bakertilly
DIGITAL

Transforming Your Finance Organization from Report Creation to Drivers of Business Analysis

Who we are

Where you are today

Digital strategy assessment & road maps

Technology assessment

Program & solution design

Solution build & delivery

Operational readiness

FUTURE STATE DELIVERED

Technology transformation

- Data solutions
- Cloud services
- Application services
- Enterprise solutions
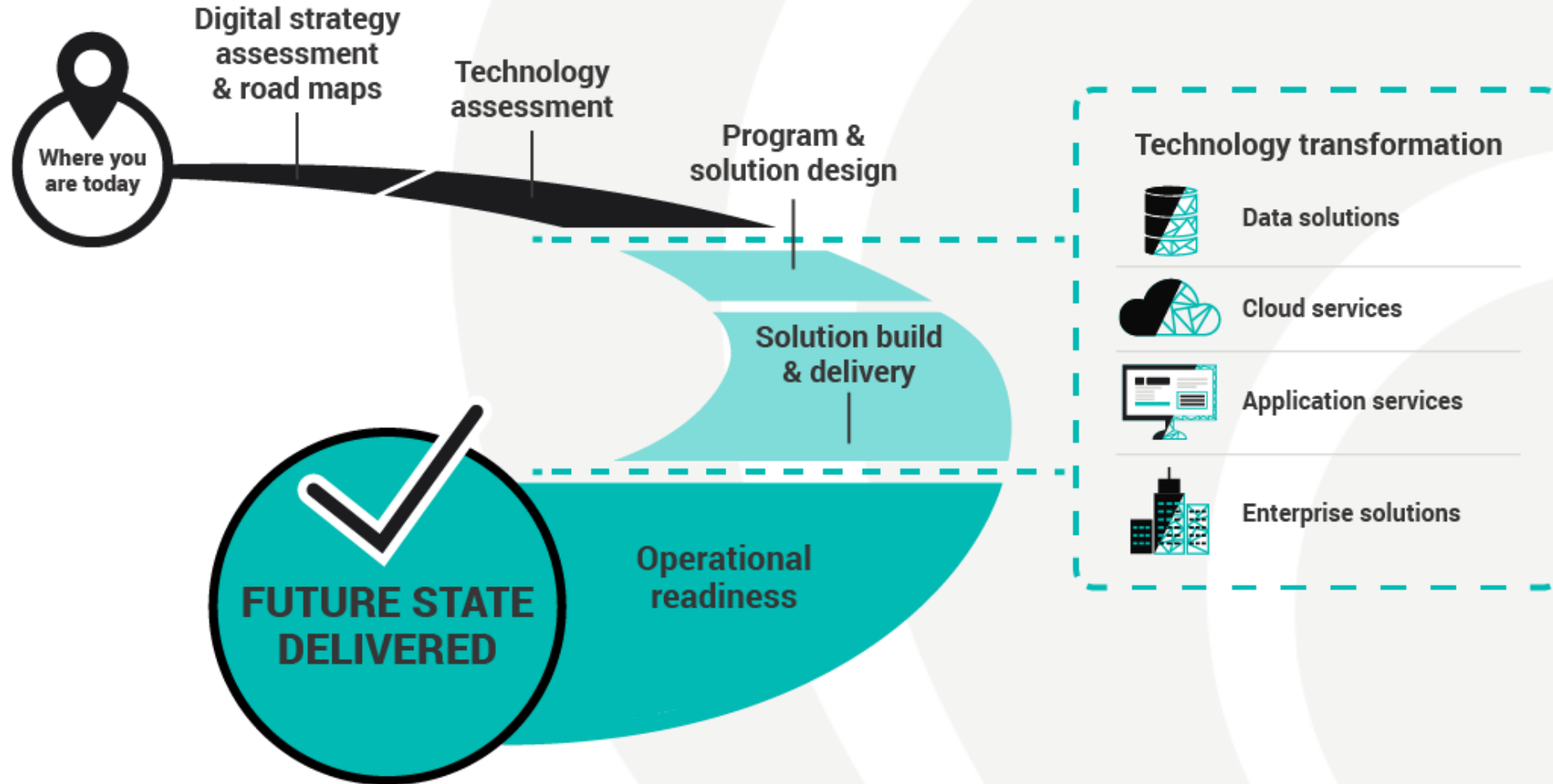
Agenda

- Perceived Value of Data
- Data Valuation
- Data Capabilities
- Data Strategy
- Data Governance

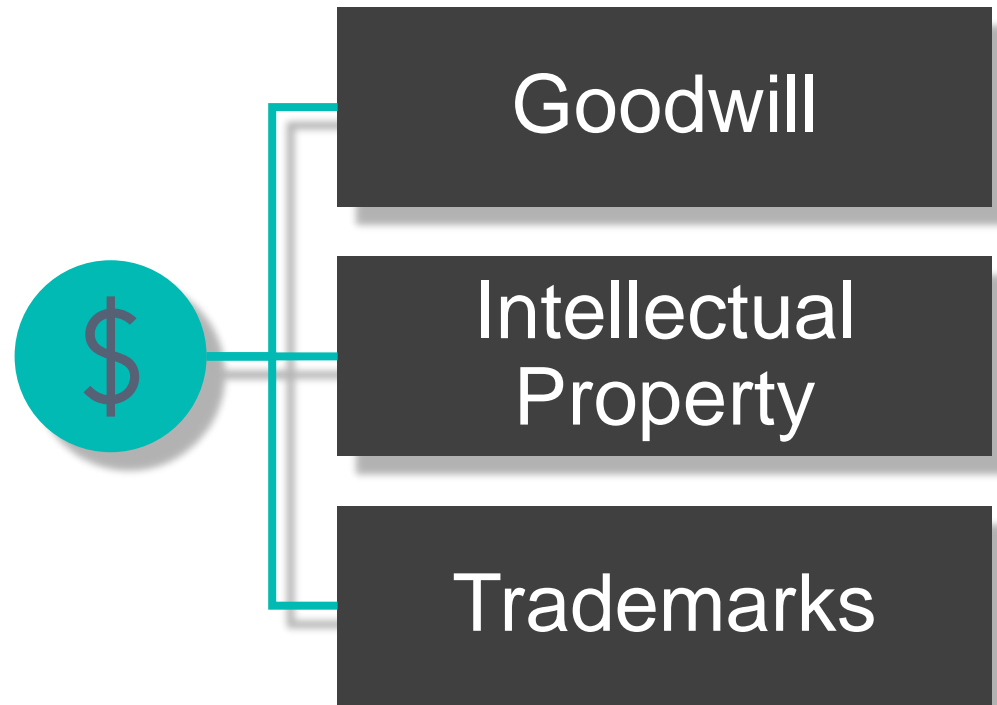# Perceived Value of Data

"Data is a precious thing and will last longer than the systems themselves."

