



DMBoK Metrics

Scorecards for Data Management:

A managerial approach and discipline

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Agenda



DMBoK Metrics

The Business Trends requires Data Management

Enterprise Architecture a key element

Value of DM BoK to enhance business' success

Use of DM BoK KPIs to the rescue

Analytic approach to bring business value

An insurance company example

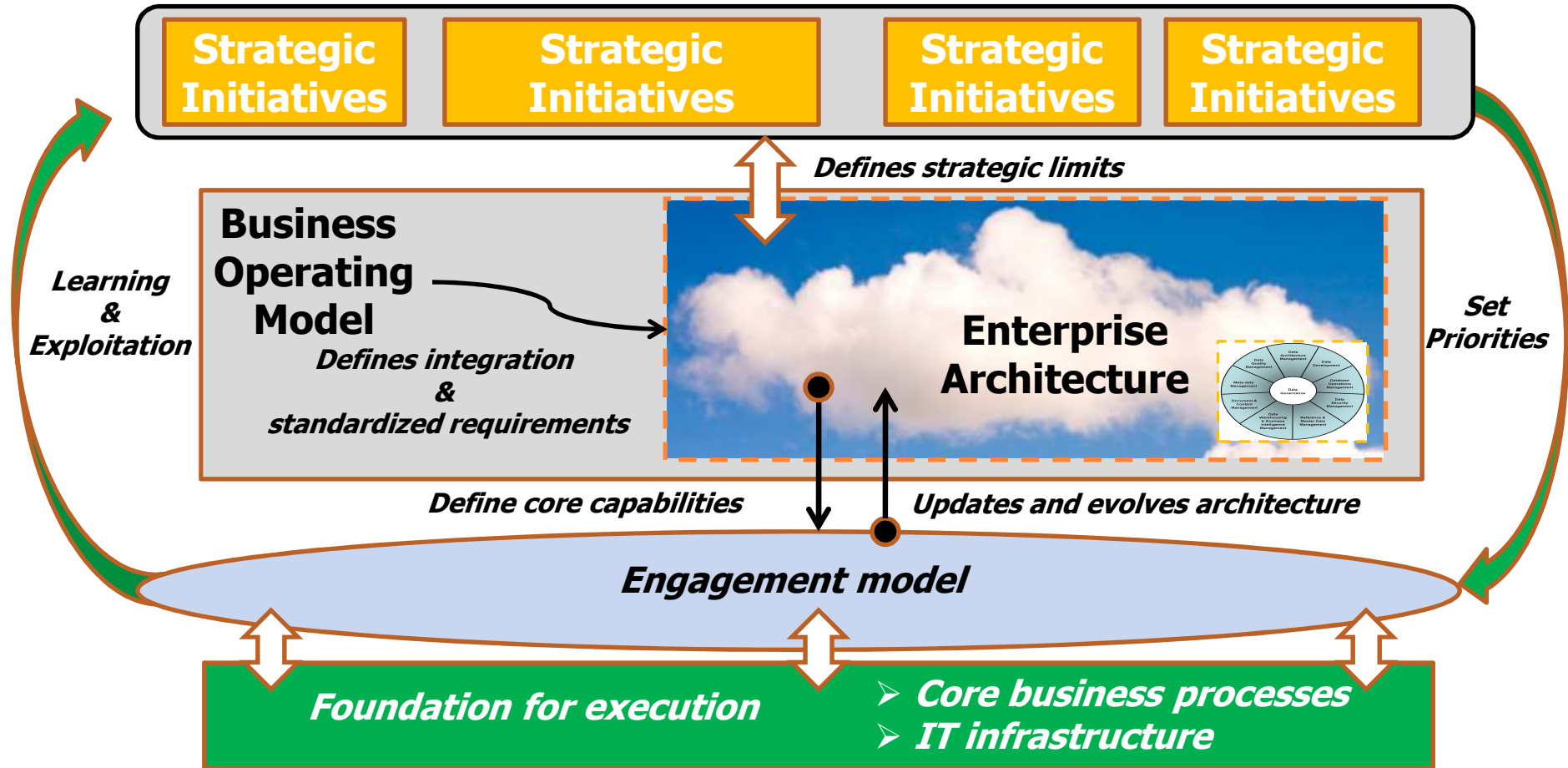
Using DM BoK for success

Business Architecture



DMBoK Metrics

Every business has an explicit or implicit architecture



Source: Enterprise Architecture as a Strategy Ross, Weill, & Robertson

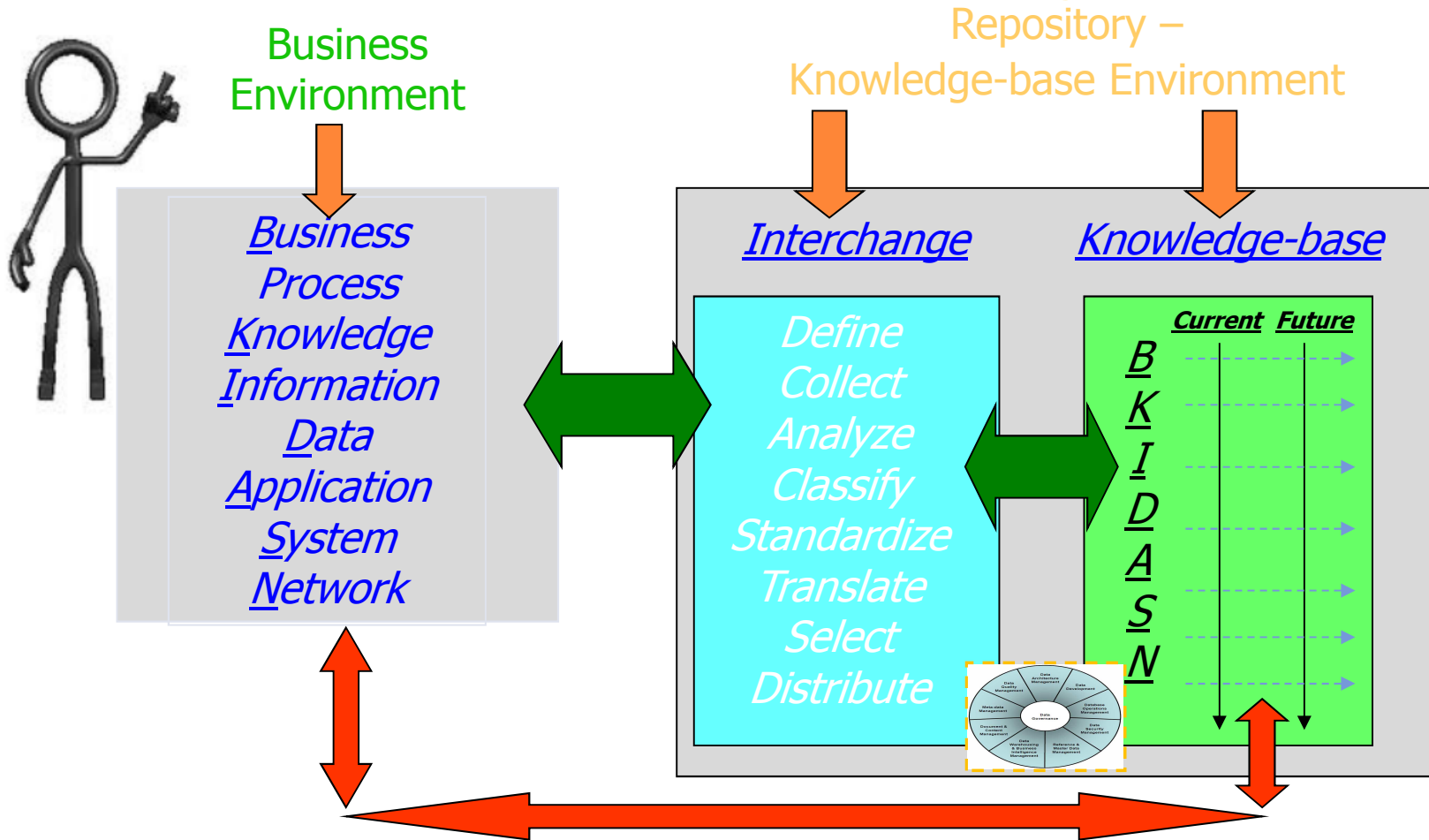


Business Environment



Decision-making through knowledge & Information Resource Management

DMBoK Metrics





How do we move from Business to DMBok?



