Institute of Information Management

University of St.Gallen





One Size Does Not Fit All: Best Practices for Data Governance

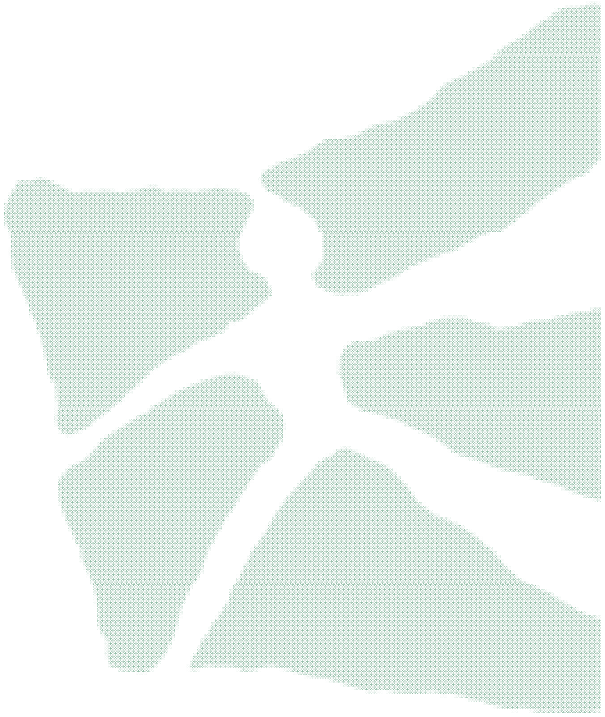
Boris Otto

Minneapolis, MN, September 26, 2011

University of St. Gallen, Institute of Information Management
Tuck School of Business at Dartmouth College

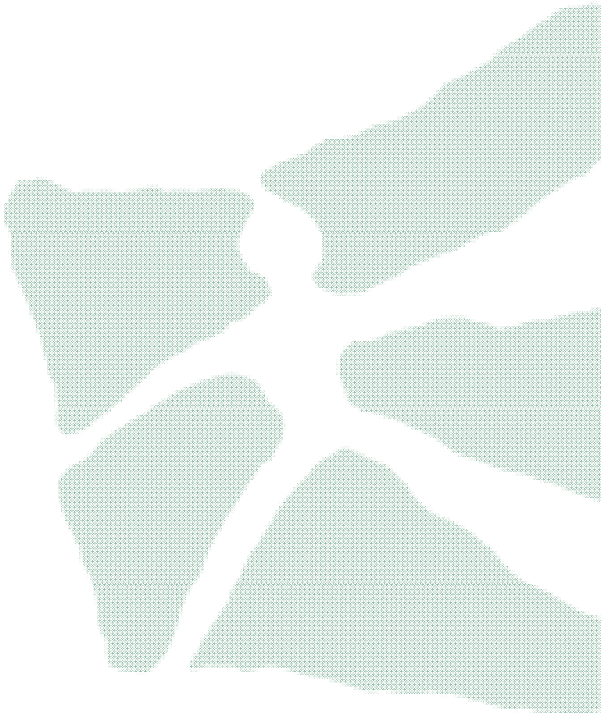
Agenda

1. Business Rationale for Data Governance
2. Data Governance Design Options
3. Best Practice Cases
4. Competence Center Corporate Data Quality



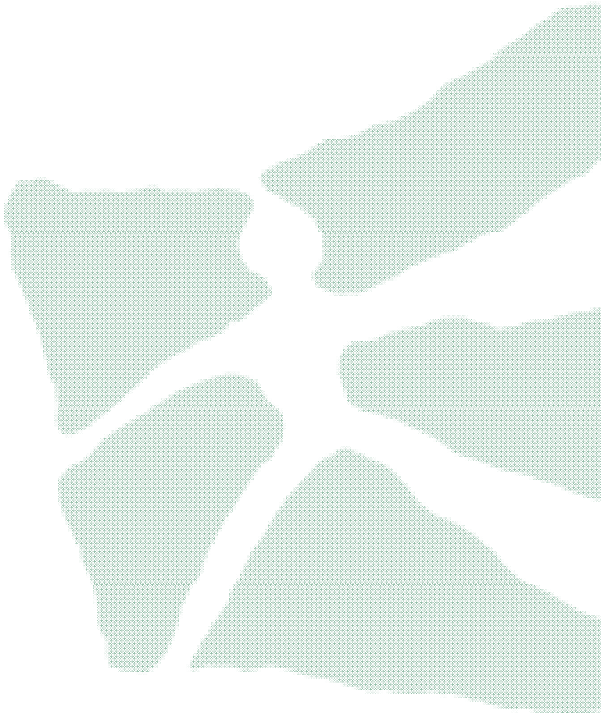
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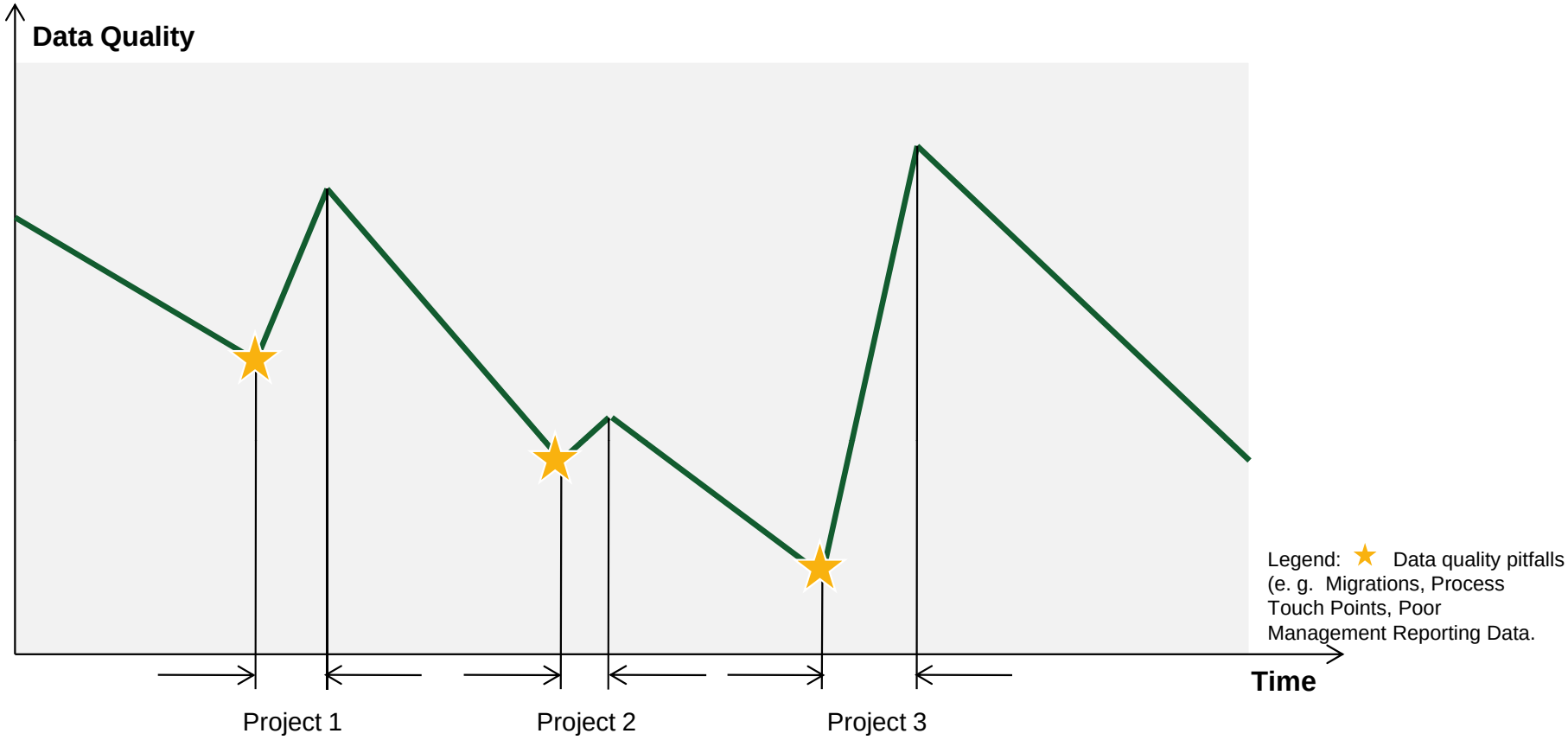


