Building a Data Strategy –
Practical Steps for Aligning with Business Goals

Donna Burbank

Global Data Strategy, Ltd.

February 27, 2025

Enhance your Data Strategy with CData Software

The Data Connectivity Company

Creating a data foundation for your business is both more urgent and complicated than ever

62%

of IT leaders say their organizations **aren't equipped to harmonize data** systems to fully leverage AI[4]

Adding pressure to existing demands for fresh, accurate data

Exponential growth of data sources and destinations
Large enterprises now manage over 664 different applications and are adding an average of 11 new applications every 30 days[1]

Growing diversity of users who need to access data
57% of IT professionals spend more than half their work week servicing data requests[2]

Increasing demand for diverse integration types
Increasing architectural complexity and greater diversity of use case requires multiple integration patterns[3]

Building Your Data Strategy
Essential questions to consider

- What are the business goals?
- Where is your data? Where does it need to be?
- What is your tolerance for "staleness?"
- How will you support modern data tooling?
- What environments do you need to support?
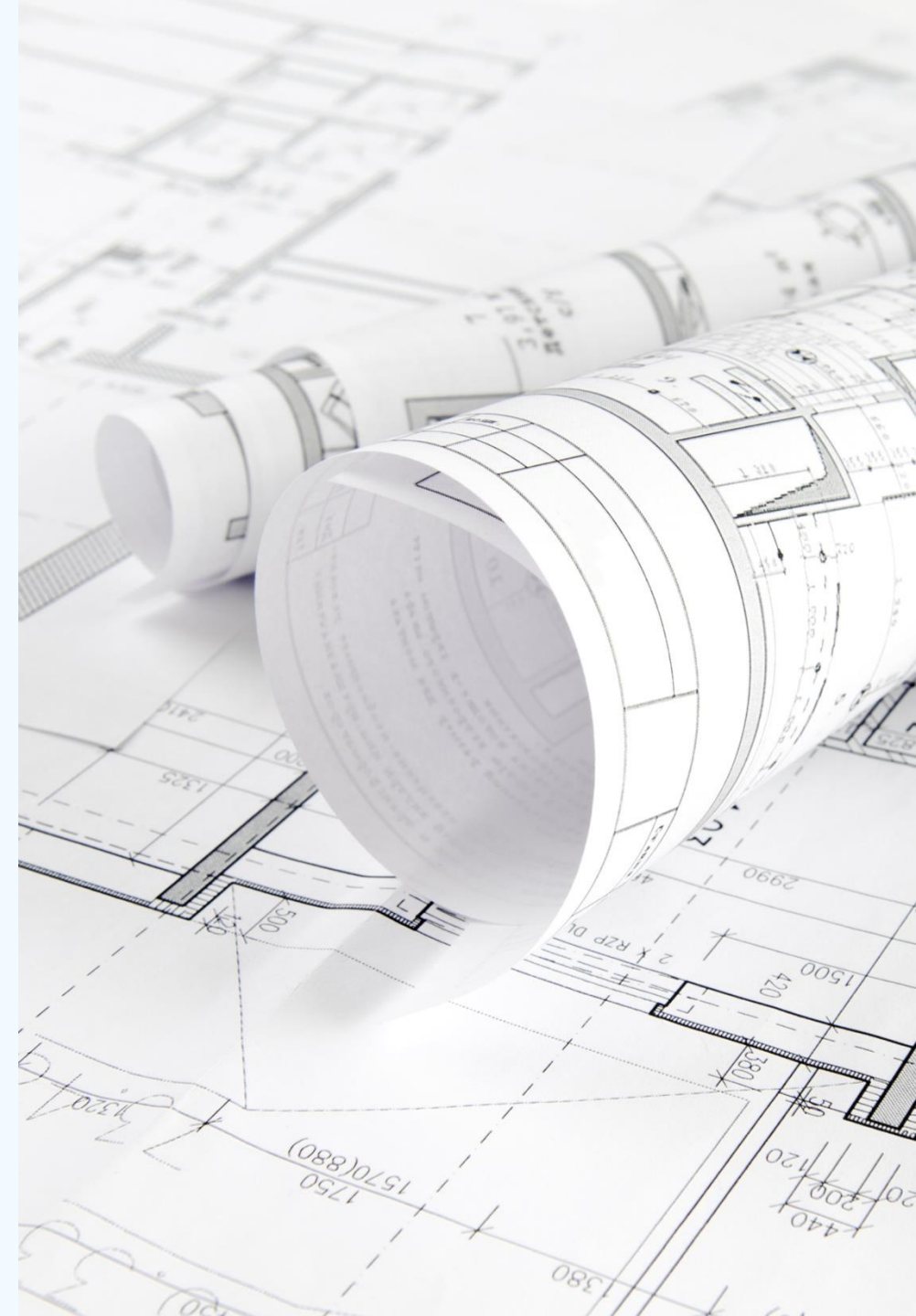
Companies work with CData to implement a solid data strategy in four main ways