DMBoK Metrics

**Importance of data and information
to the overall business strategy
requires**

An approach to link the Business Strategy to DMBok Implementation



A Descriptive Analytic Approach



DMBoK Metrics

A collection methodology:

1. Create lists of one or more areas of interest
2. Describe relationships that exist between areas of interest. For example:
 - a. Business Strategy-to-Goals
 - b. Business Strategy-to-Initiatives
 - c. Business Strategy-to-Data Mgt. Strategy
 - d. Initiatives-to-Projects
 - e. Projects-to-technology, information, data, decisions, documents, etc.
3. Build relationship matrices for each area of interest
4. Add appropriate data attributes
5. Assess impact of multiple inferred relations.

Business situation determines which areas of interest used in analysis.



What's missing?



DMBoK Metrics

A technique to capture the relationships

What techniques can be used to get the “relationships” mapped into each matrix from a group technique?

1. Survey (1-7) (nothing to highly coupled)
2. Specific focus groups of SME and Business Experts
3. Delphi Technique
4. Interviews
5. Combination of techniques

Business Strategy to Function Matrix



DMBoK Metrics

And with these linked relationships

1. Building the relationships between the business' strategy and its functions

Strategies of a company	
KL	Name
	Increase Market Share web
	Improve Performance
	Develop New Markets
	Improve supplier relationships
	Increase market share - Partition

Major functions of a company

KL	Name
	Research
	Marketing
	Sales
	Customer Care Service
	Production
	Planning
	Inbound Logistics
	Human Resources
	Finance
	Accounting
	Product Development
	Outbound Logistics
	Product Engineering
	Product Support

2. Do the same between the business' functions and its data management strategy

Matrix Model Workspace

Model Name: DAC Strategic and Functional Direction [From Dimension: BUSINESS DECISIONS -- To Dimension: FUNCTIONS]

From	To	Research (DAC Core Processes)	Marketing (DAC Core Processes)	Sales (DAC Core Processes)	Customer Care Service (DAC Core Processes)	Production (DAC Core Processes)	Planning (DAC Core Processes)	Inbound Logistics (DAC Core Processes)	Human Resources (DAC Core Processes)	Finance (DAC Core Processes)	Accounting (DAC Core Processes)	Product Development (DAC Core Processes)	Outbound Logistics (DAC Core Processes)	Product Engineering (DAC Core Processes)
Increase Market S			●	●	●		●					●		
Improve Performar				●		●			●	●	●		●	
Develop New Mar		●	●											●
Improve supplier r								●			●			●
Increase market sl			●	●	●		●					●		

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Business function to DM strategy



You can begin to see key relationships to your strategy

DMBoK Metrics

Model Name: APCD DM Strategy Coverage [From Dimension: FUNCTIONS -- To Dimension: DATA]

All
 Expand Contract Relations: 35 -- Density: 29.17%

From	To	Archive data consistent with needs (Data)	Identify master data (Data)	More flexible data environment (Data)	Maintain currency of data (Data)	Develop single views of data for customer, (Data)	Reduce resistance to change (Data)	Maintain high quality of data (Data)	Govern logical and physical data (Data)
Accounting (DAC		●		●	●		●	●	●
Research (DAC C			●	●					
Marketing (DAC C					●	●			
Sales (DAC Core F		●			●	●	●		
Customer Care Se				●	●	●	●	●	
Production (DAC C			●				●	●	●
Inbound Logistics							●		
Finance (DAC Cor		●		●				●	●
Product Developm			●						
Outbound Logistic				●		●			
Product Engineeri			●						
Product Support (I						●			
Information Techn				●	●			●	●

3
4
6
4
5
4
5
4

- 6
- 2
- 2
- 4
- 4
- 3
- 1
- 4
- 2
- 2
- 1
- 1
- 4

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This is a business strategy to DM Strategy Inferred Matrix



DMBoK Metrics

The results of building these matrices and seeing the inferred results

Matrix 1 = Business Strategy → Functions

Matrix 2 = Function → Data Management strategy

Resultant matrix is Business Strategy → Data Management Strategy

Matrix Model Workspace

Model Name: APCO DM Strategies and Business Strategies [From Dimension: BUSINESS DECISIONS -- To Dimension: DATA]

All
 Expand Contract Relations: 30 -- Density: 62.5%

From	To	Archive data consistent with	Develop single views of data for	Govern logical and physical data	Identify master data (Data	Maintain currency of data (Data	Maintain high quality of data	More flexible data environment	Reduce resistance to
Develop New Mar		●	●	●	●	●	●	●	●
Improve Performar		●	●	●	●	●	●	●	●
Improve supplier re									●
Increase market sl			●				●	●	●
Increase Market S			●		●	●			
Increase Sales (St		●	●	●		●	●	●	●
		3	5	3	3	4	4	4	4

