

(RE-)POSITIONING OF LOGISTICS SERVICE PROVIDERS IN A GLOBALISED WORLD – AN EMPIRICAL SURVEY ON POSITIONING MODELS AND STRATEGIC CAPABILITIES

*Michael Hülsmann¹, Benjamin Korsmeier², Verena Brenner³, Jacobs University gGmbH
Josef Decker⁴, Michael Krähe⁵, Hochschule für Internationale Wirtschaft und Logistik*

*¹m.huelsmann@jacobs-university.de, ²b.korsmeier@jacobs-university.de,
³v.brenner@jacobs-university.de, ⁴decker@bvl.de, ⁵kraehe@bvl.de*

Acknowledgement

This research was supported by the German Research Foundation (DFG) as part of the Collaborative Research Centre 637 "Autonomous Cooperating Logistic Processes – A Paradigm Shift and its Limitations".

INTRODUCTION

Logistics Service Providers (LSP) have to face the strategic challenges of a relatively homogenous product span: Transporting, storing and handling goods is not determined by a versatile and volatile spectrum of product-related characteristics (Davis, Golicic & Marquardt 2008). Hence, LSP can deploy only limited opportunities to position and differentiate their services and companies; achieving a competitive position in distribution logistics service markets seems to be majorly restricted to price, place and promotion as key components of the marketing mix (Speh 2008). Moreover, diverging and changing customer expectations from all over the world (Narasimhan & Das 1999), developing and challenging market activities of international competitors (Dornier et al. 1998), ubiquitous and real-time information accessibility (Siegele 2002), fluid and diffuse market structures, global and standardised service supply, etc. force the LSP to adapt their strategies constantly and very flexibly (Hülsmann, Grapp & Li 2008, Person & Virum 2001). Hence, a LSP has to redefine its strategic agenda and to re-position itself in the markets (Lemoine & Dagnaes 2003). In order to learn more about the strategic implications and constraints of a globalised world for LSP this paper intends to provide first exploratory insights into the positioning of German LSP in the field of distribution logistics.

The paper – besides introduction and conclusions – will firstly provide a comprehensive overview about positioning and positioning models for LSP; secondly, it intends to give an overview about the current positioning and the underlying resources of LSP in the German market. Thirdly, the paper would like to outline a framework for prospective needs and possibilities for the repositioning of German LSP.

POSITIONING MODELS FOR LSP

Logistics companies act in volatile markets as well as environments. Additionally, forecasts expect growing environmental uncertainty with every passing year (Wheelen 2006). That results from the fact, that companies are confronted with permanent changes in their close environment (e.g. changing customer demands on their local markets) as well as in their broader environment (e.g. exchange rate shifts or interest rates) (Saloner, Shepard & Podolny 2001). Thus, companies have to find a successful, sustainable and adequate strategic position in order to cope with these environmental challenges. However, aiming only for the right position to customers (deliver highest customer value) and competitors (try to differentiate) (Bruhn 2009) does not guarantee success, since rivals can copy a market position very easy and competitive advantages are mostly temporary (Porter 1996). Thus, companies have to be flexible. That means they have to adapt their

own strategic behaviour or rather their own position according to changing customer requirements and competitors positions. This ability to establish and adapt a certain position in the market is based on a company's resources and its capabilities, since a certain position requires resources (assets owned by a company), which can lead to capabilities (what a company can do) through an appropriate resource allocation (Grant 2005). In result, companies can gain long lasting competitive advantages based on their unique capabilities and resources, which are difficult to imitate by competitors (Johnson & Scholes 2008) and which have to be changeable (e.g. adaption of human skills in order to meet changing customer demand for new products or services).

