Data Management at Proposal

An evidence-based proposal for the establishment of a Data Management program.

Karoline Sears, August 2023

What is Data Management?

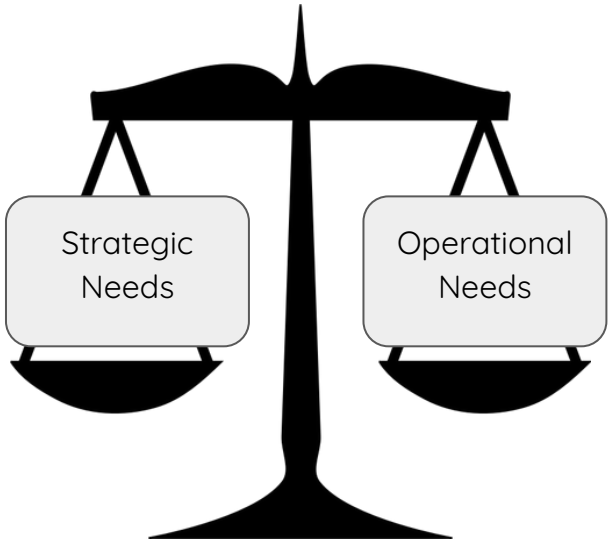
Treating data as an *asset* and extracting value from that asset as any other company asset.
To enable organizations to get value from their data assets as they do from other assets.

Today	Asset Management	Future w/ Proper DM
• Raw data • Unknown/lack of understanding	What do we have?	• Complete, reliable data • Complex data model • Full understanding of our data and capabilities
• Limited capabilities • Basic statistical functions • Reporting features only	What can we accomplish?	• Advanced analytics • Predictive analytics
• Very slowly • Questionable accuracy • Vague wishlist that is not rooted in evidence-based needs	How can we meet those goals?	• Clear roadmap with actionable steps • Resulting in the proper investment of people, products, technology that is aligned with our needs in order to support goals

What is Data Management?

Universal Data Management Principles

Balance



Principles of Data Management

1. Data is valuable - mismanagement is a cost to the company
2. Effective data management requires leadership and commitment
3. Data management requirements **are** business requirements
4. Data management depends on diverse skills
5. Data management is lifecycle management
6. Managing data includes managing the risks associated with data
7. Data management must drive information technology decisions, not vice-versa

Data Management & Company Goals

Why invest in Data Management now?

- It is the key to achieving our company goals

Sustainable Profitability	Automate recurring workflows to improve productivity and efficiency Identify at least 2 purpose/ use-based customer segments that are not currently being targeted
Customer Centricity	Understand purpose-based eating segments of current and potential customers to enable matchmaking with our products (capture/ store/ retrieval/ use of relevant data and insights on customers to allow for matching with products/recipes) Establish Customer Satisfaction metric and baseline, identify opportunities to increase Customer Satisfaction Match the right customers with the right products (refined and expanded based on customers needs) as measured by retention and Customer Satisfaction metrics
Long-Term Growth	Build product data management tools/ systems to enable matchmaking with current and potential customers Build a foundation of systems, tools, and processes that enable operational scale and flexibility
Talent	Attracting top talent with tools and systems that allow for a smooth, efficient workflow;

