Data Quality as a Business Success Factor

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Chair of Prof. Dr. Hubert Österle
Case A looks at one of the business drivers of data quality at leading automotive supplier ZF Friedrichhafen AG.

«Starting in January 2010, the Services business unit will additionally pool the global customer service activities of the Group. In doing so, the Services departments at German division and business unit locations will be organizationally merged with the worldwide Services companies. With this new structure, ZF has established a systematic approach in the after-sales market.»

ZF Friedrichshafen AG: Annual Report 2009, p. 64.
At ZF OEM Relationship Management requires consistent and accurate master data about vehicles, customers, products across the organization.

1) OEM - Original Equipment Manufacturer.
Data quality is necessary to respond to strategic business requirements

1. Customer-Centric Business Models

2. Value Chain Excellence

3. Contractual and Regulatory Compliance
The typical evolution of data quality over time does not live up to its business relevance.

Legend: Data quality
"Submarines" (e.g. migrations, process errors, irregularities in management reporting).

- No risk management possible
- No chance to plan and to control budgets and resources
- No target values for corporate data quality
- No sustainability
- High recurring project costs (change requests, external consultants etc.)

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Case B analyzes root causes of poor data quality at Bayer CropScience

Legend: KPI - Key Performance Indicator.
Corporate Data Quality Management (CDQM) is a Business Engineering task and relates to a company’s business strategy, organization, and information systems.

**Strategy**
- Strategy document
- Value management
- Action plan

**Organization**
- CDQ Controlling
- Organization for CDQM
- CDQM Processes and Methods

**System**
- Corporate Data Architecture
- Applications for CDQM

**Mandate**
- Strategy for CDQM

**Goals and targets**
- Data quality metrics

**Data Governance**
- Roles and responsibilities
- Change management
- Standards & Guidelines

**Data life cycle management**
- Business metadata management
- Data-driven business process management

**Conceptual corporate data model**
- Software support (e.g. MDM applications)
- System landscape analysis and planning

**Value management**
- Action plan

**Goals and targets**
- Data quality metrics
The EFQM Excellence Model for CDQM\textsuperscript{1} was collaboratively developed by EFQM, the University of St. Gallen, and partners from industry.

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\textbf{CDQM Maturity Assessment}

Legend:  
- Current value 2010
- Target value
- 2011 (= one maturity level for all enablers)

\textsuperscript{1) EFQM: EFQM Framework for Corporate Data Quality Management: Assessing the Organization’s Data Quality Management Capabilities, EFQM Press, Brussels, 2011}
The Competence Center Corporate Data Quality (CC CDQ) is a consortium research project involving 22 partner companies.

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NB: Overview comprises both current and past research partner companies.
Material master data quality has continuously been improved at Bayer CropScience (Case B)
Data quality leads to tangible business benefits

Savings of 2 percent of average inventory value p.a.\(^1\)

More than GBP 500 million saved through retrieval of «lost assets»\(^2\)

CHF 3,000 saved per obsolete master data record\(^3\)

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1) Benefit assessment as a result from a series of expert interviews at one of the CC CDQ partner companies.
CC CDQ Resources on the Internet

Institute of Information Management at the University of St. Gallen
http://www.iwi.unisg.ch

Business Engineering Institute St. Gallen
http://www.bei-sg.ch

Competence Center Corporate Data Quality
http://cdq.iwi.unisg.ch

CC CDQ Benchmarking Platform
https://benchmarking.iwi.unisg.ch/

CC CDQ Community at XING
http://www.xing.com/net/cdqm
Please reach out to me in case of questions and comments

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