Regarding the repositioning two different options are possible: A customer oriented repositioning in order to meet the position demanded by the customer on the one hand or on the other hand a competitor oriented repositioning which aims for a position which is as far as possible away from those of competitors (Trommsdorf & Paulssen 1999). Regarding the positioning of LSP the literature provides different analysis approaches. According to Juga et al., positioning models for LSP can be distinguished regarding the model type (classical positioning models, resource/ competence based models), the model dimensions (characteristics) and the offered position classification. Thereby, resource and competence-based models aims for displaying the position base on the LSP assets (resources) and capabilities (Juga, Pekkarinen & Kilpala 2008). Examples for classical positioning models are given by (Delaney 1991), (Cooper, Browne & Peters 1994), (Bask 1999), and (Person & Virum 2001). Resource and competence-based models are introduced beside others by (Africk & Calkins 1994), (Berglund 1999), (Schary & Skjott-Larsen 2001), (Bask 2001), and (Hertz & Alfredsson 2003). Regarding the model dimensions the classic positioning models basically refer to the broadness of service portfolio and the industry presence, whereas the resource and competence based model refer e.g. to asset specify, complexity of services, degree of customer integration or offered physical services vs. management services. For displaying the current positioning of LSP in Germany a resource and competence-based model will be used, since the importance of resources and competences (capabilities) for the positioning was already reasoned above. The resource and competence based model, which originates from the research of (Hertz & Alfredsson 2003) and bases on the research of (Hakansson & Johanson 1982), compares the dimensions "general ability of problem solving" (high/ low) and "ability of customer adaption" (high/ low). The model classifies the LSP in terms of Standard Transport Firms, Traditional House Brokers or Warehousing Firms, Integrators, and TPL Providers. The TPL Providers are further classified into Standard TPL Provider, Customer Adapter, Service Developer, and Customer Developer. Moreover, a TPL Provider is defined as an "external provider who manages, controls, and delivers logistics activities on behalf of a shipper" (Hertz & Alfredsson 2003).

POSITIONING, RESOURCES AND CAPABILITIES OF LSP IN GERMANY

For displaying the current positioning of LSP in Germany an empirical study was arranged with ten logistics experts. The expert interview form was used because of the importance of the individual expert knowledge for the exploratory survey (Bortz & Döring 2006). Moreover, the advantage of the personal interview form towards e.g. a web-based interview form lies in the possibility to obtain complete and precise information during the face-to-face interview situation (Zikmund 2003). The logistics experts are located in different business areas (production logistics, distribution logistics, consultancy, logistics education). That should assure a broad and comprehensive view on the logistics industry. For the evaluation a verbalised four item scale was used in order to avoid indecisive answers, which are located in the middle of the scale (Porst 2008). During the interviews the logistics experts were asked regarding their estimation of the LSP "general ability of

problem solving” and the “ability of customer adaption” as two examples for logistics provider’s capabilities. The capabilities were evaluated regarding their general importance (not important, less important, important, very important) for LSP and the estimated configuration (very low, low, high, very high). The experts’ answers can be summarised as follows:

90% of the experts estimate the importance of the general ability of problem solving for LSP as very important (50%), or important (40%), and one expert as less important (10%). Regarding the configuration with the general ability of problem solving all experts estimate the configuration for LSP in Germany as high (100%). The ability of customer adaption is mostly rated as important (60%). Two experts rate it as very important (20%) and two as less important (20%). The ability of customer adaption is estimated as high (50%), low (40%), or very low (10%) in terms of the LSP configuration.

The results clearly show a gap between the importance of the evaluated abilities and the estimated configuration. Regarding the ability of problem solving half of the interviewed experts rate it as very important, whereas four experts rate this ability as important and one expert as less important. That shows a core in the “very important” area. However, the configuration is rated as “high” by all interviewed experts. Thus, a gap between the importance (very important) and the configuration (high) can be assumed. It becomes more obvious regarding the ability of customer adaption: 80% percent of the experts rate this ability as important or very important and 20% as less important. However, 40% evaluate the configuration as low, 50% as high, and 10% as very low. Thus a gap can also be assumed regarding the ability of customer adaption cause of the rated importance (important and very important) and the rated configuration (high and low). Thus, it can be assumed that because of the identified gap between the importance of the abilities and its configuration an adaption of the abilities or rather a repositioning is required through an appropriate resource adaption. Therefore, the positioning is displayed in the following figure based on the configuration estimation:

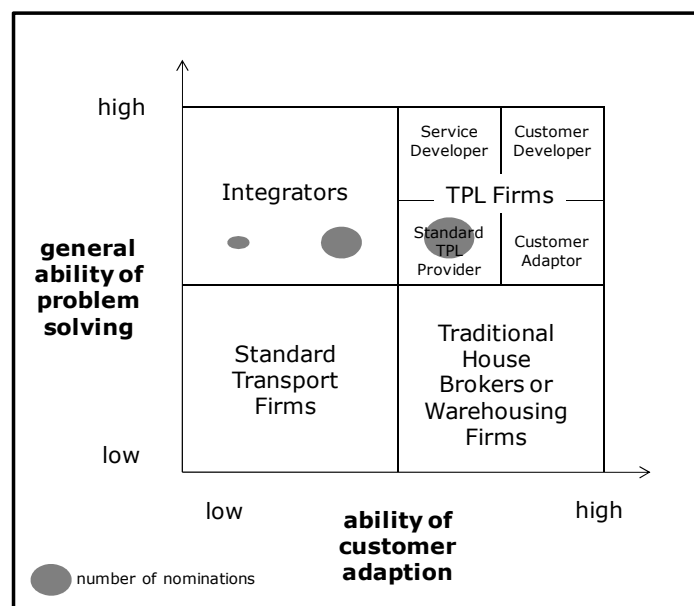


Figure 1: Positioning of Logistics Service Providers in Germany

Firstly, the positioning model displays two covered areas or rather two main groups of LSP in the German market: Integrators and Standard TPL Providers. The group of “Inte-

grators" exhibits a high ability of solving general problems and are less capable to adapt to special needs of customers. Such Service Providers combine the assets of different partners in order to create transportation networks and offer standardised services (Hertz & Alfredsson 2003). Due to suchlike standardised services and processes the possibilities for customer adaption can be seen as low, since standardised services come along with a higher robustness but also a simultaneous lack in flexibility. The Standard TPL Providers can be seen as providing basic TPL services like warehousing and distribution in addition to the general transport services (Hertz & Alfredsson 2003), without providing high developed value adding services like e.g. the Customer Adaptor. The ability of general problem solving requires, beside others, resources in terms of cost focused work force, successful process management, physical asset base, and high quality IT-system, in order to establish cost efficient and robust processes. For the ability of customer adaption a LSP needs, beside others, creative and flexible work force, flexible processes and special knowledge, well established networks, and versatile IT-systems, in order to adapt to special customer demands through an open minded, creative and solution oriented system.

Secondly, the positioning model shows areas, which are not covered by LSP. One example are Standard Transport Firms, which are offering basic services like the A to B transport without a broad service portfolio or a high level of customisation. Traditional House Brokers or Warehousing Firms offer a low range of services with a higher customisation (e.g. special storage services for customers). The non-occupation of the lower positions in the positioning model show that the changing conditions in logistics markets require a high level of problem solving ability and customer adaption, since customers demand for a service portfolio, which is standardised as well as adaptable to a certain degree. However, Standard Transport Firms as well as Traditional House Brokers or Warehousing Firms are part of logistics networks, which are driven by Integrators or Standard TPL Providers. Thereby, they serve as subcontractors whereas their individual service is part of the logistics network portfolio. The upper positions (Service Developer, Customer Adaptor and Customer Developer) constitute areas, which can be covered by Integrators or Standard TPL Providers through an adaption of the underlying resources.

Thirdly, the question occurs which resources are needed by Integrators and Standard TPL Providers for their positioning or rather their individual abilities? For the ability of general problem solving an Integrator needs beside others a successful process management in order to create standardised, efficient, and robust processes and establish economies of scale and scope. Thus, an Integrator's task refers to the creation of robust processes with a high utilisation, in order to meet customers demand for reliable low cost services. Therefore, an Integrator also needs own physical assets (e.g. logistics buildings and transport equipment) in order to ensure the robustness of the processes through own control. These robust processes can be combined to reliable networks and can lead to a broad range of standardised services. Thus, a logistics Integrator can assure a high competence in solving general problems.

Fourthly, in order to become a Standard TPL Provider with a higher ability of customer adaption a service provider has to focus on the establishment of special knowledge (Bask 2001), in terms of analytical and logistics design skills (Berglund 1999) as well as flexible processes, which can be adapted to special customer needs. That means that the core task refers to the permanent analysis of customers' individual problems and the subsequent design of own processes in order to solve suchlike changing exercises. Moreover, the Standard TPL Provider needs less physical assets but well-established networks (Person & Virum 2001). That results from the fact that through the connection of internal and external assets high flexible networks can be established and own assets can be combined with external ones according to the given customer problem.

OPTIONS FOR THE REPOSITIONING OF LSP IN GERMANY

Based on the current positioning and underlying resources three major options for the repositioning of LSP in Germany are possible: The improvement of the ability of general problem solving, the improvement of the ability of customer adaption or the improvement of both simultaneously.