ETL/ELT and data preparation standardization
Standardize ETL/ELT pipelines and data manipulation

Centralized source of truth for analytics
Create a real-time, unified semantic layer

Accelerate tech stack modernization
Decouple data access from operation systems and analytics tools
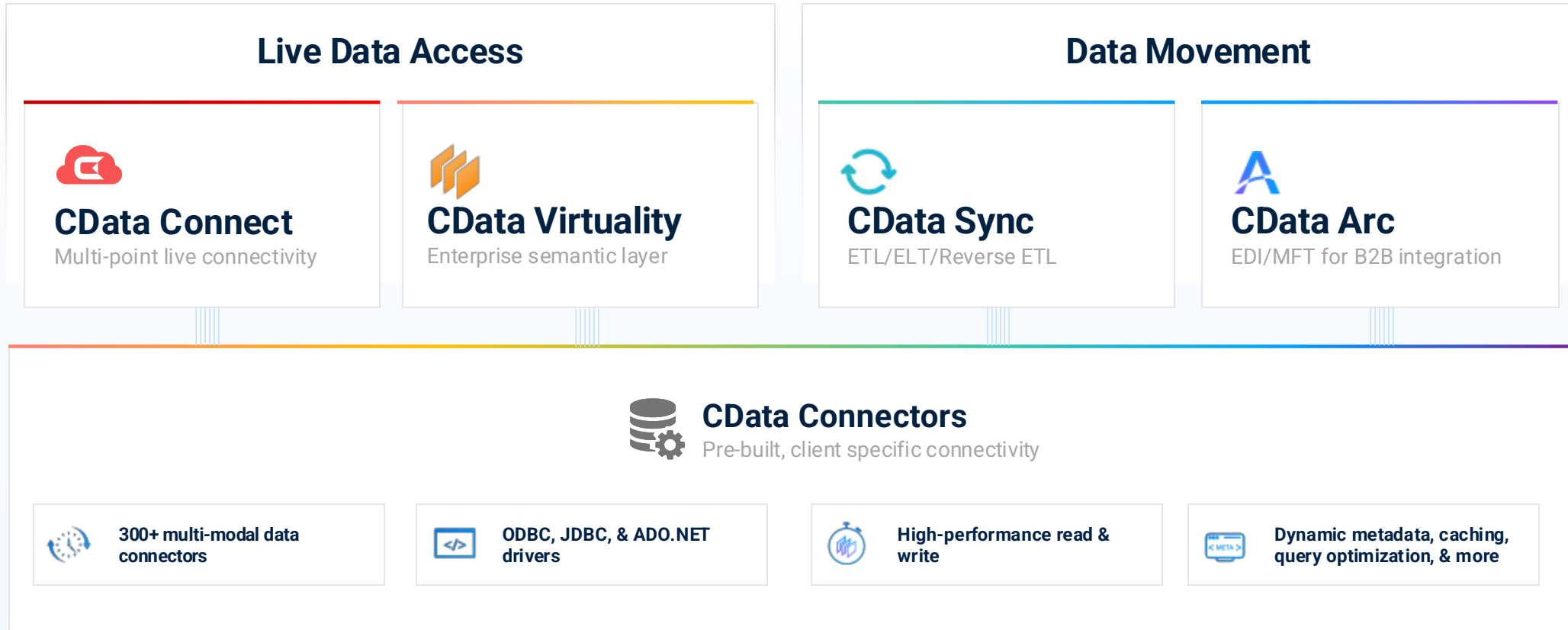
Connect across architecture types and ecosystems
Create integration flows across hybrid architectures and between diverse ecosystems