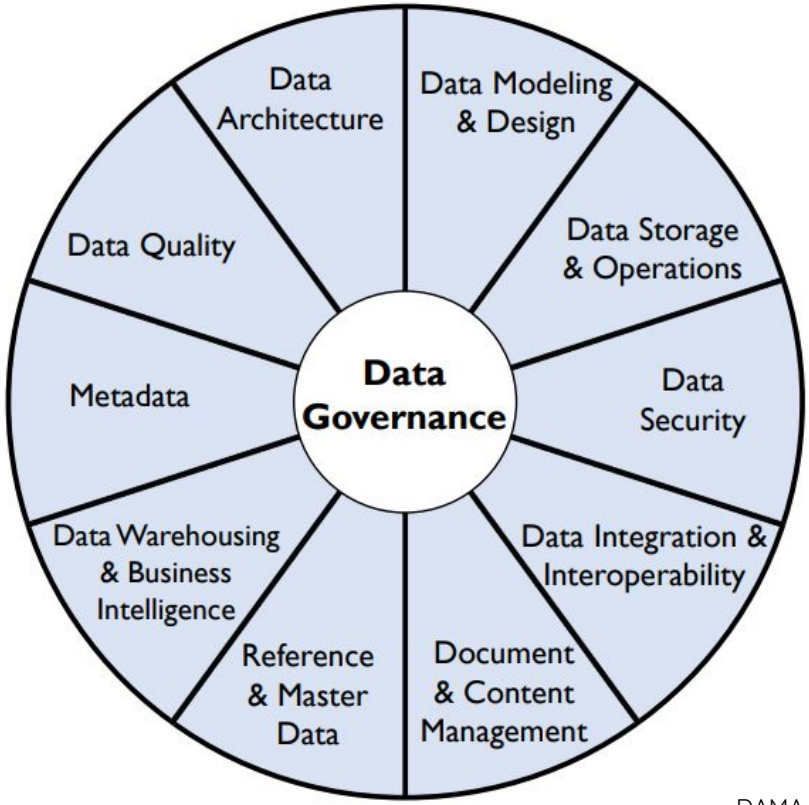
Data Management & Core Competencies

It is a major component of our company values and core competencies:

- Learning
- Making it Happen
- Ownership
- Integrity
- Winning Together
- Be Bold

- We can only truly learn from our customers if we have the tools and systems in place to accomplish this. With a well developed data management system, we can not only learn about our customers In nuanced ways, we have the potential to *predict* their behavior in reliable ways.
- Well constructed data management systems allow for us to make data driven decisions quickly.
- Having a clear path, understanding where our data comes from, how it is used, and involving key stakeholders in the data governance process fosters a culture of data ownership and self-service.
- We cannot have data with integrity without data governance.
- Data management is not the responsibility of a single person; is a cross-functional, team effort.
- This is the time to be bold and take those steps to establish a data management culture.

Data Management Framework



DAMA-DMBOK2 Data Management Wheel

All aspects of data management stem from a solid foundation of **data governance**.