First Option: Improve ability of customer adaption

The first option is to aim for the development from an Integrator or Standard TPL Provider to a Customer Adaptor. Thereby, the Customer Adaptor takes over the already existing activities of customers and aims for improving the efficiency of them without focusing on developments of services (Hertz & Alfredsson 2003). Regarding the development of creative and flexible work force logistics companies should focus on the establishment of an open minded, cooperative and innovation-supporting environment, in order to allow for creativity and advance solution-oriented thinking. An innovative environment can e.g. be established through the principle of self-organisation (Hülsmann & Cordes 2009) or through working in teams (Bea & Haas 2009). Flexible processes refer to the establishment of services, which are not highly standardised but can be adapted to special customer needs. In order to be flexible processes have to be established, which are independent from each other, in order to avoid bullwhip effects through the failure of several processes. That means that in case one process is changed other processes are not highly influenced. Regarding the special knowledge LSP have to invest in the development of the company's knowledge base, which collects the organisational information. Such a knowledge base ensures the availability of relevant processes and services related knowledge, since the relevant know-how of several organisational members is accumulated and becomes available for the collective. In order to develop networks based on less physical assets LSP have to focus on cooperation activities. Thus, flexible interfaces have to be established in order to allow for the connection and integration of network partners. Moreover, own processes have to be transparent and the LSP has to focus on the relationship development with e.g. subcontractors in the network. Also processes for searching, evaluating and controlling network partners have to be implemented in order to expand the network and ensure the highest efficiency in the cooperation. In order to provide versatile IT-systems LSP have to focus on modularised software components, which can be expanded with other modules if necessary. Also the IT-systems have to be highly compatible with other software respectively with the data of customers, since the solution of individual customer problems demand for an integration of specific problem-related data and information.

Second Option: Improve general ability of problem solving

The second option aims for the development from a Standard TPL Provider to a Service Developer. The Service Developer offers advanced value adding services for different customers whereas the services often consist of standardised services, which are adapted to special customer needs as modules (Hertz & Alfredsson 2003). Regarding the development of cost focused work force a company can establish a culture, which fits to such a cost focus strategy. That means to focus on values like economy, discipline and reliability in the whole organisation (Bea & Haas 2009). For a successful process management and the improvements of internal processes LSP have to focus on process innovations or rather an adequate innovation management (Flint et al. 2005), in order to permanently reorganise and update the underlying processes. A connection to research centres (e.g. universities) can also support innovation activities, since it can lead to absorption of new ideas and an application of theoretical approaches to practical problems. In order to establish an adequate base of physical assets a logistics company has to invest in up-to

date and high-developed assets, in order to realise a high cost efficiency during their use in standardized processes. These up-to date assets can e.g. be environmentally friendly vehicles and buildings or highly developed logistics technologies (e.g. Radio-Frequency-Identification). Since the focus lays on cost efficiency these physical assets also have to be compatible to the existing asset base in order to establish economies of scope. High quality IT-systems for the support of robust processes can be established through the use of certified, highly developed and standardised hardware and software components or through the investment in such components offered by different external providers.

Third Option: Improve ability of problem solving and of customer adaption

The third option describes the development to a Customer Developer. These type of provider bases on a high integration of the customer and often covers the whole logistics activities. It requires a high level of know-how and constitutes the most difficult and advanced form of provider (Hertz & Alfredsson 2003), since it requires the highest level of general problem solving ability as well as customer adaption ability. In order to improve the general ability of problem solving as well as the ability of customer adaption LSP have to focus on different resources and on the balance between them. First the company has to combine own resources (e.g. management systems) with external resources in order to create logistics networks, which are able to offer a number of different but also highly customised services to competitive costs. Thus, the service provider has to focus on service innovation as well as on process innovation. The interfaces have to be highly flexible in order to integrate the whole customer data in the own processes as well as stable in order to provide all required information for the customer in every stage of service procedure. The network processes have to be flexible on the one hand in order to be adaptable to the special customer needs but also have to be stable in order to avoid failures. Also focusing on both, general problem solving ability and customer adaption can lead to a high complexity within a company because of managing and designing activities in a network which have to be highly adapted to special customer needs. Autonomous cooperation can be seen as one approach to balance flexibility and stability in logistics networks with the aim of high robustness (Hülsmann & Wycisk 2007, Hülsmann et al. 2011). Also the implementation of autonomous cooperation in a company can be assumed to lead to a pool of different alternatives, the promotion of creativity, and contributions to efficient problem solving through autonomous decision-making, the interaction of heterogeneous elements and an improved handling of the system's overall complexity (Hülsmann & Wycisk 2007). Thus, autonomous cooperation as an organisation principle can contribute on both, the ability of general problem solving (through efficient problem solving) and the ability of customer adaption (creation of different alternatives, promotion of creativity) as well as the handling of complexity resulting from these abilities.