The CData Connectivity Platform

Industry-leading connectivity framework packaged to handle every integration use case

Live Data Access

CData Connect
Multi-point live connectivity

CData Virtuality
Enterprise semantic layer

Data Movement

CData Sync
ETL/ELT/Reverse ETL

CData Arc
EDI/MFT for B2B integration

CData Connectors
Pre-built, client specific connectivity

300+ multi-modal data connectors	**ODBC, JDBC, & ADO.NET drivers**	**High-performance read & write**	**Dynamic metadata, caching, query optimization, & more**

Providing unmatched
Range of Connectivity | Time-to-value | Price-to-performance

How are CData customers modernizing?

- ✓ Consolidating operational data into a central repository
  - o Manhattan Associates moves Salesforce and Jira data into Snowflake

- ✓ Moving data from on-premise to cloud
  - o American Red Cross replicates data from on-prem Teradata to Amazon Redshift

- ✓ Deploying new data fabric, mesh, or governance strategies
  - o NYU ensures all data users gain self-service data access through a single hub

How are CData customers modernizing?

✓ Rapid pipeline deployment for comprehensive reporting

- o Recordati saw SAP HANA, SAP ERP, and Salesforce reports delivered 7x faster with half the errors

✓ Scaling IT infrastructure with a growing business

- o Scorpion's FP&A team replaces manual processes for extracting and consolidating data

✓ Connecting data between specific systems

- o BJ's improved employee retention by 10%

Start building your data foundation with CData today

"You need all kinds of styles of data, but the data is locked away in these complex enterprise applications and databases and a lot of legacy systems.

And that's where we have found an amazing partner like CData to be able to unlock the data, bring it in, **so you can get on your AI journey**."

Google

Chai Pydimukkala
Product Lead, Data Analytics and BigQuery Governance

Exponential growth of data sources and destinations
Unmatched breadth and depth of connectivity that scales as your environment matures

Growing diversity of users who need to access data
Every user from developer to business analysts can work with and access data how they want to

Increasing demand for diverse integration types
Integrate across architectures and ecosystems with multiple integration styles

What's next?

Free trials

- Live data access:
  Connect Cloud & CData Virtuality
- Data movement:
  CData Sync & CData Arc
- Point integration:
  CData Drivers

Want to learn more?

Check out CData Foundations and hear from our customers how how a modern data connectivity strategy can build a strong foundation for your company.

Thank You

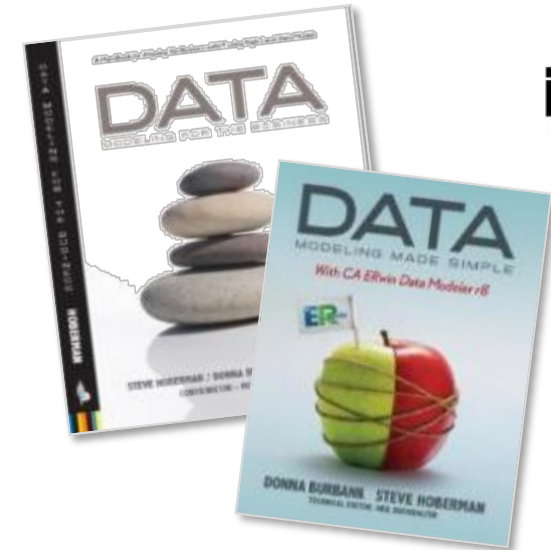THE DATA CONNECTIVITY COMPANY

Donna Burbank

Donna is a recognized industry expert in data management with over 25 years of experience in data strategy, data governance, data modeling, metadata management, and enterprise architecture. Her background is multi-faceted across consulting, product development, product management, brand strategy, marketing, and business leadership.