8
7
1
4
3
7

Setting up KPI's to measure business value of these relationships

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Investment in DM Services & Strategies



DMBoK Metrics

And to continue to evaluate in situation with some form of a risk/return analysis

Matrix Model Workspace

Model Name: DM Service Coverage of DM Strategy [From Dimension: DATA -- To Dimension: FUNCTIONS]

All
 Expand Contract Relations: 19 -- Density: 26.39%

From	To	Data Architecture Management (DM Service)	Reference and Master Data Management (DM Service)	Meta - Data Management (DM Service)	Data Security Management (DM Service)	Data Quality Management (DM Service)	Data Development (DM Service)	Data Base Operations (DM Service)	Data Warehousing and Reporting (DM Service)	Document and Content Management (DM Service)
Archive data cons		(\$155,000.00)		(\$125,000.00)			(\$56,000.00)			
Identify master dat		(\$345,000.00)	(\$126,000.00)	(\$76,000.00)						
Maintain high qual					(\$26,000.00)	(\$78,000.00)				
Govern logical and				(\$135,000.00)		(\$45,000.00)				
Maintain currency								(\$75,000.00)		
Develop single vie		(\$125,000.00)	(\$75,000.00)						(\$200,000.00)	
Reduce resistance		(\$75,000.00)		(\$85,000.00)						(\$85,000.00)
More flexible data				(\$50,000.00)			(\$65,000.00)			

Is this investment analysis sufficient and does it meet the corporate hurdle ?

Calculations

Average

Investment

Calculator			
Tab	Field	Calculation	Result
Just One	Investment	Average	\$105,368.42
Just One	Investment	Sum	\$2,002,000.00
Just One	Return	Average	\$207,105.26
Just One	Return	Sum	\$3,935,000.00

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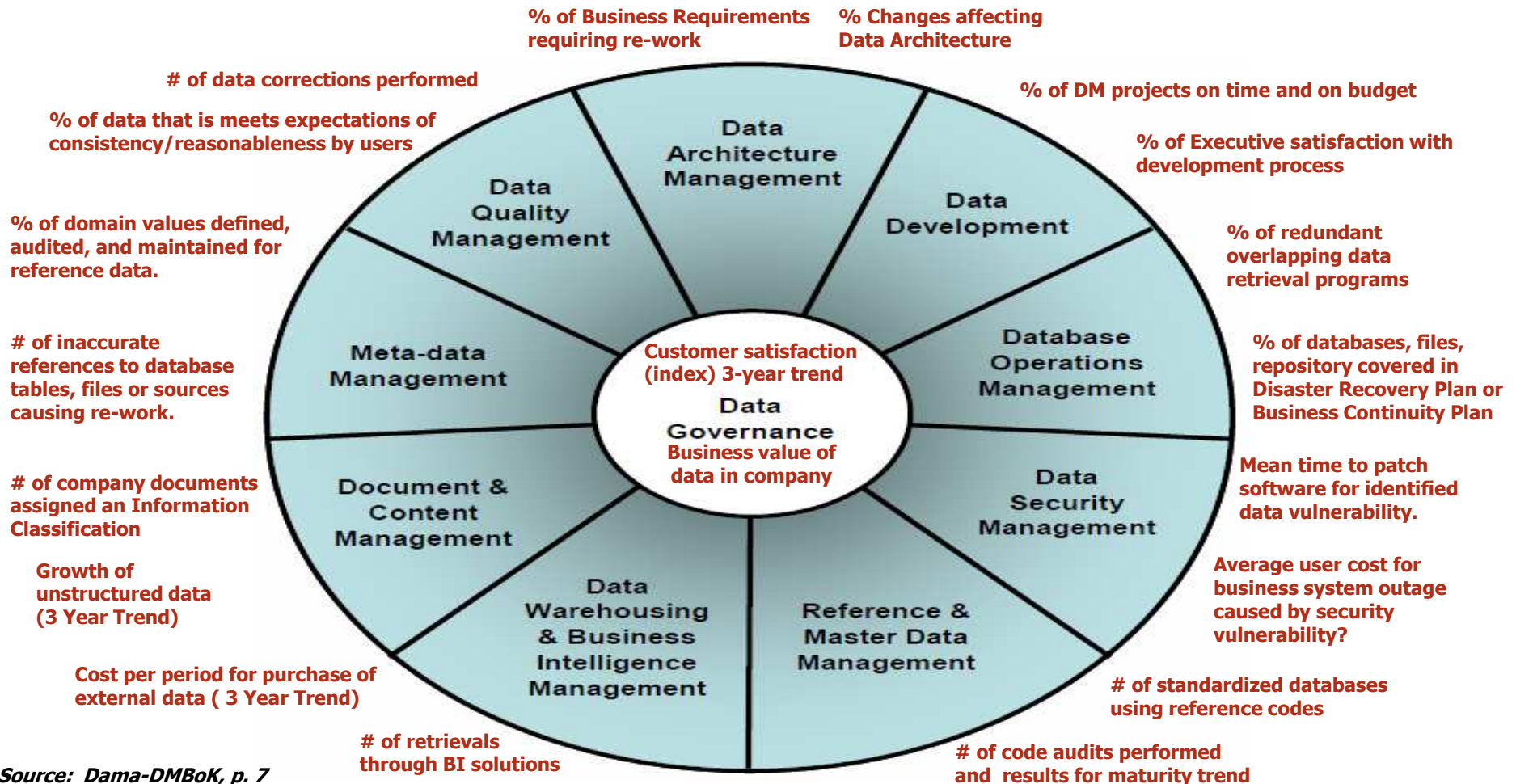


