Institute of Information Management

University of St.Gallen

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EFQM Excellence Model for Corporate Data Quality Management (CDQM)

Martin Ofner

Bad Soden, November 19th, 2010

Institute of Information Management (IWI2)
Chair of Prof. Dr. Hubert Österle

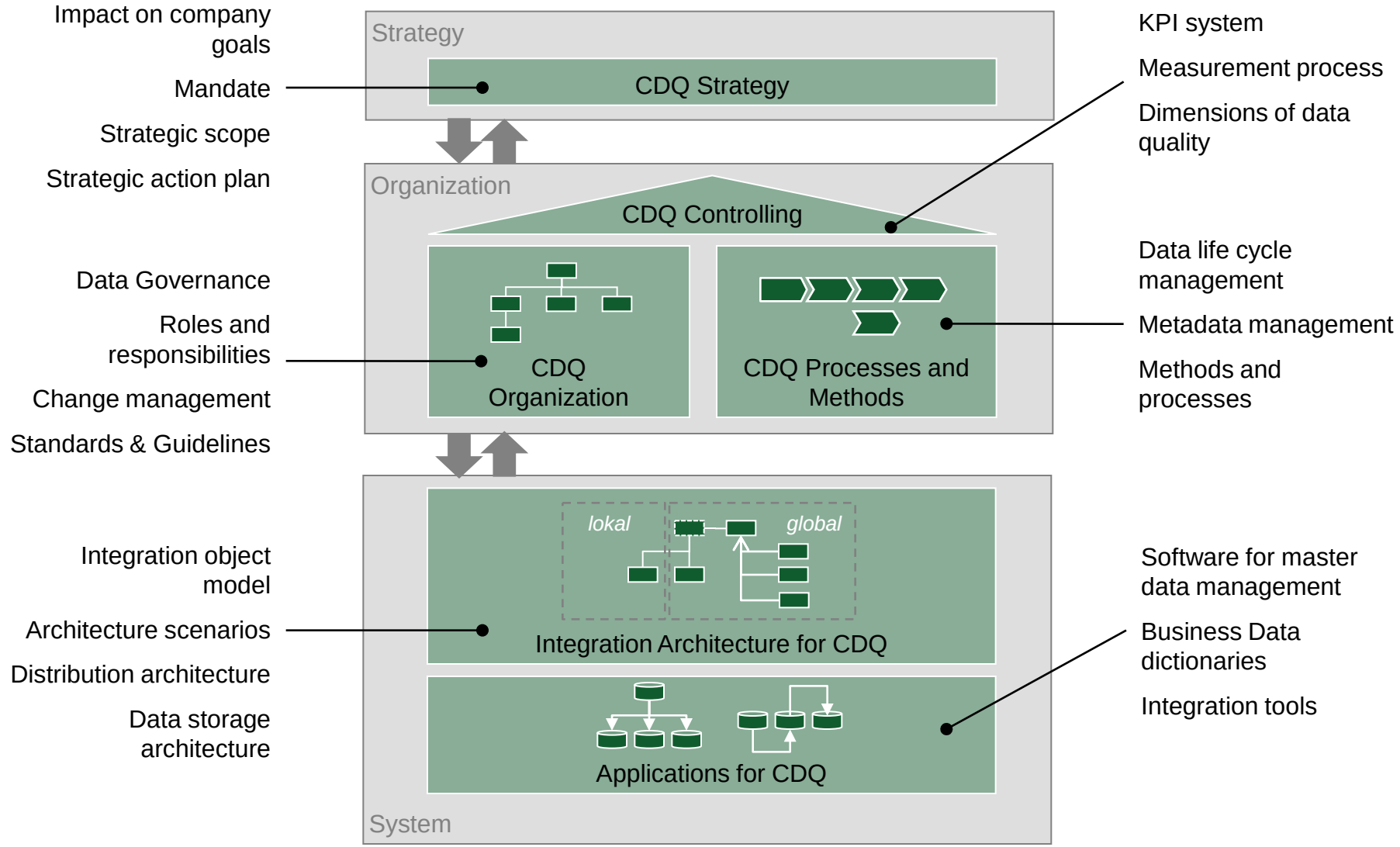
EFQM Shares what works.

CDQ Corporate Data Quality

Agenda

1. Rationale
2. Excellence Model for CDQM: Design and Components
3. Excellence Model for CDQM: Application and Examples

CDQ Framework



Typical situation regarding the establishment of CDQM

- Scope unclear, no structured approach
- Progress control and strategic alignment needed
- Plan to learn from others

Companies require an instrument to assess and improve the progress and performance of their CDQM initiatives