CONCLUSION

An adequate positioning in their environment is essential for LSP in order to differentiate from competitors and achieve competitive advantages. Thus, this research investigated the positioning of German LSP through an empirical study with ten logistics experts, based on the LSP ability of customer adaption and the ability of general problem solving. For the outline of repositioning options different resources were described in terms of options for their development and adaption. Three main results can be outlined: (1) The study showed a misfit between the estimated importance of the LSP abilities (high) and its estimated configuration (low). This leads to a need for repositioning of LSP in Germany. (2) The investigation showed the main positioning of LSP as Integrators and Standard TPL Providers. Thus, a number of uncovered fields could be outlined, which allows for potential repositioning. (3) It was shown that a LSP can reposition itself to an uncovered area through the development of resources like work force, processes or IT sys-

tems. Thereby, autonomous cooperation as organisational principle can contribute to a development of resources and the handling of complexity. From a managerial perspective it can be stated that in the areas, which are currently covered by LSP, the offered service portfolios are similar and thus a differentiation from competitors seems to be difficult. Thus, logistics managers have to focus on repositioning their company to less- or uncovered fields through the development of the company's resource base. A successful repositioning can lead to an outperforming of competitors and to the achievement of competitive advantages through the establishment of a differentiating and high customer value delivering service portfolio. Thus, repositioning activities should be and are already on the agenda of logistics companies (e.g. the LSP Kühne + Nagel focuses on their customer adaption ability or rather aims for becoming a Customer Adaptor at the moment (Klimm & Clausen 2011)). This research also demonstrated some options for the repositioning of LSP but it could only cover a limited number of resources and two possible dimensions of positioning models. Thus, further research could focus on an investigation of other resources and positioning model dimensions for LSP.

REFERENCES

- Africk, J.M. & Calkins, C.S. 1994, "Does asset ownership mean better service?", *Transportation and Distribution*, vol. 35, no. 5, pp. 49-61.
- Bask, A.H. 2001, "Relationships among TPL providers and members of supply chains: a strategic perspective", *Journal of Business & Industrial Marketing*, vol. 16, no. 6, pp. 470-486.
- Bask, A.H. 1999, *Third party relationships in logistics services*, Helsinki School of Economics and Business Administration.
- Bea, F.X. & Haas, J. 2009, *Strategisches Management*, Lucius & Lucius, Stuttgart.
- Berglund, M. 1999, "Third-party logistics: is there a future?", *International Journal of Logistics Management*, vol. 10, no. 1, pp. 59-70.
- Bortz, J. & Döring, N. 2006, *Forschungsmethoden und Evaluation : für Human- und Sozialwissenschaftler*, Springer Medizin Verlag Heidelberg, Berlin.
- Bruhn, M. 2009, *Marketing: Grundlagen für Studium und Praxis*, Gabler Verlag / GWV Fachverlage GmbH, Wiesbaden.
- Cooper, J., Browne, M. & Peters, M. 1994, *European logistics: markets, management and strategy*, Blackwell, Oxford.
- Davis, D.F., Golobic, S.L. & Marquardt, A.J. 2008, "Branding a B2B service: Does a brand differentiate a logistics service provider?", *Industrial Marketing Management*, vol. 37, no. 2, pp. 218-227.
- Delaney, R.V. 1991, "Trends in Logistics and U.S. World Competitiveness", *Transportation Quarterly*, vol. 45, no. 1, pp. 19-41.
- Dornier, P., Ernst, R., Fender, M. & Kouvelis, P. 1998, *Global Operations and Logistics - Text and cases*, John Wiley & Sons, New York.
- Flint, D.J., Larsson, E., Gammelgaard, B. & Mentzer, J.T. 2005, "Logistics Innovation: a Customer Value-Oriented Social Process", *Journal of Business Logistics*, vol. 26, no. 1, pp. 113-147.
- Grant, R.M. 2005, *Contemporary Strategy Analysis*, 5th edn, Blackwell, Malden.
- Hakansson, H. & Johanson, J. 1982, "Industriella Marknadsföringstrategier i Stal- och Skogsindustrierna" in *Företag i Nätverk - Ny syn på Konkurrenskraft*, eds. I. Hägg & J. Johanson.
- Hertz, S. & Alfredsson, M. 2003, "Strategic development of third party logistics providers", *Industrial Marketing Management*, vol. 32, no. 2, pp. 139-149.
- Hülsmann, M. & Cordes, P. 2009, "Autonomous Co-operation and Control in Complex Adaptive Logistic Systems - Contributions and Limitations for the Innovation Capabil-