Data Governance is necessary in order to meet several strategic business requirements

- Compliance with regulations and contractual obligations
- Integrated customer management (“360 degree view”)
- Company-wide reporting needs (“Single Source of the Truth”)
- Business integration
- Global business process harmonization

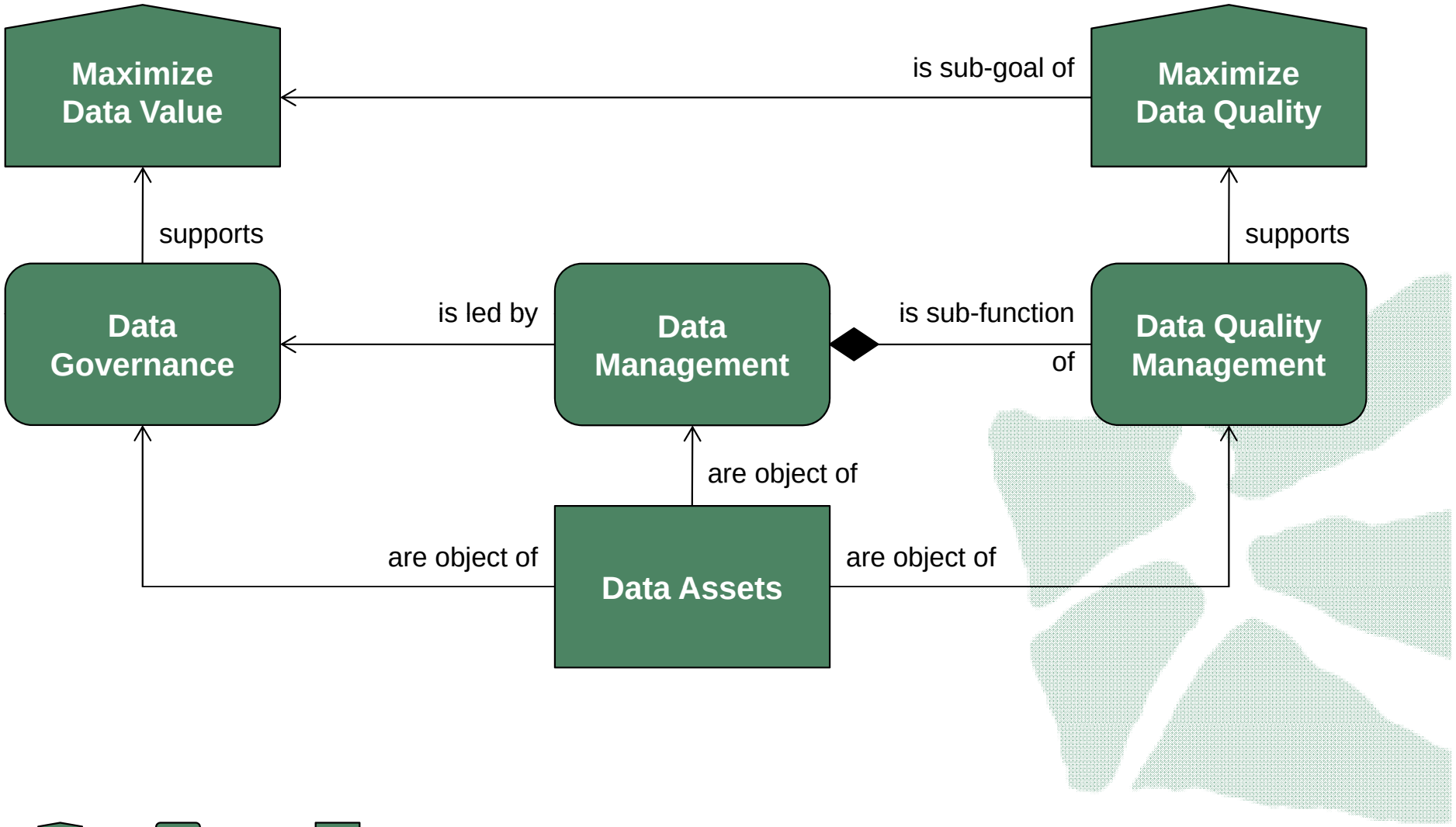


The typical evolution of data quality over time in companies shows a strong need for action



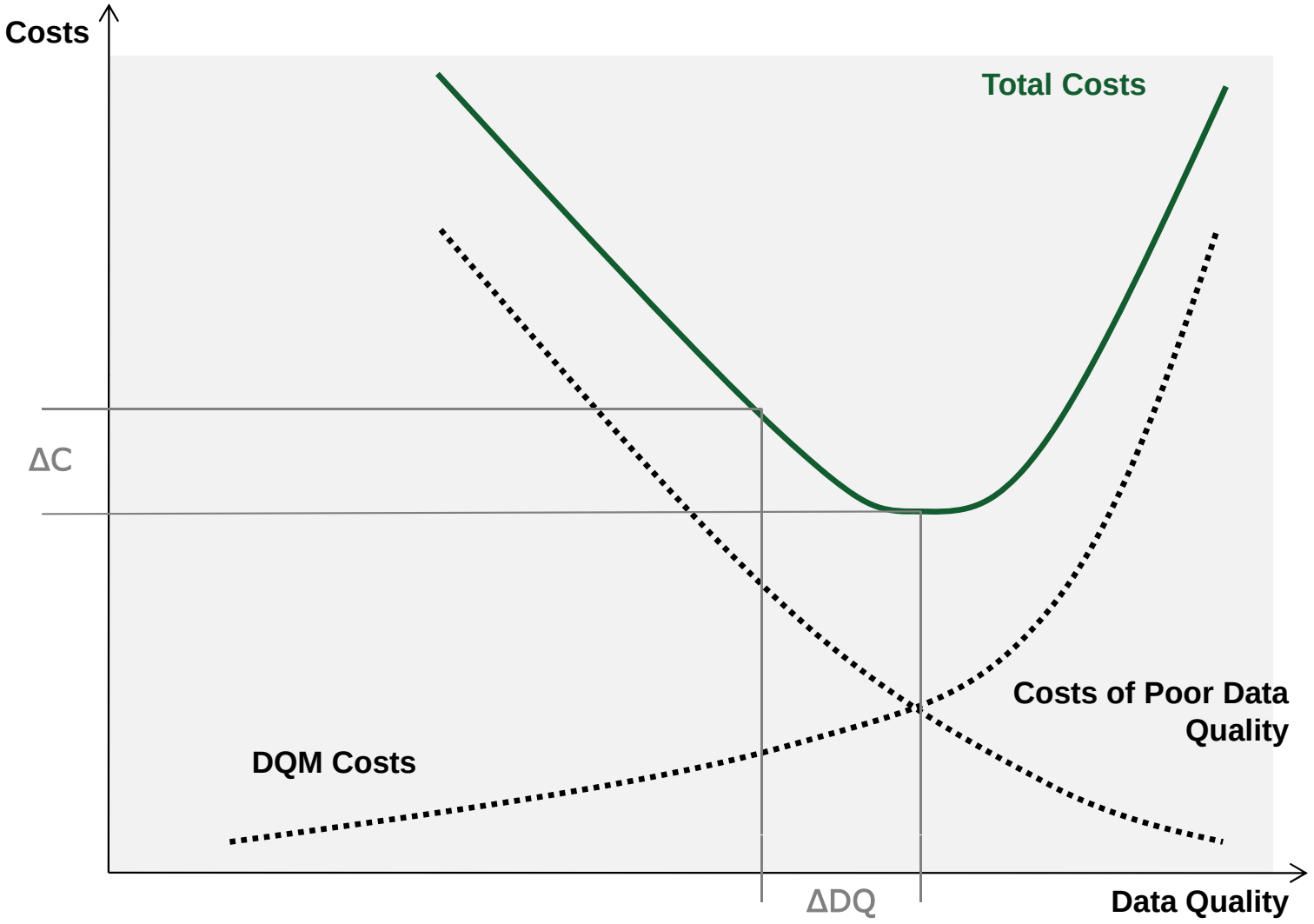
- No risk management possible
- Impedes planning and controlling of budgets and resources
- No targets for data quality
- Purely reactive - when too late
- No sustainability, high repetitive project costs (change requests, external consulting etc.)