These are global data management standards set by DAMA International

Data Management Functions

Oversight: Data Governance

Strategy

Data Valuation

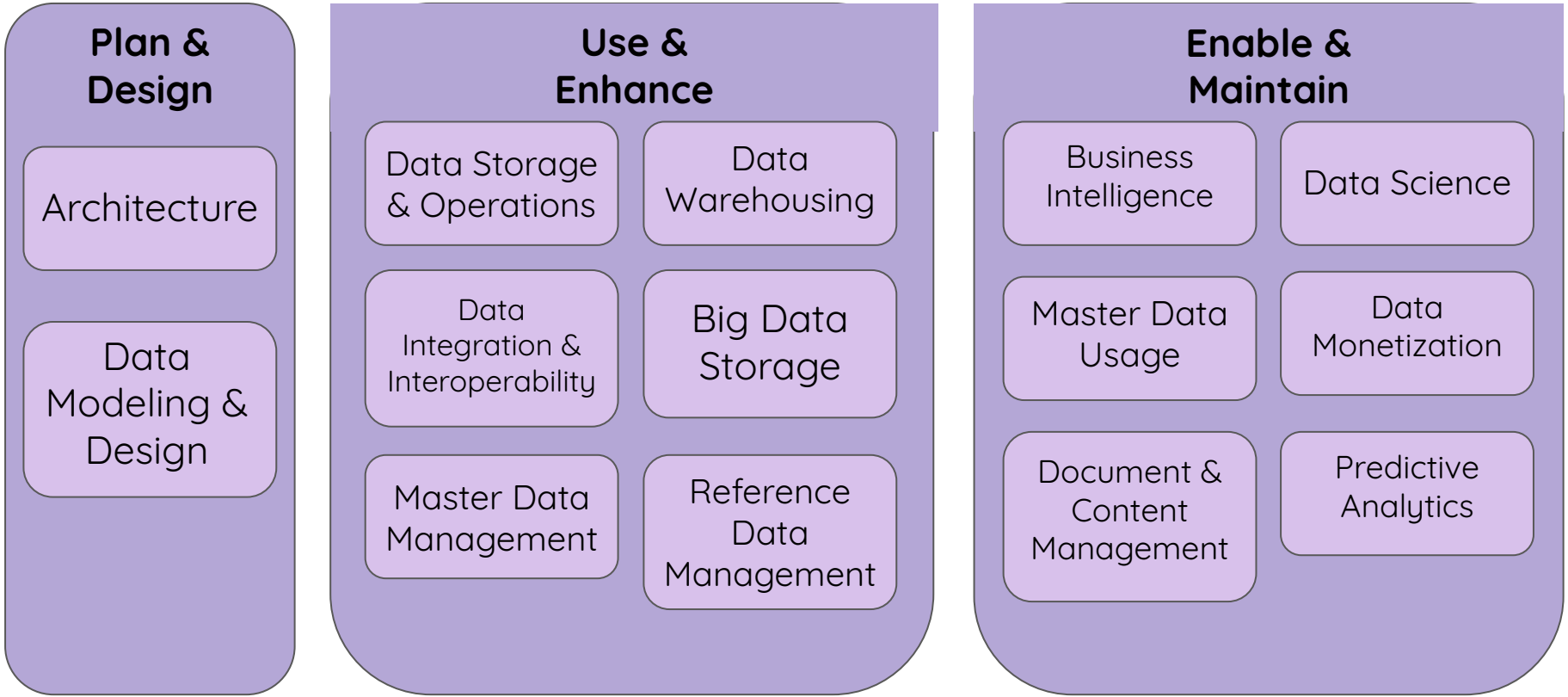
Principles & Ethics

Policy

Stewardship

Culture Change

Lifecycle Management



Foundational Activities

Data Risk Management: Security, Privacy, Compliance

Metadata Management

Data Quality Management

Roadmap & Proposed Measures

Short Term Objectives:

Streamline our data model
Establish a data governance model
Conduct a data management maturity assessment (DMMA)
Release a State of Data report
Data/Technology reorganization for more aligned collaboration, establish a Data Management function.
Foster an environment of data ownership

Measures of Success:

Streamlined data model for faster consumption in Looker
A complete data governance plan
Actionable roadmap for data management improvement from the DMMA and State of Data report
Creation of the Data Governance Council
Ending the use of Google Sheets for any analytic work/data collection
Consistent, well-written SOPs for all knowledge areas

Long Term Objectives:

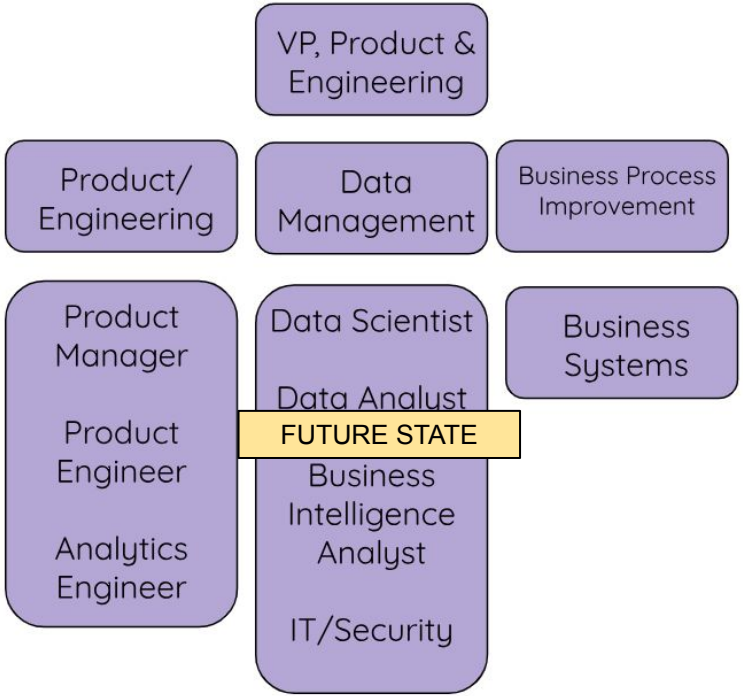
In-depth analysis of various knowledge areas to identify areas of improvement
Consistent hiring standards for data/engineering
Robust data modeling and engineering
Develop a cohesive vision that supports overall organizational strategy
Develop a well-defined management strategy

Measures of Success:

Understanding of data management across the company
Insightful/advanced data analytics and data science (predictive analytics!)
Accurate, complete, consistent, reliable, and current data
Ensure data privacy and security
Cost-effective management of data infrastructure
Data literacy across the company

Roadmap & Proposed Measures

How can we begin the transition to proactive data management? With Data Governance. We already have many pf the resources and tools, we just need to better organize them.