Business Data Mgt. Metrics



Over 250 typical DM Metrics for managing performance?

DMBoK Metrics



Source: Dama-DMBoK, p. 7

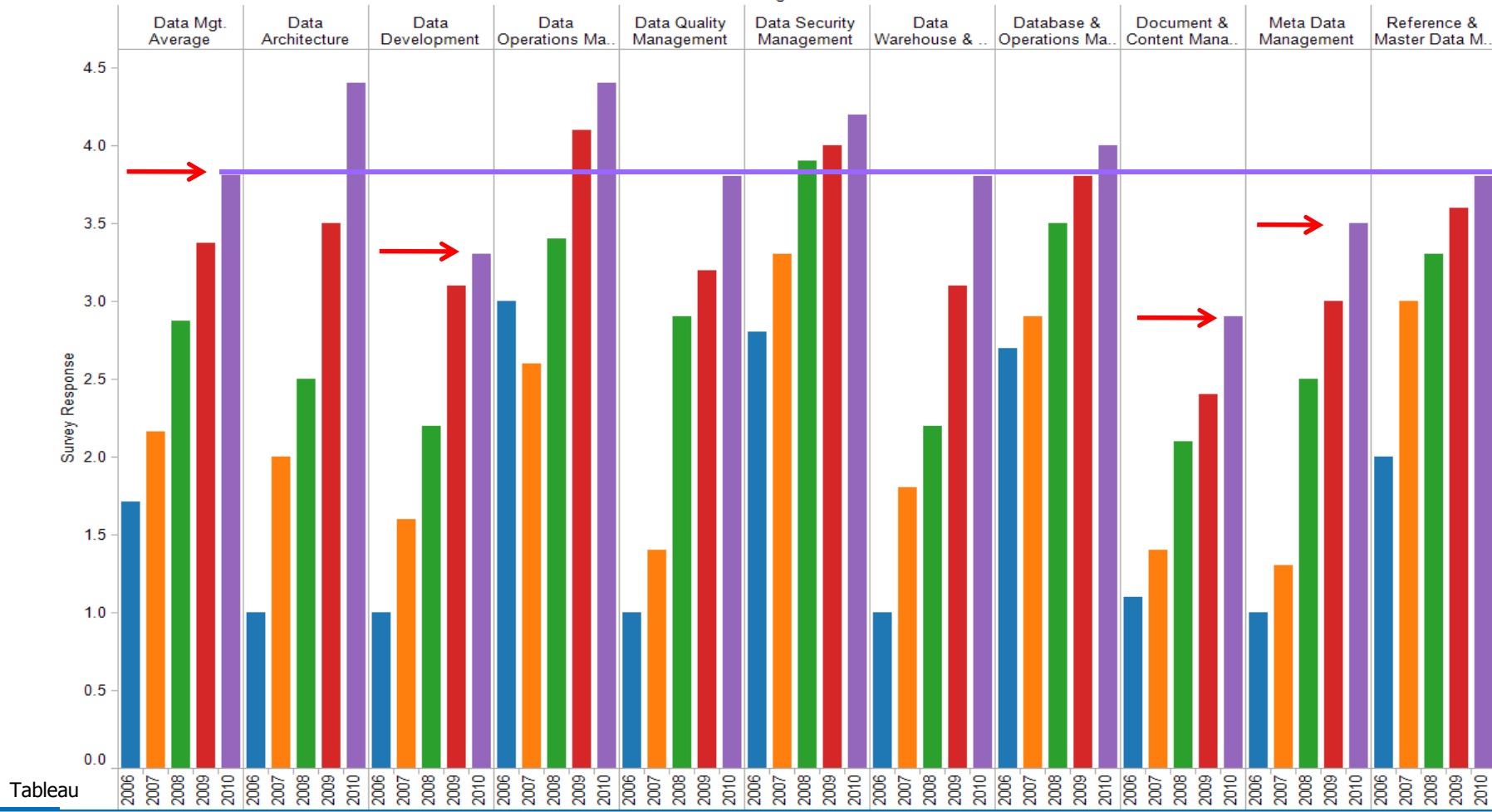


Information Management Scorecard



DMBoK Metrics

DMBoK Measurement Approach



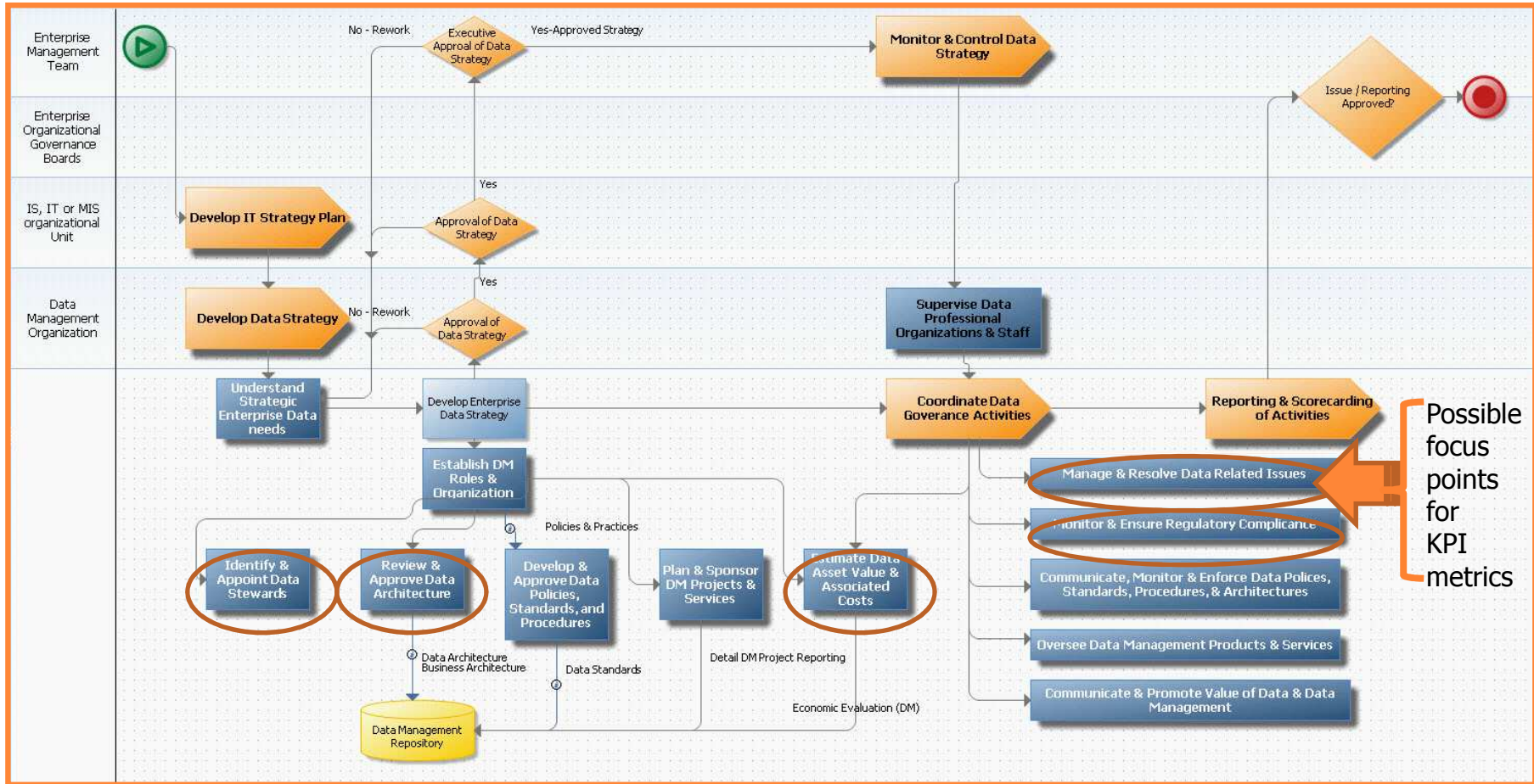


DM Bok Data Governance Process



DMBoK Metrics

Even at his level - metrics



QPR ProcessGuide



Another Scorecard

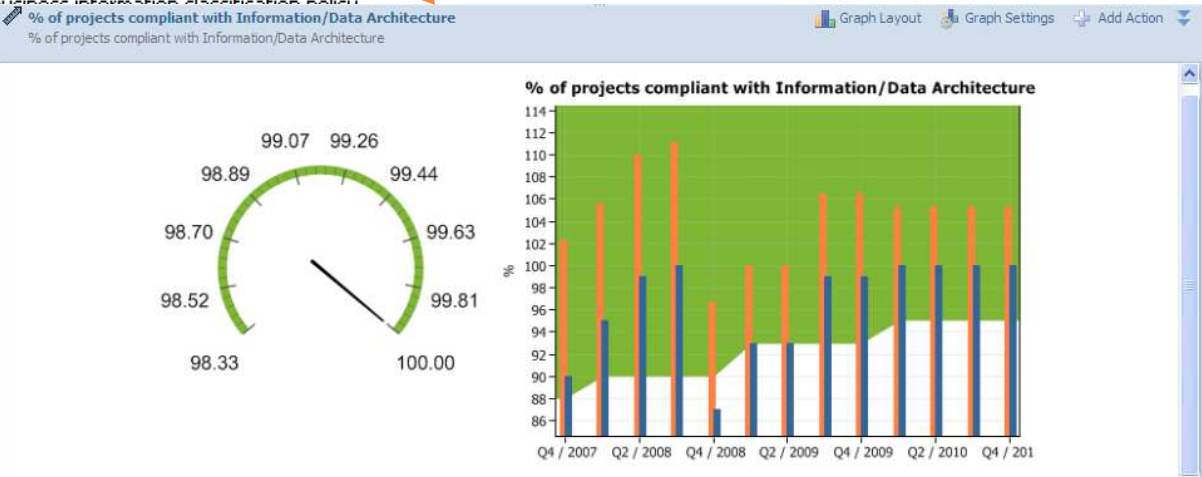


DMBoK Metrics

- DMA**
 - 1. Data Governance
 - 1.1 Planning
 - % of DM projects on time
 - % of projects compliant with Information/Data Architecture
 - Degree to which the portfolio and business risks have been reduced by undertaking the portfolio comp
 - Ensure Data Stewardship Responsibility
 - Minimize Unknown Data Sources
 - 1.2 Supervision
 - % of Staff with CMDP Certifications
 - 1.3 Control
 - % DM Budget over IT Budget
 - % enterprise data areas with data models and metadata defined.
 - % of DM projects on time
 - % of Identified Data Stewardship Responsibility
 - % of files, databases, documents classified by business information classification policy
 - 1.4 Use
 - % of "Shared" and managed Redundant data
 - % of Customers satisfied with DM solution
 - % of Identified Redundant Data
 - % of actual value versus expected value
 - Duration Time for Data Modeling and Architecture
 - 1.5 Budgeting
 - % DM Budget over IT Budget
 - % of projects that meet or exceed expected value
 - Increase of revenue attributable to the Portfolio
 - 10. Data Quality Management

Measures of:

- Customer Satisfaction
- Data Quality
- Architecture Compliance
- Business Impact