She is currently the Managing Director at Global Data Strategy, Ltd., an international data management consulting company that specializes in the alignment of business drivers with data-centric technology.

In past roles, she has served in key brand strategy and product management roles for several of the leading data management products in the market.

As an active contributor to the data management community, she is a long time DAMA International member, contributor to the DMBOK 2.0, Past President and Advisor to the DAMA Rocky Mountain chapter, and was awarded the Excellence in Data Management Award from DAMA International.

She has worked with dozens of Fortune 500 companies worldwide in the Americas, Europe, Asia, and Africa and speaks regularly at industry conferences. She has co-authored several books and is a regular contributor to industry publications. She can be reached at donna.burbank@globaldatastrategy.com Donna is based in Boulder, Colorado, US.

DATAVERSITY Data Architecture Strategies

This Year's Lineup

- **January**   Trends in Data Architecture
- **February**   Building a Data Strategy - Practical Steps for Aligning with Business Goals
- **March**   Building the Right Architecture for Analytics & Reporting
- **April**   Data Architect vs. Data Engineer vs. Data Scientist – Making Sense of Roles in Today's Data-Centric Organization
- **May**   Master Data Management - Aligning Data, Process, and Governance
- **June**   Where Data Models Fit in Today's Modern Data Architecture
- **July**   Data Architecture vs. Enterprise Architecture
- **August**   Data Quality Best Practices (with guest Nigel Turner)
- **September**   Modern Data Architecture: Practical Options for Today's Data-Driven Organization
- **October**   Best Practices in Metadata Management
- **December**   The Business Value of Data Modeling

What We'll Cover Today

- Developing a **Data Strategy for your organization can seem like a daunting task – but it's worth the effort**.

- **Getting your Data Strategy right can provide significant value, as data drives many of the key initiatives in today's marketplace**, from digital transformation to marketing, customer centricity, population health, and more.

- This webinar will help **demystify Data Strategy and its relationship to Data Architecture** and will provide concrete, practical ways to get started.

Strategy

A Structured Approach to Data Strategy: Getting Key Questions Answered

DATA **ARCHITECTURE** STRATEGIES

Business Goals & Strategy	Current State Assessment	Proposed Future State	Implementation Roadmap

Business Goals & Strategy
- What are the key **business drivers** for data?
- How are **business stakeholders** affected?
- How can we **link data management to business drivers**?
- How can we **show value & ROI** from data?

Current State Assessment
- How complex is the **current data landscape**?
- What **key technical issues** impacting the business?
- How **mature** is our data management practice?
- How do we align with **industry best practices**?

Proposed Future State
- How do align the **people, process and technology** to enact change?
- What is the **right data architecture** pattern for us?
- What **tools and technologies** do we need?
- How do we design our **Data Governance Framework**?

Implementation Roadmap
- **What do we do next**?
- How do **we plan for the long-term, via "quick wins"** along the way?
- How do we **change the culture** to support data?
- How do we promote data projects through **marketing & communication**?

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The Rise of the Data-Driven Business

Data, more than ever, is seen as a key business asset and strategic differentiator.

Business Optimization vs. Business Transformation

Digital Transformation is transforming business

Business Optimization
Becoming a Data-Driven Company

- Improving Efficiency
  - Reduce Redundancy
  - Eliminate Manual Effort
- Growing Revenue
  - Improved Marketing Campaigns
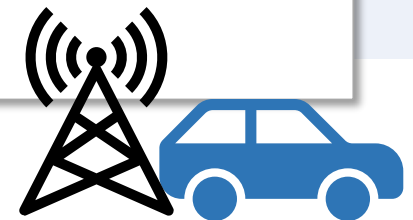 - Data-driven Product Development
- Etc.

