

# Data Maturity Assessment - Domain and Question Mapping Guide

## DOMAIN GROUPS AND ASSESSMENT FOCUS

### DATA LIFECYCLE DOMAIN GROUP

**What it Assesses:** The core operational capabilities for managing data from collection through strategic use - the fundamental data value chain that organizations must master.

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#### 1. DATA COLLECTION SUBDOMAIN

**What it Assesses:** The organization's approach to systematically identifying, gathering, and capturing data from various sources.

##### Q1 - Data Needs Identification

**Assessing:** Strategic approach to determining what data to collect **Measures:** Whether data collection is reactive/opportunistic vs. strategic/purposeful

##### Q2 - Collection Process Design

**Assessing:** Methodology for implementing new data collection initiatives **Measures:** Planning sophistication and quality control integration in collection processes

##### Q3 - Collection Standardization

**Assessing:** Consistency and coordination of data collection across organizational units **Measures:** Organizational discipline and systematic approach to data gathering

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#### 2. INFRASTRUCTURE SUBDOMAIN

**What it Assesses:** Technical foundation and systems capability for storing, processing, and integrating data effectively.

##### Q4 - Data Integration Capability

**Assessing:** Technical ability to combine data from multiple sources for analysis **Measures:** System sophistication and ease of cross-source data analysis

##### Q5 - System Reliability and Performance

**Assessing:** Dependability and operational stability of data systems **Measures:** Technical infrastructure maturity and support capability

## **Q6 - Scalability and Capacity Management**

**Assessing:** Ability to handle growing data volumes and processing demands **Measures:** Proactive technical planning and infrastructure adaptability

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## **3. QUALITY SUBDOMAIN**

**What it Assesses:** Systematic management of data accuracy, consistency, and reliability throughout the organization.

### **Q7 - Error Detection and Correction**

**Assessing:** Organizational processes for identifying and fixing data quality issues **Measures:** Quality management maturity and systematic error handling

### **Q8 - Data Consistency Management**

**Assessing:** Coordination and synchronization of data across multiple systems **Measures:** Integration effectiveness and data governance capability

### **Q9 - Data Standards and Documentation**

**Assessing:** Knowledge management and training for proper data use **Measures:** Organizational learning capability and data literacy infrastructure

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## **4. ANALYSIS SUBDOMAIN**

**What it Assesses:** Sophistication and depth of organizational capability to examine data, understand patterns, and generate insights.

### **Q10 - Causal Analysis Capability**

**Assessing:** Analytical depth for understanding why events occur **Measures:** Investigation methodology and analytical sophistication

### **Q11 - Predictive Analysis and Planning**

**Assessing:** Forward-looking analytical capability for anticipating future challenges **Measures:** Forecasting maturity and scenario planning capability

### **Q12 - Program Evaluation Rigor**

**Assessing:** Systematic approach to measuring program effectiveness and impact **Measures:** Evaluation methodology sophistication and outcome measurement capability

### **Q13 - Comparative Analysis and Benchmarking**

**Assessing:** External orientation and competitive intelligence capability **Measures:** Market awareness and systematic competitive analysis

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## **5. APPLICATION SUBDOMAIN**

**What it Assesses:** Organizational effectiveness in converting data insights into concrete actions and operational improvements.

### **Q14 - Insight Implementation Process**

**Assessing:** Speed and effectiveness of translating discoveries into action **Measures:** Action orientation and organizational responsiveness to insights

### **Q15 - Performance Problem Response**

**Assessing:** Systematic approach to addressing poor performance revealed by data **Measures:** Problem-solving methodology and data-driven improvement capability

### **Q16 - Change Management for Data-Driven Insights**

**Assessing:** Organizational adaptability when data challenges established practices **Measures:** Learning agility and openness to evidence-based change

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## **6. STRATEGY SUBDOMAIN**

**What it Assesses:** Integration of data insights into high-level organizational decision-making and strategic planning.

### **Q17 - Data-Driven Resource Allocation**

**Assessing:** Use of data analysis in budget and resource allocation decisions **Measures:** Strategic analytical sophistication and evidence-based prioritization

### **Q18 - Strategic Expansion Analysis**

**Assessing:** Analytical rigor in major strategic decisions like market entry **Measures:** Strategic planning maturity and risk assessment capability

### **Q19 - Impact Communication and Accountability**

**Assessing:** Ability to demonstrate organizational value and effectiveness through data **Measures:** Stakeholder communication sophistication and accountability through evidence

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## **GOVERNANCE & PROTECTION DOMAIN GROUP**

**What it Assesses:** Risk management, compliance, and ethical frameworks that enable safe and responsible data use across the organization.

