. Baofeng *et al.*, 2008; Bask, 2001; Boyson *et al.*, 1999; Gadde & Hulthén, 2009; Halldorsson & Skjott-Larsen, 2004; Huiskonen & Pirttilä, 2002; Knemeyer & Murphy, 2004; Panayides, 2007a; Panayides & So, 2004; Skjoett-Larsen, 2000). The design of contract logistics service bundles has also gained some attention in the literature. A small number of authors have addressed the problems associated with the design of contract logistics service bundles. In particular, the lack of understanding of customer needs, the lack of appropriate expertise in products and markets, unrealistic customer expectations, the inadequate description of services and service levels, lack of cost awareness and insufficient innovative power of LSPs are cited in the literature (Ackerman, 1996; Ellram & Cooper, 1990; Selviaridis & Spring, 2007; Wilding & Juriado, 2004).

The existing literature provides general advice for building partnerships and defining the scope of services but does not shed light on how service bundles can be designed successfully. This thesis seeks to examine how LSPs, in collaboration with the shipper, successfully design contract logistics service bundles. Fig. 1-1 provides a consolidated overview on the theoretical and practical relevance of this research on the design of contract logistics service bundles.

¹ Though not addressed in scientific contract logistics literature, publications concerning 'ramp-up management' must be mentioned. The topic was viewed from a practical point of view in the study of Schmidt *et al.* (2007) and in a book section by Prockl & Rudolph (2007). This dissertation distinguishes the design phase from the implementation phase considered in ramp-up management. Accordingly, ramp up management of contract logistics services is not part of this dissertation.

² Researchers' efforts to establish and manage contract logistics arrangements also resulted in multiple contributions addressing issues of activities of the development process, such as partner selection, contract design, coordination, communication and information integration (Marasco, 2008).

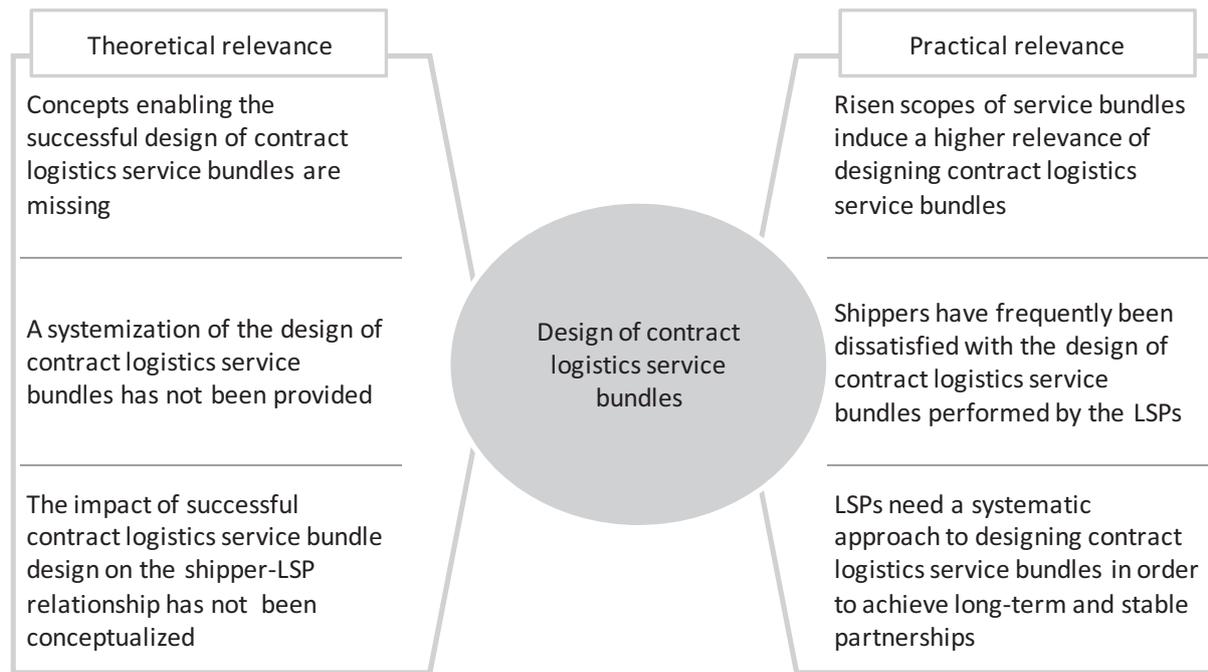


Fig. 1-1: Theoretical and practical relevance of the design of contract logistics service bundles

1.2 Objectives and research questions

The cornerstones of successful service bundle design in contract logistics are addressed in this research in order to fill the theoretical gap and provide managerial advice. Existing research is incorporated in the analysis and supplemented by examining the design of contract logistics service bundles that currently lack conceptual and empirical investigation in the literature. The design phase is viewed through the eyes of the LSP, while also considering the interaction and relationship with the shipper. As stated by Murphy & Poist (2000), a mismatch between the provider's and the shipper's perspectives may be observed in the contract logistics literature. A large number of publications focus on the demand side. Even information sharing, a crucial element of the pre-design and strongly influenced by the interaction of the involved parties, is addressed only from the shipper's perspective (Bienstock, 2002).

This thesis primarily seeks to analyse cornerstones of the successful design of contract logistics service bundles, with the establishment of long-term, stable relationships based on the satisfaction of the involved parties. In the first step, the internal premises of an LSP affecting the design of contract logistics service bundles need to be analysed. Depending on these premises the resources necessary for the design and

capabilities may vary. In the second step, the actual design of specific contract logistics service bundles is addressed.

The objective of this research is consistent with call for research in the literature (Selviaridis & Spring, 2007) indicating the need for further research in the design and implementation of contract logistics services. Researchers are encouraged to address how logistics services are defined and designed within specific shipper-LSP relationships. Consequently, more empirical research on *how* services are defined in contract logistics is required. Another issue addressed is the need for empirical research concerning contract content (*what*) (Selviaridis & Spring, 2007). The existing literature regarding the contractual content is mainly conceptual in nature. Hence "empirical evidence is needed about the type of contracts, charging mechanisms and fee structures applied, [...] and the extent of inclusion of penalty/incentive clauses" (Selviaridis & Spring, 2007, p. 140).

Due to the ongoing growth of contract logistics with an increased scope of services driving complexity, successful service bundle design becomes a key challenge for many LSPs. Yet, practitioners do not adequately cope with this challenge. So far, the literature does not provide sufficient guidance on how to design contract logistics service bundles successfully. In response to this deficiency in the literature, this research investigates cornerstones of successful service bundle design and offers advice for practitioners. In order to guide this research and ensure that the objective is met, the following research questions are formulated:

RQ₀: *How can contract logistics service bundles be designed successfully?*

Contract logistics service bundles are designed successfully when both the LSP and the shipper are satisfied with the designed service bundles, resulting in a long-term, stable relationship (compare Fig. 1-2). This perception of successful contract logistics design in the sense of enabling long-term and stable relationships based on satisfaction with the designed service bundles is supported by numerous authors (Blancero & Ellram, 1997; Bolton, 1998; Lambert *et al.*, 1999). Furthermore, long-term and stable relationships are an indicator of successful design because if the relationship was uneconomical or somehow unsatisfactory, in the long run, one of the partners would end the relationship. In order to answer the main research question, three subordinate research questions are derived and subsequently addressed.