Tim Berners-Lee

Intangible Assets

$

Goodwill

Intellectual Property

Trademarks

Data?

Tangible Versus Intangible Assets

S&P 500

Chart Source: https://www.oceantomo.com/intangible-asset-market-value-study/
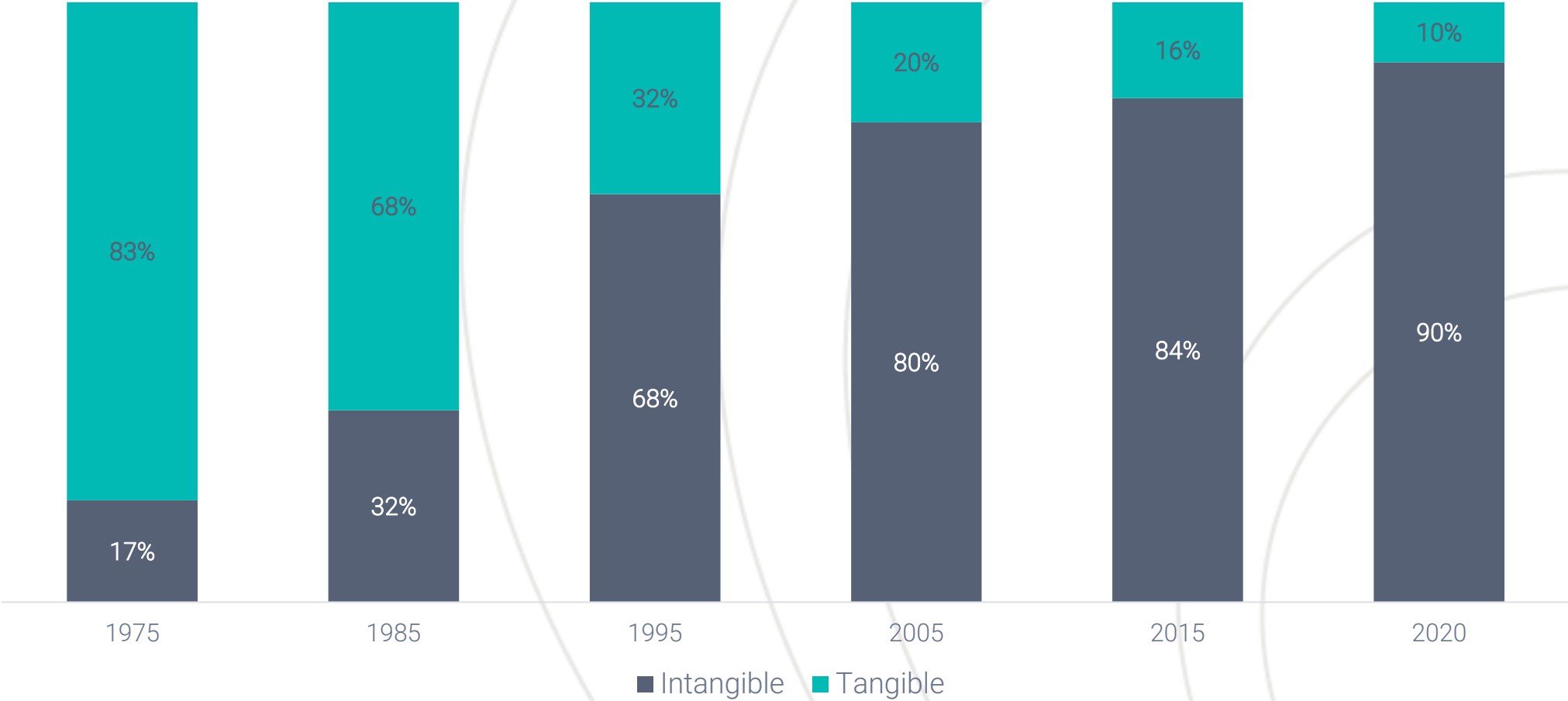
Top US Companies by Market Capitalization

Rank	1975	2000	2010	2020
1	IBM	Microsoft	Exxon Mobil	Apple
2	AT&T	General Electric	Apple	Microsoft
3	Exxon	Cisco Systems	Microsoft	Amazon
4	Eastman Kodak	Walmart	Berkshire Hathaway	Alphabet
5	General Motors	Intel	General Electric	Facebook (Meta)

Investors view data as an asset

Market-to-Book Value

3X

2X

Average Companies

Data Savvy Companies

Data Product Companies

Zonda

Learn more | Portal login

Zonda.
Research

Access the latest data and insights with our monthly report subscriptions. Stay ahead with detailed concise and authoritative insights from our Advisory team backed by proprietary housing data.

Market Reports

National Outlook (new)

Building Products Outlook

Rental Housing Outlook

Stay up-to-date on the latest market conditions with our collection of housing market reports for 100+ U.S. CBSAs. Zonda monitors 109 data fields, including 48 proprietary data points, providing all the essential housing performance metrics in one location along with easy-to-read narratives that add local market insights about changes in the market.

Zonda provides complementary access to Market Snapshots, a condensed version of these reports.

Preview your latest local market snapshot for free today.

Get your market snapshot

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Polling question #1

According to Gartner research, the Market-to-Book value of data product companies is?

a. 1x
b. 2x
c. 3x
d. 10x

Data Valuation

Attributing Data Value

Market Based

Economic Benefit

Dimensional

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Attributing Data Value

Dimensional

Identifying attributes about the data including quality, completeness, accuracy, timeliness, frequency of use, and ownership.

