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DCAM Overview

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The DCAM Framework

The **D**ata Management **C**apability **A**ssessment **M**odel (DCAM) is the industry leading Data Management and Governance Framework

Data Management Capability Assessment Model (DCAM)

- Guide for implementing Data Management practices in an organisation.
- Describes the capability that you need to build an effective Data Management function.
- Provides a structure within which you can organize your teams and assign responsibility.
- Serves as a framework to create a common terminology and dialog across functions.
- Allows you to assess strengths and weaknesses and create metrics to track progress.

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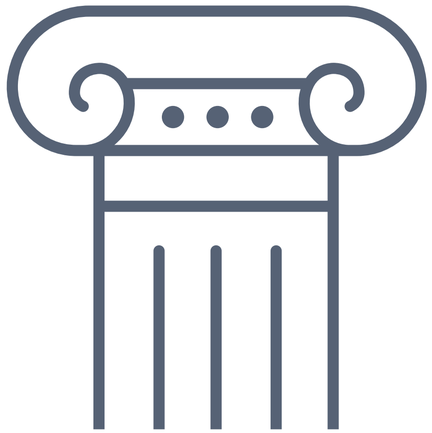
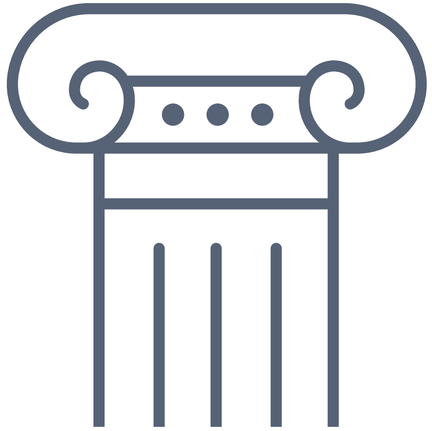
DCAM Foundational Tenets

Managing Content (Identify, Define, Locate)



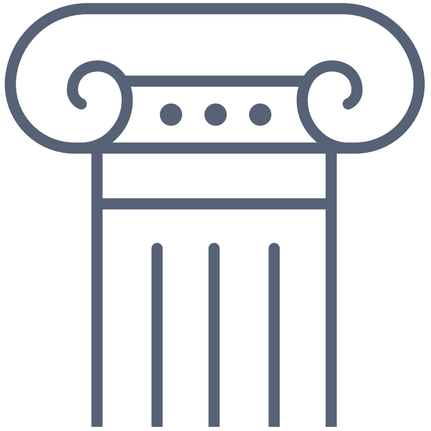
- Unique identification of “things” (products; customers; entities, transactions; etc.)
- Assignment of precise definition of meaning (unambiguous, shared, agreed)
- Data discovery via the development of comprehensive inventories (where data resides)

Build a sustainable program



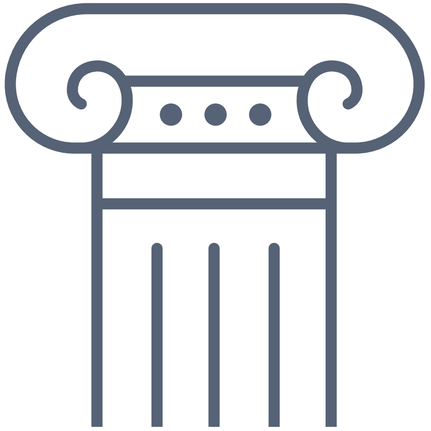
- Identify and develop essential skill-sets, executive support; stakeholders, etc.
- Ensure that data governance is enforceable (authority)
- Drive culture change - sanctioned by executive management, based on standards,
  harmonized across the lifecycle, governed by policy and monitored by audit

Ensure Data Quality (Data must be Fit-for-Purpose



- Establish formal discipline of best practice for data quality
- Clear assignment and accountability for quality assurance
- Minimize manual processes/maximize automation

Enable Cross Organizational Collaboration



- Coordinate with Business: business drives data which drives technology
- Partner and align with technology (dotted line relationship)
- Collaborate with Cross-organizational Control Functions

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DCAM Best Practice Paradigm

- Provides a common measurable framework
- Translates industry expertise into operational standards
- Establishes common language for data management
- Documents capability requirements
- Grounded in evidence, formality, and organizational engagement
- Evidence-based artifacts

Enables organizations with trust and confidence that the data they are relying on is accurate, complete, rationalized, and actionable

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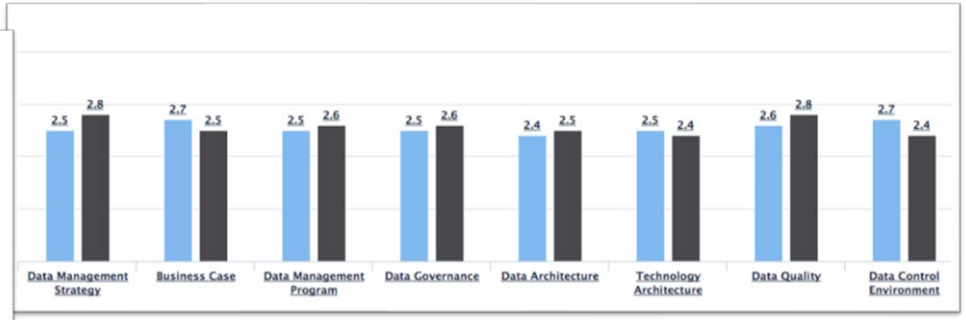
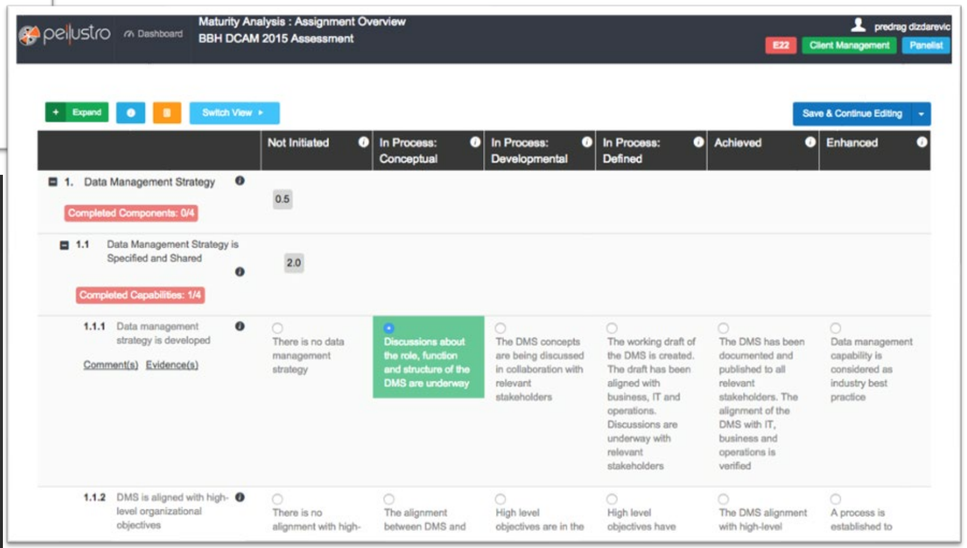
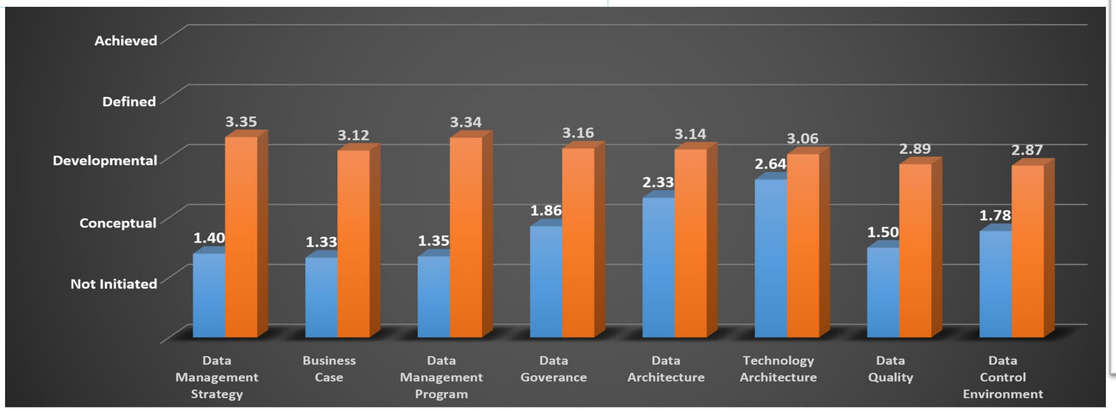
DCAM Goal