How do we do what we do ***better****?*

Business Transformation
Becoming a Data Company

- New Business Models
  - Data is the product
  - Monetization of information
- Digital Transformation
  - New Business Models
  - Data is the Business
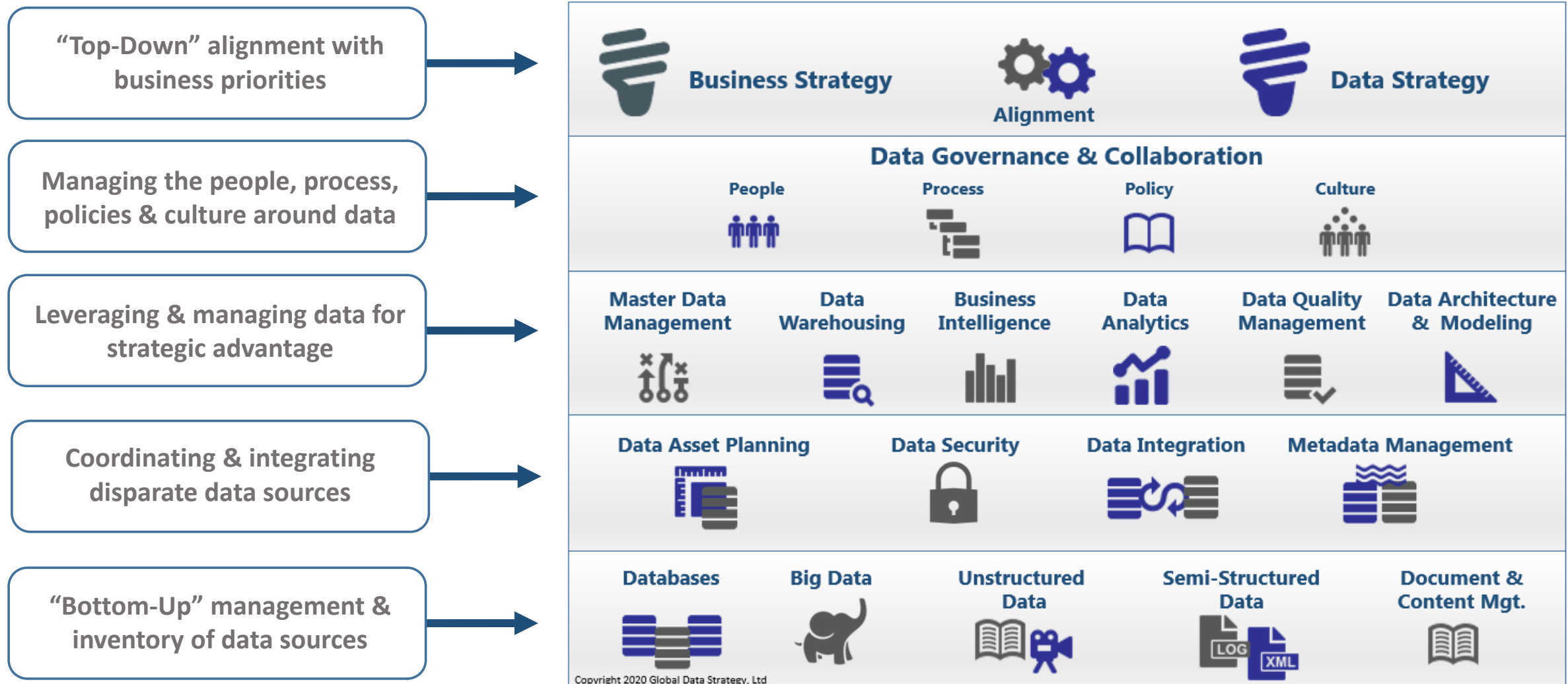- Etc.