Data Governance Council

Sponsors
(Sr. Director, VP)

Trustees
(Data Management Stakeholders)

- **Sr. Business Process Improvement Manager**
- **Analytics Engineer**
- **Director, Product Design**
- **Sr. Marketing Analytics**
- **Sr. Operations Analytics**
- **IT & Security Manager**

Data Governance Council

What Does the Council Do?

Data Governance Council

Sponsors

- **VP**
- **Data Management**

Trustees
(Data Management Stakeholders)

- **Senior Business Process Improvement Manager**
- **Analytics Engineer**
- **Director, Product Design**
- **Marketing Analytics**
- **IT & Security Manager**

- A committee of designated leaders (Data Trustees) with planning and management responsibility for data within their functional areas.
- Works towards supporting and maintaining effective data management by regularly reviewing policies and standards, recommending new standards, advocating for resources, and broadly overseeing data governance efforts.
- May propose new initiatives, evaluate issues, and discuss data strategy in an effort to continuously improve data quality and integrity.
- Monitors the compliance of data policies and promote the overall culture of data excellence.
- Approves and provides oversight over all data-related standard operating procedures for all functional areas across the organization.

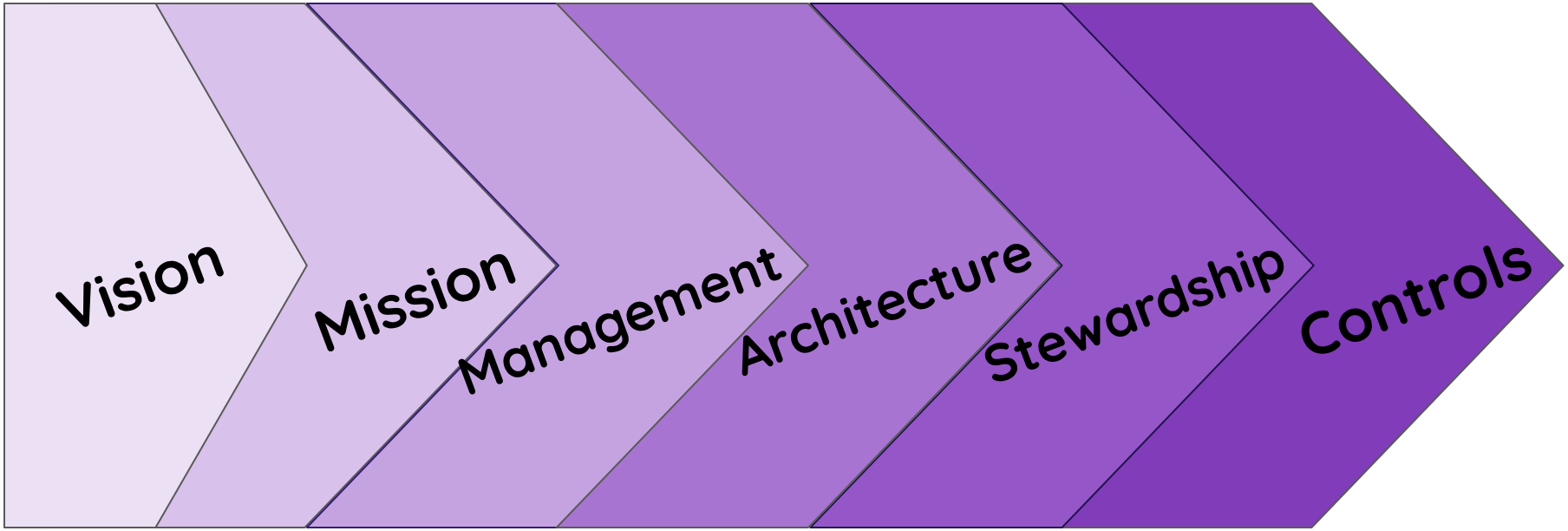
A Critical Juncture

We cannot meet these goals without a solid data management foundation. Data management starts with data governance, establishing business logic, re-modeling our data, and setting consistent data use standards.

Our analysts must be on the same page, working together, using a well-build model, in order to help stakeholders make decisions based on commonly understood terms and concepts..