Data Governance and Data Quality Management are closely interrelated



Legend: Goal Function Data.

Data Governance is also about cost trade-off's



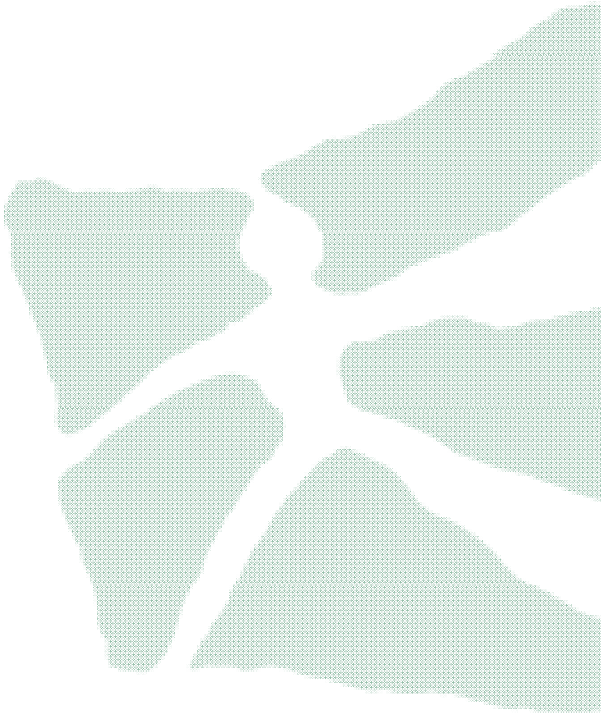
Without Data Governance companies are missing direction with regard to their data assets



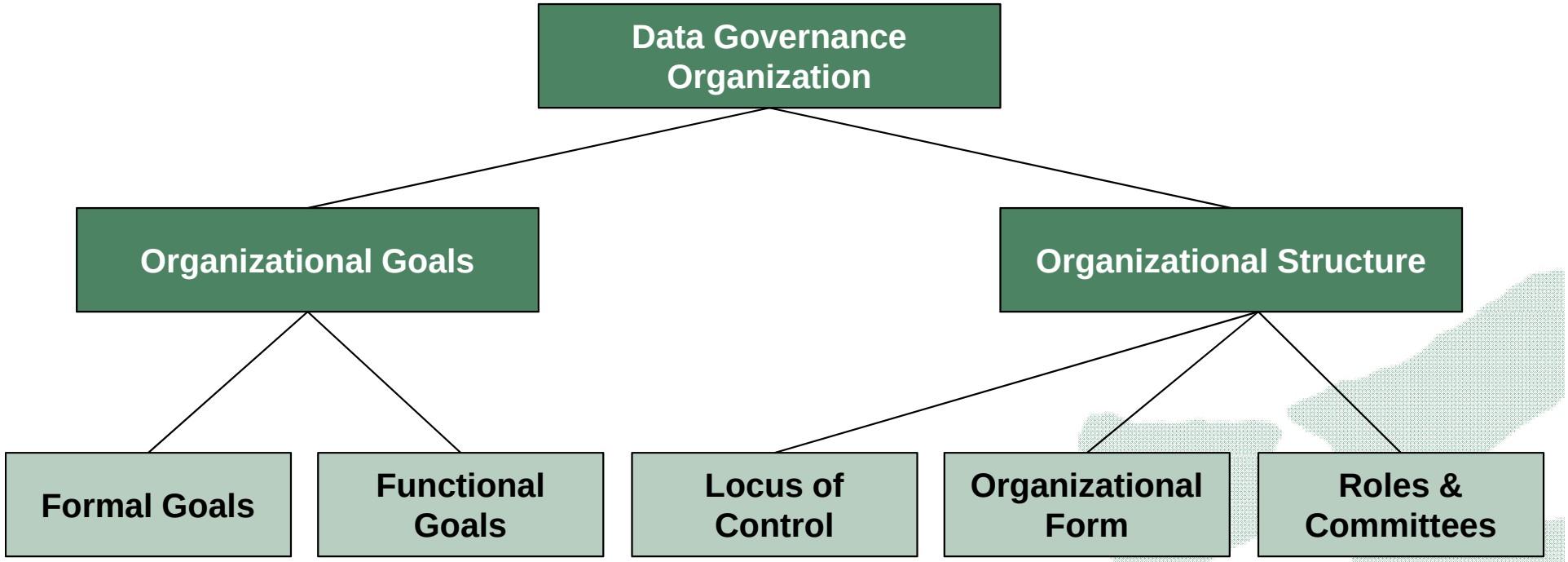
Source: Strassmann, 1995.

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As Data Governance is an organizational task, design decisions must be made in five organizational areas



Source: Otto, 2011.