How do we do something ***different****?*

# Business & Data Strategy – the Interdependency

Business Strategy

Informs & Guides

Data Strategy

Informs & Guides
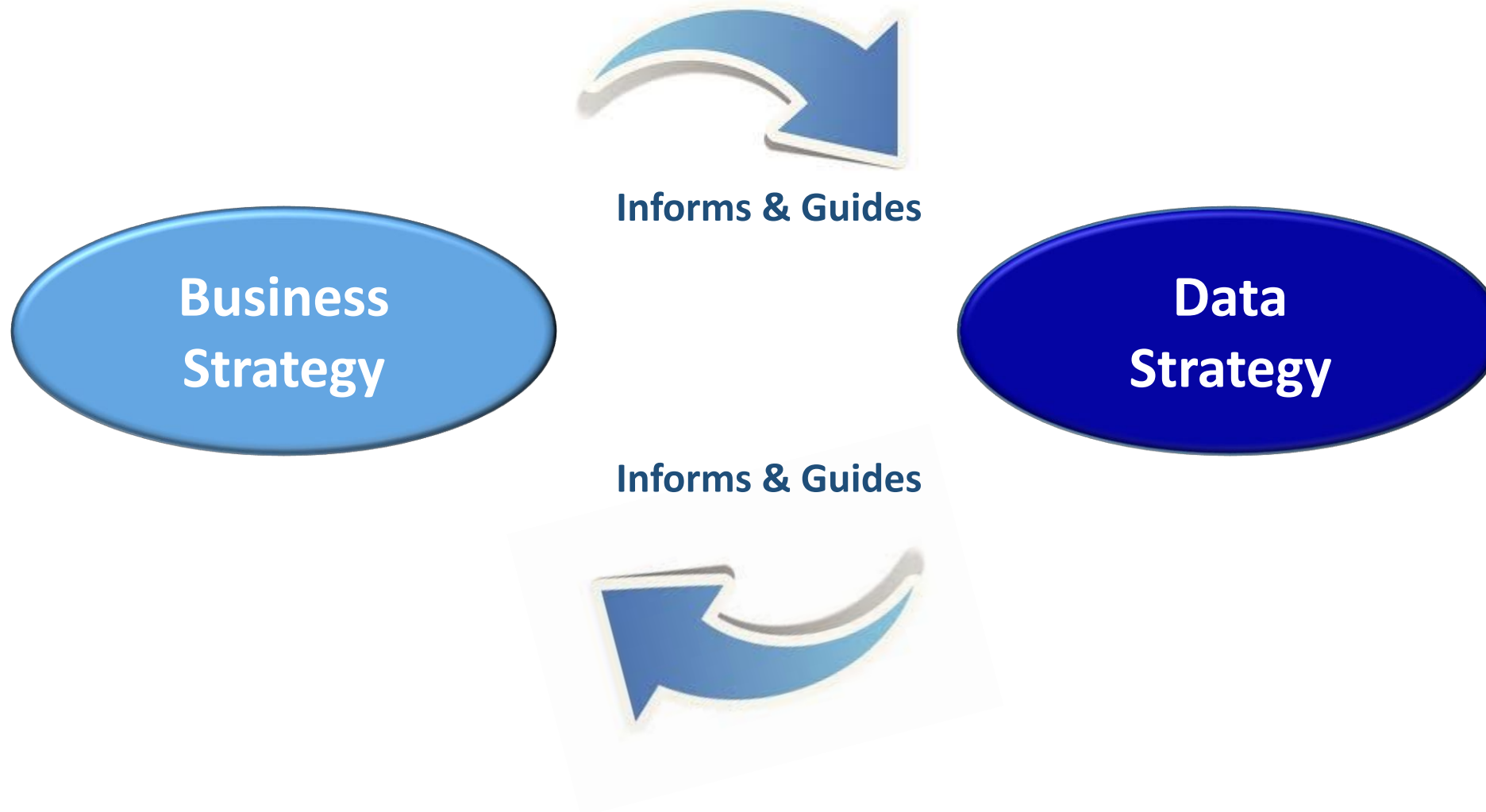
Aligning Business and Data Strategy

A Successful Data Strategy links Business Goals with Technology Solutions

"Top-Down" alignment with business priorities

Managing the people, process, policies & culture around data

Leveraging & managing data for strategic advantage

Coordinating & integrating disparate data sources

"Bottom-Up" management & inventory of data sources

Business Strategy   Alignment   **Data Strategy**

Data Governance & Collaboration
People   Process   Policy   Culture

Master Data Management   Data Warehousing   Business Intelligence   Data Analytics   Data Quality Management   Data Architecture & Modeling

Data Asset Planning   Data Security   Data Integration   Metadata Management

Databases   Big Data   Unstructured Data   Semi-Structured Data   Document & Content Mgt.