Usage
- More useful in driving out competing initiatives or innovation around a given dataset.

Business Value of Information =

$$\sum_{p=1}^{n} (Relevance_p) * Validity * Completeness * Timeliness$$

where p = the number of business process functions.

https://hdsr.mitpress.mit.edu/pub/1qxkrnig#n1tjprp4s7a

Attributing Data Value

Economic Benefit

Benefits of making the data available to the broader community.

Examples
- Census data
- GPS data
- Public healthcare data

Adapted From: https://hdsr.mitpress.mit.edu/pub/1qxkrnig/release/1

Attributing Data Value

Market Based

Identifying the cost and revenue of buying and selling data

Examples
- Direct buying and selling of data. Zonda, Dun and Bradstreet
- Leveraging data to improve products and services. Amazon recommendations.
- Enhancing customer experience using data. Dominos
- Assessing the value of a data breach or loss. Insurance policy value
- Purchasing or selling data-intensive companies. Microsoft buying LinkedIn

Adapted From: https://hdsr.mitpress.mit.edu/pub/1qxkrnig/release/1

Byproducts of Treating Data like an Asset

1   Investment in people, technology, and other resources

2   Improved governance and accountability

3   Increased data quality and availability

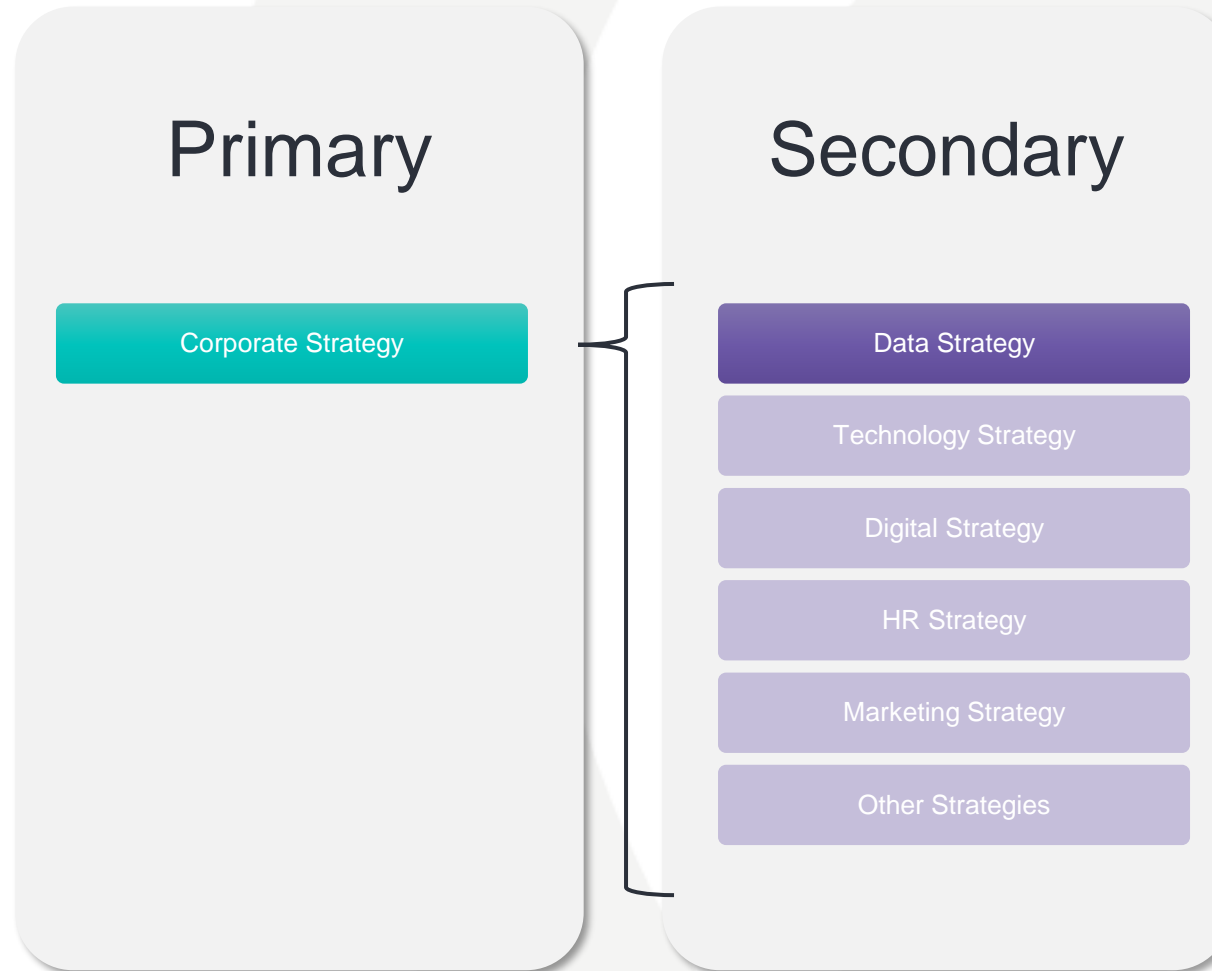**4**   Quicker turnaround for new analysis

Polling question #2

How would you describe your organization's ability to monetize data?