Translate the Practice of Data Management into Science







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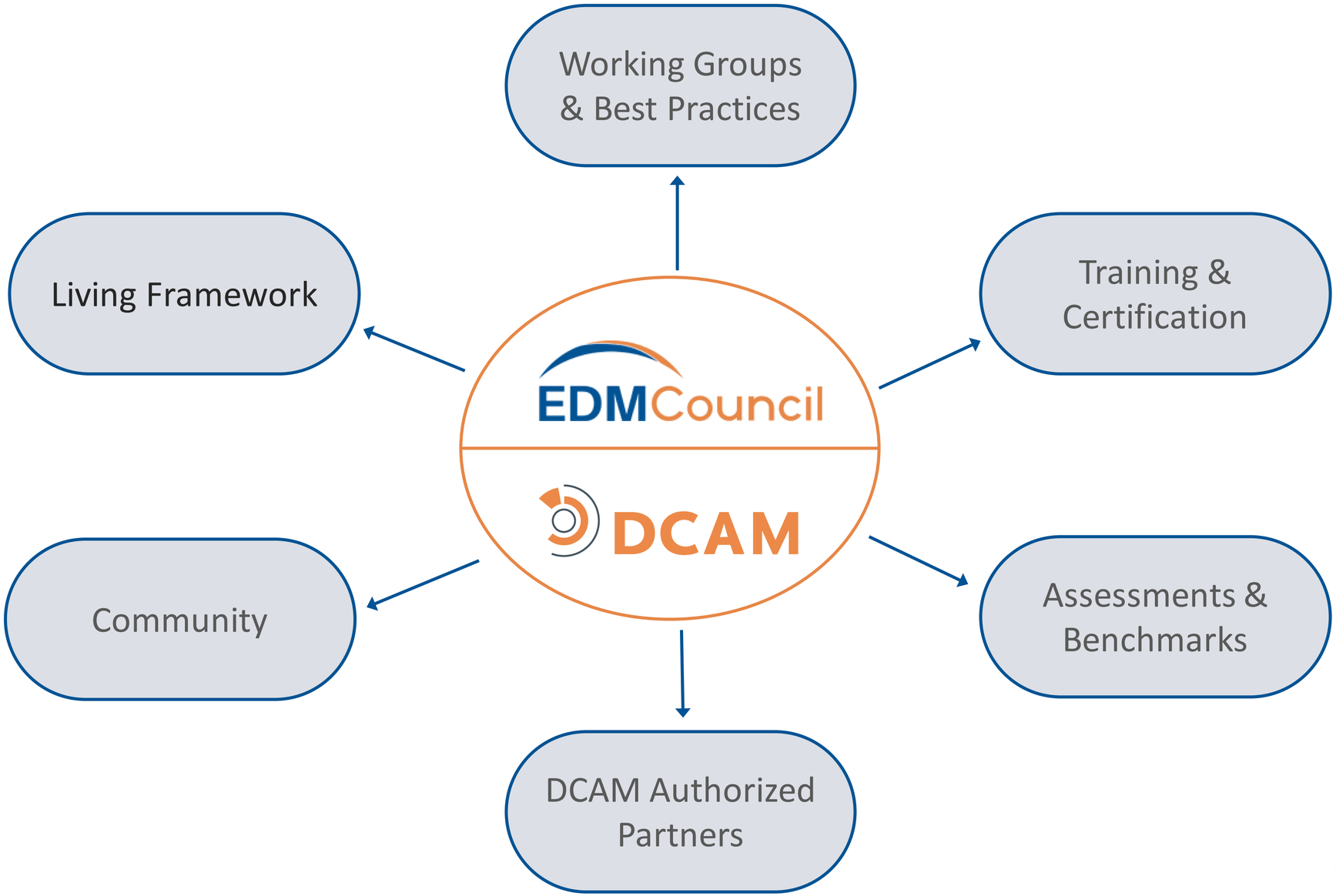
The DCAM Ecosystem



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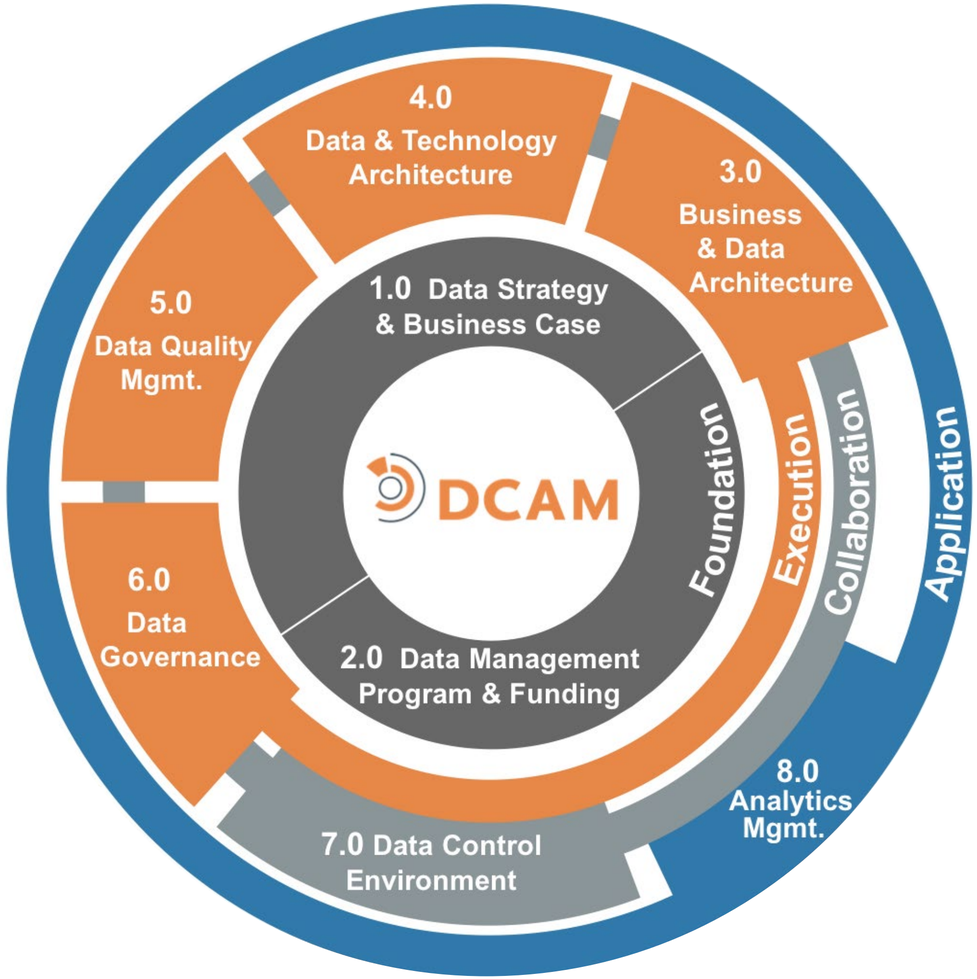
DCAM Components

2 Foundational Components

Define your strategy and vision. Build your team and put the roadmaps in place.

1 Collaboration Component

Ensure diverse teams work together to manage, protect and leverage data across the organisation.



