

Module 5 Physical Design and Governance of Data Warehouses

Lesson 4: Data Governance



Lesson Objectives

- Discuss motivation underlying data governance
- Define data governance and identify focus areas
- Visualize relationships among core processes in the Microsoft data governance approach
- Explain artifacts for controls, risks, and capabilities





Motivation for Data Governance

- Complex regulatory environment especially for personal identifiable data
- Information security especially theft of confidential data
- Information privacy especially control over usage of personal data





Data Governance Definitions

DGI definition

 "Data Governance is the exercise of decision-making and authority for data-related matters."

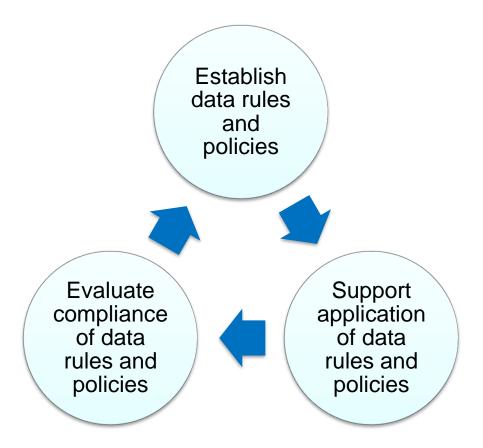
DAMA definition

- "The exercise of authority and control over the management of data assets. It is the planning, supervision and control over data management and use."





Checks and Balances







Focus Areas

- Data quality
- Mergers and acquisitions
- Data warehouse and business intelligence development



Components of the Microsoft DGPC Framework

People

- Strategic commitment by executive management
- Guidance by governance organization
- Cooperation from data consumers

Process

- Establish policies and standards
- Manage governance organization
- Apply tools and technologies
- Implement and monitor controls

Technology

- Trusted infrastructure
- Identity and access controls
- Information protection and classification
- Monitoring of integrity and compliance





DGPC Core Processes

Manage Governance Organization

- Appoint committee members
- Report status
- Define roles and responsibilities



Manage Requirements

- Data quality requirements
- Regulations
- Security and privacy standards
- Control frameworks



Manage Strategies and Policies

- Policies for privacy classification
- Data security and privacy principles



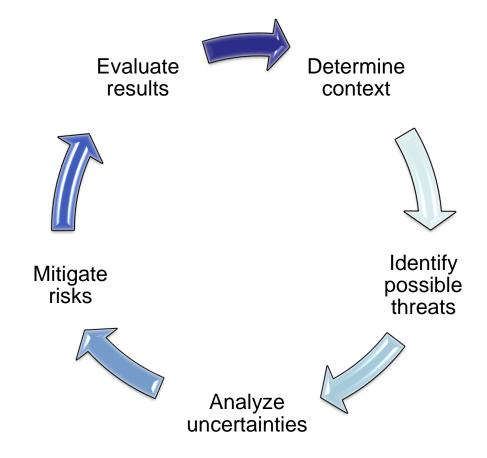
Manage Control Environment

- Apply tools to domains and life cycles
- Monitor controls





Risk Gap Analysis Process







Risk Gap Analysis Matrix

Lifecycle Stage	Technology Domain					
	Secure Infrastructure	Identity and Access Control	Information Protection	Auditing and Reporting	Manual Controls	
Collect						
Update						
Process						
Delete						
Storage						
Transfer						





Capability Maturity Model

Stage	People	Process	Technology
Basic	Lack of training and awareness	Few, immature processes	Lack of tools without integration
Standardized	Formal training	Established and communicated processes	Minimal tools for foundation goals
Rationalized	Formal training with compliance metrics	Process improvement	Increased usage of automated controls and some integration
Dynamic	Formal training with compliance metrics	Integrated compliance efforts	Full usage of automated and technology-aided controls with integration





Summary

- Prominent role for data governance in organizations
- Identify focus and follow procedures for data governance
- Understand Microsoft approach
 - Processes and components
 - Risk tools
 - Capability Maturity Model