a. We are excited but haven't started
b. We have a data foundation but haven't monetized it
c. We have started monetizing but see an opportunity to do more
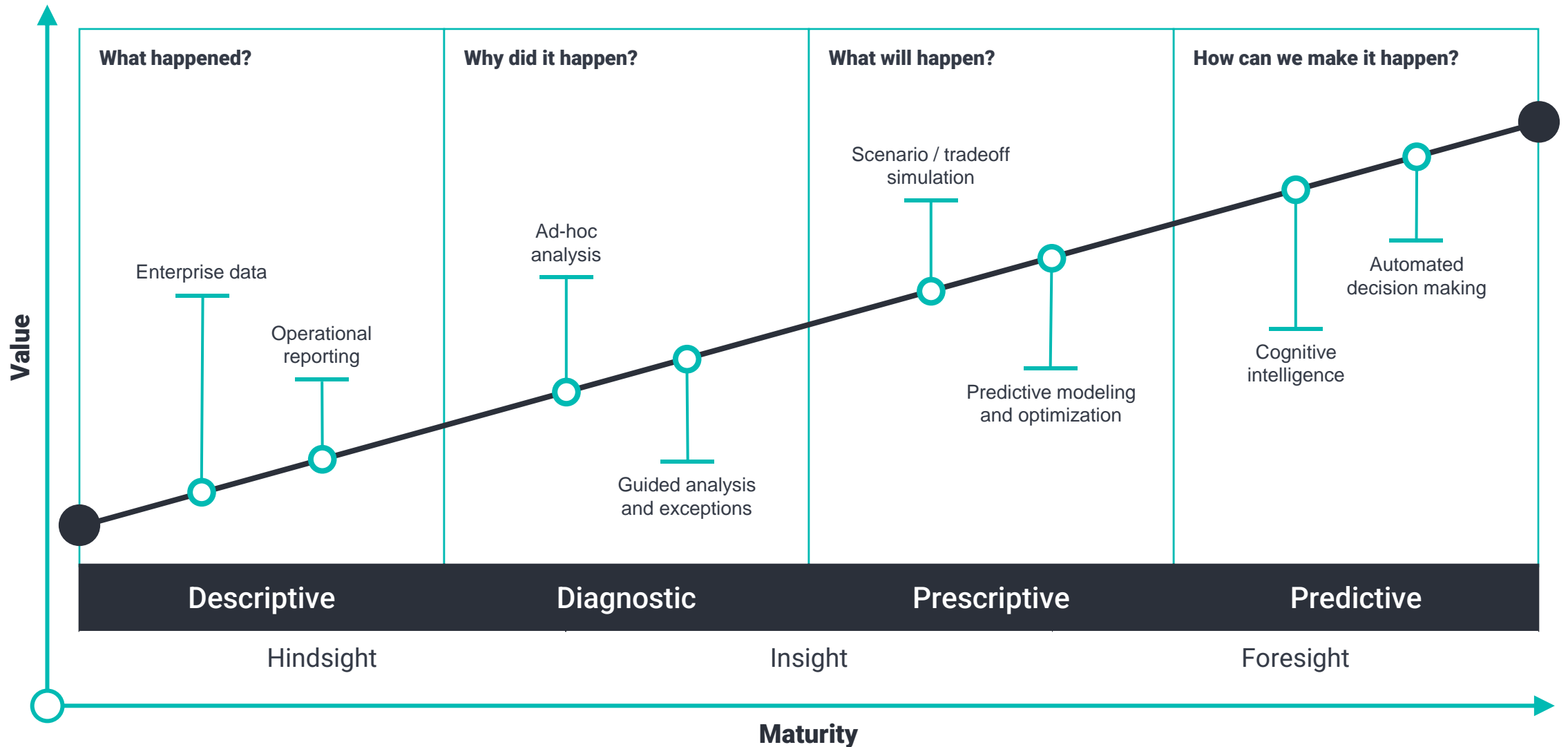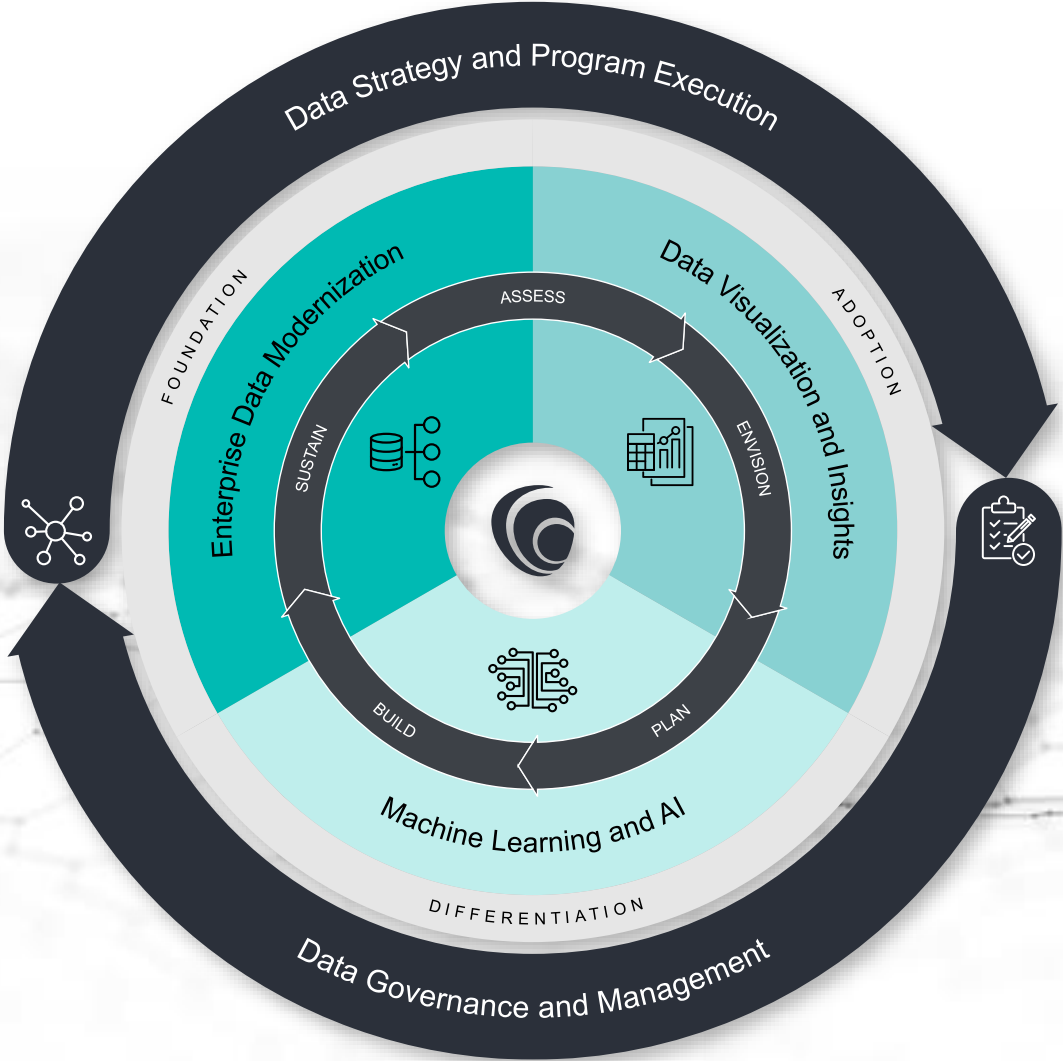d. We are monetizing and doing great