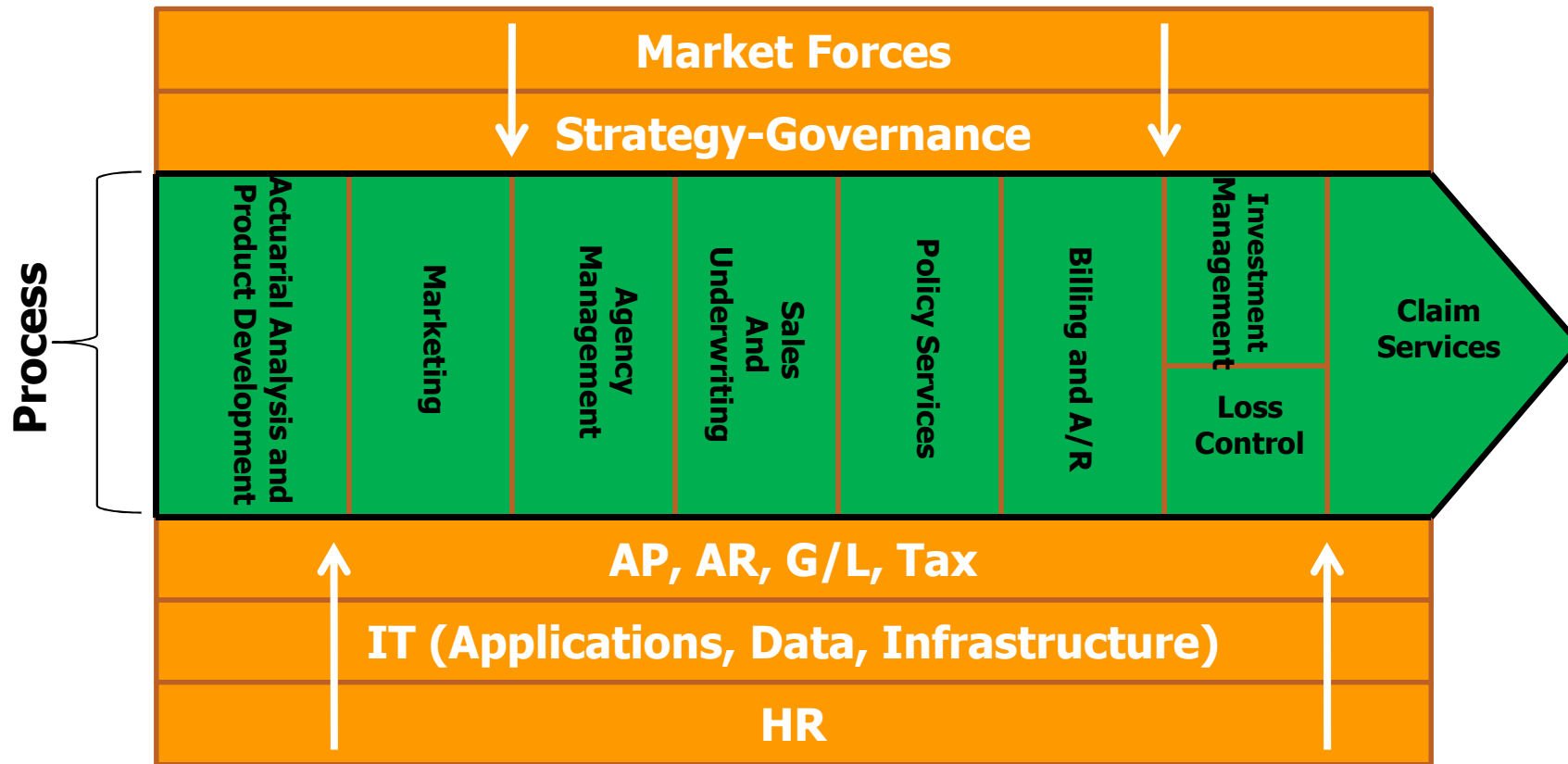
QPR Scorecard



An Insurance Company Example



DMBoK Metrics





An Observation



DMBoK Metrics

"The Learning organization – a change"

At the heart of a learning organization is a shift of mind -- from seeing ourselves as separate from the world to connected to the world, from seeing problems as caused by someone or something 'out there' to seeing how our own actions create the problems we experience.

A learning organization is a place where people are continually discovering how they create their reality. And how they can change it.

(The Fifth Discipline, Peter M. Senge, 1990, pp. 12-13)

Dama International's - Book of Knowledge Guide unlocks keys for the learning organization and data management.