

# Dynamics in Demand of Qualifications and Competences in Logistics—Actual and Future Challenges for Human Resource Managers

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**Abstract** Logistics is an important business sector for the German economy. But it is influenced by so-called social and economic megatrends that lead to rising qualification and competence requirements. In this context it could be asked, if existing qualification and competence profiles do fit these quickly rising new requirements. This extended abstract discusses first approaches and attempts to find out, if misfits between new qualification and competence requirements and existing qualification and competence profiles indeed exist. Furthermore, first ideas of follow-up problems for employees and human resource managers in logistics are sketched.

**Keywords** Human resource management · Logistics sector · Qualifications · Competences · Megatrends · Qualitative skill shortage

## Introduction

Depending on the general development of the economy, logistics can be seen as a growth industry with a huge demand for employees, in particular for logistics/supply chain managers and qualified personnel (see, e.g., BVL 2013; Kille and Schwemmer (2012)). But due to the demographic shifts in society, we can also expect in the logistics sector a ‘war for talent’, meaning that qualified people will become a scarce resource in future. Furthermore, there are major technological developments in automation for material flow systems and International Technology (IT), which significantly affect the required qualification and competence profiles of future logistics employees, too (Katz and Margo 2013). Beneath the demographic shift and technological advancement, other so-called social and

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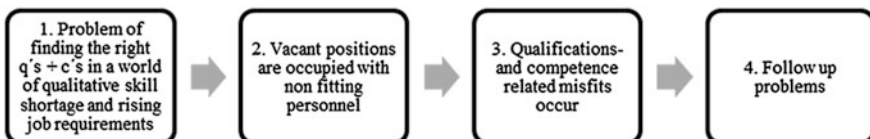
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economical megatrends influence the logistics sector, e.g., globalization, rising environmental consciousness, and so on (Kotzab and Unselde 2009). Logisticians have to attend to a lot of new issues that come with these megatrends. Social and business megatrends result in a trend of quickly rising requirements regarding demanded qualifications and competences (Oxford Research 2010; Jasper and Wählisch 2004). In other words, employees in logistics have to cope with more and more complex problems and situations in this context. However, employees have an existing portfolio of qualifications and competences as a toolkit to solve these problems. It can be questioned, if new job requirements sooner or later rise above the existing job qualification and competence profiles—eventually they actually do. This development would lead to a qualitative skill shortage going along with the quantitative skill shortage caused by the demographic shift. The reason for not finding the needed qualifications and competences is a misfit between new, quickly rising job requirements and existing qualification profiles. Taking into account these thoughts, the following questions can be asked:

Is there a misfit between qualification and competence requirements and profiles and which problems for logistic companies can be derived in that context? Where are possible problem-solving starting points for human resource managers in logistics?

## Literature Review and Modeling Ideas

A combined keyword search of logistics and human resource management searching terms within the scientific databases of WISO-NET and business source premier led to 132 relevant reviewed journal articles that discuss human resource management matters in logistics. Social megatrends and their effects on human resource management aspects in logistics do not attract much attention. This is especially the case when talking about qualification and competence aspects. The problem of qualification- and competence-related misfits has not been discussed yet, but putting together different fragments and connections leads to the assumption, that they do exist. Impressions from the literature and the introduced basic problem led to a first model sketch, shown in Fig. 1.



**Fig. 1** Outcome of qualification- and competence-related misfits

## Methodological Approach

To solve the introduced problem and validate the prior modeled thoughts, qualification and competence profiles and requirements have to be confronted with each other. For this reason, a mixed method approach will be used. The research will take place as a case study in cooperation with a German logistics provider that kindly agreed to be available for the study. To give the following research steps a frame, different instruments have been used. The following research methods have been structured along with qualifications and competences proposed by Frey and Balzer (2007) and job advertisement observations done and presented at the LM2013 conference by Kotzab and Wünsche (2013). Furthermore, the classification of jobs 2010 published by the GFLMA (2011) has been used to make differences between requirement and hierarchy levels. In the first step qualification and competence requirements for now and the future have to be found. For this, leading human resource managers from the company have been interviewed in a structured and guided way. Table 1 shows the interview characteristics. Afterwards a requirement profile has been built from the answers, which has been approved by the responsible persons.

In the second step, a survey has been held to find out the existing qualifications and competences within the company. Employees of all positions and departments have been asked for assessment of used behavior during their work. The survey has been designed by proposals of Frey and Balzer (2007). Table 2 shows the key facts of the survey.

**Table 1** Interview characteristics

Kind of interview	Structured and guided
Conversional partner	Human managers from the company
Generated data	Information about required qualifications and competences within the company along different hierarchy levels
Interview date	17.06.2013

**Table 2** Survey characteristics

Kind of survey	Scale-based survey, 94 questions
Asked subjects	Employees of all positions and hierarchy levels within the company
Generated data	Information about existing qualifications and competences within the company along different hierarchy levels by self-assessment
Asking period	12.08.2013–18.10.2013
Possible number of respondents/actual number of respondents/return rate	332/105/31.62 %

Afterwards average Is-qualification and competence profiles have been built from the answers for different occupational categories. In the final step, both profiles have to be compared with each other to identify, whether there are misfits between them or not.

## First Results

Currently work is in progress, but first results from the research described above confirm observations discussed in the literature and it can be assumed that misfits between existing qualifications and competences and requirements exist. On the basis of estimations done by the human resource management experts, the following statements can be derived.

- The trend of rising requirements regarding qualifications and competences can be confirmed for the sample company. It can be said that requirements rise hierarchy level-comprehensive.
- Only in rare exceptional cases a requirement can be described as sinking in importance.
- Even at the lowest hierarchy level (mainly low skilled workers) only a few competences are disposable.

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