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DATA ARCHITECTURE STRATEGIES

"Offense" vs. "Defense"

Which style of data strategy fits your organization?

Offense
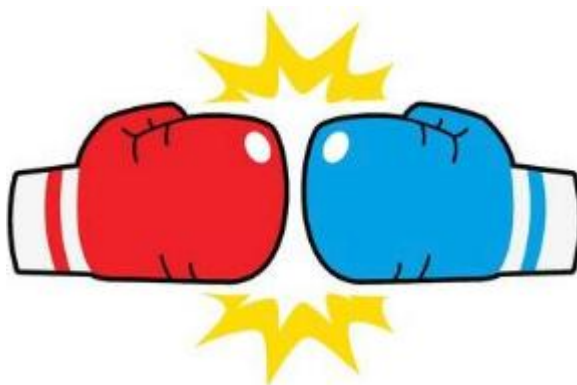
- Focused on Creating Opportunity
  - Improving Profitability
  - Increasing Revenue
  - Improving Customer Satisfaction
  - Competitive Advantage

Defense

- Focused on Reducing Risk
  - Compliance & Regulation
  - Avoiding Audits or Fines
  - Fraud Detection
  - Security & Privacy

**On which end of the spectrum is your organization?**

Making the Business Case

While Business Cases and ROI Calculations can be complex, they generally fall into 4 categories:

Decreasing Costs

- **Wasted Labor costs due to manual efforts**
  (Data cleansing, manual integration, etc.)

- **Inefficient business processes for data management**
  (Product Master Data process)

- **Data quality cost avoidance**
  (Wasted mailings sent to wrong address)
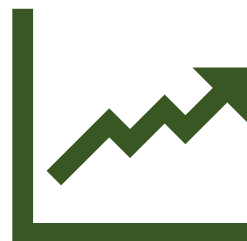
Increasing Revenue

- **Price Optimization through Analytics**

- **Improved Marketing Campaigns through Quality Customer Data**

- **Data-Driven Recommendation Engines to enhance the sales cycle.**

- **Better Grant writing through data-driven needs analysis**
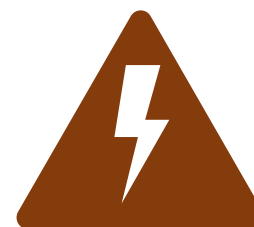
Reducing Risk

- **Industry regulations**
  (GDPR, HIPAA, BCBS 239, Spice, etc.)

- **Product Traceability**
  (Food lineage from farm/catch)