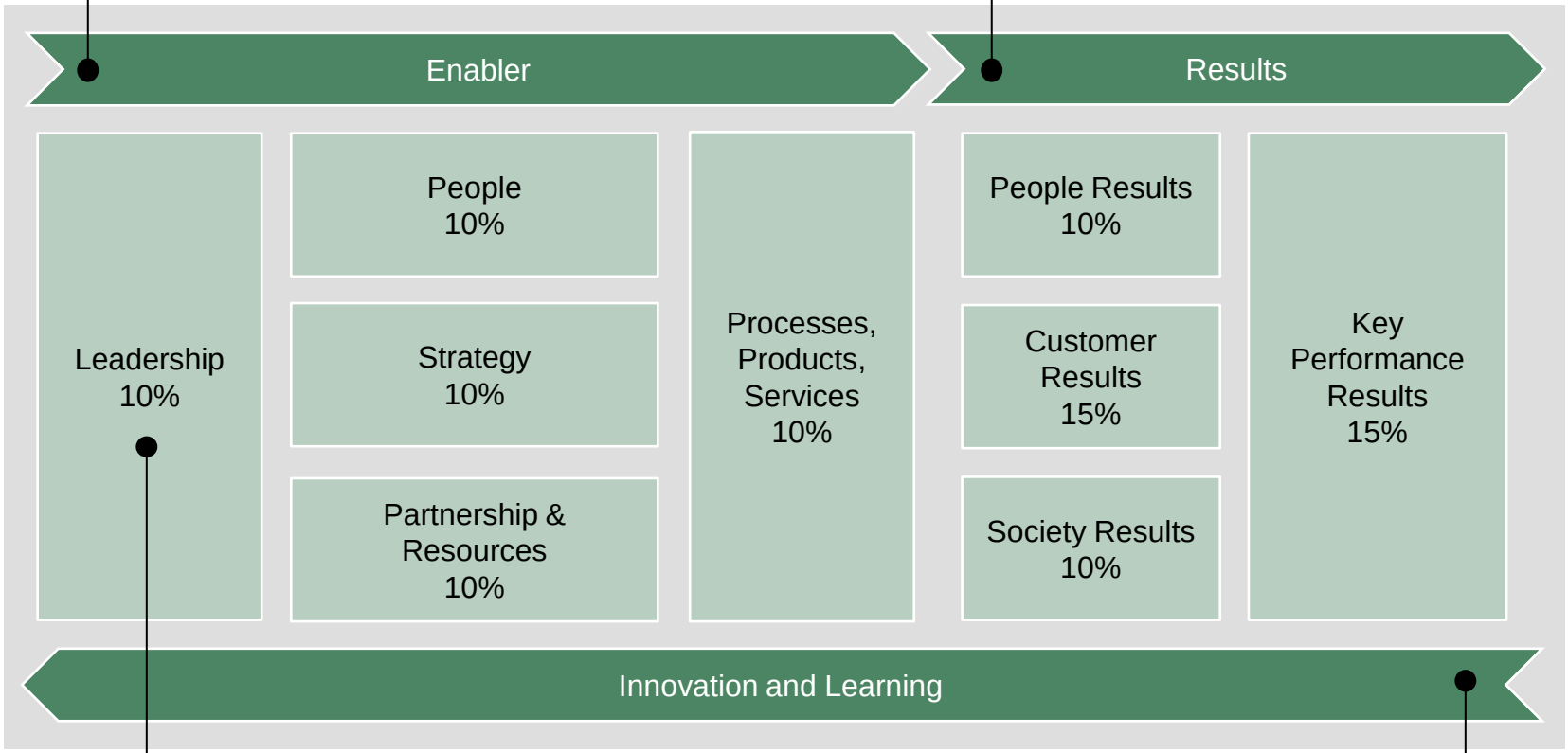
Agenda

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EFQM Model for Excellence

Enabler criteria cover what an organization does.

The Results criteria cover what an organization achieves. Results are caused by Enablers.



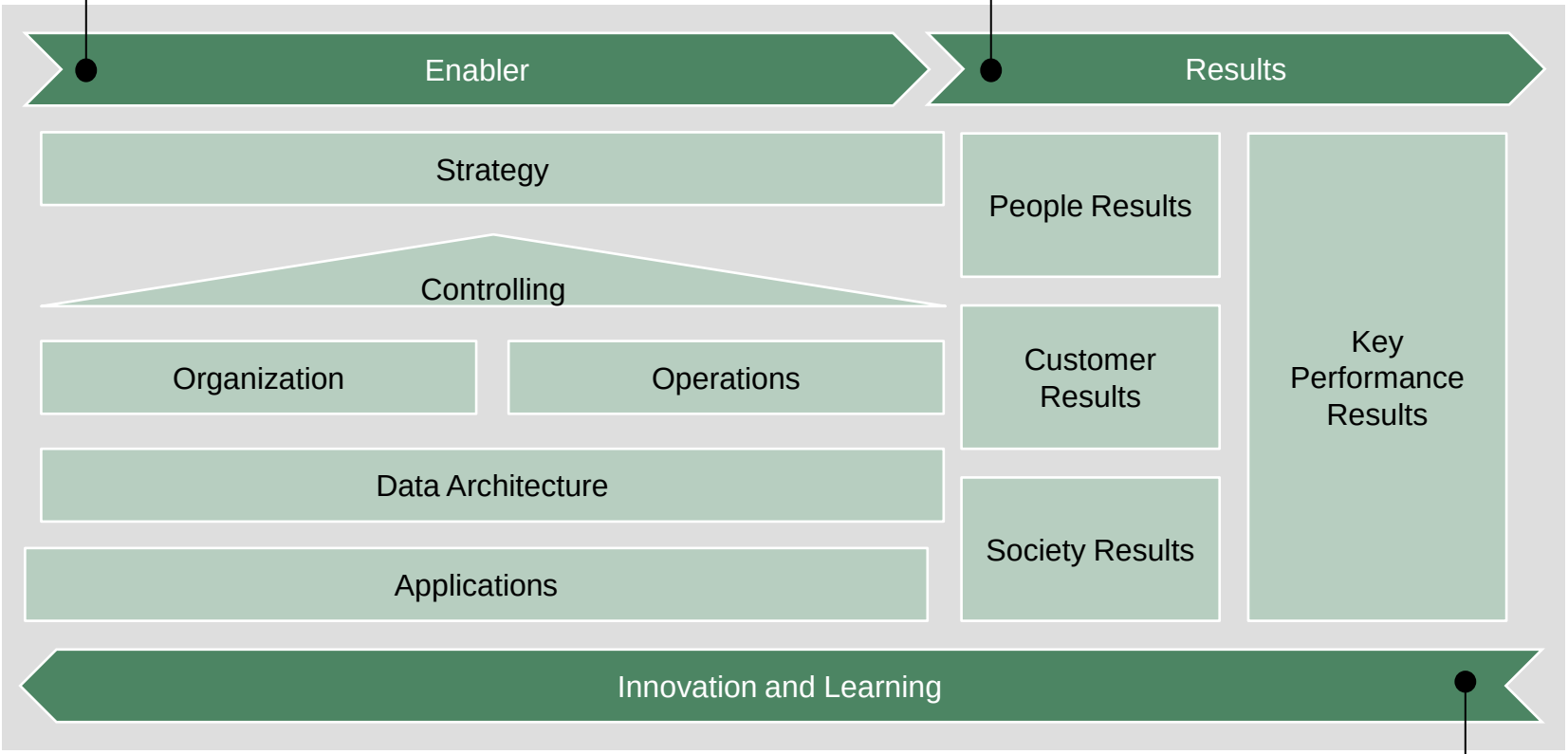
Weightings are assigned to each criteria and are used to determine the final score.

Enablers are improved using feedback from Results and root-cause analysis.

EFQM Framework for CDQM[1]

Enabler criteria cover what an organization does in terms of CDQM.

