

# Data Governance Fundamentals

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## DG-01 Data Governance Fundamentals

### Module 0: About the Course (6 min)

### Module 1: Introduction to Data Governance (27 min)

- What is Data Governance?
  - Definitions
  - Six Dimensions of Data Governance
  - What Isn't Data Governance?
  - Data Governance vs. Data Management
  - Related Governance Disciplines
- Data and Governance
  - What Data to Govern Part 1
  - What Data to Govern Part 2
  - How Much Governance is Needed?
  - Data Governance Policy Management
- A Data Governance Framework
  - The Big Picture
  - What is Governed – Scope of Data
  - What is Governed – How Data is Used
  - What is Governed – Data Architecture Collaboration
  - What is Governed – How Data is Managed
  - How to Govern
  - Who Governs
  - Data Governance Leadership & Maturity
  - Data Governance Interdependence & Collaboration
- Summary

### Module 2: Data Governance and Data Value (57 min)

- Why Data Governance: The Big Picture
  - The Power of Data
  - Strategic Context: Data is Integral to Every Modern Business Model
  - SVOT and MVOT Require Governance and Architecture Together
- Business Impact of Data
  - Strategic Rationale for Data Governance
  - Types of Data to Govern
  - Maximizing the Business Value of Data
  - Data Governance Game Plan: Offense and Defense
  - Data on Offense and Defense
  - Using Data of Offense: Competing in the Market
  - Offense: Data as a Resource to Differentiate and Compete
  - Data Monetization Defined
  - Data Monetization and Data Architecture
  - Data Value in Offense: Capability to Execute (Mission Effectiveness)
  - Data Value in Offense: Capability to Execute (Mission Effectiveness)
  - Data Value in Offense: Operational Processes (Efficiency)



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- Data Value in Offense: Intellectual Property
- Role of Governance in Driving Upside Value: 4 Major Functions
- Data Value in Defense: Risk Mitigation
- Data Value in Defense: Stakeholder Protection
- Data Value in both Offense and Defense
- Impediments on the Road to data Value
- Data Risks
  - Data Risks: Direct
  - Data Risks: Opportunity Costs
  - Role of Governance in Managing and Mitigating Risks
- Data Retention and Disposal
  - Why Retention and Disposal Matter
  - Regulatory, Legal, and Ethical Considerations
  - Business Nature of Data Determines Retention Policies
  - Role of Governance in Data Retention and Disposal
  - Value Increases with Scale
- Module Summary

### Module 3: Data Governance and Data Leadership (49 min)

- Shaping Data Culture
  - What is Data Culture
  - Example in a Data Culture
  - Why Does a Data Culture Matter
  - Perspectives on Data Culture
  - Executive Team Perspectives on Data Culture
  - Business Management Perspectives on Data Culture
  - Data Management Perspectives on Data Culture
  - Data Users Perspectives on Data Culture
  - Customers, Vendors, and Partners Perspectives of Data Culture
  - Data Culture is Part of Corporate Culture: P
  - Data Culture is Part of Corporate Culture: 2
  - Data Culture is Part of Corporate Culture 3
  - The Role of Culture in Shaping Governance
  - The Role of Governance in Shaping Data Governance
- Fostering Data Culture
  - Providing Data Literacy
  - Data Literacy Definition
  - Why Does Data Literacy Matter
  - Who Should be Data Literate
  - Role of Data Literacy in Data Governance
  - Role of Data Governance in Fostering Data Literacy
- Promoting Data Ethics
  - What is Data Ethics?
  - Why Does it Matter?
  - Challenges & Complexities
  - The Role of Data Governance in Promoting Data Ethics
- Other Forms of Data Governance



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- Data Governance as Collaboration
- Data Governance as Service
- Summary

### Module 4: Data Governance Organization (42 min)

- Data Governance is a Program
- A Data Governance Program
- Organization Structures
  - Various Organizational Setups
  - Example of a Data Governance Organization
  - Governance of Data Products 1
  - Governance of Data Products 2
  - Governing Data/ AI Ethics
- Roles and Responsibilities
  - Who Has a Role in Data Governance?
  - Data Governance Accountability
  - Establishing Data Governance Accountability
  - Data Governance Teams
  - Data Governance Teams & Roles: Data Governance Office
  - Data Governance Teams & Roles: Data Governance Councils
  - Data Governance Teams & Roles: Technical Data Steward
  - Data Governance Teams & Roles: Business Data Steward
  - Data Governance Teams & Roles: Data Product Owner
  - Roles and Responsibilities in Data Governance: Management
  - Management Teams & Roles
  - Management Teams & Roles (continued)
  - Roles and Responsibilities in Data Governance: Data Stakeholders
  - Data Stakeholders & Role
- Technology Governance Considerations
  - Technical Governance Considerations
  - New Technology Considerations in Data Governance

### Module 5: Data Governance and Data Protection (47 min)

- Module Overview
- Concepts
  - Concepts: What is Data Protection?
  - Concepts: Data Protection
  - Concepts: What is Data/Information Privacy
  - Concepts: What is Personally Identifiable Information (PII)
  - Concepts: Personally Identifiable Information (PII)
  - Concepts: Identifying PII Data
- Terminology
  - Terminology: Consent
  - Terminology: Meaning of Consent
  - Terminology: Traceability, Tracking, Lineage
  - Terminology: The difference Between Lineage and Traceability
  - Terminology: Data Deletion



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- Terminology: Masking
- Terminology: Data Masking Techniques
- Terminology: Data Anonymization
- Terminology: Encryption
- Terminology: Pseudonymization
- Privacy and Protection in the Real World
  - Data Privacy in the Real World
  - GDPR – EU General Data Protection Regulation
  - GDPR: What are the Primary Mandates
  - California Consumer Privacy Act (CCPA)
- Module Summary

### Module 6: Data Quality and Data Governance (57 min)

- Foundations: What is Data Quality
  - What is Data Quality?
  - Further Points – Defining and Measuring Quality
- The Business Case for Data Quality
  - Only 3% of Companies' Data Meets Basic Quality Standards
  - The "Data Doc's" Rule of Ten
  - Bad Data and its Impact: The Headlines
- Data Quality "Must Dos"
  - Eight Data Quality Must Dos
    - Pro-Actively Attack Data Quality
    - Get the Right People Involved
    - Customers Must Clarify and Communicate Their Needs
      - The Most Important tool in Data Quality Management (and Maybe all Management)
    - 4. Measure Against the Needs (Customer Requirements)
      - Friday Afternoon Measurement Protocol
      - Assemble the Last 100 Records
      - Mark Obviously-Erred Data in Red
      - Rate the Record as "Perfect" on Not
      - Count the "Perfects"
      - Interpret Results
    - Find and Eliminate Root Causes of Error
      - Quality Improvement Cycle
    - Implement Controls to Stop Errors in Their Tracks
      - Data Quality Controls
      - Example: Age and Years with Company
      - Important Notes
    - Don't Forget the Metadata
    - Data Quality is Especially Important with Machine Learning
- Combining Data Sprawl
  - Data Sprawl Background
  - Damage Done by Data Sprawl
  - Combatting Data Sprawl: What to do
- Summary



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### Module 7: Data Governance Best Practices (12 min)

- Best Practices for Data Governance – An Overview
- Data Governance Best Practices
- Course Summary: Part 1
- Course Summary: Part 2

### 60 Second Course Survey (1 min)