November 17, 2022 (DRAFT)

- 1. Welcome
- 2. Introduction to Data Strategy
 - Why have a data strategy?
 - What's in scope of a data strategy?
 - How do data governance and data strategy relate?
 - Example: New York University
 - Getting started Setting strategy up for success
 - Examples from the community
- 3. Upcoming meetings



Guests

Developing & Executing Data Strategy Community Group

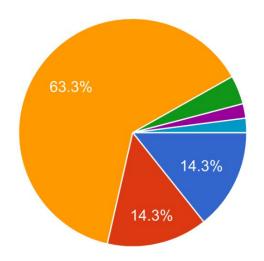
<u>Kaitlin Wilcox</u>, Director of Data Insights (Grinnell College)<u>Satya Kunta</u>, Senior Director, Enterprise Data Management (New York University)

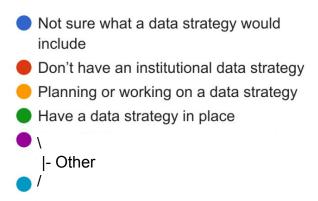


Poll results: Status

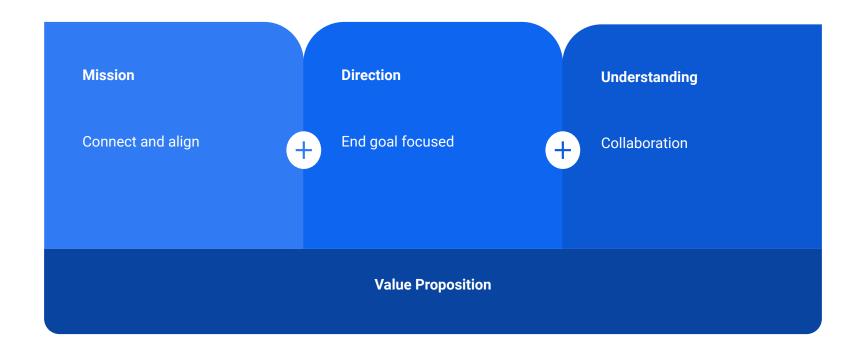


What's the state of data strategy at your institution?
49 responses





What and why?





Example: Setting overall <u>direction</u> for data management

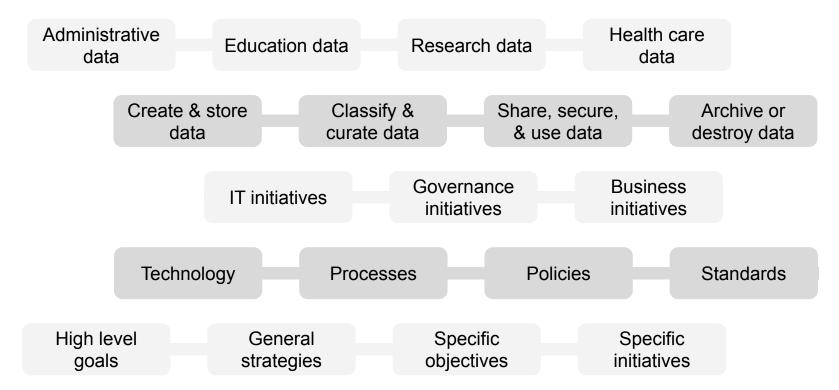
	DEFENSE	OFFENSE
KEY OBJECTIVES	Ensure data security, privacy, integrity, quality, regulatory compliance, and governance	Improve competitive position and profitability
CORE ACTIVITIES	Optimize data extraction, standardization, storage, and access	Optimize data analytics, modeling, visualization, transformation, and enrichment
DATA-MANAGEMENT ORIENTATION	Control	Flexibility
ENABLING ARCHITECTURE	SSOT (Single source of truth)	MVOTs (Multiple versions of the truth)