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### **7. SECURITY SUBDOMAIN**

**What it Assesses:** Protection of data assets through access controls, monitoring, and recovery capabilities.

#### **Q20 - Access Control Management**

**Assessing:** Rigor and sophistication of data access approval processes **Measures:** Security procedure maturity and risk assessment capability

#### **Q21 - Security Lifecycle Management**

**Assessing:** Systematic management of data access throughout employee lifecycle **Measures:** Operational security discipline and access control reliability

#### **Q22 - Disaster Recovery and Business Continuity**

**Assessing:** Preparedness for data system failures and recovery capability **Measures:** Risk management maturity and operational resilience planning

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### **8. RESPONSIBLE SUBDOMAIN**

**What it Assesses:** Ethical data practices, regulatory compliance, and stakeholder trust through transparent and responsible data use.

#### **Q23 - Privacy and Consent Management**

**Assessing:** Transparency and respect for individual privacy rights in data collection **Measures:** Privacy protection sophistication and ethical data collection practices

#### **Q24 - Regulatory Compliance Management**

**Assessing:** Systematic approach to staying current with evolving data regulations **Measures:** Compliance management maturity and legal risk mitigation

## **Q25 - Ethical Data Use Evaluation**

**Assessing:** Systematic evaluation of ethical implications for new data applications **Measures:** Ethical framework sophistication and stakeholder consideration in data use decisions

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## **ORGANIZATIONAL ENABLERS DOMAIN GROUP**

**What it Assesses:** Human and cultural factors that enable or constrain organizational data maturity - the foundation that makes all other capabilities possible.

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## **9. LEADERSHIP SUBDOMAIN**

**What it Assesses:** Executive commitment, support, and modeling of data-driven decision making throughout the organization.

### **Q26 - Leadership Data Advocacy**

**Assessing:** Active promotion and modeling of data-driven decision making by senior leaders **Measures:** Leadership commitment intensity and data-driven behavior modeling

### **Q27 - Leadership Adaptability to Data Insights**

**Assessing:** Constructive response when data reveals uncomfortable truths or challenges assumptions  
**Measures:** Leadership learning agility and openness to evidence-based change

### **Q28 - Strategic Investment in Data Capabilities**

**Assessing:** Resource allocation priority given to data-related improvements and capabilities **Measures:** Strategic commitment demonstrated through investment decisions

### **Q29 - Change Management for Data Initiatives**

**Assessing:** Leadership effectiveness in managing organizational resistance to data-driven changes  
**Measures:** Change leadership capability and organizational transformation skills

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## **10. TALENT SUBDOMAIN**

**What it Assesses:** Organizational capability to attract, develop, and retain the human skills necessary for effective data use.

### **Q30 - Technical and Analytical Talent Adequacy**

**Assessing:** Sufficiency of technical skills to support organizational data initiatives **Measures:** Talent depth and capability to handle analytical challenges

### **Q31 - Organization-wide Data Literacy Development**

**Assessing:** Systematic development of data skills across all organizational levels and roles **Measures:** Data literacy strategy and broad capability building

### **Q32 - Analytical Talent Acquisition and Retention**

**Assessing:** Success in building and maintaining a strong analytical workforce **Measures:** Talent management effectiveness and organizational attractiveness to data professionals

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## **11. CULTURE SUBDOMAIN**

**What it Assesses:** Organizational attitudes, behaviors, and norms that encourage or inhibit effective data use and collaboration.

### **Q33 - Data-Driven Innovation Culture**

**Assessing:** Organizational openness to challenging assumptions and practices using data evidence

**Measures:** Innovation culture strength and psychological safety for data-driven questioning

### **Q34 - Cross-Functional Data Collaboration**

**Assessing:** Effectiveness of collaboration between technical data teams and operational program staff

**Measures:** Organizational integration and collaborative capability across functional boundaries

### **Q35 - Experimentation and Learning Culture**

**Assessing:** Organizational encouragement of data-driven experimentation and learning from results

**Measures:** Learning culture strength and systematic approach to data-driven innovation

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## **OVERALL ASSESSMENT DIMENSIONS**

### **Primary Measurement Focus:**

- **Capability Maturity:** How sophisticated are the organization's data-related capabilities?
- **Systematic Approach:** How organized and disciplined are data practices?
- **Integration Level:** How well are data capabilities integrated across the organization?
- **Strategic Alignment:** How well does data use support organizational strategy?
- **Cultural Readiness:** How prepared is the organization's culture for data-driven transformation?

## **Key Maturity Indicators:**

- **Initial (1.0-1.8):** Ad-hoc, reactive approaches with minimal systematic processes
- **Developing (1.9-2.6):** Basic capabilities with inconsistent implementation across the organization
- **Defined (2.7-3.4):** Standardized approaches with documented processes and systematic execution
- **Advanced (3.5-4.2):** Enterprise-wide integration with proactive management and optimization
- **Optimized (4.3-5.0):** Innovative approaches with continuous improvement and industry leadership

## **Assessment Value:**

This framework provides organizations with a comprehensive view of their data maturity across the complete data lifecycle, enabling targeted improvement strategies that address both technical capabilities and organizational enablers necessary for sustainable data-driven transformation.