
THE IMPORTANCE OF RISK MANAGEMENT WHEN OUTSOURCING LOGISTICS PROCESSES

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Abstract

The aim of this article is to establish a connection between risk management and outsourcing processes. For this purpose, the authors examined a specific company in the period from February to June 2017. Thereby, the article attempts to illustrate how involving profound risk management practices when outsourcing logistics processes creates incremental value to the company.

Firstly, a theoretical framework for risk management and logistics processes will be defined. Subsequently, this framework will be applied to the case of a German production company in the food sector.

The primary purpose of this article is to introduce a best practice case of outsourcing logistical processes by utilizing a specific risk management approach.

The conclusion of the implementation of the best practice case shows that the outsourcing of business processes has become increasingly important. Outsourcing enables companies to focus on its key competencies and gain more competitiveness among other organizations. However, these implementations should be supported by risk analysis since it enable a more valuable and comprehensive foundation for outsourcing decisions.

Keywords

Risk management, medium-sized company, risk management restructuring process, outsourcing.

JEL Classification

M11, M21

Introduction

Risk management has been increasingly important within German companies in recent years. Thereby, risk management practices have been of rising significance due to two principal reasons. On the one hand, the consequences of the global financial crisis demanded stricter internal and external requirements with regard to risk management practices. On the other hand, projects failures always lead to an assessment of the question of how an appropriate analysis and supervision prior and throughout the project could have prevented failures and instead ensured success (Sitnikov, 2017).

However, especially projects in which returning to the initial situation is impossible, a lack of an adequate risk management approach can be considered a critical threat to the company

as these projects can have severe impacts on the company and even threaten its existence. A suitable example for such projects constitutes the outsourcing of logistics processes. Logistics processes are a vital component of the value chain as they enable clients to receive and evaluate products and services. Hence, decisions and errors adversely affecting the implementation of Projects aiming to outsource logistics have to be prevented. Already completed outsourcing projects imply that the principal reason for projects which fail can be traced back to imprecisely defined requirements for the service provider. Consequently, deliveries might be delayed and could hence potentially lead to existence threatening liquidity constraints with regard to the company and the respective outsourcing service provider. Additionally, further substantial risks constitute a considerable damage to the company's image as well as timely and monetary exceedances of the project's budget. Based on this issue will be examined whether and to what extent a suitable risk management system can potentially increase the probability of success of projects with a focus on outsourcing logistics processes. Furthermore, whether a risk management system represents an appropriate tool for the different phases of an outsourcing project and whether it effectively identifies potential risks at an early stage in order to ensure that these respective risks are controllable will be evaluated. Hereby, XY AG which applied within the scope of their outsourcing project a risk analysis in the context of their risk management system, serves as a practical example.

1 Current Approaches / Scientific Context

1.1 Principles of Risk Management

Risk management is the systematic analysis, evaluation, handling and steering of risks within a company. The target is to recognize critical situations in business activities at an early stage, to avoid those risks as well as to reduce or minimize the effects of the risks (fig. no.1). A business can be successful in handling unpredictable risks by avoiding and reducing critical situations as well as by planning and steering those situations (Kromschröder and Lück 1998). A well-wrought and fully operative risk management can act as an early warning system for the top management (Baetge and Jerschenksky 1999). Hereby, appropriate countermeasures can be taken when potential risks are arising. Those countermeasures can develop respective and desired (counter)-effects. Risk management is often referred to as a component or a synonym for the internal control system (IKS) in literature as well as in practice. The authors consider risk management an important part of the IKS (Brauweiler, H.-C. 2009).



Fig. no. 1. Risk Management Procedure

1.2 Implementing a risk analysis (once) within projects

The various stages of a risk management system build upon each other and are interdependent among one another. This can also be defined as a cybernetic regulating cycle. Thus, an adequate risk management system does not encompass non-recurring activities but rather repetitive processes within a business. Thereby, this process comprises all activities from identifying to supervising the respective risk and can thus be applied throughout the entire life cycle of a company. (Vanini 2012). When taking the utilization of risk management systems of projects into consideration, projects do not encompass repetitive processes since they exhibit clearly defined end dates. Furthermore, non-repetitive risks also occur within the scope of projects (Fischer/Pfeffel 2010). An example constitutes for instance that the risk of implementing crucial IT system adjustments can be eliminated by executing corresponding tests. Therefore, despite the fact that the process stages involved in a risk analysis are similar to the different stages of a risk management system, the process can still be defined as performing a risk analysis. The following figure illustrates an appropriate approach of the performance of a risk analysis within a project.