4 Execution Components

Capabilities to execute on and deliver your data strategy. These components are the work engine of your data management program.

1 Analytics Component

Capabilities to build innovative and robust advanced analytics teams.

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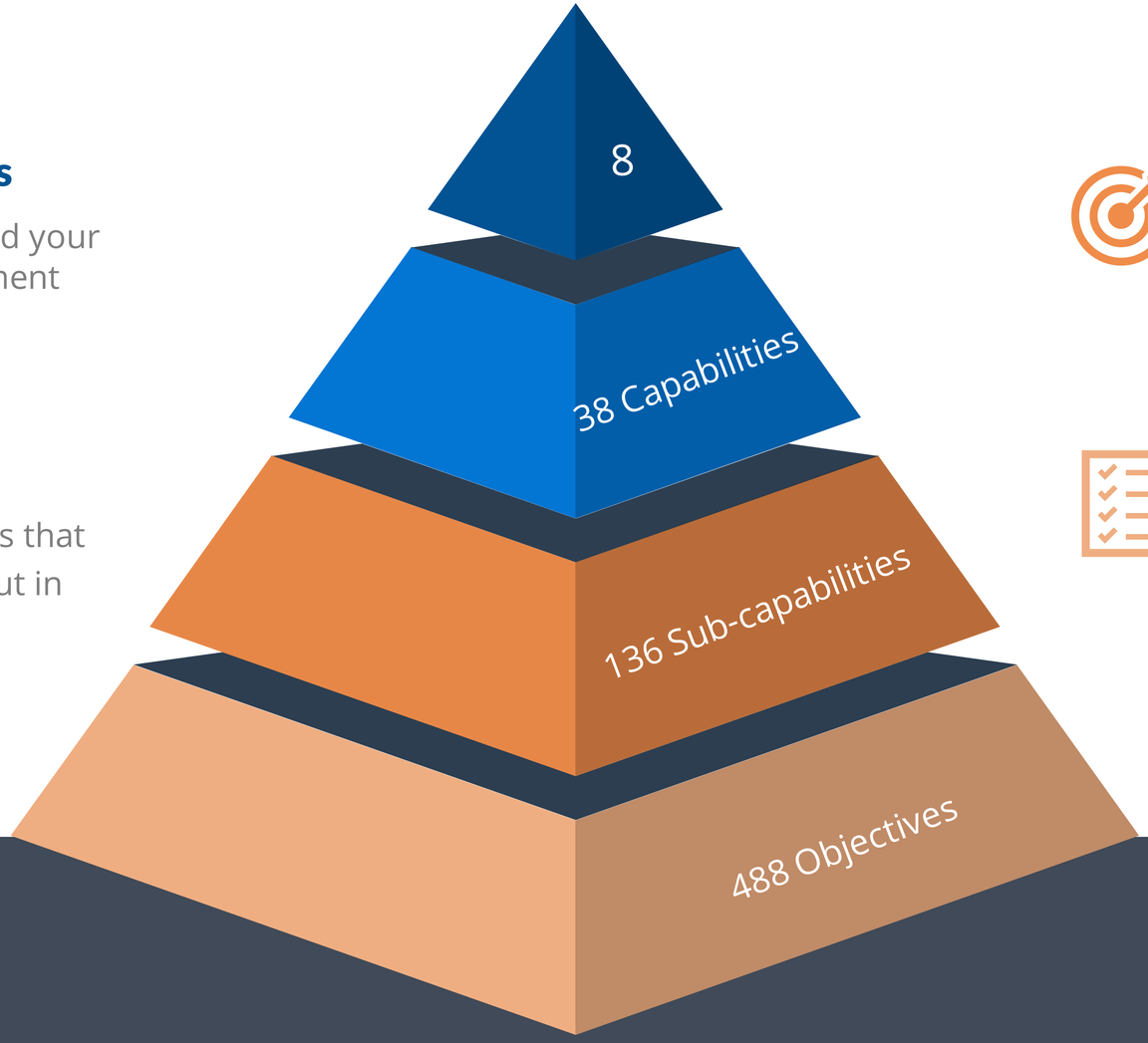
DCAM Hierarchy

Components

Boxes that hold your data management capabilities.

Capabilities

Big ticket items that you need to put in place.



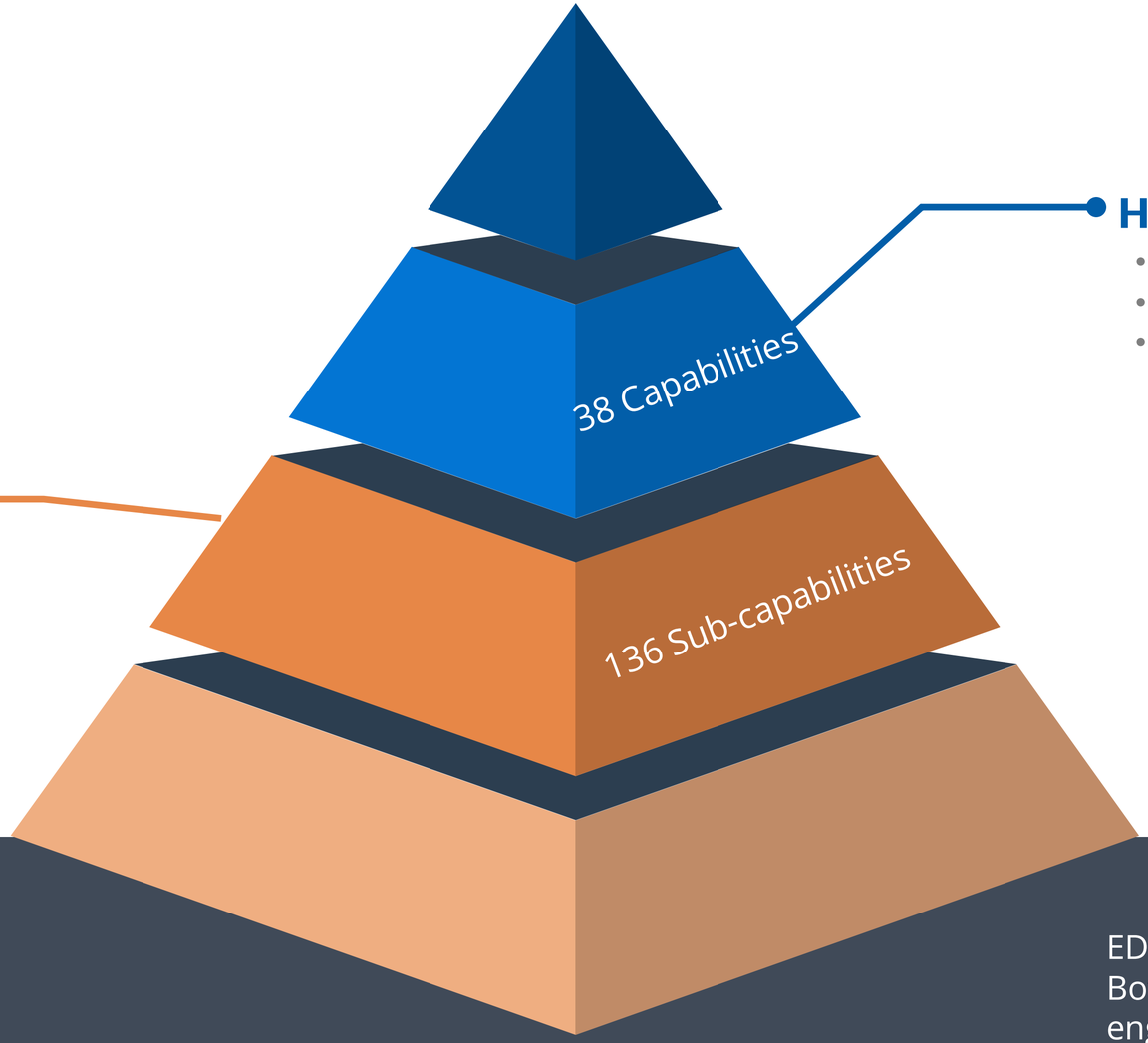
Sub-capabilities

Targets you need to hit if you want to deliver on the capabilities.