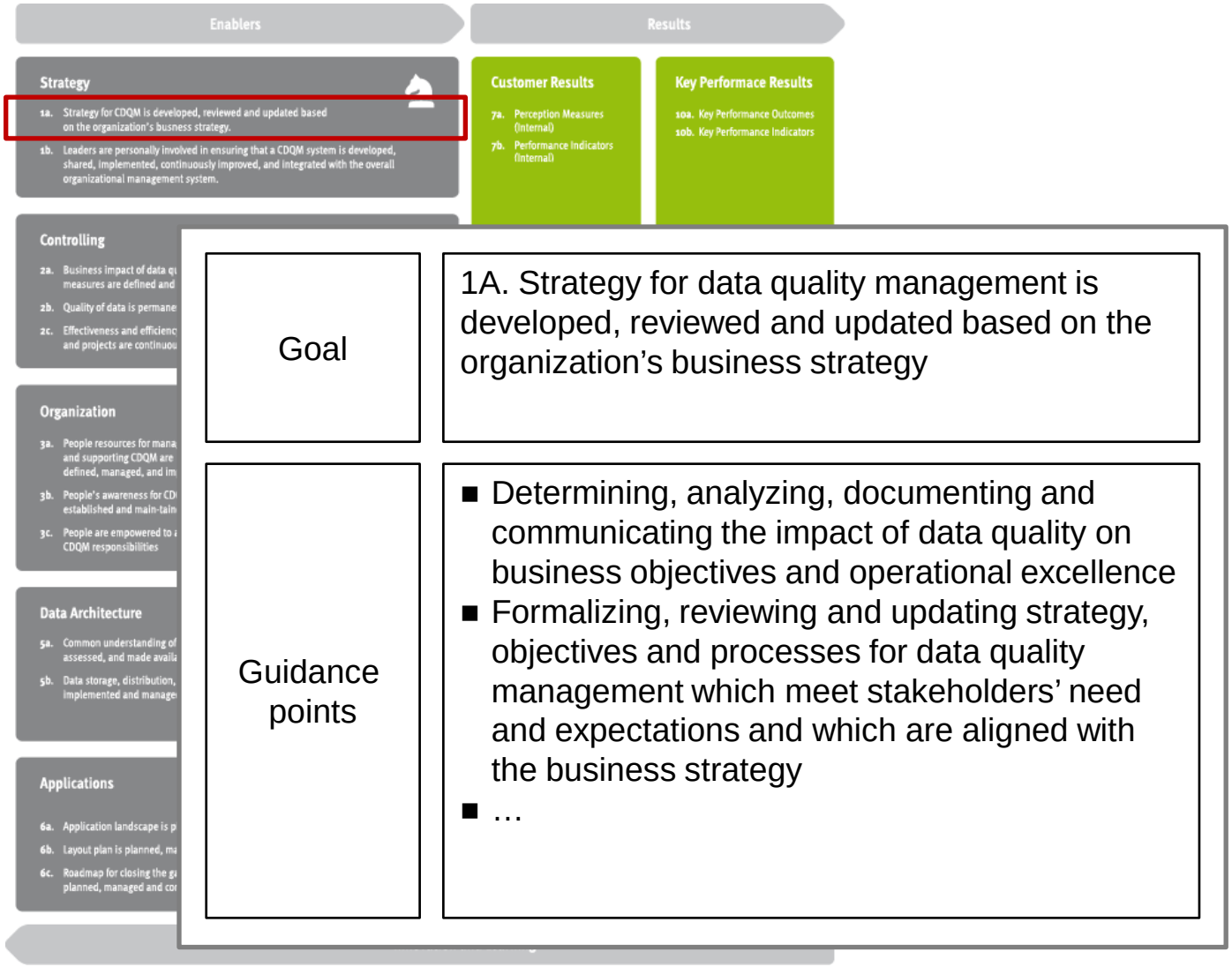
The Results criteria cover what an organization achieves in terms of CDQM. Results are caused by Enablers.



Enablers are improved using feedback from Results and root-cause analysis.

1) The Framework was jointly developed by EFQM and CC CDQ to promote sound practice in CDQM across Europe