From "WHAT'S YOUR DATA STRATEGY?" BY LEANDRO DALLEMULE AND THOMAS H. DAVENPORT, MAY-JUNE 2017

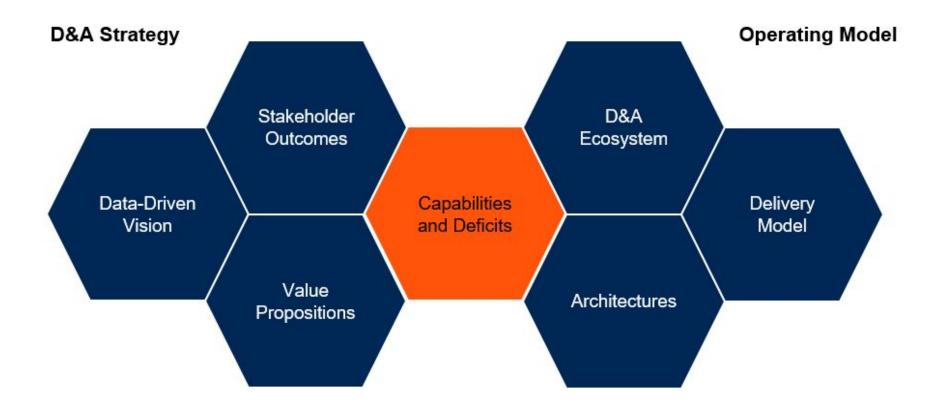
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What's in scope of a data strategy?

Scope can vary greatly by institution; some dimensions to consider:



Example: A data & analytics strategy framework (Gartner)





Example: Scope of data management (DAMA DMBoK)

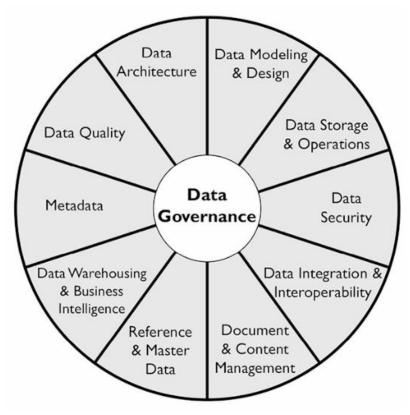


Image source: DAMA Data Management Body of Knowledge (2nd edition)

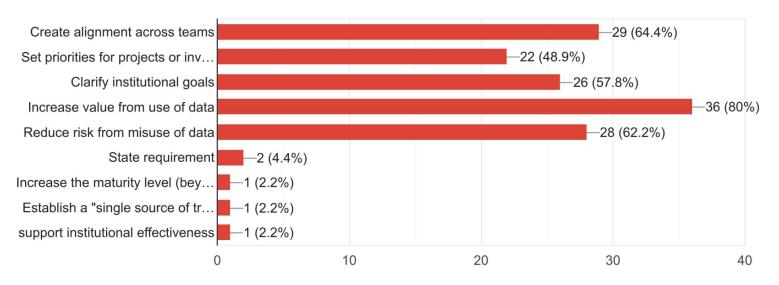


Poll results: Drivers



If you have or are planning a data strategy, what are top drivers for establishing it? (Please check all that apply.)

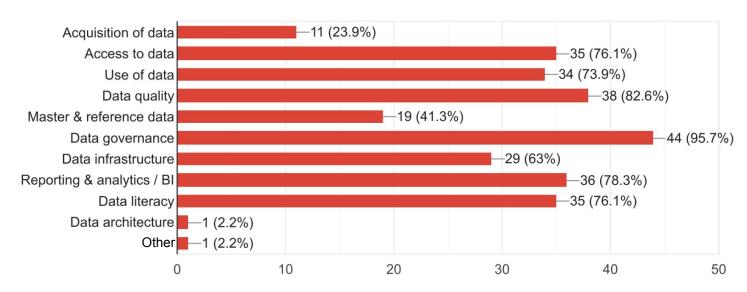
45 responses





Poll results: Scope

If you have or are planning a data strategy, What topics are in scope? (Please check all that apply.) 46 responses



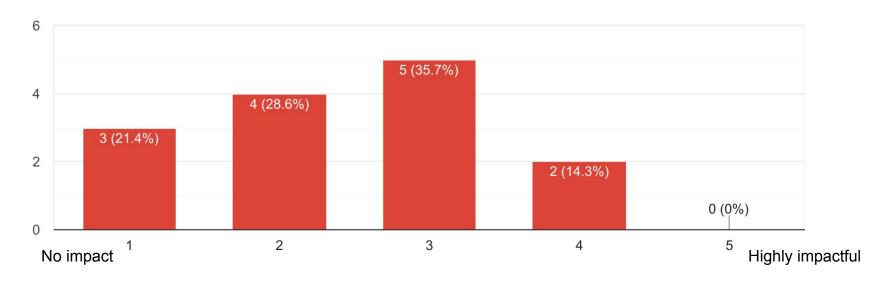


Poll results: Impact



If you have a data strategy, how would you rate its effectiveness?