Objectives

Individual tasks or a checklist of items you need to complete.

DCAM Assessment Levels



High Level Assessment
- 38 questions
- Available to EDMC members.
- 2-6 weeks to complete.

Granular Assessment
- 136 questions
- Available to EDMC members.
- 6 – 12 weeks to complete.

EDM Council members may self-assess. Both members and non-members may engage DCAM Authorized Partners to perform assessments.

Scoring Guidelines

Scoring

1	2	3	4	5	6
1 **Not Initiated**	2 **Conceptual**	3 **Developmental**	4 **Defined**	5 **Achieved**	6 **Enhanced**
Not performed	Initial planning stages	Engagement underway	Defined and approved	Adopted and enforced	Integrated and optimized
Ad hoc activities performed by heroes Formalization not discussed or considered No awareness of the need for or existence of the capability	Need for the capability is recognized Issues being debated and discussed Some awareness of where capability may already exist	Key stakeholders and participants identified Workstreams defined and meetings underway Progress is reflected in work-in-progress artifacts	Fully approved by all stakeholders (business, technology and data) Responsibilities defined and designed Policy and standards defined	Capability is operational and supported by evidence Enforceable, auditable and measurable Benefits recognized and value-added measured	Fully embedded in the operational culture Regularly assessed and reviewed Continuously improved and supported by evidence
It's not really on our radar at all. At an overall level we haven't really thought about this but it might be happening in pockets of the business by chance.	We haven't put any funding or material resourcing behind this but we are starting to think about it – we have had some workshops or whiteboarding sessions to think about how we can achieve this.	Work is underway. We have committed to building out this capability. We have plan and goals. We have more work to do but we see a path to having this capability in place.	We have almost delivered this capability. We have defined what it will be and how it will be achieved. We have the approval of all key stakeholders.	We are really happy with this capability. Across the organization people know about it. The capability is being actively used or operated and is embedded in our BAU processes. We don't believe there is much more that can be done here.	We have a best in class capability and feel that we are a model for others to follow. Our capability is regularly revisited and we are consistently improving it.

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Scoring Example

Scoring Example Question 1

"DM Strategy has been developed and communicated across the organization."

Score	Meaning
1	No formal DMS exists.
2	No formal DMS exists, but the need is recognized, and the development is being discussed.
3	The formal DMS is being developed.
4	The formal DMS is defined and validated by directly involved stakeholders.
5	The formal DMS is established and understood across the organization and is being followed by the stakeholders.
6	The formal DMS is established as part of business-as-usual practice with a continuous improvement routine.

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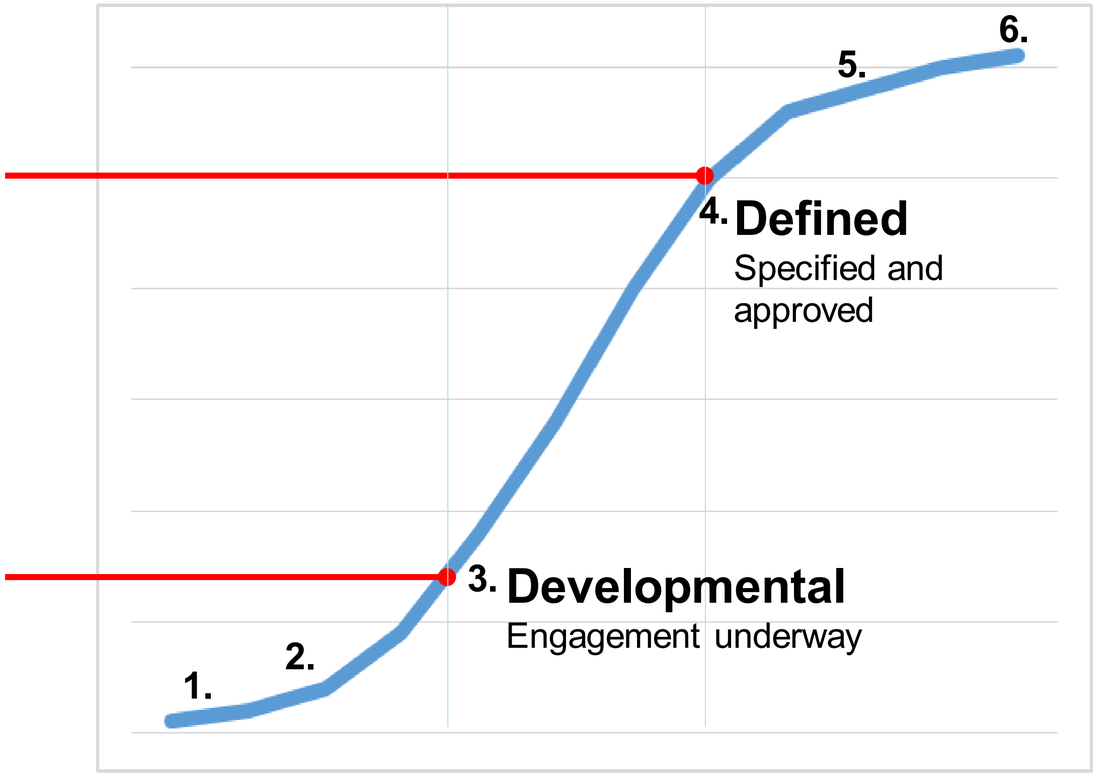
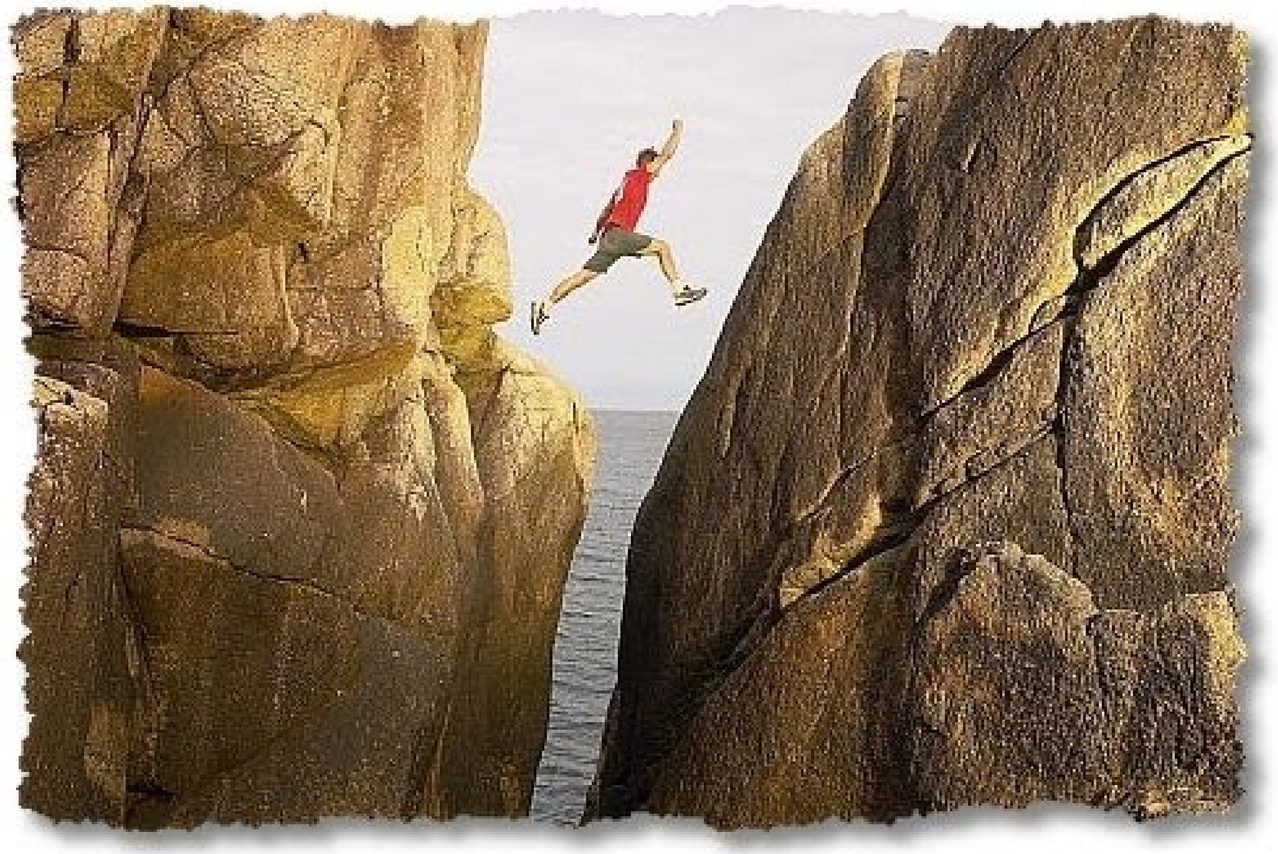
Capability Chasm