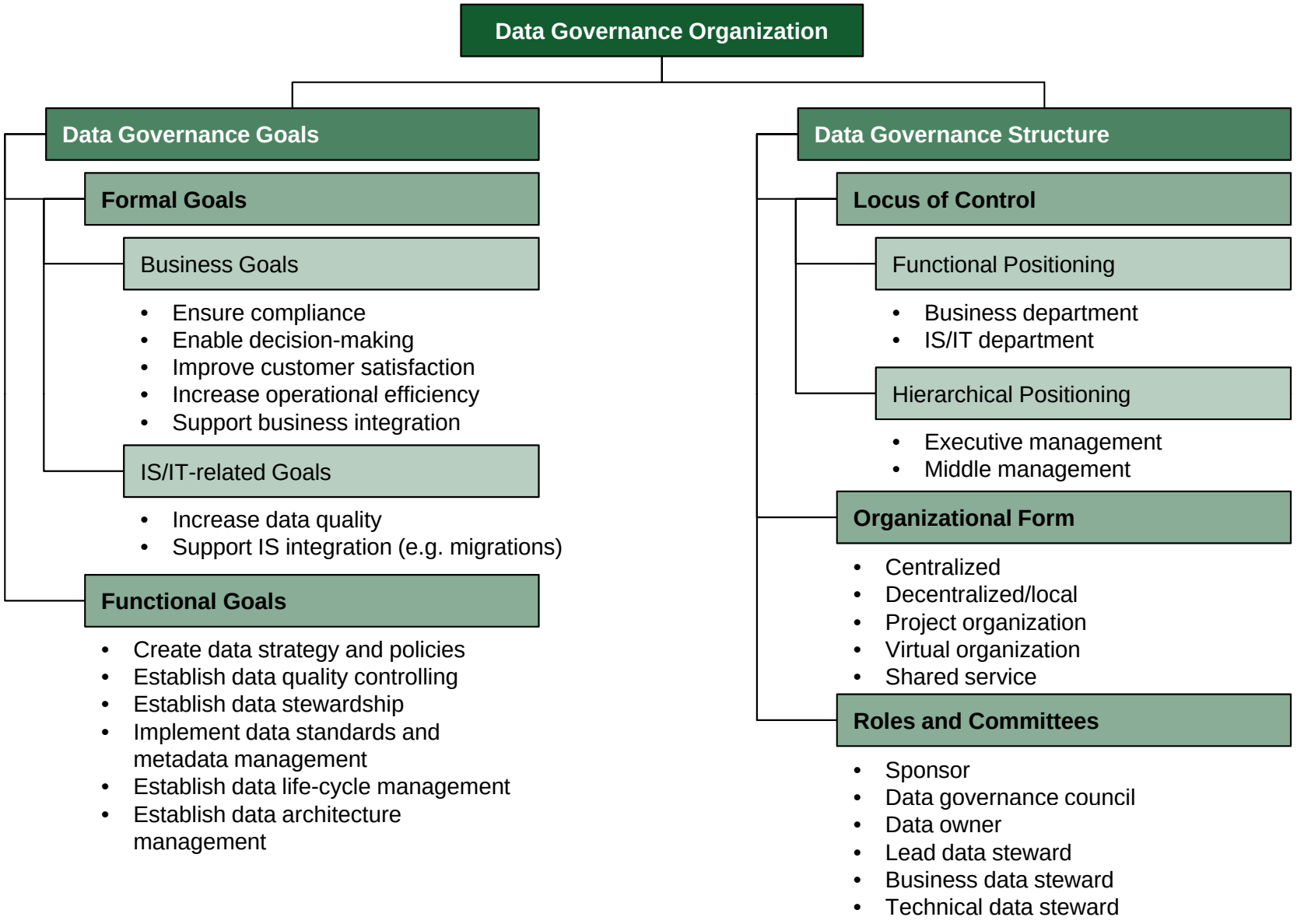
Six cases from global companies are used to illustrate the different design options

Case	A	B	C	D	E	F
Industry	Chemicals	Automotive	Mfg.	Telecom	Chemicals	Automotive
Headquarter	Germany	Germany	USA	Germany	Switzerland	Germany
Revenue 2009 [million €]	6,510	38,174	4,100	64,600	8,354	9,400
Staff 2009 [1,000]	18,700	275,000	23,500	260,000	25,000	60,000
Role of main contact person for the case study	Head of Enterprise MDM	Program Manager MDM	Head of Data Governance	Head of Data Governance	Head of MDM SSC	Project Manager MDM

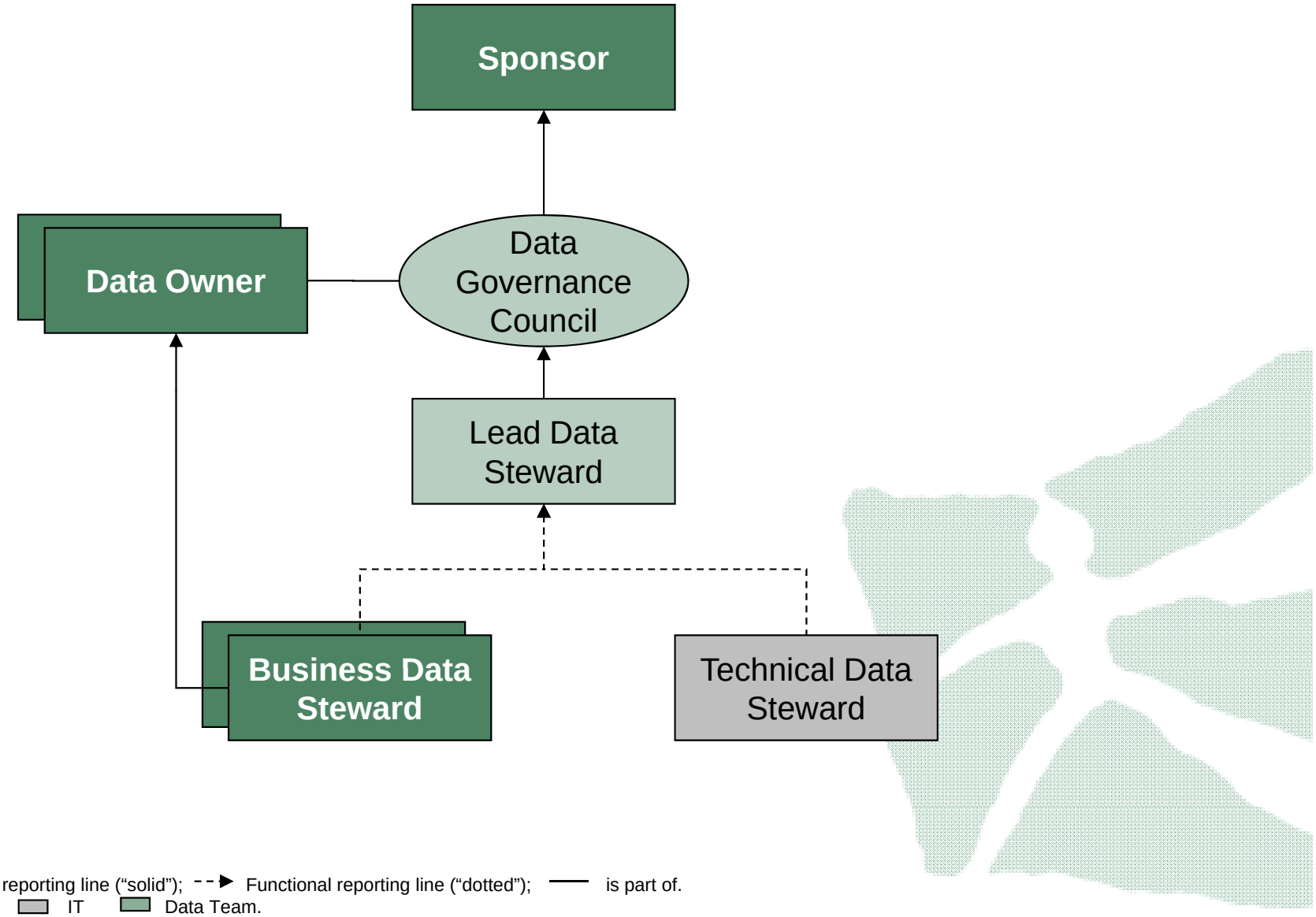
Key: MDM - Master Data Management, Mfg. - Manufacturing; SSC - Shared Service Center.

NB: All case study companies are research partner companies in the Competence Center Corporate Data Quality (CC CDQ).