14 responses



Getting started - Setting strategy up for success

Commonly cited success factors for strategy include:



Analyze the right scope of strategy

- Assess opportunities and threats
- Analyze gaps between needs and capabilities
- Balance the need for planning/control vs. innovation/agility



Establish a broad base of support

- Enable many stakeholders to participate in the vision
- Obtain senior leadership support and alignment
- Listen to input and focus strategy on areas of real commitment



Build execution into the strategy initiative

- Set and track measurable goals
- Apply strategy at all levels
- Empower people to deliver on the strategy
- Celebrate success
- Maintain and evolve strategy



Satya Kunta, NYU: Vision, Mission & Guiding Principles



Vision, Mission and Guiding Principles

DATA@NYU: Protected, Organized and Interconnected

Vision

To provide protected, organized and interconnected data as a service to everyone who has a need for information

Mission

Establish the strategies, services, standards, tools and platforms to support an open, flexible, trusted, secured and governed data ecosystem to support application integration, reporting and analytics

Guiding Principles

Simple

Accurate

Timely

Secured

Self-Service

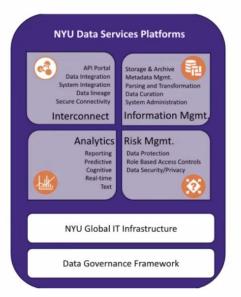
Satya Kunta, NYU: Data Strategy Alignment to Business Goals













Data Literacy: Improve data training for the knowledge workers

Standard Data: Continuously grow strategic IT investments (e.g., API portal, AIDA Data Hubs, UDW+ Modernization, Shared Reporting Portals etc.) to establish and disseminate standard data sets to knowledge workers.

Data Security/controls: Develop and improve processes for requesting access to data with approval workflows and controlled access policies using data security guiding principles.

Data Supply: Reduce the time and cost required to ingest, process and disburse data from variety of data sources for business needs.



- Improve NYU's ability to create, preserve, and disseminate knowledge
- \bullet Improve trust in data management decisions and data quality
- Reduce risk through regulatory, policy and procedural compliance
- Provide visibility of "What" and "Where" the data is located
- Provide "How" the data can be requested and used
- Provide what systems are using the data and for what purposes

Satya Kunta, NYU: Data Management Strategic Priorities



EDM Strategic Priorities

BI/Analytics

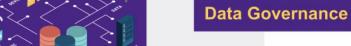
- BI licensing strategy across toolsets(OBIEE, Tableau, Brio)
- BI data management/data services modernization (OAC/Saas)
- Develop Data Science strategy/support (R, Python, Spark)

Data Warehouse

- Modernize UDW+ & migration to Cloud DW (Snowflake)
- Create Data Marketplace for Data Shopping experience
- · Create Metadata repository with Governance process

API Platform

- · Create an open, accessible API platform
- Introduce new and improved reusable APIs
- Introduce advanced capabilities (JWT, GraphQL APIs)



- Aligh with
- Align with "Business Capabilities Model" for DG functions
 - Continue to maintain knowledge and asset repository
 - Foster "Community of Practice" for consumers and authors

Data Operations

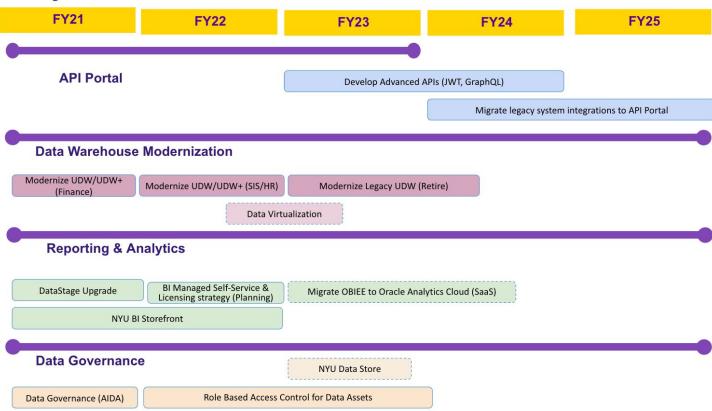
- Cost and performance optimization strategies
- Re-architect and consolidate UDW and Census
- Build and implement low cost global operating model