Fig.no. 2. Risk Management Procedure

Source: Based on Huber/Laverentz 2012

Depending on the status of the project, the amount of potentially occurring risks may decrease. Nevertheless, additional risks can still arise throughout the further course of the project and thus have to be examined. Therefore, depending on the complexity and the relevance of the project for the persistence of a company, it is generally recommended to conduct a periodic review of the risks. Thereby, this periodic review should also be adjusted according to the duration of the project.

1.3 Logistics processes

With regard to the term logistics there are nowadays various similar definitions (Arnold/Isermann/Kuhn/Tempelmeier 2008). Hereby, the term encompasses an integrated system which deals with logistical objects, logistical processes, resources and organization (Huber/Laverentz 2012). Logistical objects can either be defined as tangible assets or human resources. Contrarily, logistical processes can be distinguished by five primary purposes: Transport-, handling, warehousing, processing and information processes. These are geared towards local, timely and physical transformation of logistical objects (Huber/Laverentz 2012).

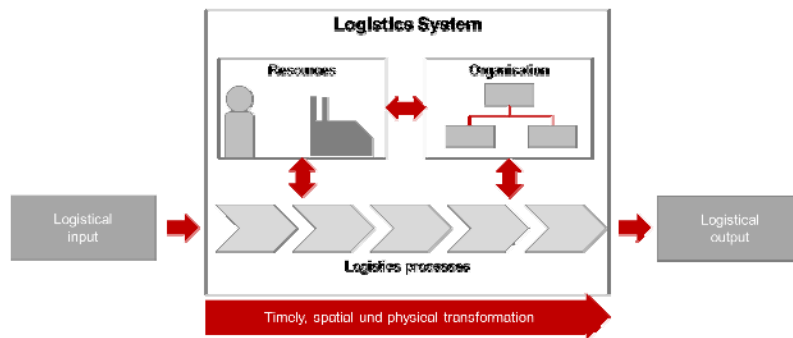


Fig. no. 3. The components of a logistics system

Source: based on Huber/Laverentz, 2012

For the implementation of logistical processes, tangible, human, financial and legal resources are vital. The planning, controlling and coordination activities of logistical processes and resources require corresponding organizational structures and processes (fig. no.3). Whereas an organizational structure takes care of allocating resources, a process organization is responsible for establishing a local and timely linkage between the processes within a logistics system (Huber/Laverentz 2012).

A modern understanding of logistics further encompasses the systematical planning and controlling of all relevant logistical processes that contain procurement, production, distribution and disposal activities (Huber/Laverentz 2012). There are additional transport-, handling, warehousing, processing and information processes within these logistical processes which are however not within the scope of this article (PlanFabrik GmbH 2017 and BIBA 2017).

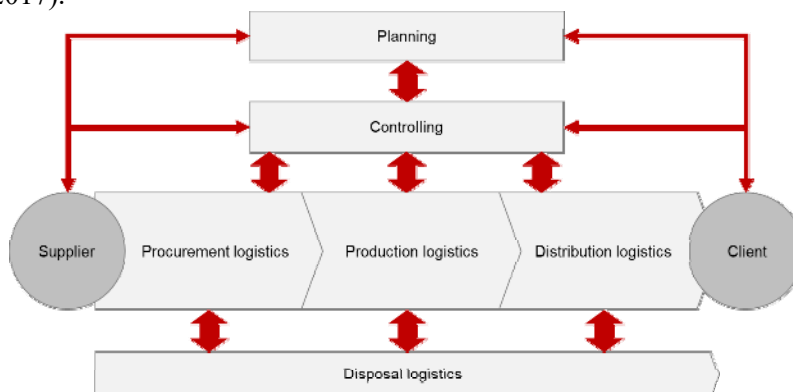


Fig. no. 4. Theoretical framework of a modern understanding of logistics

Source: Based on PlanFabrik GmbH, 2017 und BIBA, 2017

Procurement logistics includes all processes that are connected to providing the materials essential for production as well as their transport and their storage (fig. no.4). Thereby, transport and storage are conducted within the company (Gleißner/Femerling 2012).