Data Governance design options can be broken down into 28 individual items



For example, the design area “Roles & Committees” comprises six individual roles



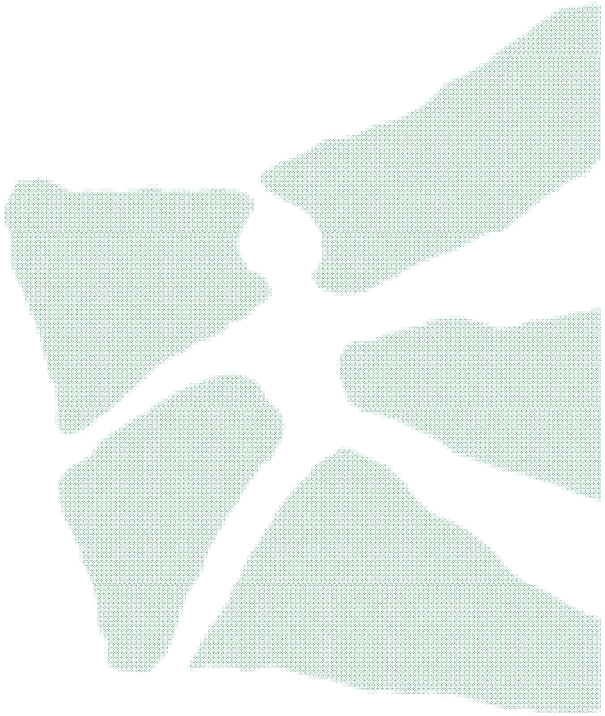
The cases show a variety of different Data Governance designs

	Data Governance Goals		Data Governance Structure		
Case	Formal goals	Functional goals	Locus of control	Org. form	Roles, committees
A	No formal quantified goals; DQ index and data lifecycle time measured	DQ, data lifecycle, data arch., software tools, training	Business (IM and SCM), 3rd level	Central MDM dept., virtual global organisation	MDM council, data owners, lead steward, technical steward
B	No formal quantified goals	Business: Data definitions, ownership, data lifecycle, data arch.; IS/IT: Data models, IT arch., projects, DQ	Business (corporate accounting), 3rd level	Central project organisation, virtual organisation	Steering committee, master data owner, master data officer
C	No formal quantified goals, data lifecycle time measured, SLAs with internal customers planned	Data ownership, data lifecycle, DQ, service level management, project support	Business (shared service centre), 4th level	Central data management org.; virtual global organisation	DG manager, DQ manager, data owner, data stewardship manager, data steward; no committee
D	Alignment with business strategic goals, no quantification	DQ standards and rules, data quality measuring, ownership, data models and arch., audits	Hybrid (both central IT and business), 3rd and 4th level	Central organization, supported by projects	“Data responsible”, data architect, data manager, DQ manager, no committee
E	Alignment with business drivers, formalisation through SLAs	Data strategy, rules and standards, ownership, DQ assurance, data & system arch.	Business (shared service centre), 4th level	Shared service	Head of MDM, data owners, lead stewards (per domain), regional MDM heads, data architect; no committee
F	No formal quantified goals	MDM strategy, monitoring, organisation, processes, and data arch., system arch., application dev.	IS/IT, 3rd level	Central organisation, supported by projects	Head of MDM, data owners, DG council, data architect

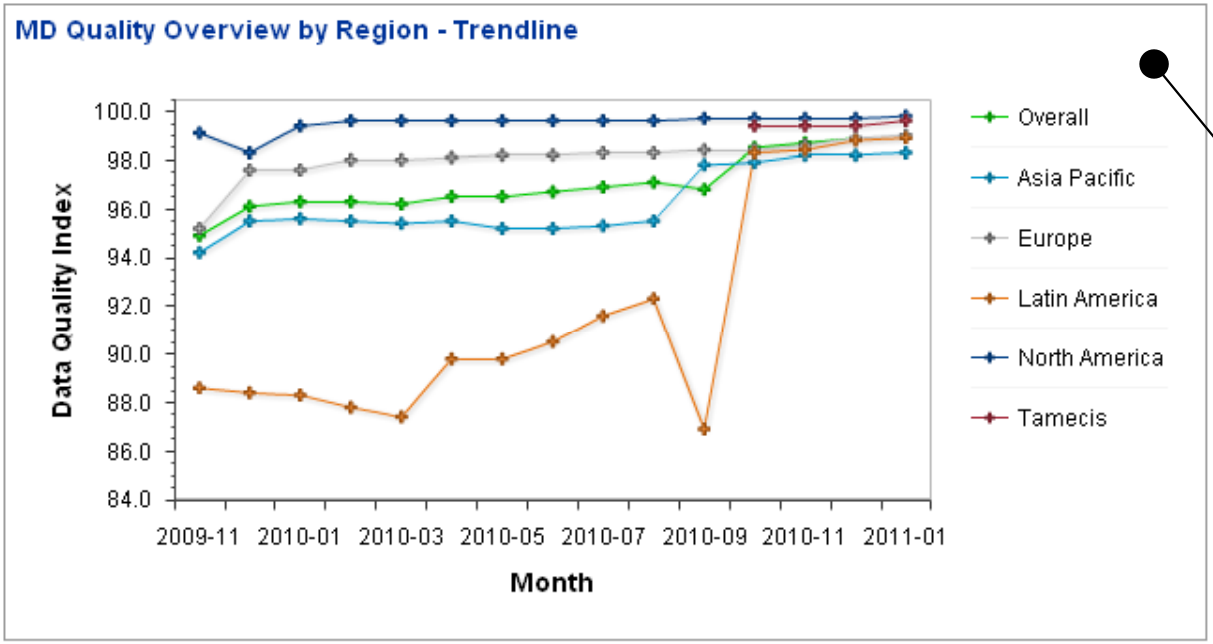
Key: DG - Data governance; Org. - Organisational; DQ - Data quality; arch. - architecture; IM - Information Management; SCM - Supply Chain Management; MDM - Master Data Management, dept. - department; IS - Information Systems; IT - Information Technology; SLA - Service Level Agreement.

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In Case A data quality is measured on a continuous basis



Overall data quality indices per region and per country are published on the corporate intranet.

Regions and countries can monitor their own progress (as well as the progress of best-in-class countries)

MD Quality Overview by Region - Table

Validation Date 2011-01

Validation Date	Region	Record Count	Violation Count	Violation Rate [%]	Data Quality Index
2011-01-07	Asia Pacific	847,305	14,315	1.7	98.3
2011-01-07	Europe	2,678,726	26,822	1.0	99.0
2011-01-07	Tamecis	3,970	14	0.4	99.6
2011-01-07	North America	871,848	1,986	0.2	99.8
2011-01-07	Overall	4,678,695	46,662	1.0	99.0
2011-01-07	Latin America	351,306	4,006	1.1	98.9

