The Digital Transformation of the Industry
The Logistics Example
Agenda

1. Introduction
2. The BVL Study
3. Conclusions
Trends and Strategies in Logistics and Supply Chain Management

Timeline of the Study

- "Trends and Strategies in Logistics: Agenda for Logistics Management in 2010" - 2005
- "Trends and Strategies in Logistics and Supply Chain Management - Embracing Global Logistics Complexity to Drive Market Advantage" - 2013
- "Trends and Strategies in Logistics" - 1991
- "Trends and Strategies in Logistics: Changing Supply Chains" - 2002
- "Trends and Strategies in Logistics – Global Networks in an Era of Change" - 2008
- "Trends and Strategies in Logistics and Supply Chain Management – Digital Transformation Opportunities" - 2016
The 2016 Edition of the Study Was Compiled by Four Partners.

Study Partners

Prof. Dr. Dr. h. c. Wolfgang Kersten

Prof. Dr. Mischa Seiter

Dr. Gabriele Reich

Dr. Ralf Sauter
We Have Listened to Logisticians, Evaluated Data and Discussed with Experts...

Research Methods

- Expert interviews
- Online survey
- Focus group discussions

Trends and Strategies in Logistics und SCM
Trends and Strategies in Logistics in 2016

Digital Transformation

Cost pressure remains the top trend in the age of the digitalization.

There are many prospective technologies, a clear path is not evident.

The importance of data scientists increases also in logistics.

Data is already often shared within the supply chain – especially transport and quality data.

Companies often do not know, how their digitized business model could look like.
Cost pressure is becoming the most important trend.

The importance of sustainability increased distinctly.
Trends and Strategies in Logistics und SCM

Digitalization Needs to Catch Up

- Digitalization trends have a higher importance for larger companies.
- “The truly successfull companies in the logistics sector are IT companies that have learned logistics.”
  - Program Manager Digital Lab, KEP -
Trends and Opportunities

Opportunities und Risks of a Digital Transformation

73% estimate the chances for their companies between high to very high...

... but more than half wait, until proven solutions are available.

At the same time one third of the interviewees notice high to very high Risks.
Innovative Technology Concepts

The Digital Future

- Sensor technology
- Predictive analytics
- AGV
- Wearables
- Mobile data access (customers)

- ERP
- WMS
- AR

Status of implementation:
- not planned
- planned
- low
- partial
- extensive

- Data collection
- Data analysis
- IT services
- Assistance systems
- Autonomous systems
- Information exchange

Trends und Strategien in Logistik und SCM
Innovative Technology Concepts

Data as a Value – Technologies as a Provider

**Mobile**
- Mobile devices permit to access data; from everywhere and at any time.
- For customers they are an essential communication channel, for employees a pocket sized super computer.

**Analytics**
- A high quality data basis permits subsequent evaluation.
- With this data basis future developments and needs for action can be predicted.

**Sensor Technology**
- The complete admission of status data will be very important in future.
- This includes not only the recording of the geographical position but also of temperatures, videos...
Innovative Technology Concepts

Top 5 Implementation Challenges

- Incompatibility with existing systems: 41%
- Higher costs than planned: 37%
- Coordination difficulties between department and IT: 35%
- Technology is not yet ready for application: 31%
- Unclear use cases: 29%

“Many companies reach their limits, when it is about to dare new things, because the IT-Infrastructure is very interwoven. Everybody’s task now is to do his or her own homework.”

- Director Supply Chain Management, Retail -
Changes in the Supply Chain
The Vision

4 of 5 companies say, that a

- Transparent Supply Chain
- Customized Supply Chain
- Digital Supply Chain

... is relevant or very relevant!

- Networking of products, (manufacturing) facilities, means of transportation and processes
- Realtime intelligent planning
- IT as a competitive advantage
Top-Challenges in the professional development of specialists and executives for companies

- **Lacking resources (financial, temporal, staffing)**: 46.2%
- **Unrecognized future demands**: 28.0%
- **Lack of internal training concepts**: 26.5%
- **Lack of Staff motivation**: 13.5%
- **Risk of “brain drain” after further qualification**: 36.7%
- **Confusing external training opportunities**: 30.4%
- **Lack of Staff motivation**: 28.5%
Conclusions

- Digitalization changes industry fundamentally
- Most companies see big opportunities but as well several risks
- New technologies need new qualifications
- Only few specialists for data science are available at the moment
- Companies need support to find their way into a digitized business
- Hamburg invests in a new platform “Ahoi Digital” including additional 35 professorships for computer science
- Germany invests in several competence centers to support small and medium sized companies. One of them is located in Hamburg.
Medium-sized enterprises 4.0 – Competence-Center Hamburg

Project content:

- Under the promotion initiative "Mittelstand 4.0" the project aims to support small and medium-sized enterprises in the digital transformation, the value-adding process, networked production and application of industry 4.0.
- More than 4200 company representatives are to be reached directly through event formats such as workshops, seminars, lectures, trade fair visits and trainings.
- The competence center actively supports companies in their specific scenarios during the transformation process, the design of new business models and the application of new concepts.
Thank you for your attention!

Prof. Dr. Dr. h. c. Wolfgang Kersten

Hamburg University of Technology
Institute of Business Logistics and General Management
Schwarzenbergstraße 95, Building D
21073 Hamburg, Germany
phone:  +49 (0)40-42878-3525
fax:     +49 (0)40-42878-2200
email:   logu@tuhh.de
web:     www.logu.tuhh.de

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