The “leap” from developmental capability to defined capability is the most difficult challenge

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DCAM Capabilities

DCAM Components

2 Foundational Components

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1 Collaboration Component

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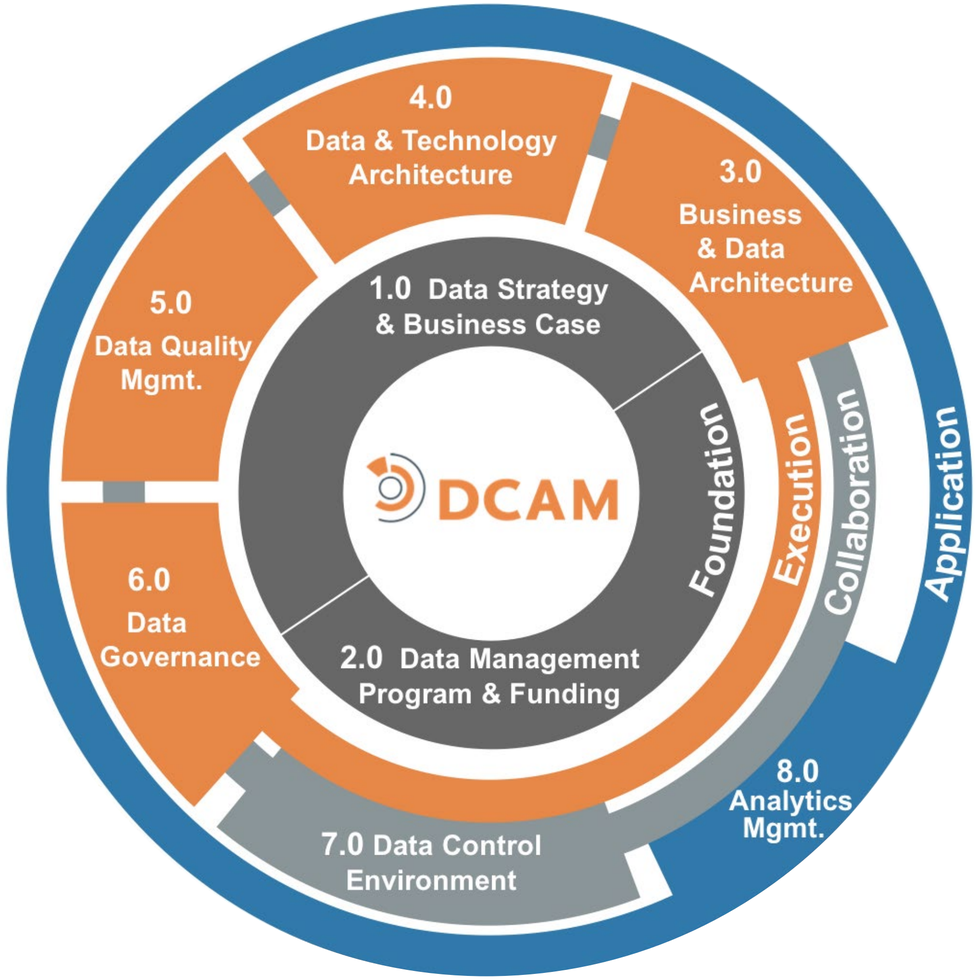

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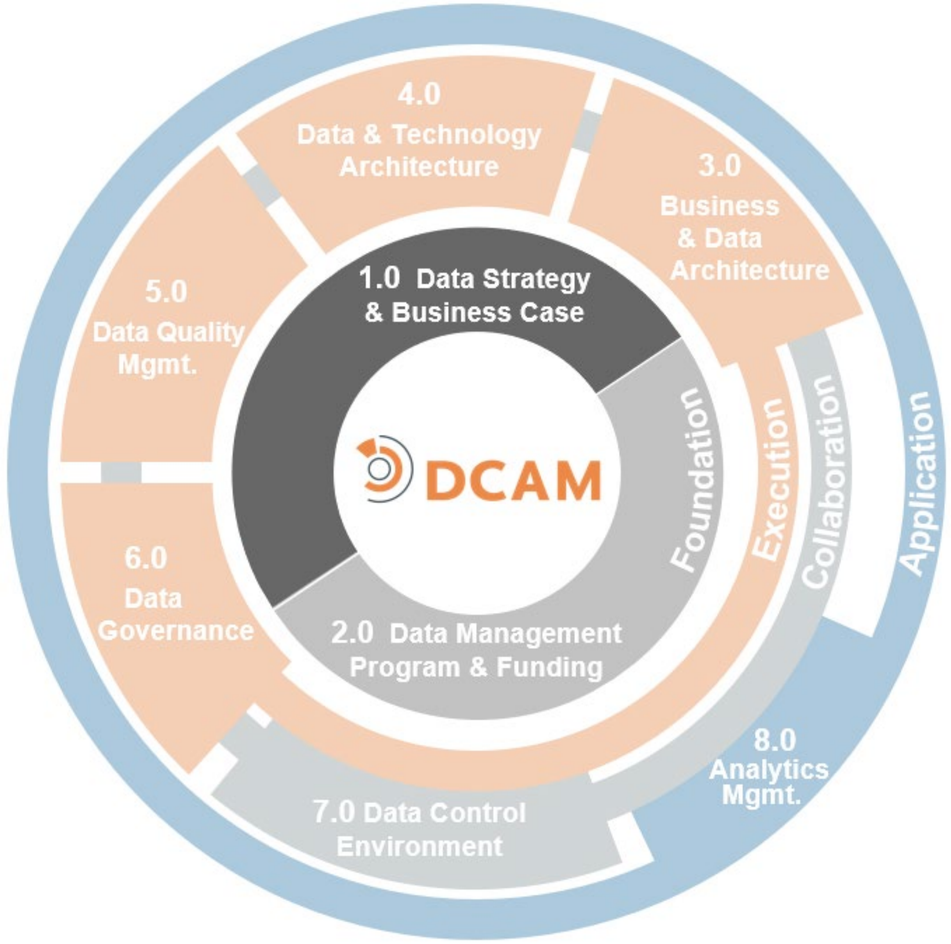
1.0 DM Strategy & Business Case



1.1 Data Management Strategy Specified and Shared

Does a strategy exist? Is it documented? Has it been reviewed by key stakeholders?