Developing Data Capabilities

Multiple strategies support the organization

Primary

Corporate Strategy

Secondary

Data Strategy

Technology Strategy

Digital Strategy

HR Strategy

Marketing Strategy

Other Strategies

Analytical Maturity Model

Data Capabilities Framework

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Key Outcomes: Data Strategy

Data strategy and program execution

Data governance and management

Enterprise data modernization

Data visualization and insights

Machine Learning and AI

Establishing an overall data strategy ensures that an organization aligns its strategic objectives to the organization's demand for increased visibility into key data domains.

- Defined focus areas
- Adequate resource alignment
- Technical vision
- Clear communication
- Established prioritization

Key Outcomes: Data Governance

Data strategy and program execution

Data governance and management

Enterprise data modernization

Data visualization and insights

Machine Learning and AI

A data governance program is essential for ensuring the effective management and use of data within an organization.

- Defined roles and responsibilities
- Ownership to ensure accountability
- Protection of sensitive information
- Continuous monitoring of data quality

Policy, standards, strategy

Data quality

Management and support

Data Governance

Privacy, compliance, security

Enterprise data infrastructure

Architecture, integration

Key Outcomes: Enterprise Data Modernization

- Data strategy and program execution
- Data governance and management
- Enterprise data modernization
- Data visualization and insights
- Machine Learning and AI

Enterprise data modernization ensures that an organization has a foundation to consume various sources of data enabling powerful insights for more informed decision making.

- Creates a single source of truth
- Models data to support analytical needs
- Integrates disparate sources of information
- Allows for cross-domain access
- Creates speed to value for core data requests

Key Outcomes: Data Visualization and Insights

- Data strategy and program execution
- Data governance and management
- Enterprise data modernization
- **Data visualization and insights**
- Machine Learning and AI

Good data visuals are pivotal in presenting complex information in an understandable and compelling manner. Good data visuals act as a bridge between raw data and human comprehension, fostering better understanding, engagement, and action.

- Increase audience engagement
- Enhance data comprehension
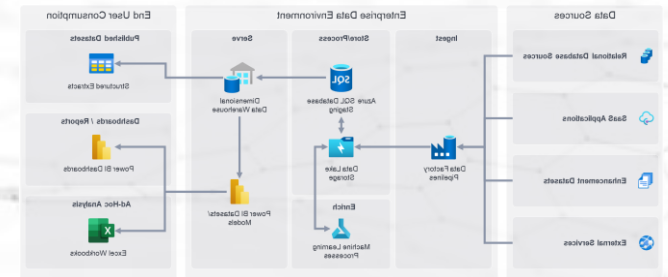- Increase overall adoption
- Uncover new insights

Key Outcomes: Machine Learning and AI

Data strategy and program execution

Data governance and management

Enterprise data modernization

Data visualization and insights

Machine learning and AI

Machine learning and AI have the potential to transform the business landscape, enabling organizations to operate more efficiently, innovate rapidly, and navigate complex challenges with data-driven insights, ultimately fostering competitive advantage and growth.

- Create efficiency through automation
- Leverage predictive analytics
- Enhance decision making
- Create innovate products and services

Where to Start
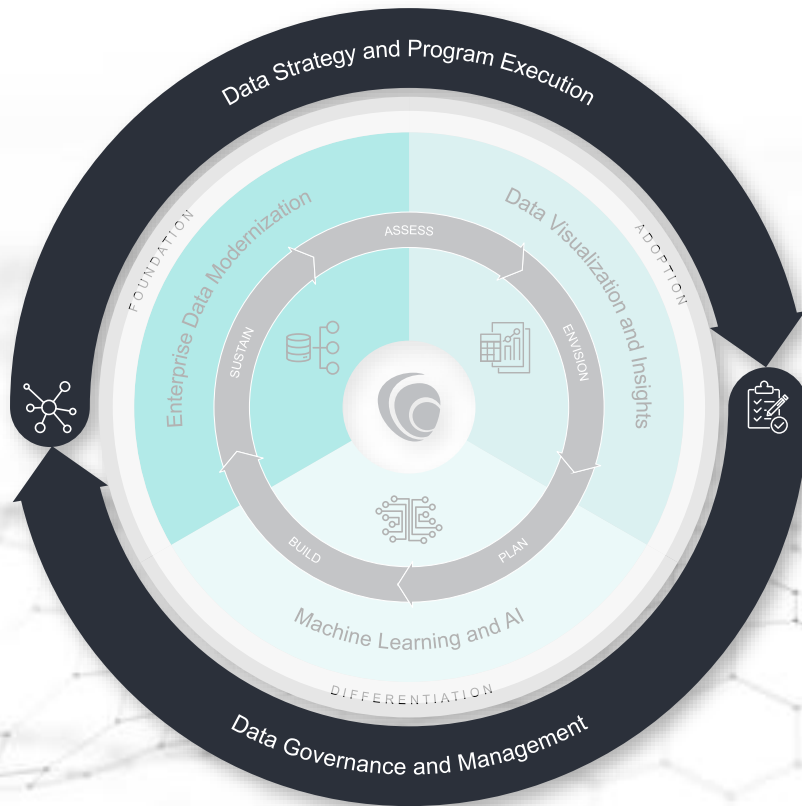
A. Looking to build a program to enhance overall data capabilities and need to create an execution plan to get there.
   - Start with **Data Strategy and Program Execution**

B. Looking to understand what is in flight, who has ownership and where are potential risks
   - Start with **Data Governance and Management**

Polling question #3

Where do you think is the most likely place your organization should start their data journey?

a. Data strategy and program execution
b. Data governance and management

Developing Data Strategy

Data Strategy and Program Execution

5 STEPS
to build a
stronger strategy

1. Discovery and prioritization

2. Business dimensional model

3. Solution concept

4. Put the right team in place

5. Implementation road map

Discovery and Prioritization

It's key to align business overall business priorities to analytical initiatives. Below are typical scoring criteria to develop a four-square priority matrix of requests.