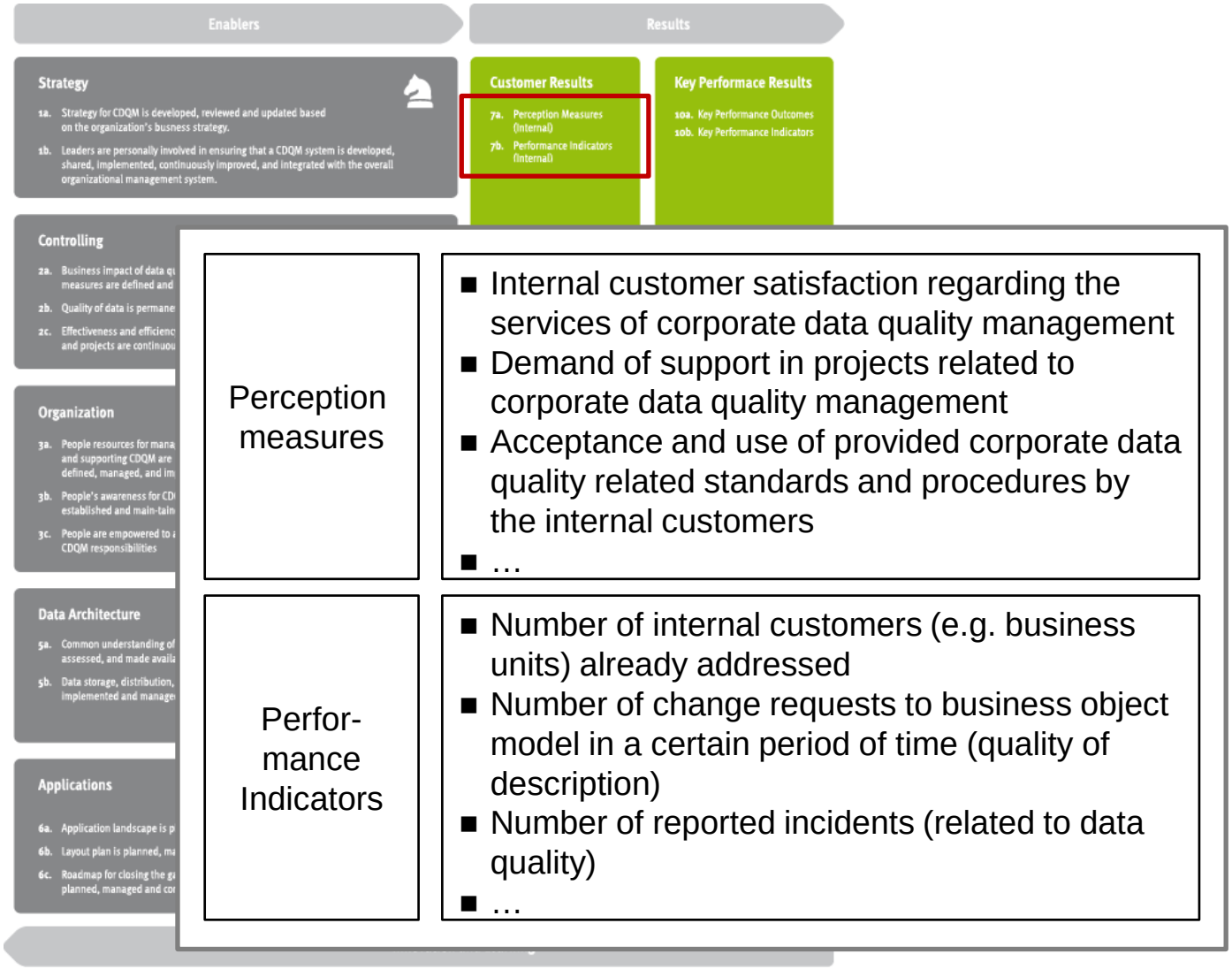
Model in detail - Enabler



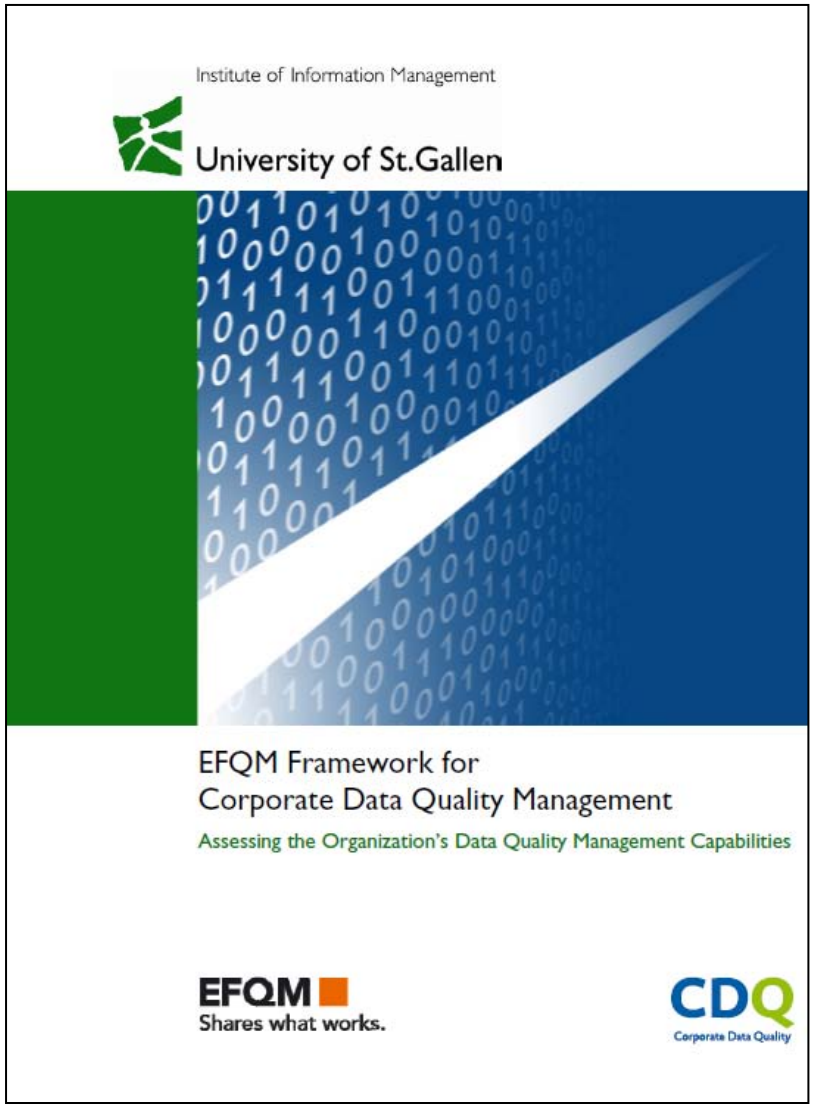
CDQM Maturity Levels

Level	Description
V. Fully completed	■ Excellent results in all areas ■ Outstanding solution found; no significant further improvement imaginable
IV. Major progress made	■ Clear proof of successful implementation ■ Regular verifications and substantial improvement ■ But approach is still not fully applied in all areas
III. Substantial progress made	■ Proof that initiative is seriously established ■ Successful implementation in a number of areas ■ A number of examples of verification and improvement identifiable, but the full potential is by far not fully exploited yet
II. Minor progress made	■ Some indications of a positive development identifiable ■ Casual, more accidental verifications that have led to some improvement ■ Positive results in very specific areas
I. Not yet started	■ No initiative identifiable ■ Some good ideas expressed, but still wishful thinking is predominant

Model in detail - Results



Joint Publication



Supporters/Contributers:

& more.

Agenda

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Company's Profile

- Germany's largest municipal company: energy and water supply, swimming pools, public transport, telecommunication and all related services
- 7'000 employees and a total revenue of 4.7 billion in 2007

Initial situation

- Data Quality Management initiative established in 2009
- Provides standards, processes, services, and guidelines for the business segment Customer Management
- Internal customer's needs and requirements unclear
- Area of improvements (from a business perspective) unidentified

Goals of the Self-Assessment



Determine the maturity of the DQM (As-is)



Define target values (To-be)



Identify areas of high priority

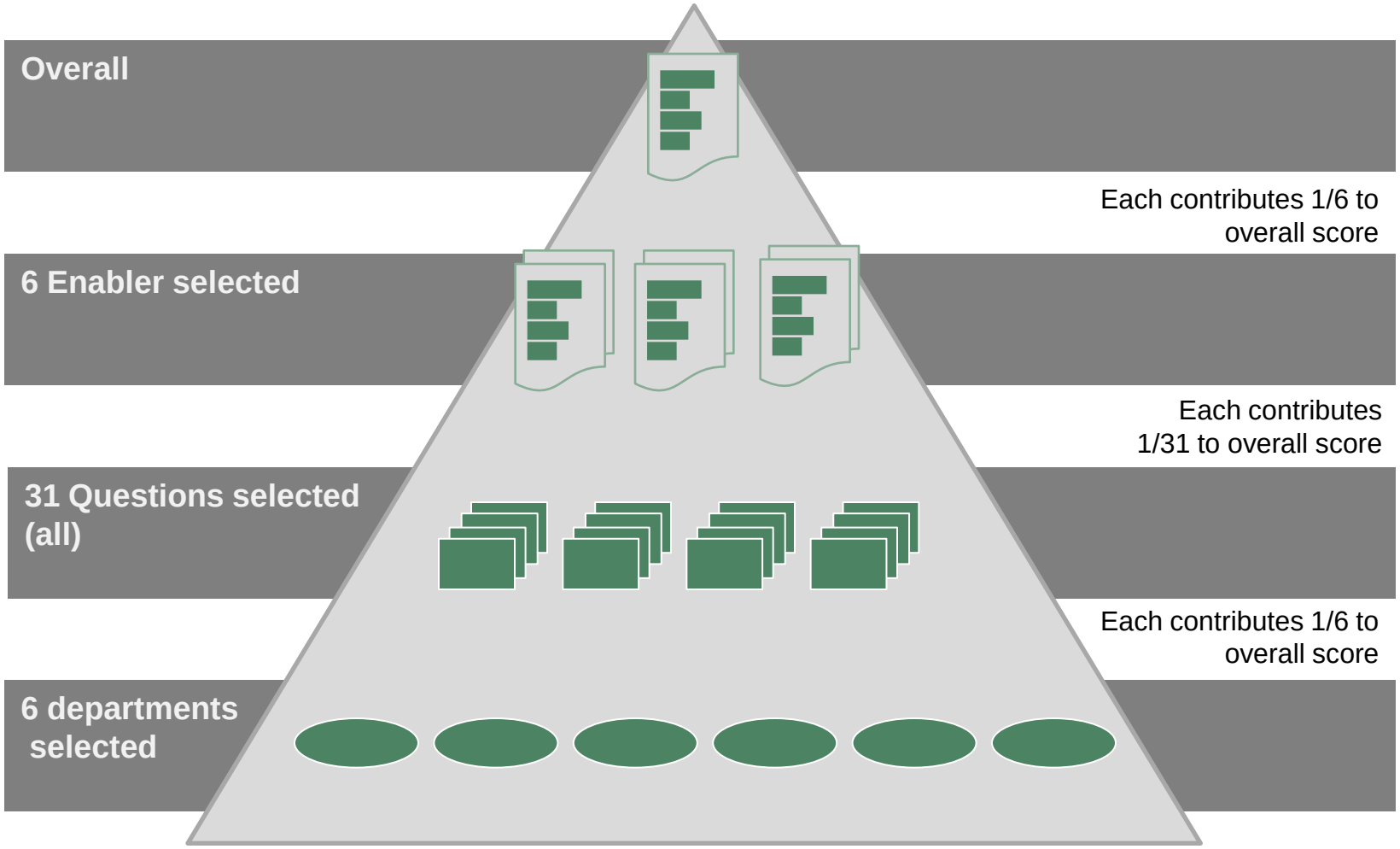


Recommend actions for improvement (List of actions)