1.2 Data Management Business Case is Defined

Defining the data strategy is dependent upon understanding and support the business objectives

1.3 The Data Management Vision is Defined

The DMS & BC must articulate the vision of the data initiative and how it will be deployed across the organization

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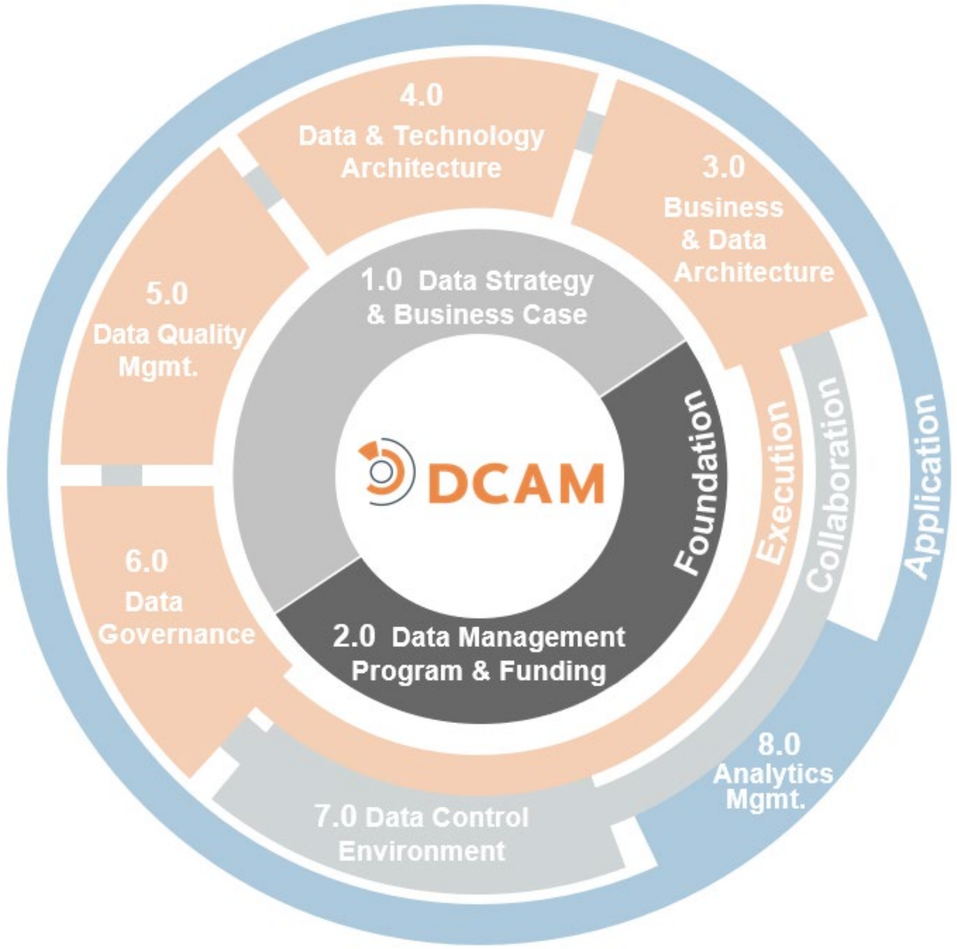
2.0 Data Management Program & Funding



2.1 The DM Program is Established
Data Management program is formalized

2.2 Funding Model is Established
Funding is Secured

2.3 Organizational Structure is Created
Roles and Responsibilities are Defined

2.4 Roadmaps are Developed
Plans are Communicated

2.5 Process Excellence is Established
Adherence to Standards and Best Practices

2.6 Stakeholder Engagement Established
Enterprise Accountability

2.7 Communications and Training
Internal and External Awareness

2.8 Program Measured and Tracked
Program Metrics Established

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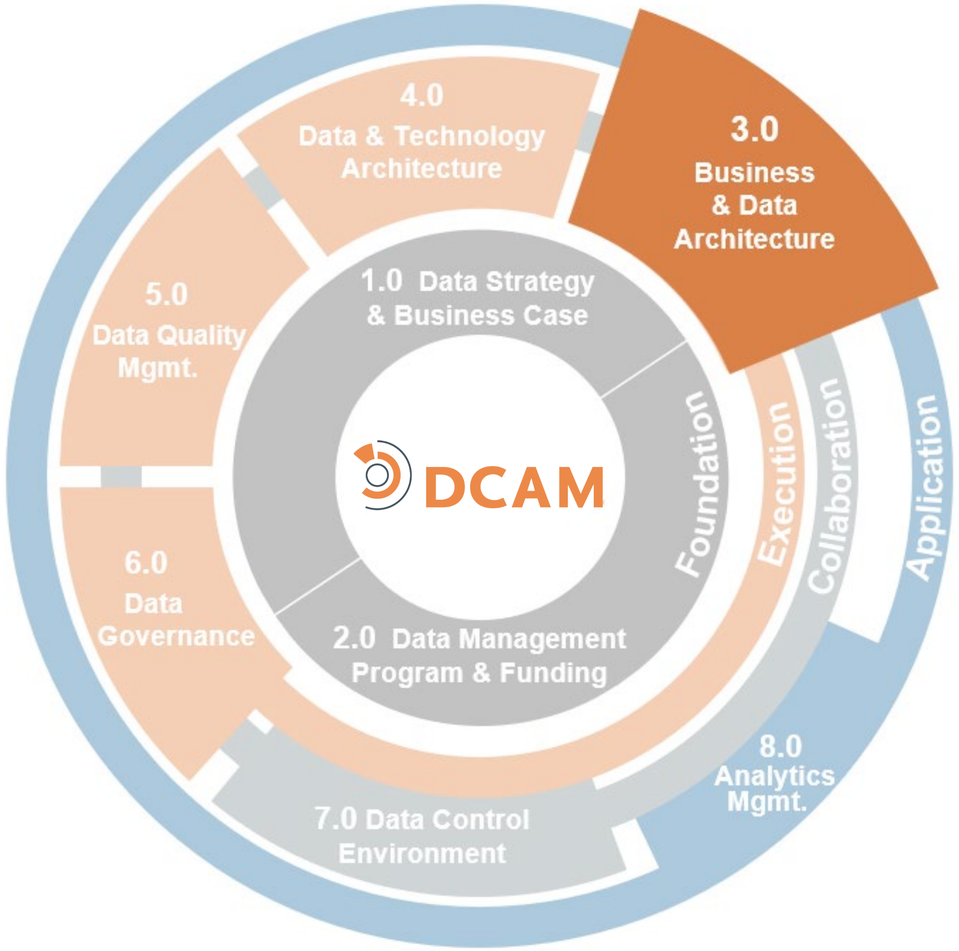
3.0 Business & Data Architecture



3.1 Data Architecture function is established.

Formal focus on data architecture is critical to a successful data management program

3.2 Business Architecture is Integrated with Data Architecture

Business processes define and prioritize data requirements

3.3 Identify the Data

Required data is identified (logical), and sources of the required data are documented (physical)