Business Impact

- Weighted Number of Anticipated Users
- Existing Alternatives
- Achievement to Financial Goals
- Strategic Significance and Alignment
- Frequency of Use

Technical Feasibility

- Data Availability
- Transformation Complexity
- Infrastructure Impact
- Maintenance and Support
- Data Quality

Business Dimensional Model

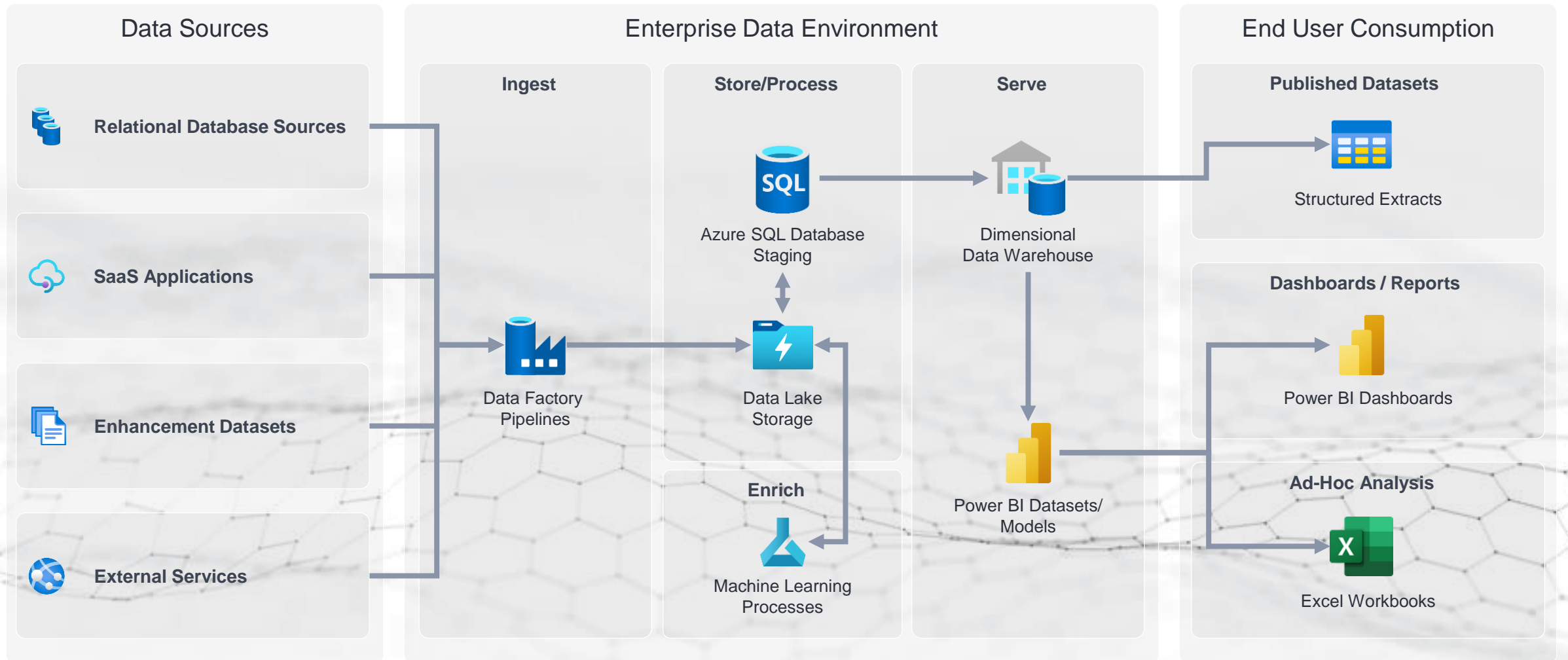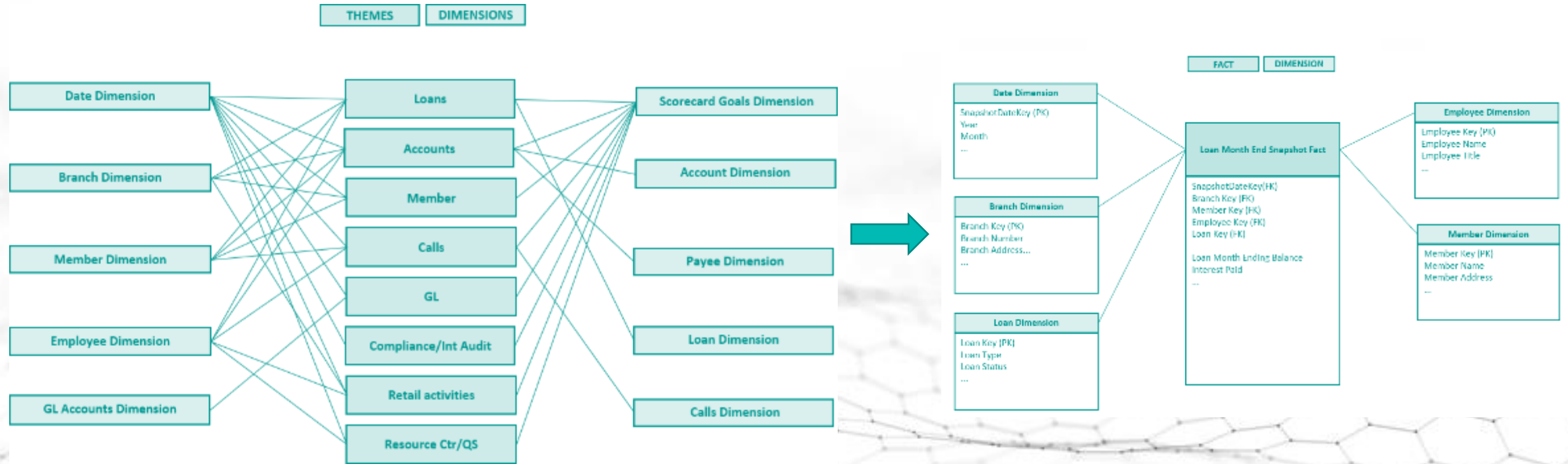| Dimensions	Loans	Accounts	Member	Calls	GL	Comp / Int Auditing	Retail activities	Res Ctr / Quality Solutions
Date Dim	●	●	●	●	●	●	●	●
Branch Dim	●	●	●				●	
Member Dim	●	●	●	●				
Employee Dim	●	●		●			●	●
Scorecard Goals Dim	●	●	●	●	●	●	●	●
GL Accounts Dim					●			
Payee Dim								
Loan Dim	●							
Accounts Dim		●						
Calls Dim				●				