Self-Assessment approach

	I. Preparation	II. As-is analysis	III. Action planning
Activities	■ Define scope and goals ■ Identify and analyze stakeholders ■ Select interviewees ■ Choose self assessment technique ■ Select and adapt criteria	■ Conduct interviews ■ Assess interviews ■ Analyze results	■ Analyze internal and external dependencies ■ Plan actions for improvement
Results	■ Stakeholder analysis ■ Communication plan ■ List of company-specific criteria	■ Maturity results ■ Benchmarking results ■ Strengths and area of improvements ■ Priority analysis ■ Statisical analysis	■ List of actions

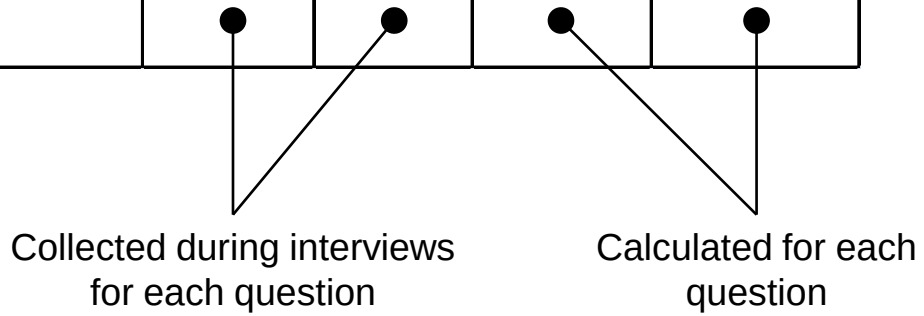
Approach to determine the overall maturity level



Data collection

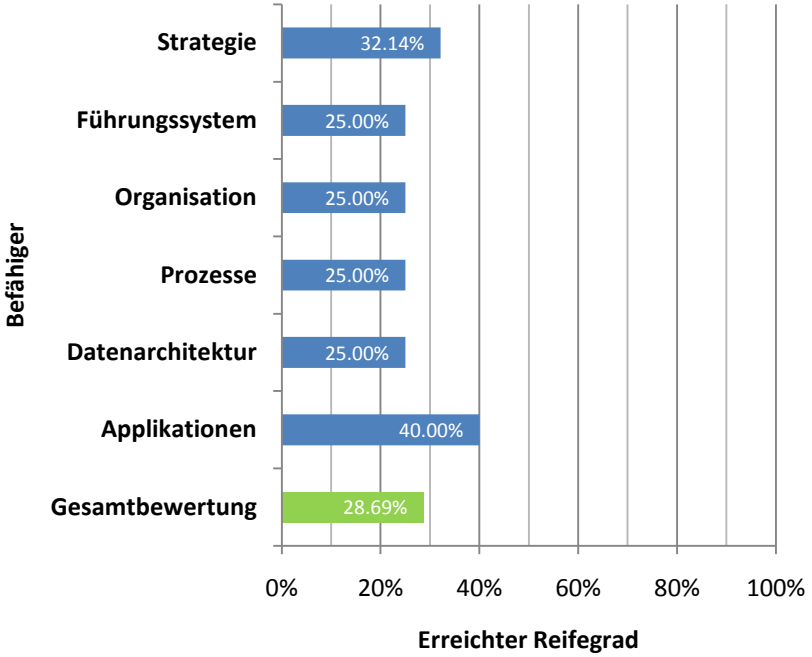
Example

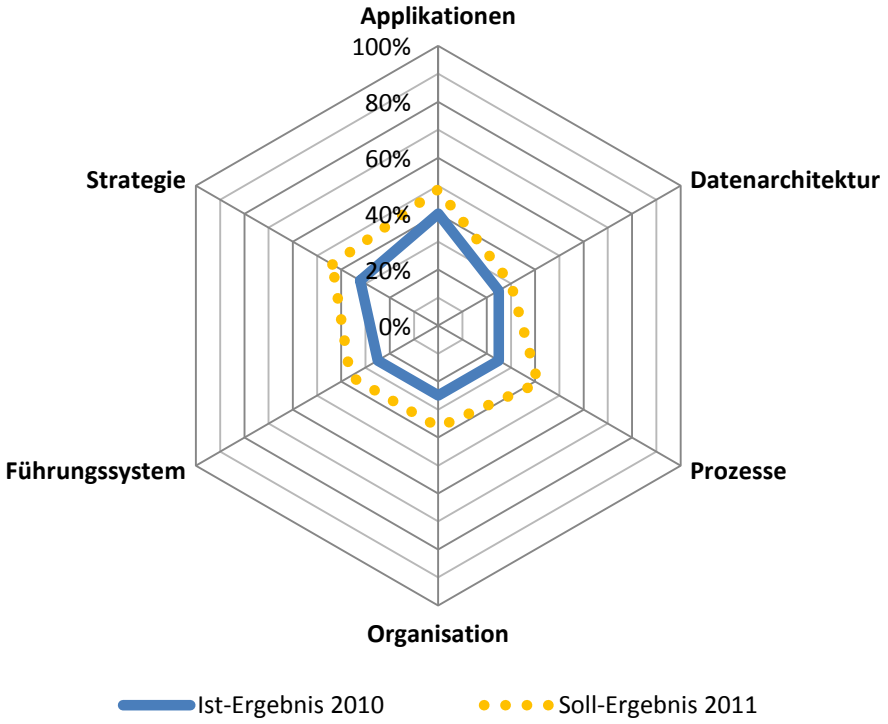
Teil-kriterium	Frage	Bewertung	Priorität	Handlungs-bedarf	Angestrebt. Verbess. 2011
1A	Existieren strategische Ziele und Werte für das Datenqualitäts-management im GFL KM und IN-PK (in dokumentierter und kommunizierter Form)?	25.00%	3	0.75	18.75%
1B	Unterstützen die strategischen Ziele und Werte des Datenqualitäts-managements die Geschäftsstrategie?	25.00%	3	0.75	18.75%
..	..	..	..	..	..