Within the framework of production logistics, receipt and control of the delivered raw materials take place. Hereby, all activities that are associated with processes from the production accompanied internal distribution of materials, their transport and their storage to completing the final product are planned and controlled by production logistics. Thus, production logistics can be considered as a crucial linkage between procurement and distribution logistics. Moreover, this requires an early spatial and timely planning of both operational divisions in order to ensure an optimization of lead times and resource availability (Gleißner/Femerling 2012). The primary focus of distribution logistics are all procedures that assure an appropriate delivery of the goods to the client. The respective

residual materials of the procurement, production and distribution logistics will (afterwards) be correctly disposed within the scope of disposal logistics (Gleißner/Femerling 2012).

2 Analysis of the outsourcing process (logistics) in regards to the implementation of a risk management system at the XY AG

The company investigated is a food production company that has performed their respective logistics processes by themselves in the past. After an assessment of the status quo of their logistics, the article will outline the inclusion of the risk analysis within their outsourcing process. Subsequently, the risk analysis with regard to outsourcing the logistics processes will be evaluated. More specifically, the extend of incremental value generated for the company will be examined. In addition, substantial criteria for implementing a risk analysis, specifically within outsourcing projects, by means of a respective implementation sketch will be developed.

2.1 Existing logistics processes of the example company

Taking the logistics processes of the production, procurement, distribution and disposal logistics mentioned in 2.3 into consideration, allows to transfer these to the respective utilized logistics processes of XY AG (fig. no. 5). Consecutively, the logistics processes of XY AG will be examined in greater detail.

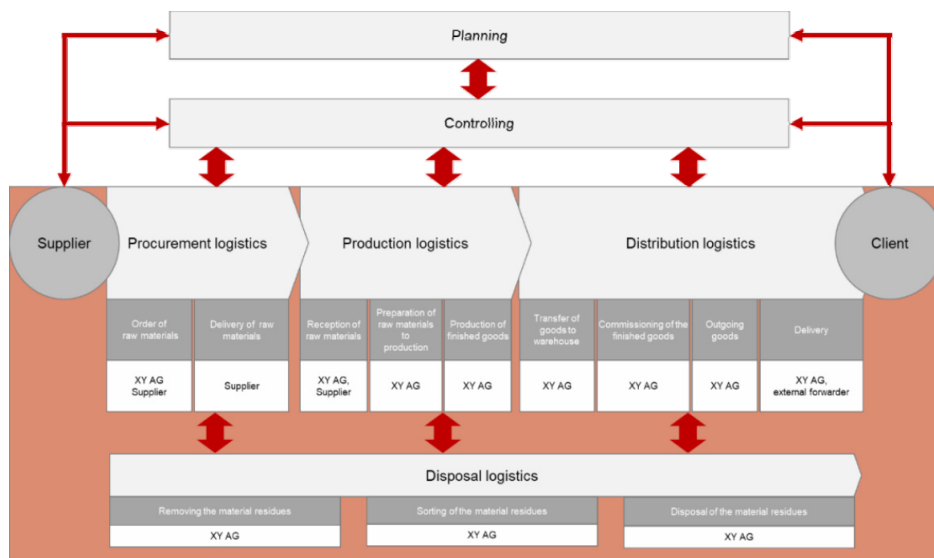


Fig. no. 5. Overview of the logistics processes of XY AG

The scope of procurement logistics comprises for instance ordering processes of the necessary raw materials with the suppliers of the XY AG. Upon receipt of the order at the supplier, the raw materials are prepared by the supplier and are subsequently delivered to XY AG (fig. no. 5). Within the process of production logistics, the delivered raw materials will be checked for their quality and completeness prior to providing them to production and thus further processing and manufacturing by warehouse workers.

After the manufacturing of the final products, the goods are transferred from production to distribution logistics. Thereafter, in distribution logistics, follows the order processing in which goods are commissioned and palletized by warehouse workers. Afterwards, the palletized goods are loaded onto the respective means of transportation in the outgoing goods department. The delivery of the final goods to the client is hereby either conducted by an internal warehouse worker or a commissioned logistics service provider. Any incurred

material residue from procurement, production and distribution logistics will be sorted within the scope of disposal logistics and will be disposed correctly by employees of XY AG. Within the scope of Procurement logistics essential raw materials are ordered at the suppliers of XY AG.

2.2 Involving the risk analysis in the outsourcing process

In the past XY AG approached the outsourcing of services which lead to rising costs, process uncertainties as well as quality related issues accordingly.