Themes / Measures:

- **Loans:** # Loans, $ Loan balance, # Loans closed, # Loans in Pipeline, Delinquency % (Avg 30 days), Charge off amount, # Days App To Close, # Days App To Close, Loans Closed/Apps Ratio, LTV (Loan to value), (...and more)
- **Accounts:** # Accounts, Balance, # Transactions, # Days Since Last Transaction, # ACH payments, # MyCoVantage Logins, Deposit growth, # New checking accounts, (...and more)
- **Member:** # Members, % Active MyCoVantage Users, Membership growth, Credit score avg, bands, # Members with a share, # Members with mortgage, Avg income, (...and more)
- **Calls:** # inbound calls, # emails, # notes entered on calls, # calls abandoned %, Avg Rating Phone, M2M successful, MyCoV - # unique clicks - on w, MyCoV - online registrations - s, P2P # of transfers, (...and more)
- **GL:** Net income, Operating expenses, GL activity count at Branch, Forecast, Budget, Operating expense to asset rati, Unsolved Cumulative Variance, FMV (Fair Market Value), Risk position, (...and more)
- **Comp / Int Auditing:** Num of badge entries, Num of fraud detections, Num of loan audits, (...and more)
- **Retail activities:** % Time as MS/Teller for Full Te, % Time as MS/Teller for Part Ti, Net Promoter Score (NPS), Observations per month, (...and more)
- **Res Ctr / Quality Solutions:** # RC calls, # RC calls top reason, % of total RC calls, Avg time calls answered, % help desk 1st call resolution, # HD calls top reason, Avg Turnaround days (mortg), Commercial appraisals ordered, # Deceased Accounts checklists, (...and more)

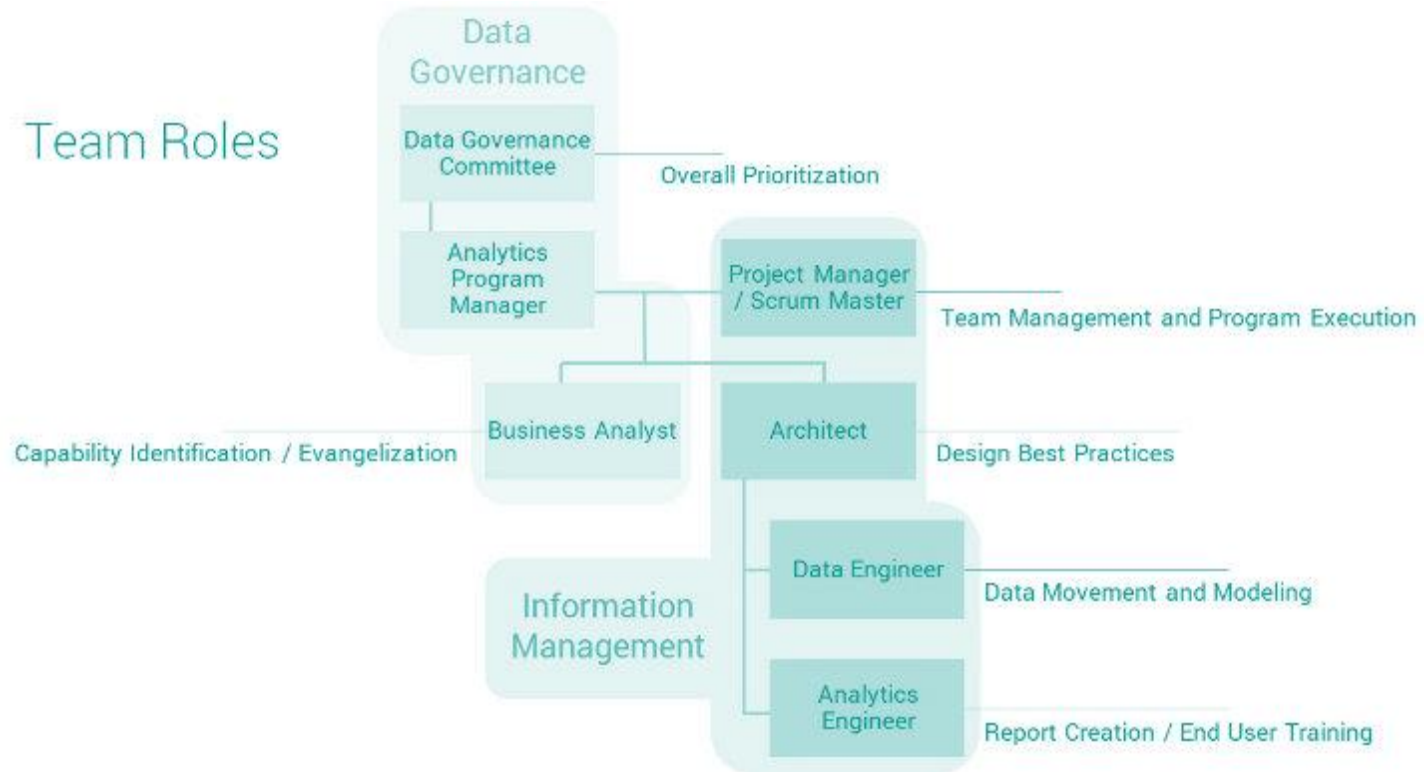# Conceptual Solution Design (Microsoft Example)