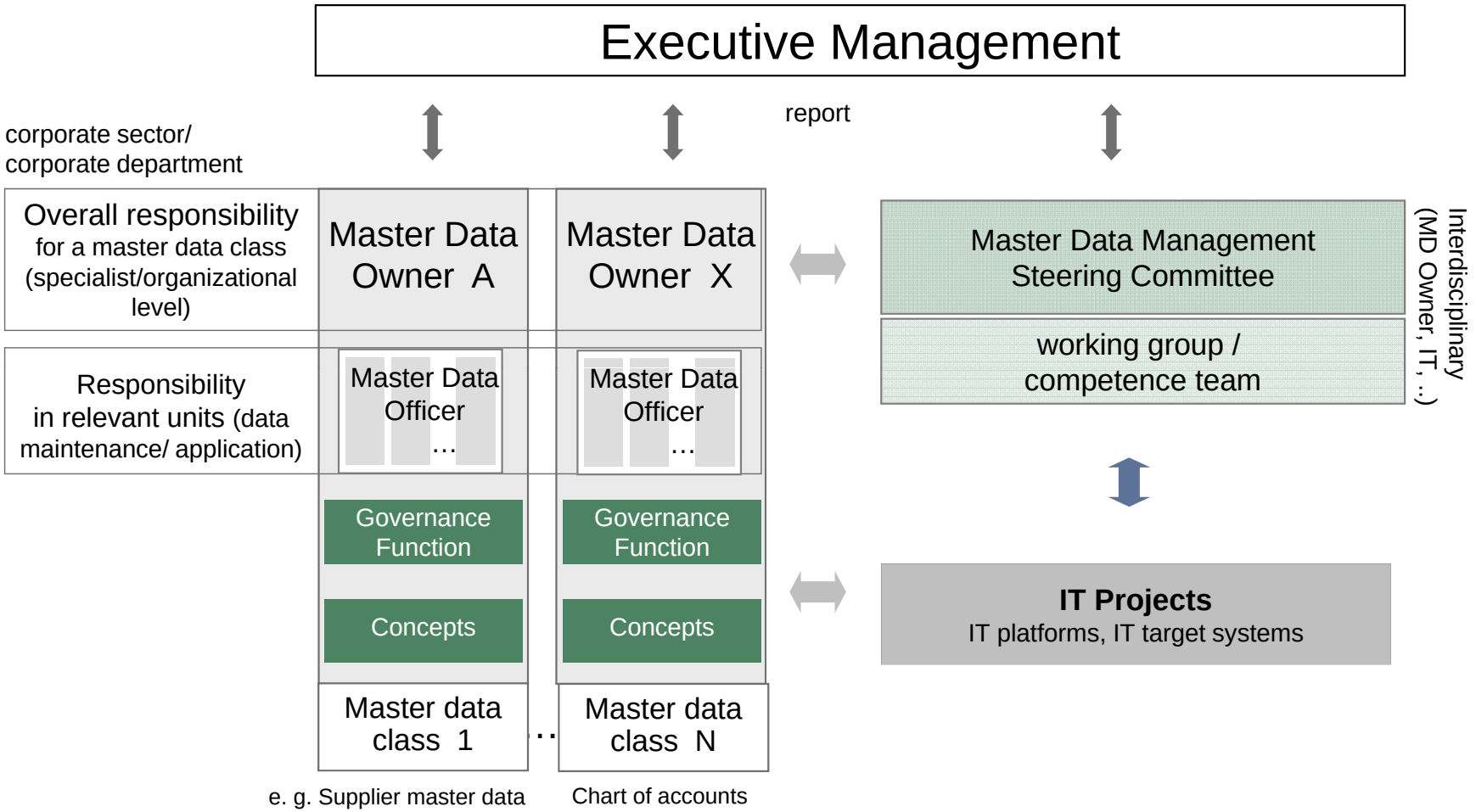
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Measurement and data quality indices are made transparent to everybody.

Calculation of indices can be track down to the individual record level.

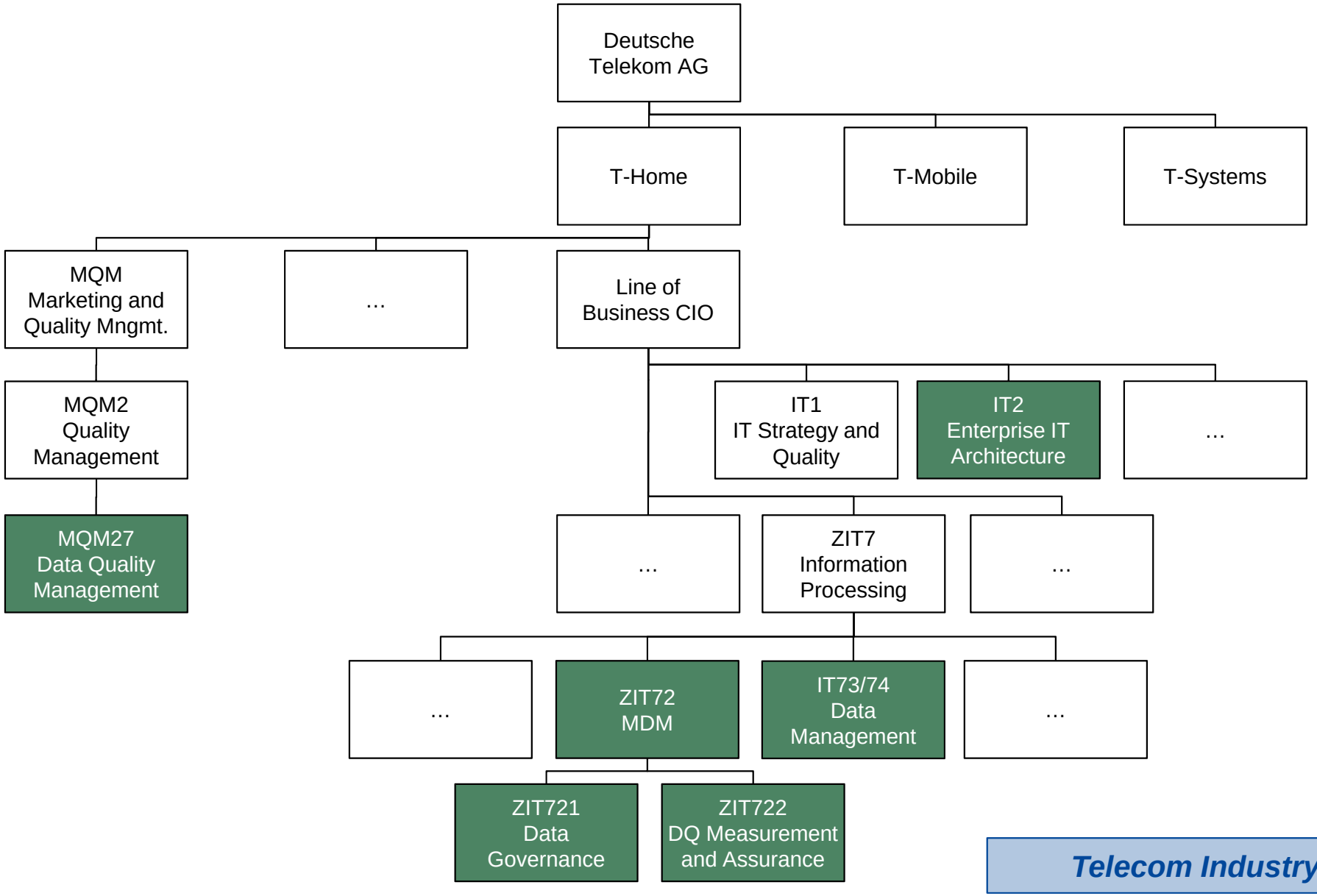
Chemical Industry

Data Governance in Case B is well-balanced between IT and business functions as well as between corporate and business units