NB: Figure in project language. Data anonymized

Final Results





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Overview of main findings

1. Data quality is a topic of high priority among all participants

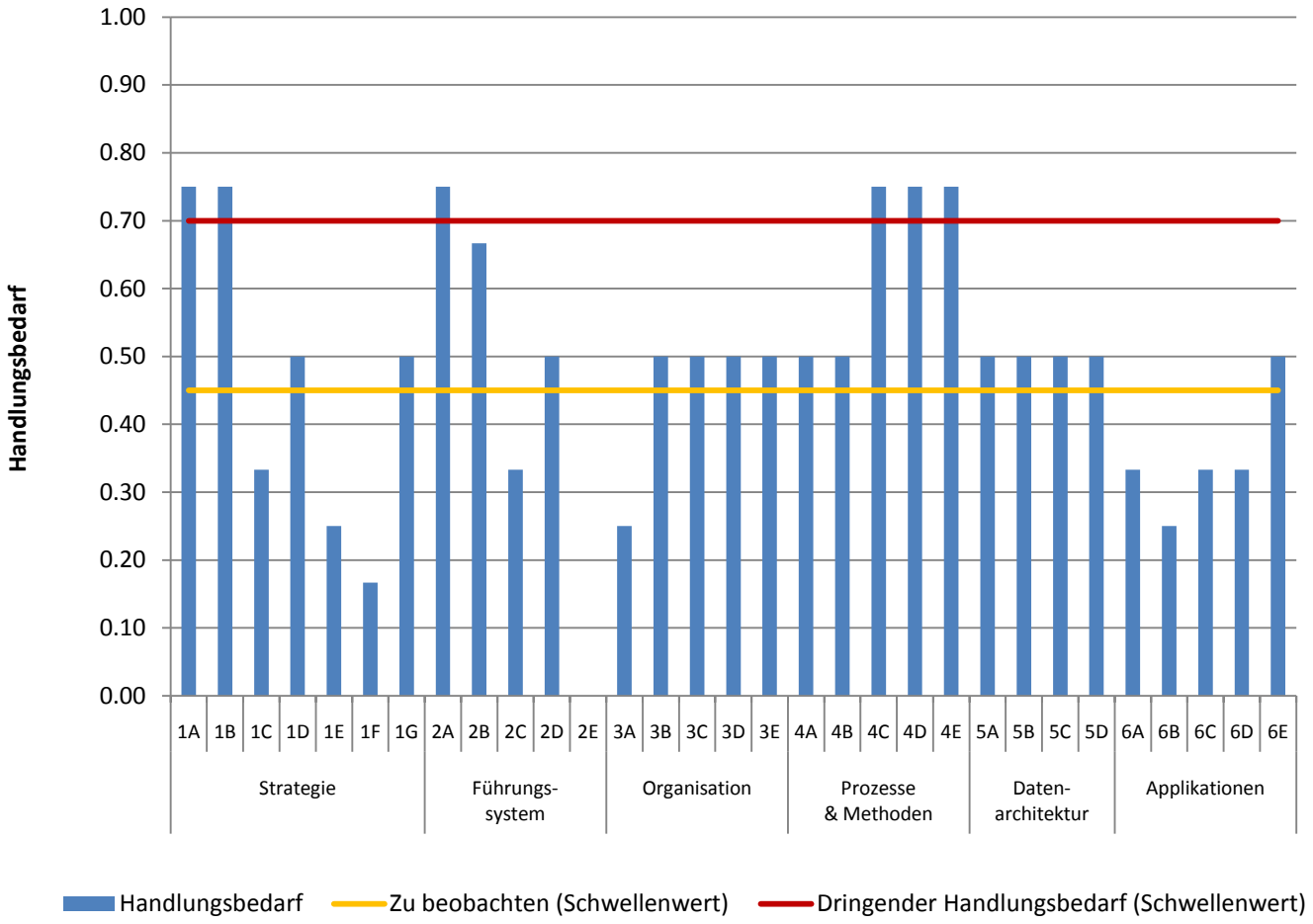
2. Increase of CDQM communication neccessary

3. Missing global roles and responsibilities prevent effective CDQM measures

4. CDQM process not transparent

5. Enabler with highest priority: Strategy, Organization and Processes

Priority Analysis



NB: Figure in project language. Data anonymized

Components of the overall Maturity Assessment Service

Maturity Model

- EFQM Excellence Model for CDQM© as maturity model
- Covering all relevant aspects and tasks of CDQM

Appraisal Method and Tools

- EFQM Self-Assessment for CDQM© as procedure model
- EFQM RADAR© as appraisal method
  - Questionnaire technique
  - Award-simulation technique

Benchmark Database

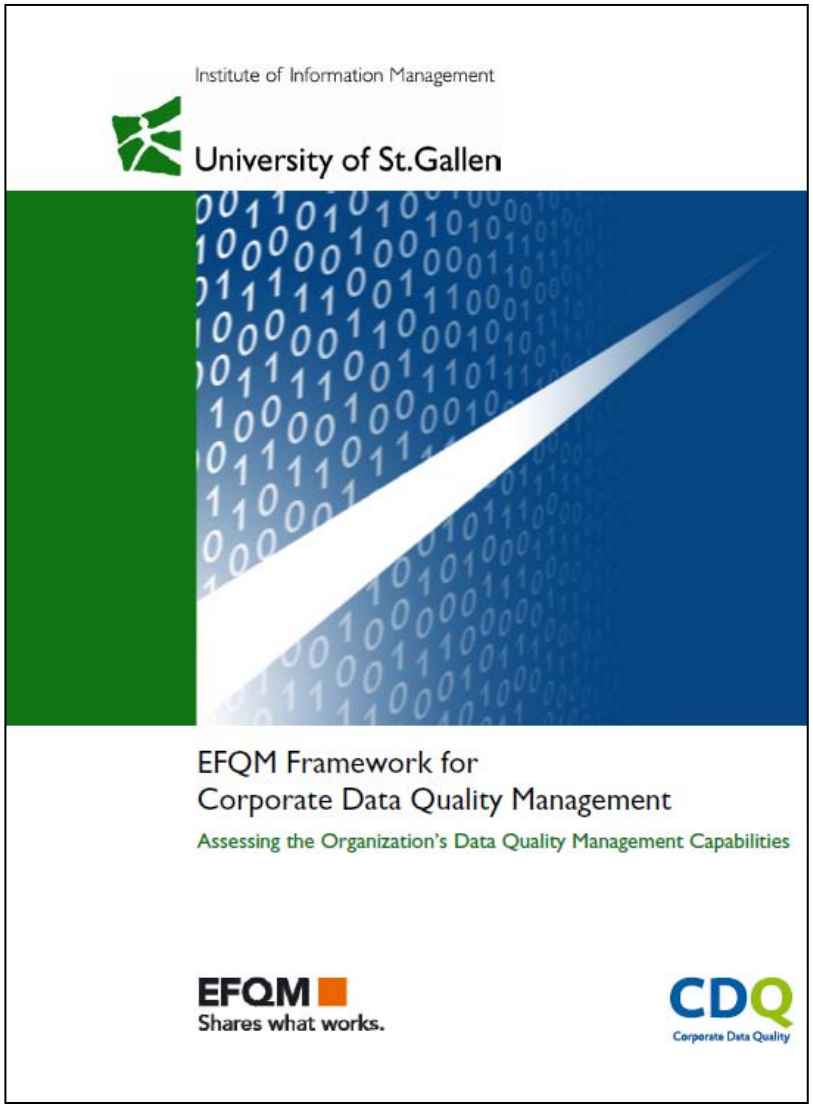
- Growing database with reference values of already conducted Self-Assessments
- Various reports (for example, compare to best-in-class, compare to industry-average, etc.)