- ity of International Supply Networks" in *COMPLEX 2009, Part 1, LNICST 4 - Proceedings of the First International Conference on Complex Sciences: Theory and Application, Shanghai, China.*, ed. J. Zhou, Springer, Berlin, pp. 1023-1032.
- Hülsmann, M., Grapp, J. & Li, Y. 2008, "Strategic Adaptivity in Global Supply Chains - Competitive Advantage by Autonomous Cooperation", *International Journal of Production Economics, Special Issue: Manufacturing Systems – Strategy & Design*, vol. 114, no. 1, pp. 14-26.
- Hülsmann, M., Korsmeier, B., Illigen, C. & Cordes, P. 2011, "Autonomous Co-operation of "Smart Parts": Contributions and Limitations to the Robustness of Complex Addaptive Logistics Systems" in *Dynamics in Logistics*, eds. H.-. Kreowski, B. Scholz-Reiter & K. Thoben, Springer, Heidelberg, pp. 255-268.
- Hülsmann, M. & Wycisk, C. 2007, "Autonomous Co-operation – A Way to Vitalize Organizations?" in *Understanding Autonomous Cooperation and Control – The Impact of Autonomy on Management, Information, Communication, and Material Flow*, eds. M. Hülsmann & K. Windt, Springer, Berlin, pp. 193-206.
- Johnson, G. & Scholes, K. 2008, *Exploring corporate strategy : text & cases*, 8th edn, Financial Times Prentice Hall, Harlow.
- Juga, J., Pekkarinen, S. & Kilpala, H. 2008, "Strategic positioning of logistics service providers", *International Journal of Logistics Research and Applications*, vol. 11, no. 6, pp. 443-455.
- Klimm, L. & Clausen, S. 2011, *Kühne + Nagel krempelt Führung um* [Homepage of Financial Times Deutschland], [Online]. Available: <http://www.ftd.de/unternehmen/handel-dienstleister/:aenderungen-bei-logistiker-kuehne-nagel-krempelt-fuehrung-um/60028499.html?query=kühne+&Suche=Suche> [2011, 04/27].
- Lemoine, W. & Dagnaes, L. 2003, "Globalisation strategies and business organisation of a network of logistics service providers", *International Journal of Physical Distribution & Logistics Management*, vol. 33, no. 3, pp. 209-228.
- Narasimhan, R. & Das, A. 1999, "An empirical investigation of the contributions of strategic sourcing to manufacturing flexibilities and performance", *Decision Sciences*, vol. 30, no. 3, pp. 683-718.
- Person, G. & Virum, H. 2001, "Growth Strategies for Logistics Service Providers: A Case Study", *The International Journal of Logistics Management*, vol. 12, no. 1, pp. 53-64.
- Porst, R. 2008, *Fragebogen - Ein Arbeitsbuch*, 1st edn, VS Verlag für Sozialwissenschaften, Wiesbaden.
- Porter, M.E. 1996, "What is Strategy?", *Harvard Business Review*, , vol. 74, no. 6, pp. 61-78.
- Saloner, G., Shepard, A. & Podolny, J. 2001, *Strategic Management*, John Wiley & Sons, New York.
- Schary, P.B. & Skjott-Larsen, T. 2001, *Managing the global supply chain*, Copenhagen Business School Press, Copenhagen.
- Siegele, L. 2002, "How About Now? - A Survey of the Real-Time Economy", *The Economist*, vol. 362, pp. 18-24.
- Speh, T.W. 2008, "Innovative LSP services: The marketing challenge" in *Managing Innovation: The new competitive edge for logistics service providers*, ed. S.M. Wagner, Haupt, Bern, pp. 31-60.
- Trommsdorf, V. & Paulssen, M. 1999, "Messung und Gestaltung der Markenpositionierung" in *Moderne Markenführung*, ed. F.R. Esch, Gabler, Wiesbaden, pp. 1047-1066.
- Wheelen, T.L. 2006, *Strategic management and business policy*, Pearson Prentice Hall, Upper Saddle River, NJ.
- Zikmund, W.G. 2003, *Business research methods*, Thomson/South-Western, Mason, Ohio.