Conceptual Model

Team Roles

Roadmap

	PHASE 0 – FOUNDATION **PLATFORM READINESS** *3 – 4 WEEKS*	PHASE I – BUSINESS INITIATIVE 1 **FOUNDATION BUILD** *3 MONTHS*	PHASE II – BUSINESS INITIATIVE 2 **ANALYTICAL REFINEMENT** *3 MONTHS*	PHASE III – BUSINESS INITIATIVE 3 **PREDICTIVE PILOT** *3 MONTHS*
	Readiness of platform, data team, data governance	**Deliver dashboard/reporting on Loan performance**	**Deliver dashboard/reporting on Share Accounts and Transaction performance**	**Pilot Predictive Model (Delinquency / Charge-off)**
TACTICS	• Provision data platform services • Develop and test data pipeline patterns • Establish data team operating guidelines	• Integrated enterprise data platform combining disparate business systems • Data team readiness on development methods • Delivering business requirements using industry best practices • Power user data exploration	• Expand data platform functions • Deliver prioritized data assets • Evangelize analytic capabilities across the organization • Data team operating at optimal efficiency • Self-service analytical platform	• Define predictive use-case • Prototype and demonstrate model capabilities • Expand data platform functions • Deliver prioritized data assets • Evangelize analytic capabilities across the organization
	• Identify Data Governance Committee members. Confirm data strategy initiatives and focus areas.	• Data Governance Committee meeting. Establish initial Data Governance program and policies.	• Data Governance Committee meeting. Updates on data strategy initiatives and focus areas.	• Data Governance Committee meeting. Updates on data strategy initiatives and focus areas.
ROLES	• Business Analyst • Architect • Data Engineer	• Business Analyst • Architect • Data Engineer	• Business Analyst • Architect • Data Engineer	• Business Analyst • Architect • Data Engineer • Data Scientist

Polling question #4

When evaluating data strategy, the key steps include?

a. Discovery and prioritization
b. Business dimensional modeling
c. Solution concept
d. Putting the right team in place
e. Implementation road map
f. All of the above

Data Governance

Data governance to enable monetization

Hexagon diagram with "Data Governance" at the center surrounded by:
- Policy, standards, strategy
- Data quality
- Privacy, compliance, security
- Architecture, integration
- Enterprise data infrastructure
- Management and support

Key Activities
- Business Stakeholder Interviews
- Analysis and Consolidation
- Establish Guiding Principals
- Set Goals and Objectives
- Define Roles and Responsibilities
- Design Organizational Framework
- Create Standard Operating Procedures
- Develop Change Management Plan
- Develop Communication and Training Plan
- Data Governance Committee Review
- Monitoring of Quality Metrics

Focus Across the Organization

Policy, standards, strategy

Data quality

Management and support

Data Governance

Privacy, compliance, security

Enterprise data infrastructure

Architecture, integration

Enterprise Level

Business Functional Areas

Data Stewards

Below are examples of the key element to evaluate

- Data Governance Charter, Standard Policies and Procedures
- Data Governance Program Structure. Processes, Decision Making Authority, and Operating Cadence
- Data Management Processes and Procedures
- Data Inventory and Areas of Responsibility
- Data Quality Policies and Procedures
- Data Quality Standards
- Privacy, Compliance, and Security Standards
- Data Steward Business Process Responsibilities
- System Integrations and Procedures

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Data Governance assessment process

Phase 1	Phase 2	Phase 3	Phase 4
Plan	**Analyze**	**Recommend**	**Report**
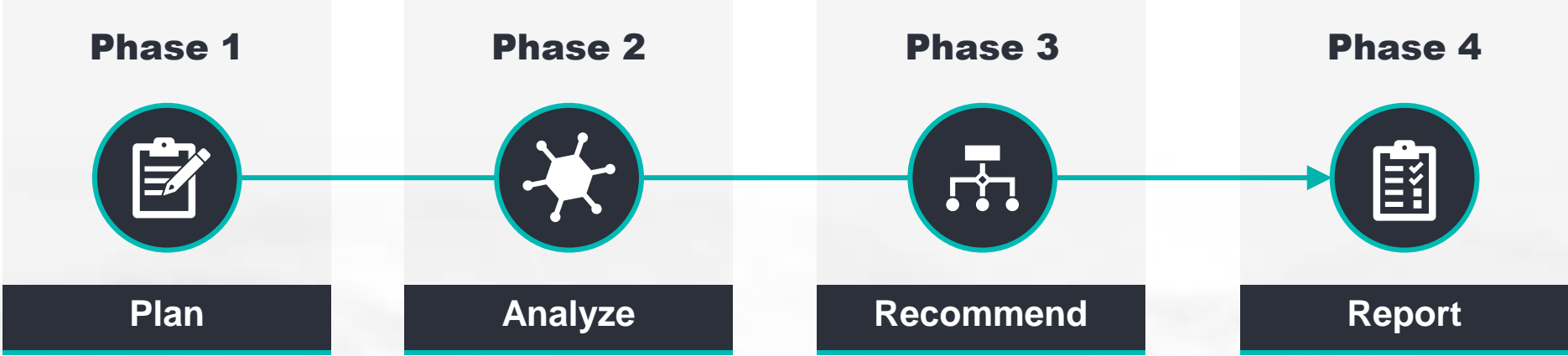
- In the **Plan** phase, work to understand the current organizational and decision-making structure

- In the **Analyze** phase, review relevant available documentation and facilitate discovery meetings and interviews with key stakeholders involved with the program.

- In the **Recommend** phase, work with key processes owners to identify those recommendations that are actionable. Discuss indications of maturity in each of the components of the data governance framework.

- In the **Report** phase, develop a draft report that summarizes the objectives, scope, approach and results. Outline and prioritize recommendations that will drive Data Governance program.

Polling question #5

In a data governance program, the key owners of data definitions are called?

a. Data engineers
b. Data visualization designers
c. Database administrators
d. Data stewards

Wrap-up

Questions?

Let's connect

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