Satya Kunta, NYU: 3-5 year Roadmaps & planning

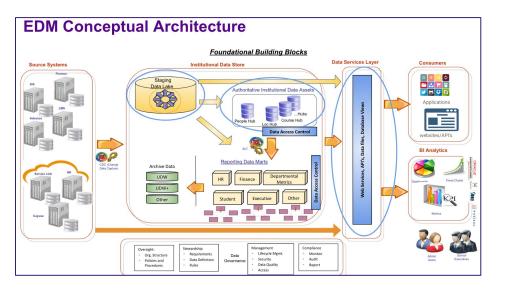


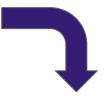
EDM Projects

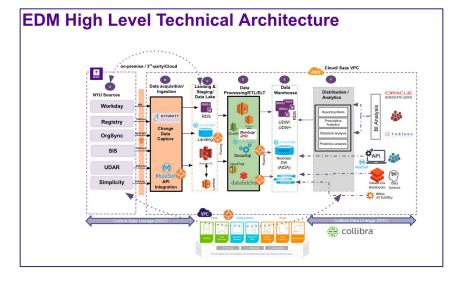


Satya Kunta, NYU: Conceptual & Technical Architecture



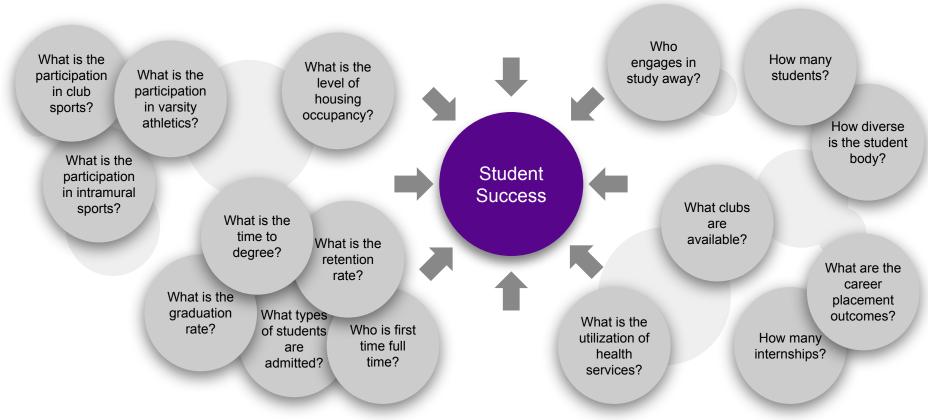






Example: Enabling specific institutional outcomes





Poll results: Could you share a link?

- > Pepperdine University <u>BI Strategy</u>
- > Southern Methodist University
- > University of Auckland <u>Data Strategy</u>



Lisa Welch, Pepperdine: Business Intelligence Strategy



Pepperdine University Overview

- > Private, not-for-profit, religiously-affiliated DRU institution
- > Stats*
 - ~10,000 students
 - ~1,100 staff*
 - ~1,000 instructional faculty