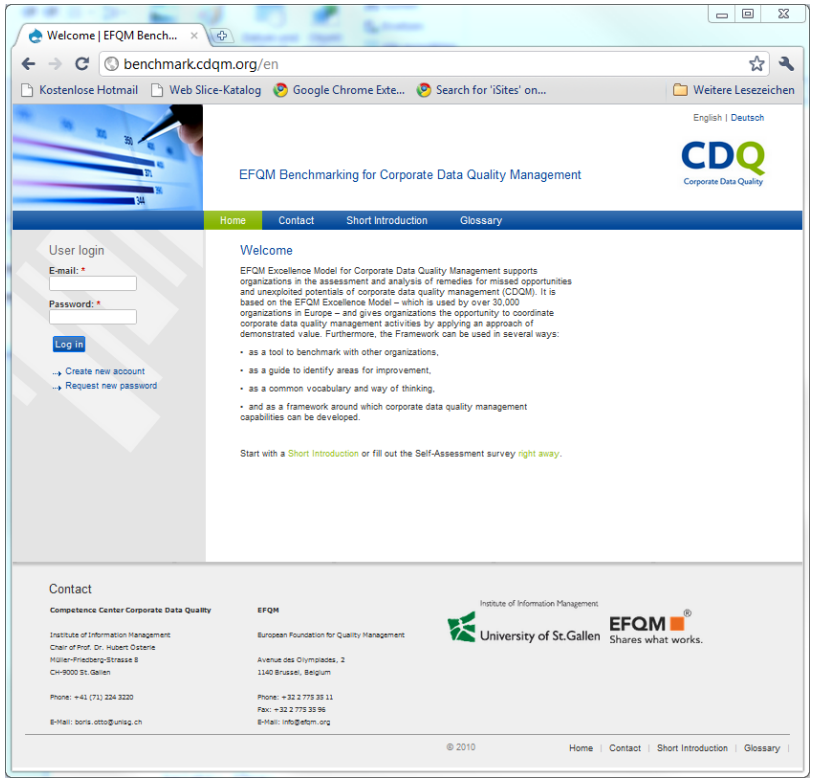
Best Practices

- Comprehensive collection of best practices for CDQM
- Lessons learned that can be used to eliminate identified weak points

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Outlook: Joint publication and Benchmarking database





Contact Person

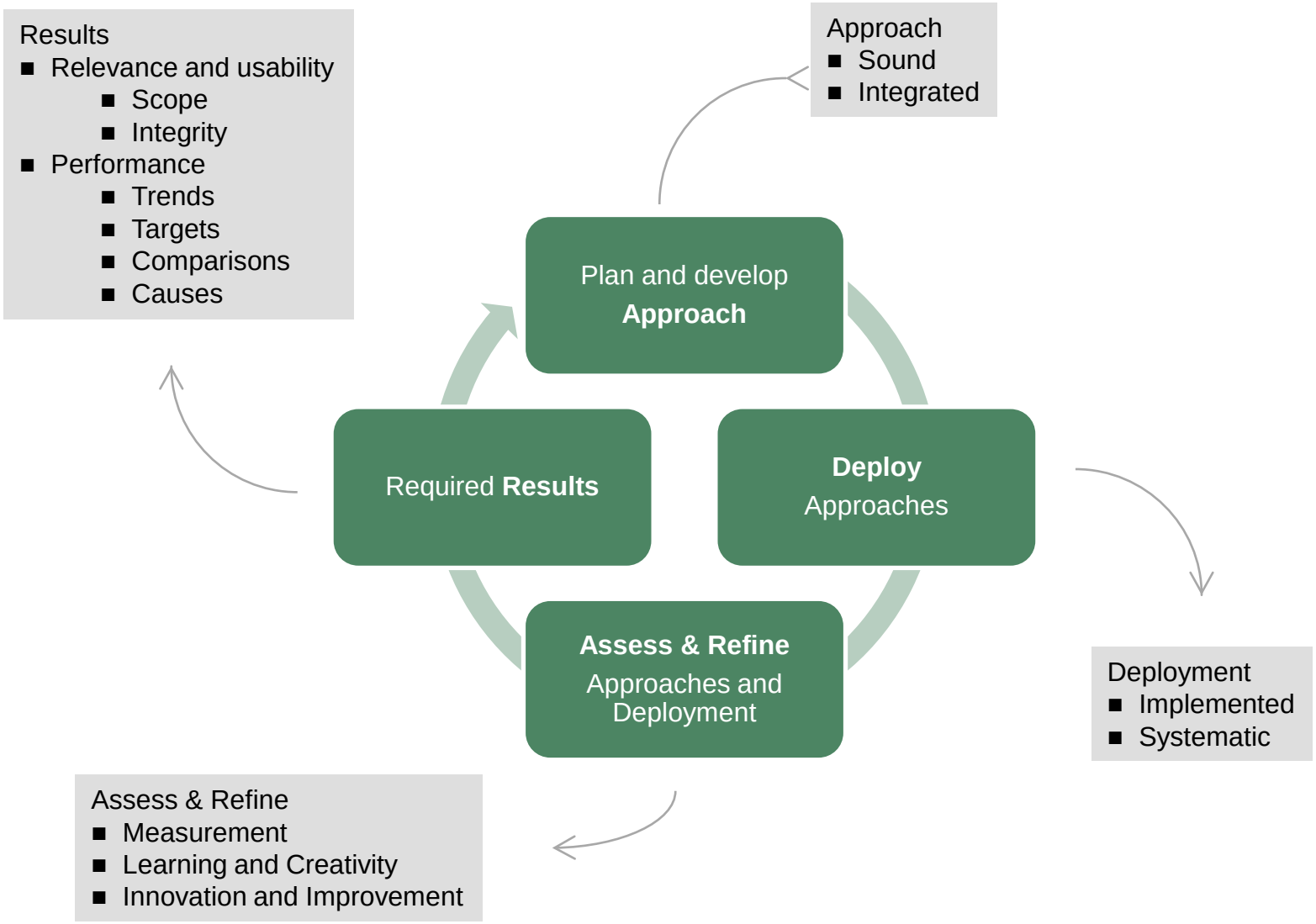


http://cdq.iwi.unisg.ch

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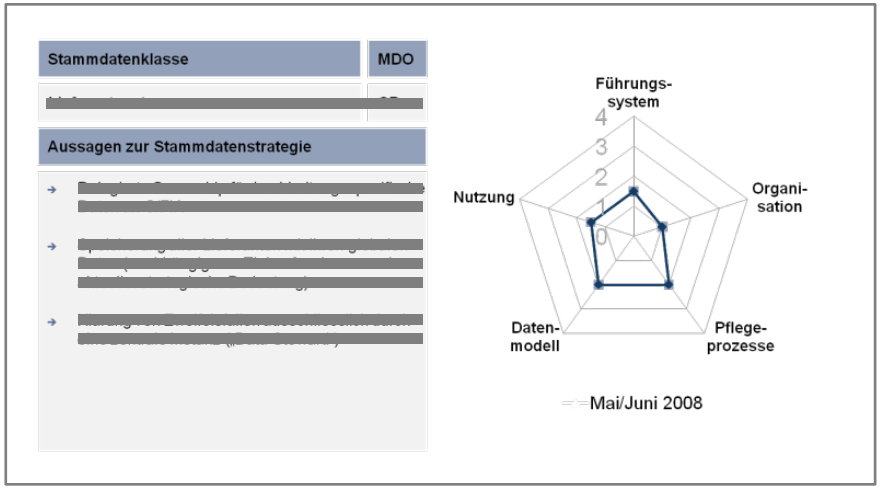
Backup