3.4 Define the Data

Data is engineered structurally and semantically

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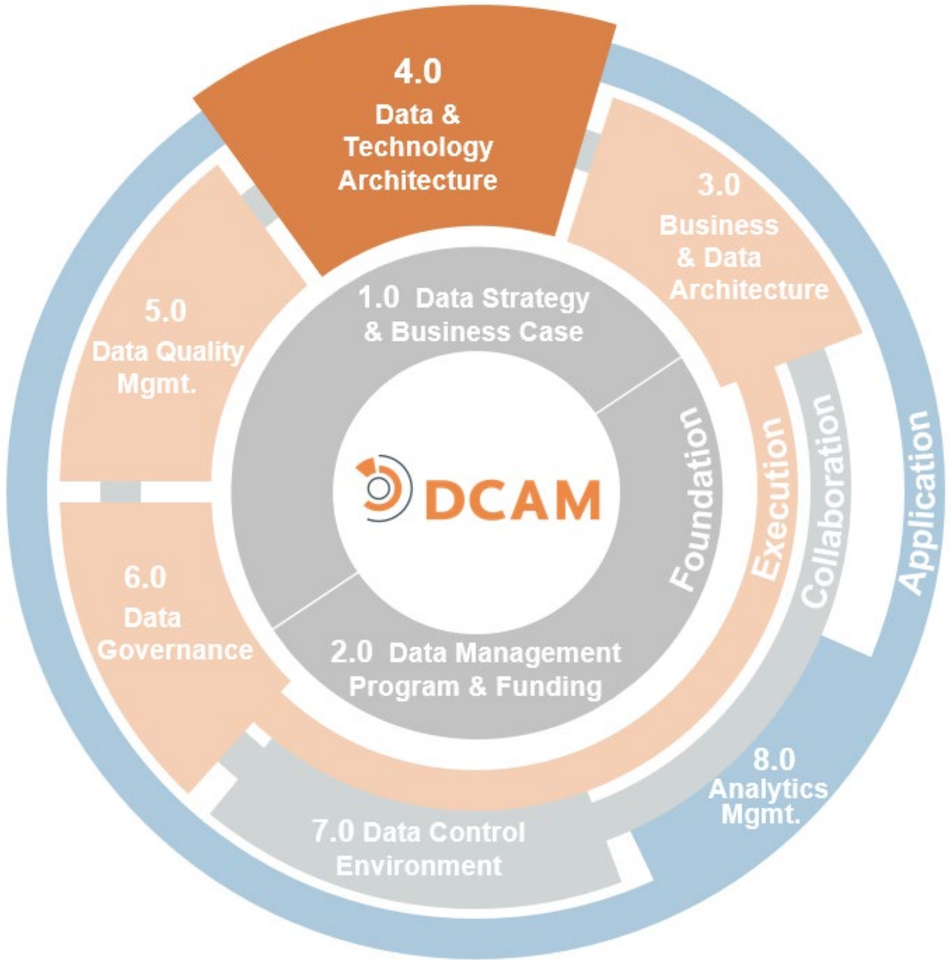
4.0 Data & Technology Architecture



4.1 Technology Architecture is defined in support of the DM initiative

Technology Architecture enables the goals and objectives of the data program

4.2 DM Tool Stack is Identified and Governed

The data management tool stack is defined and governed by data management policy and procedure.

4.3 Operational Risk Planning is in Place

Operational risk preparedness is shared collaboratively between technology and data management

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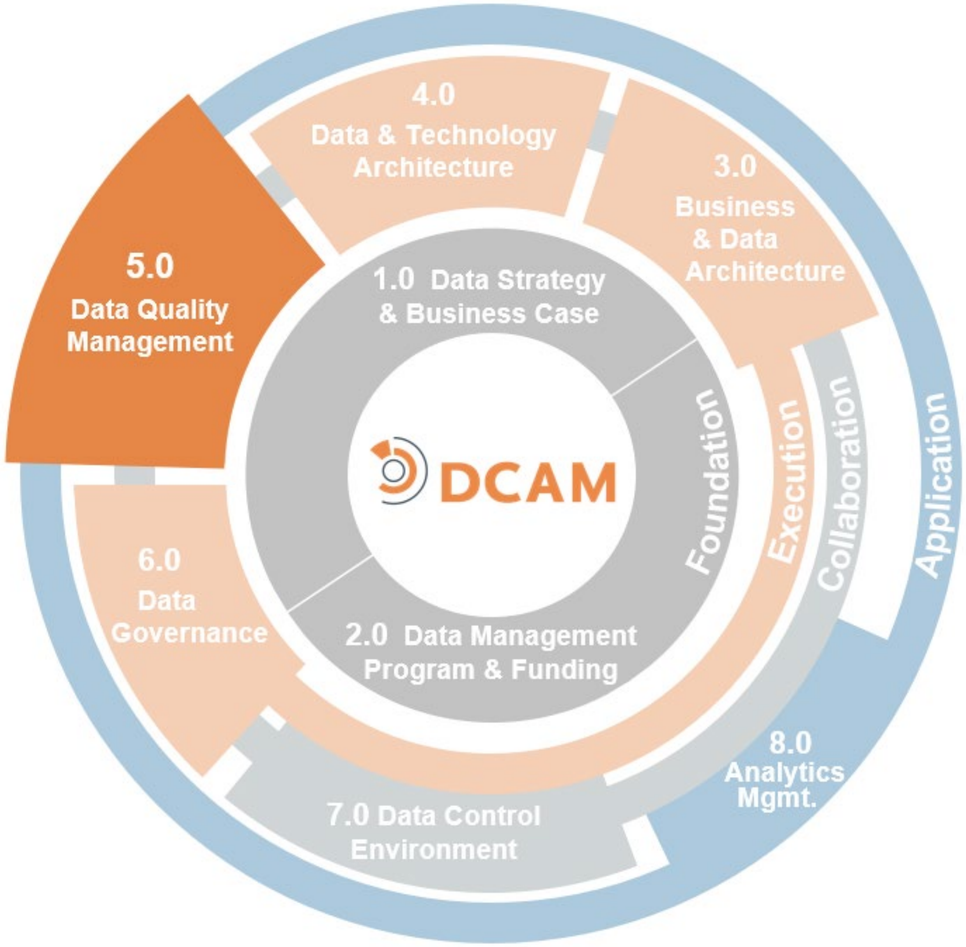
5.0 Data Quality Management



5.1 Data Quality Management (DQM) is Established

Data Quality function must be a formally established activity

5.2 Data is Profiled and Measured

The understanding of the current state of data is mandatory

5.3 Data Quality Issues are Remediated

Data quality issues are sequenced, analyzed and remediated

5.4 Data Quality is Monitored and Maintained

Ensure continuous monitoring and maintenance is performed

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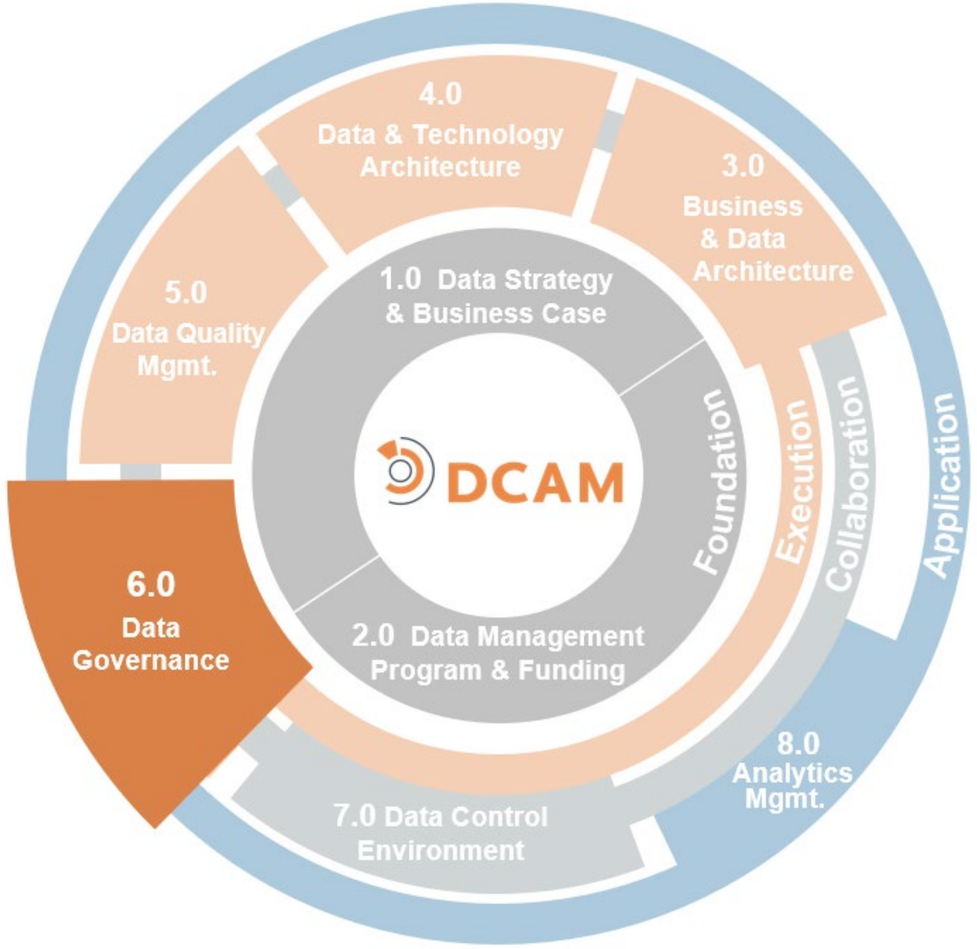
6.0 Data Governance