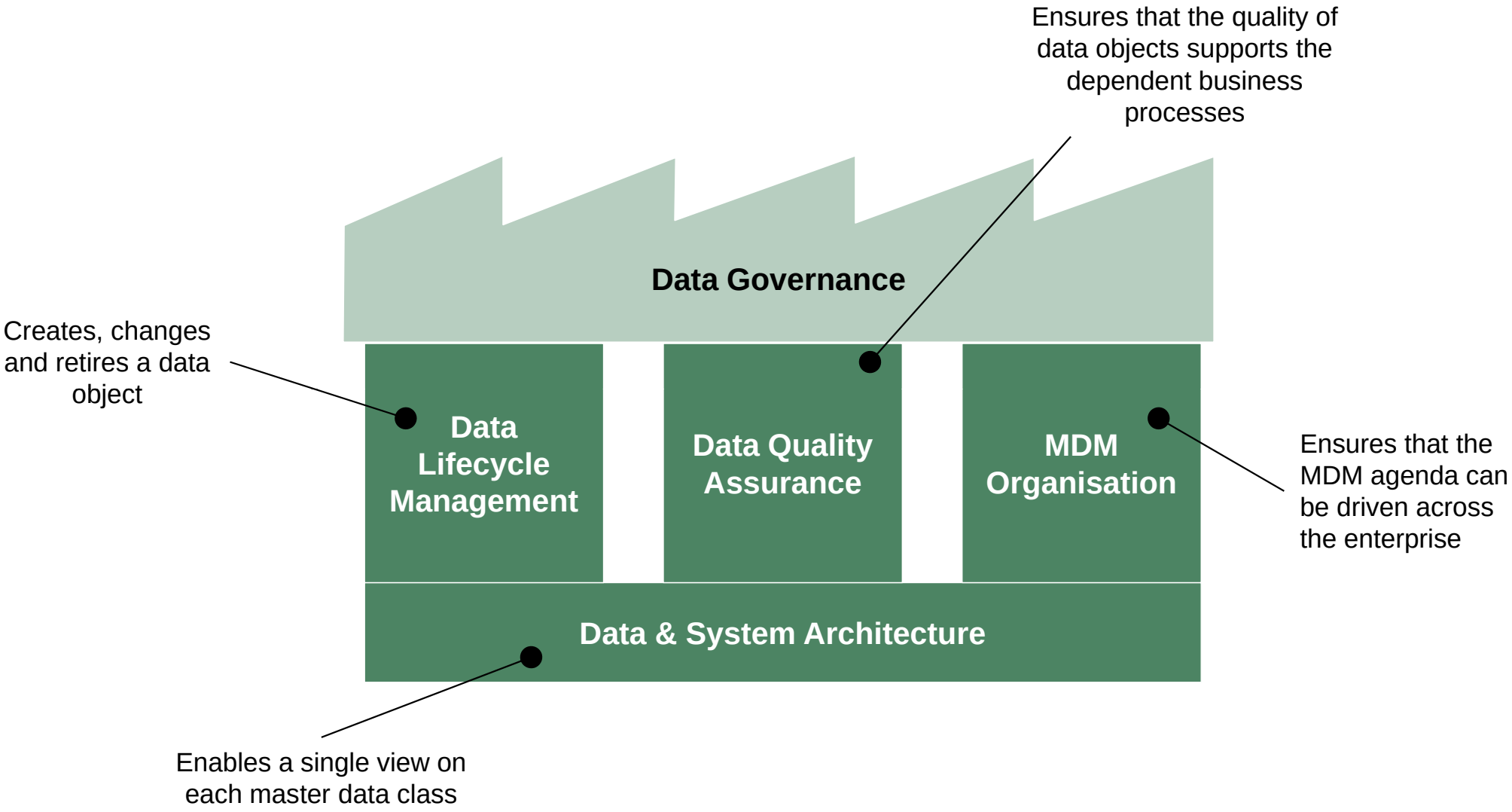
Automotive Industry

Case D is an example of a formalized Data Governance organization with hybrid location of responsibilities



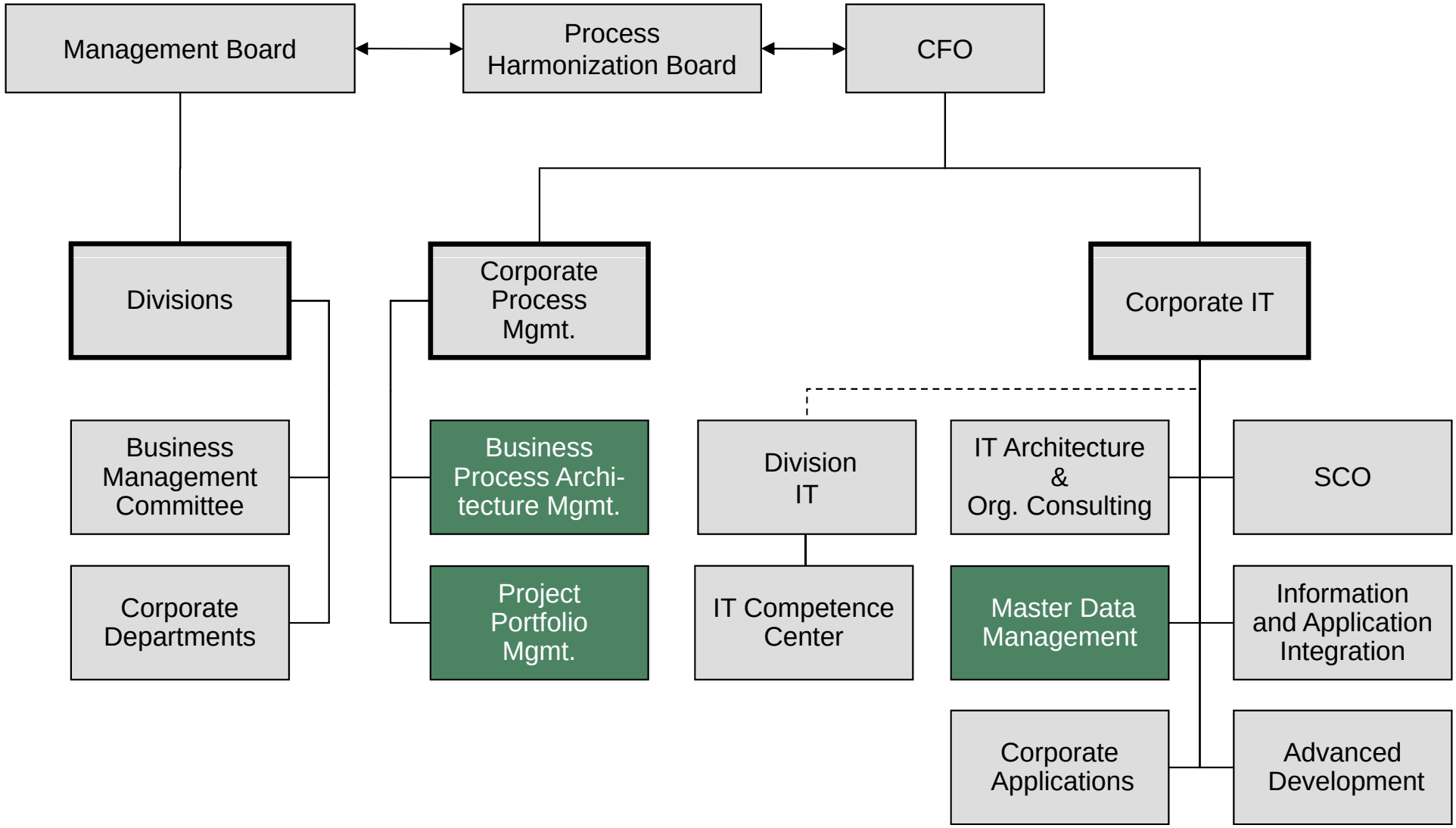
Telecom Industry

In Case E Master Data Management is organized as a shared service and operated as a “data factory”



Chemical Industry

Case F is an example for locating the Data Management Organization within the IS/IT function



Key: Recently established.

Automotive Industry

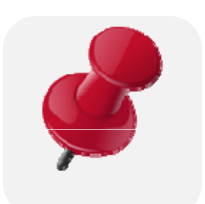
Some key success factors become apparent when analyzing the cases



Demonstrate staying power! Data Governance is a change issue and requires involvement of all stakeholders.