RADAR Logic

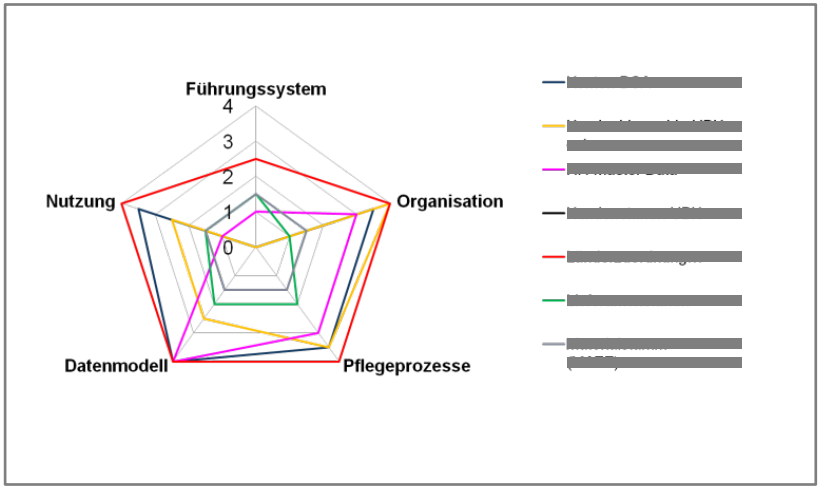

Results
Relevance and usability
Scope
Integrity
Performance
Trends
Targets
Comparisons
Causes
Approach
Sound
Integrated
Plan and develop **Approach**
Deploy Approaches
Assess & Refine Approaches and Deployment
Required **Results**
Deployment
Implemented
Systematic
Assess & Refine
Measurement
Learning and Creativity
Innovation and Improvement

Automotive GmbH[1]

- Germany-headquartered machine manufacturer and automotive industry supplier
- 270,000 employees, 290 manufacturing sites worldwide, and an annual turnover of 46 billion € (in 2008)
- Assessments conducted for 5 enable criteria and 6 master data classes (Questionnaire technique)



Detailed analysis of a single corporate data class



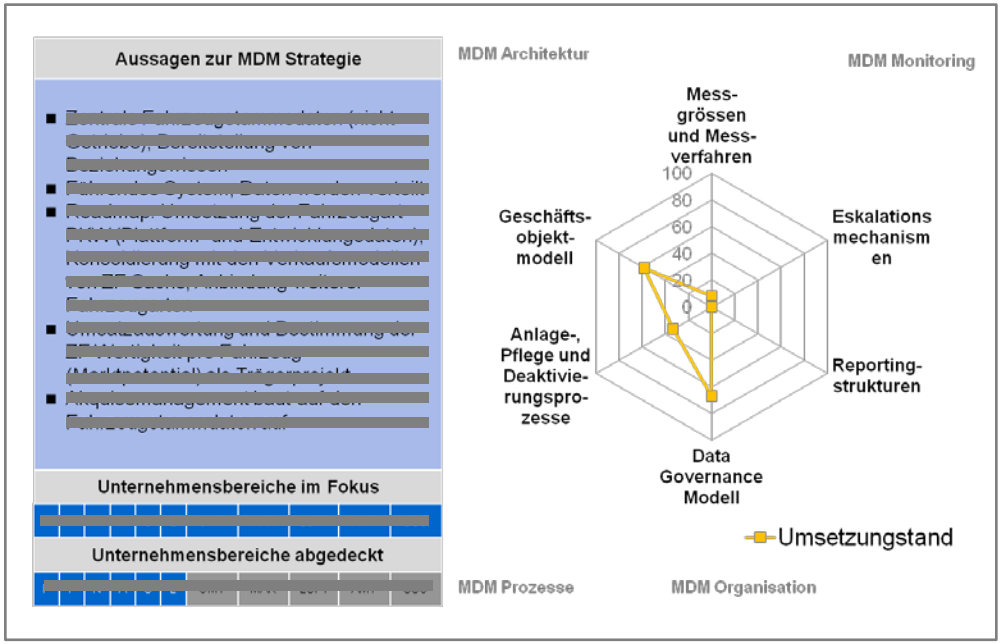
Summary

1) Anonymized due to organizations' communication policy

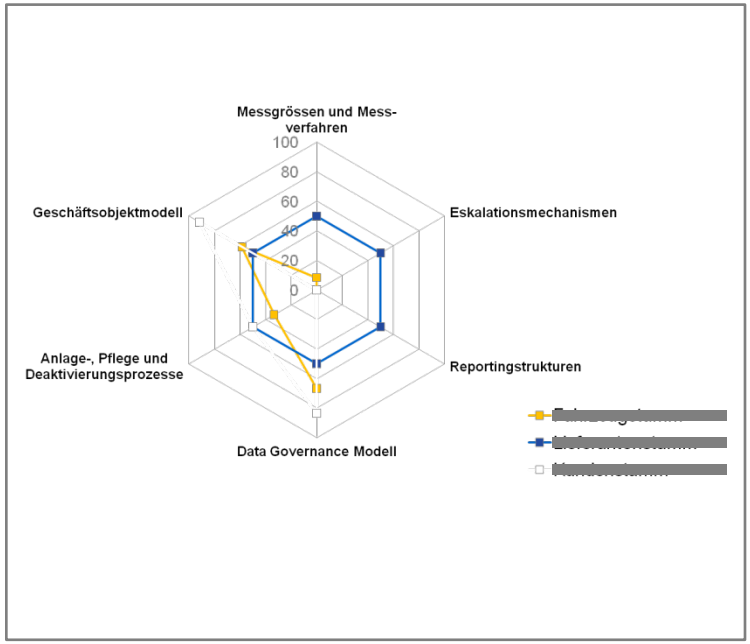
NB: Figures in project language

Case ZF Friedrichshafen AG

- Global supplier of driveline and chassis technology delivering components and systems to the automotive, marine, rail, and aviation industries, as well as for industrial applications
- 60,000 employees, 120 locations in 26 countries
- Assessments conducted for 6 divisions, 6 enabler and 7 corporate data classes



Detailed analysis of a single corporate data class



Summary

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