Fig. no. 6. Procedure without performing a risk analysis

Based on a change in this approach, an adequate risk analysis will be incorporated in the company’s procedure.



Fig. no. 7. Procedure with performing a risk analysis

At the start of the outsourcing project which aims to relocate all logistical processes, the demands of existing processes will be identified. Further, these demands will be incorporated into tender documents to identify suitable 3 PL logistics service provider. Based on these principles logistics service provider will be critically evaluated by criteria such as their continuous project planning ability, their service, their ability to meet certain requirements, key economic data of the service provider as well as their respective references within the food industry. Subsequently, a suitable external logistics service provider will be selected and hence contract negotiations will intensify.

Simultaneously, the risks that are connected to the upcoming outsourcing project will be analyzed. Therefore, in coordination with the company’s management interviews and workshops were conducted. Hereby, the investigated risks are transferred into a risk catalogue as well as allocated towards corresponding risk categories. Based on the fact that, the logistics service provider takes care of the majority of all logistical processes within the company, the requirements and prospective services of the outsourcing service provider can be considered the primary risk. On the basis of the available information of the company, their processes, the service provider and the respective market data (with regards to customers and competition) the risk’s particular probability of occurrence as well as its impact can be established.

Whereas some of the risk can be neglected, the outsourcing of logistical processes entails nine medium to existence threatening risks requiring a timely and immediate control. In particular, significant risks can be counteracted by introducing standardized processes, internal quality controllers in order to supervise and control operations as well as systematic contract negotiations with a strong focus on clearly defined requirements and coordination activities. Taking the short term effect of the adopted measures into account, this course of action was able to reduce individual risks significantly. More specifically, this short term perspective implies that it is essential to enable appropriate counter actions prior to signing the outsourcing contract or starting the project. Thus, management is provided with an extensive estimation of the potential risks as well as applicable counteractions. This allows

to intensify contract arrangements and services to be performed with external logistics service providers.

With the transition of the outsourcing project in its introductory phase, project management accepts the responsibility of risk supervision and risk reporting in order to ensure that new risks will be recognized in their initial stage, evaluated and possibly countered immediately.

2.3 Incremental value to the company

Based on the demands of risk management and risk management processes, the incremental value of the company XY AG is defined by means of the business requirements illustrated in table two.

In order to clarify the advantages of integrating a risk analysis when outsourcing logistics processes, the following sections will further describe the risk analysis exemplified by the case of XY AG outsourcing its logistics processes. The final outsourcing of the logistics processes is in fact also possible without conducting a risk analysis. However, this also implies that the necessity of employing an internal quality controller would have possibly not been detected too late or not at all. Thus, potential damages could have been incurred. An early identification of company or project risks as well the development of suitable counteractions ensures that management is able to react flexibly and effectively towards critical risks while simultaneously taking the company's risk bearing capacity into consideration.

Furthermore, implementing a risk analysis when outsourcing business processes also assures continuous operational processes. By complying with these processes, mayor errors of external service providers can be prevented, lead times of internal material transports adhered as well as on time deliveries with the appropriate products and quantities ensured. Hereby, the hazard of delayed deliveries and thus the possibility that a potential liquidity shortage could occur is prevented in the best possible way. Thus, the tool is on the one hand perfectly suited for comparing chances and risks if a comprehensive basis for decision making is required. On the other hand, the tool also enables a continuous supervision and control of the respective risks throughout the entire duration of the project.

3 Discussion and conclusion

On the one hand, globalization has led to a rise in importance of adequate risk management practices. On the other hand, globalization as well as a rapid development of the technical possibilities and hence their continuing complexities and increasing interconnections required companies to radically rethink their previous structures and established practices in order to remain competitive. Therefore, in order to solely focus on a company's key competencies, the outsourcing of business processes is becoming highly important. Moreover, it is thus essential to analyze and critically question the processes along the value chain.

Thereby, a risk analysis provides the opportunity of examining the outsourcing of value adding processes with regard to their risk potential as well as comparing them to their opportunity potential. Hence, outsourcing decisions are not predominantly based on potential cost reduction but on a company's key activities. If a risk potential exceeds the companies risk bearing capabilities, a decision can yield severe consequences and has the ability to even be threaten a company's existence.

Finally, it is important to emphasize that performing a risk analysis enables a comprehensive examination and evaluation of the current risk situations while also facilitating a companies the ability to control these risks respectively. Thus, performing a risk analysis increases the probability of pursuing optimal outsourcing decisions.

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