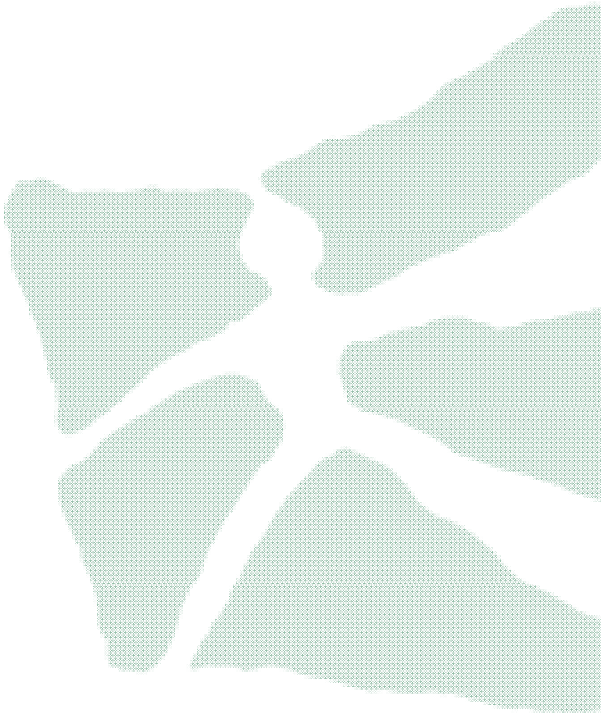
No bureaucracy! Use existing board structures and processes.



No ivory tower, no silver bullet! Use “real-life” examples to get buy in from local business units.

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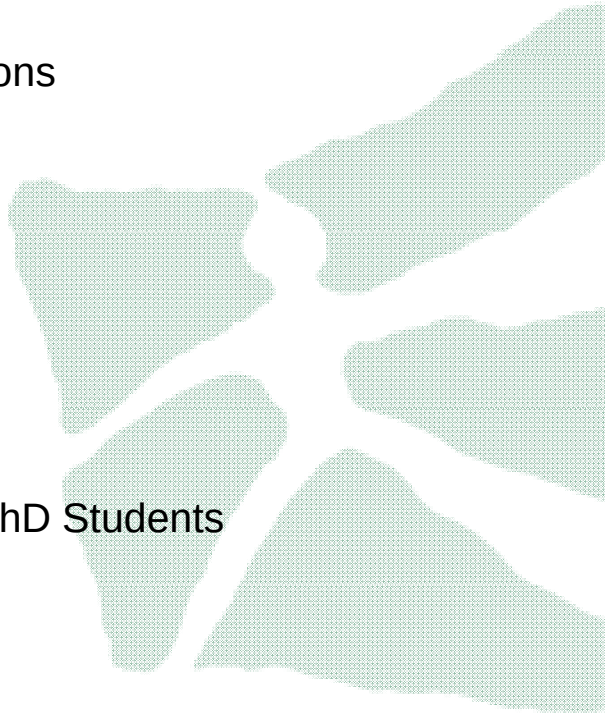
The Competence Center Corporate Data Quality comprises 20 partner companies[1]

AO FOUNDATION	ASTRAZENECA PLC	BAYER AG	BEIERSDORF AG
CORNING CABLE SYSTEMS GMBH	DAIMLER AG	DB NETZ AG	E.ON AG
ETA SA	FESTO AG & CO. KG	HEWLETT-PACKARD GMBH	IBM DEUTSCHLAND GMBH
MIGROS-GENOSSENSCHAFTS-BUND	NESTLÉ SA	NOVARTIS PHARMA AG	ROBERT BOSCH GMBH
SIEMENS ENTERPRISE COMMUNICATIONS GMBH & CO. KG	SYNGENTA AG	TELEKOM DEUTSCHLAND GMBH	ZF FRIEDRICHSHAFEN AG

1) Current and former partners as of March 2011.

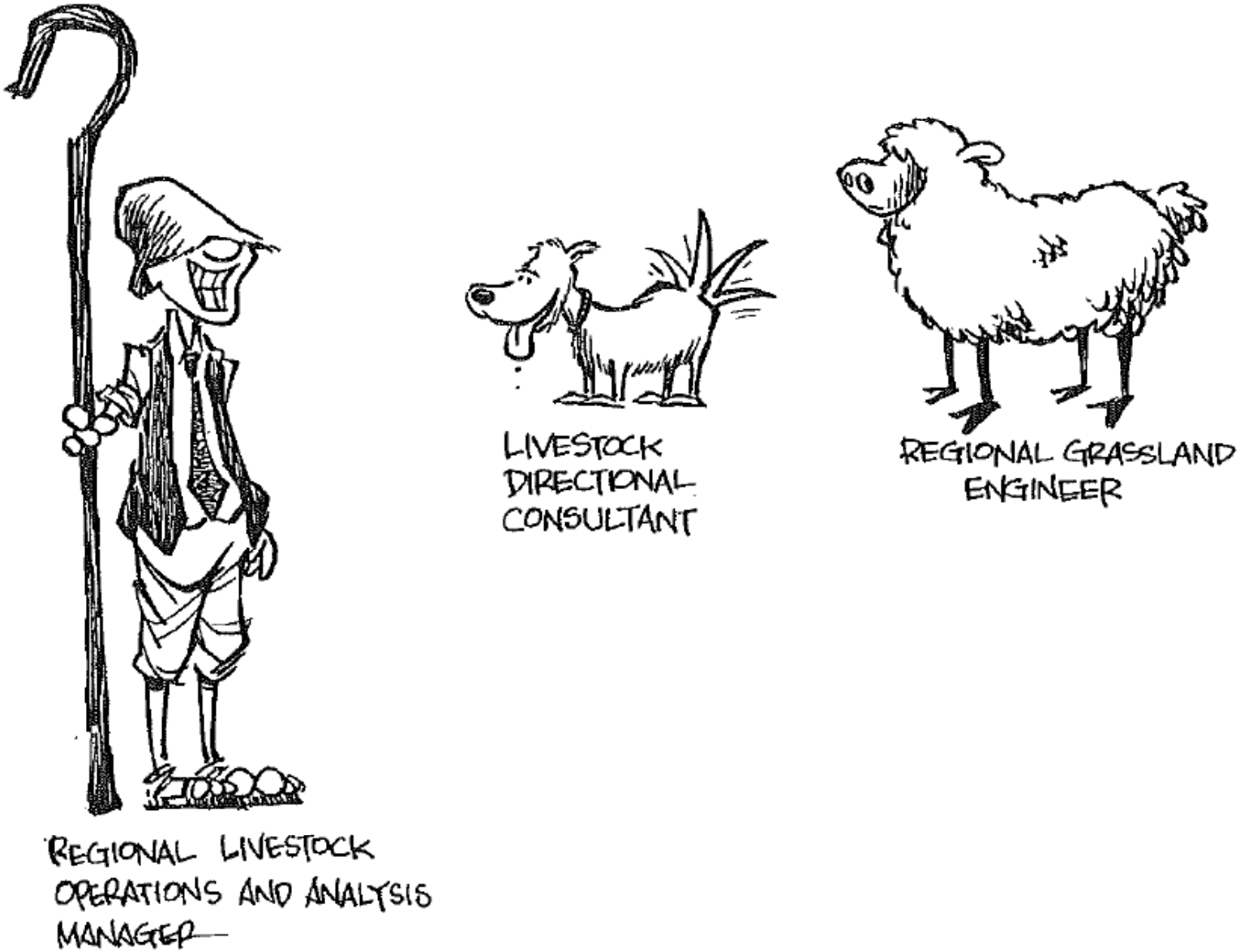
The Competence Center Corporate Data Quality channels the knowledge and experience of a large network of practitioners and researchers

650+	Contacts in the overall CC CDQ community
155+	Members in the XING Community
150+	Bilateral Project Workshops
55	Best Practice Presentations
25	Consortium Workshops
20	Partner Companies
12	Scientific Researchers/PhD Students
1	Competence Center



NB: as of August 2011.
Data covers 2006-2010.

Life is good with Data Governance…



Source: Strassmann, 1995.

Contact

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