

Preface

Logistics is currently in a complexity trap: Globalization is constantly increasing, the degree of networking is growing exponentially, “batch size one” is already a reality. The volume of logistics data is increasing by a factor of 1,000 per decade. At the same time, the stability of logistics systems and processes is decreasing. Therefore, there is no doubt about the necessity of flexibilization of the classic Supply Chain Management. Cloud Computing is now helping to cut the Gordian knot: The Cloud as a system environment has the potential to design complexity to a certain extent controllably and processes more flexibly. It is about far more than new applications and markets. It is about the fundamental redesign of logistics systems. Cloud Computing has the ability to vitally change the kind of controlling and organizing of these systems.

The Fraunhofer innovation cluster “Cloud Computing for Logistics” is an extraordinary example to show the power that can be developed by logistics and informatics as drivers of innovations. The Logistics Mall with several awards in the meantime created a market place and an infrastructure that help providers and users to test the new possibilities of Cloud Computing in a practice-oriented way. For its users the Logistics Mall makes sure that Cloud Computing in the consciousness of logistics is more than a “cloud”. Cloud Computing is understood as solution pushing forward logistics companies.

Logistics is surely one of the most important and most innovative application industries for information technologies (IT): it has internalized and pushed forward the topic of Cloud Computing because it realized very early the chances connected to it. However, the potential of Cloud Computing is by far not yet exploited as clearly pointed out in the position paper of Bundesvereinigung Logistik (BVL) e.V. “Logistics and IT as innovation drivers for the business location Germany—The new leading role of logistics in information technology”. The Fraunhofer Institutes for Material Flow and Logistics (IML) and for Software and System Technology (ISST) meet these challenges and have bundled their competencies for this purpose in the Fraunhofer Innovation Centre for Logistics and IT (FILIT) since the middle of 2014.

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Michael ten Hompel
Jakob Rehof
Oliver Wolf

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ten Hompel, M.; Rehof, J.; Wolf, O. (Eds.)

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