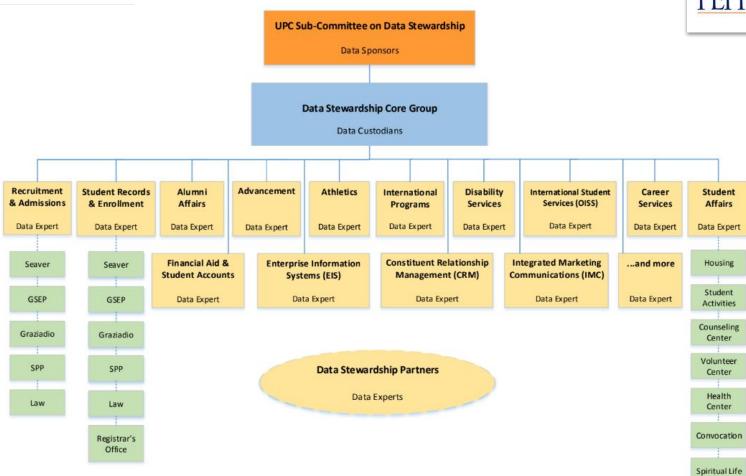
Data Architecture and Tools

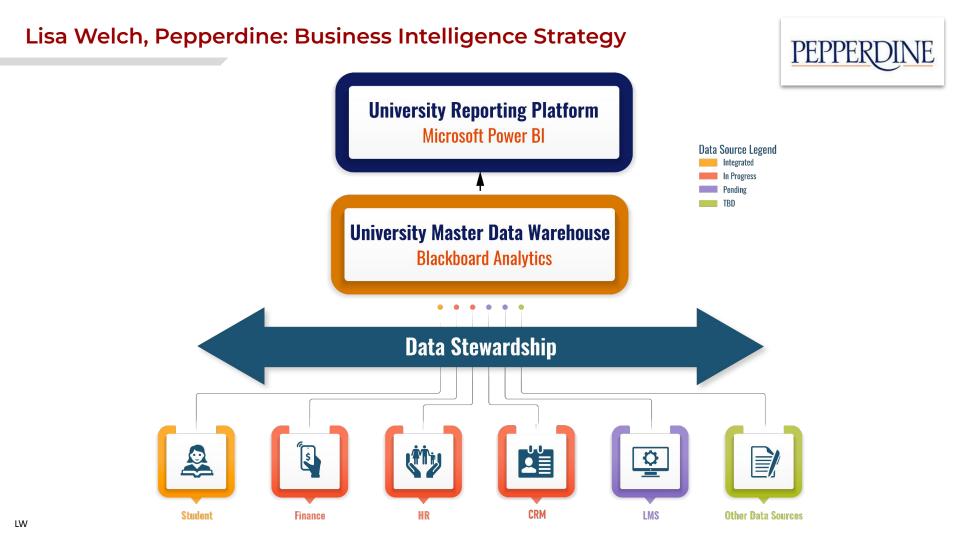
- Master Data Warehouse: Blackboard Analytics (MS SQL Server Stack)
- > **Data Visualization**: MS Power BI, SSRS
- > **Data Dictionary:** iData's Data Cookbook

^{*}based on Fall 2021 census

Lisa Welch, Pepperdine: Business Intelligence Strategy







Curt Herridge, Southern Methodist University



Data Governance at SMU - an evolution

- Data Warehouse and Analytics Council
 - a. Provost Office University Decision Support
 - b. Office of Information Technology
- 2. Data Governance Steering Committee Associate VP's
- 3. Data Stewardship Subcommittee

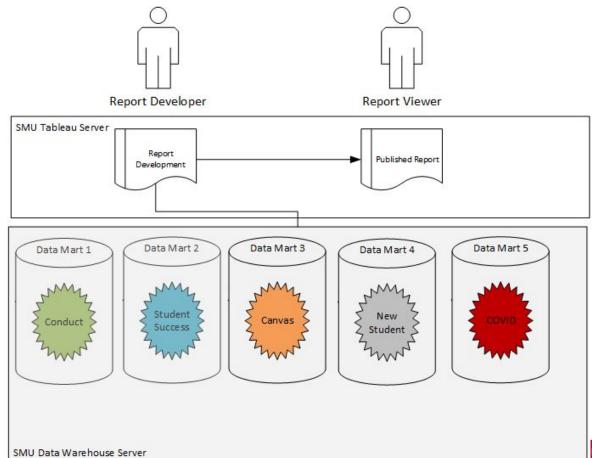
Currently undergoing charter reviews



Curt Herridge, Southern Methodist University



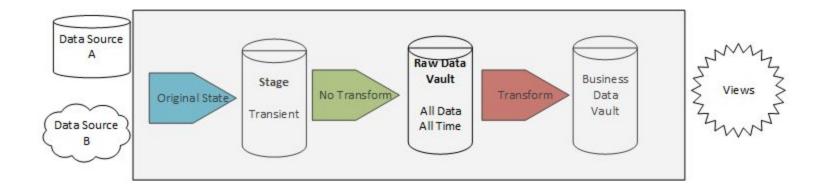
Data Mart Architecture



Curt Herridge, Southern Methodist University



Data Vault Strategy





Open forum: Examples from the community

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Appendix

Example: Braden Hosch, Key Elements of a Data Strategy

Data Acquisit	ion		Data Governance
How the institution obtains its data Build an inventory of data assets. establish a written plan for: Identification Prioritization Capture Storage Linkage Curation			g body and rules
Data Quality How data will be maintained to be complete, valid, consistent, timely, and accurate to make them appropriate for a specific use		How authorized individuals can obtain and use data while maintaining privacy and security Establish written plans for: Accessibility Security	
Data Usage & Literacy Data Extraction Reporting		on &	Data Analytics
How data users understand and use data Establish: Data user responsibilities Training/education protocols Usage metrics	How data will be queried and retrieved from storage and delivered to users Establish protocols for: Extraction Reporting		How data will be used through dynamic and visual deployment for benchmarking, exploratory and causal analysis, and prediction and forecasting