6.1 Data Governance Function is Established
Governance program is formalized

6.2 Policy and Standards are Written and Approved
Rules have been development

6.3 Govern The Data Management Program
Program governance is established

6.4 Govern the Data Structure
Standard data structures and models are followed

6.5 Govern Fit-for-Purpose
Access control conforms to specific policy

6.6 Govern the Data Ethics
Ethical use and outcome of data is managed

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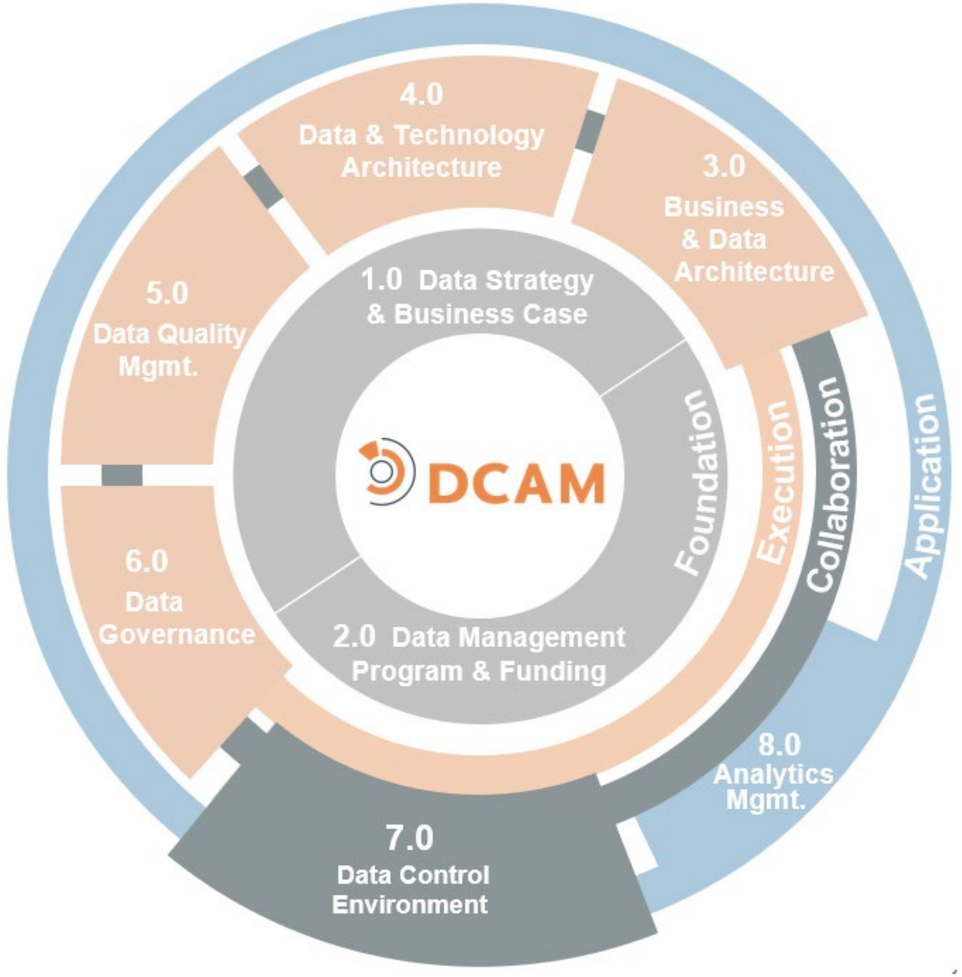
7.0 Data Control Environment



7.1 Data Control Environment (DCE) is Evidenced

The capabilities of data management are operating across the organization

7.2 Cross-organization Control Function Collaboration

Data management is operating in collaboration with control functions across the enterprise

7.3 Data Risk is Managed

Risks associated with data management have been identified, monitored and functions audited

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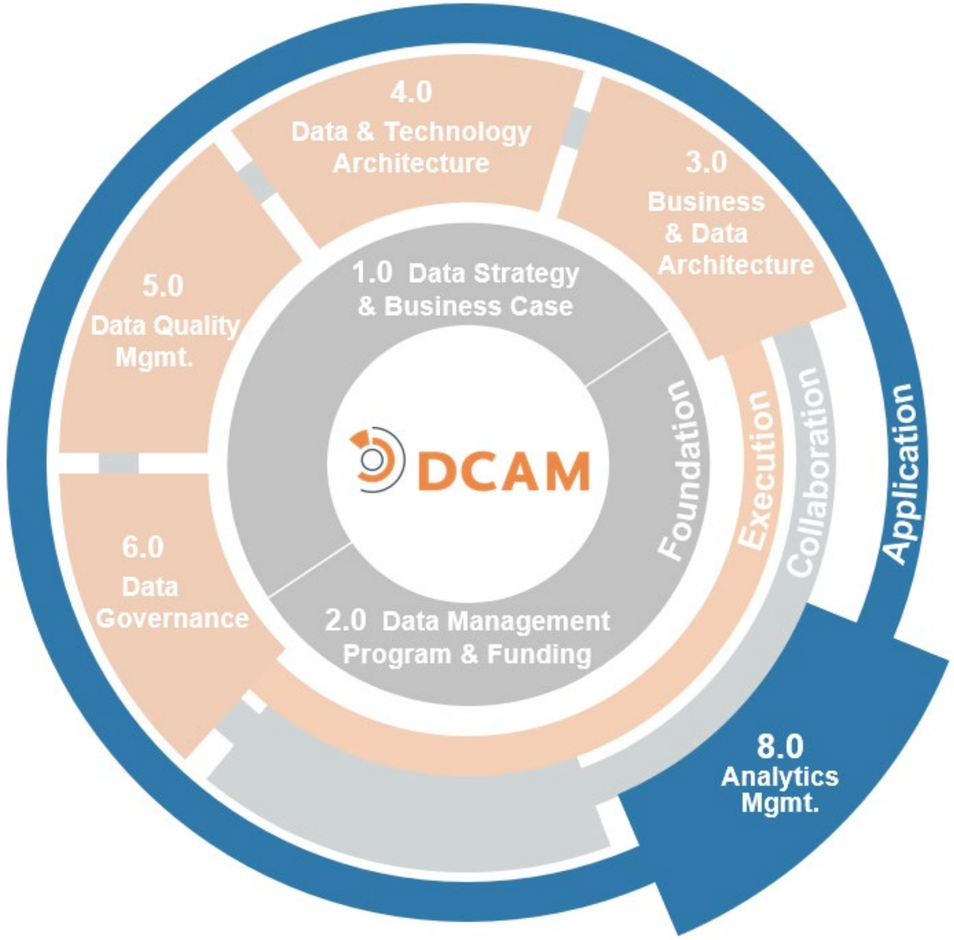
8.0 Analytics Management



8.1 The Analytics Function is Established
Analytics function is formalized and funded

8.2 Aligned with Business and Data Mgmt Strategy
Driven by Business Strategy and supported by Data Management Strategy

8.3 Aligned with Data Architecture
Data Architecture is Respected

8.4 Aligned with Data Quality
Data Quality Understood and Improved

8.5 Platform Designed and Operational
Operational Platform Established

8.6 Model Operationalization Established
Models can run in Production

8.7Culture and Education Needs Managed
Active Management of Culture and Skills

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Thank You

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