- Build customer data management tool/ system and processes to understand purpose-based eating segments of current and potential customers to enable matchmaking with our products (capture/ store/ retrieval/ use of relevant data and insights on customers to allow for matching with products/recipes)
- Establish Customer Satisfaction metric and baseline, identify opportunities to increase Customer Satisfaction
- Less Prep, Expand Plantry, Vegan Staples
- PC RTE expansion
- Mobile App
- CX/AI integration
- Food Safety internal training & customer facing information improvements
- Automate recurring workflows to improve productivity and efficiency
- Identify at least 2 purpose/ use-based customer segments that are not currently being targeted, demonstrate profitability in those segments

Data Governance



The vision informs the mission;. Each pillar of data governance supports the next pillar, all of which are aligned to support the vision and mission.

Vision: Our vision is to develop a robust technological foundation in order to foster an environment of data excellence that supports both data practitioners and partners alike.

Mission: Our mission is to make data understandable and accessible to our partners to ensure that they can quickly and easily make evidence-based decisions.

informs

supports

Management	Architecture	Stewardship	Controls
Our policies and standards	**How those policies and standards are defined**	**How we execute those policies and standards**	**How we ensure that those policies and standards are maintained**
• Conventions • Expectations • Responsibilities	• Documentation • Standardization • Lineage • Data Classification	• SOPs • Ownership • Collaboration • Accountability • Transparency	• Business Rules • Communication • Defined Roles • Literacy & Training • Defined Workflow • Checks & Balances • Issue Management

Management

Our policies and standards:

The only way to achieve data excellence is through transparent, common sense policies, industry standards, and reasonable expectations and responsibilities. Data is a *shared* resource between practitioners AND partners

First and foremost, the quality and integrity of our data shall be actively managed - what are the dimensions we should uphold of data quality?

- Accuracy
- Completeness
- Consistency
- Integrity
- Reasonability
- Timeliness
- Uniqueness/deduplication
- Validity

Management

Our policies and standards:

We must establish clear and actionable policies with rigorous standards:

- Data shall be identified, documented, and described
- Expressly communicate our conventions (e.g., language, logic, goals, methods)
- Define roles and responsibilities; not just in the immediate data management sphere, but company-wide expectations around data
- Identify data domains – each domain shall have a trustee
- Outline the data life cycle at PC

Architecture

How those policies and standards are defined

Solid architecture begins with well defined building blocks. The goal of this pillar is to facilitate standard, consistent data definitions, standards, and policies that align with our vision and mission.

First Step:

- The literal first building block of the Architecture pillar is improving our data model and recognize the need for formal analytics engineering.

Next Steps:

- Making resources accessible and understandable for all data users
- Establishing unified standards for all data knowledge areas
- Creating a culture of documentation and making our data lineage accessible in both a technical and practical way.
- Building a technical environment that attracts top talent and supports current employees in their technical development..

Stewardship

How we execute those policies and standards

In order to develop a long-lasting foundation of data excellence, we need to create structured accountability with defined roles, responsibilities, and expectations. We are all stewards of data and establishing clear expectations around how data should be used and handled should be part of the culture. We should also create data systems that are designed for future use - and maintaining those systems for those beyond ourselves.

We accomplish this through:

- Rigorously reviewed SOPs
- Ownership of data domains
- Collaboration across functional areas to maintain these standards
- Accountability
- Transparency

Controls

How we ensure that those policies and standards are maintained

Controls are critical for maintaining data governance. It is a system of guardrails designed to maintain integrity of the data, the workflow, and output.

Controls facilitate collaboration and education related to data-related policies and use of our tools. It improves communication among team members and educates our data partners on how the department functions.

A series of checks and balances allows data management to be consistently upheld even when people leave.

The Data Governance Council is a major component of this.

A Realistic Roadmap

3-6 months:

- Create the program and position
- Continue current work on data governance
- Continue current work on the development of a new data model
- Re-organize people
- Start the Council
- Begin the DMMA process
- Establish reasonable KPI standards for the company to meet,
- Produce a state of data report

6-9 months:

- Develop executive briefings,
- Create a targeted program for improvement with actionable items and roadmap
- Begin to introduce collaborative change throughout the company by defining an interaction approach
- Plan communications

Reassess regularly