- **Litigation due to Data Breach**

- **Health and Safety Audit**

Protecting Reputation

- **Customer Satisfaction**

- **Brand Trust**

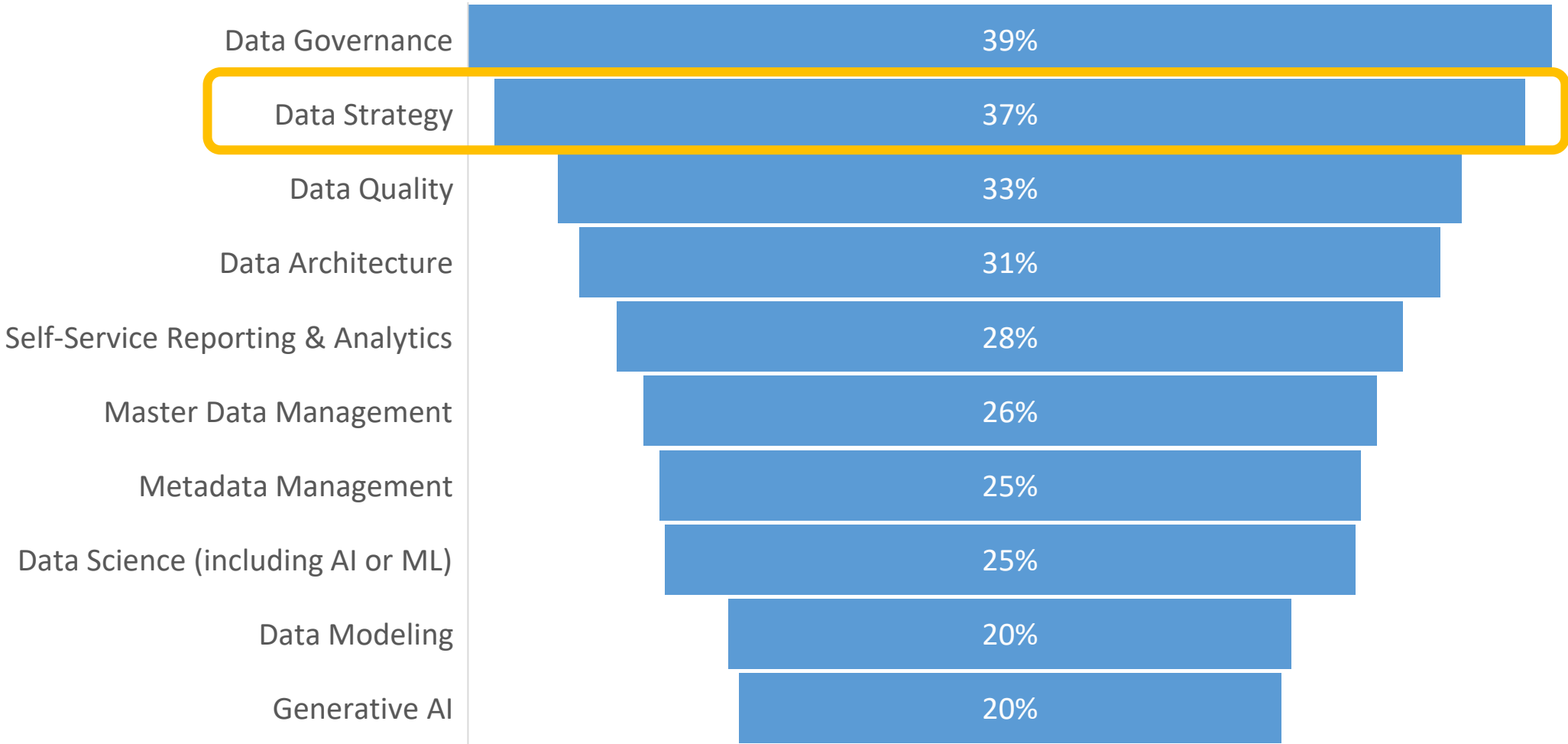- **Social Media Voice of Consumer**

- **Loyalty & 'Stickiness'**

Include the Risk of Doing Nothing

- There is significant cost and risk in the status quo
- Doing nothing often has a higher cost than investing in data management.
- Make sure to include the "do nothing" option in your analysis.

Data Strategy is a Priority for Organizations

Which Initiatives Are You Looking to Implement in the Next 1-2 Years? - Top 10

(Select All That Apply)

Initiative	Percentage
Data Governance	39%
Data Strategy	37%
Data Quality	33%
Data Architecture	31%
Self-Service Reporting & Analytics	28%
Master Data Management	26%
Metadata Management	25%
Data Science (including AI or ML)	25%
Data Modeling	20%
Generative AI	20%

From Trends in Data Management 2024, a DATAVERSITY Report, by Donna Burbank and Michelle Knight

Applying a Structured Data Governance Framework

Mapping Organizational Capability for Data Governance

- Organizational Capability, Organizational Structure, and Roles are key to any Data Strategy

Aligning to Organizational Capabilities
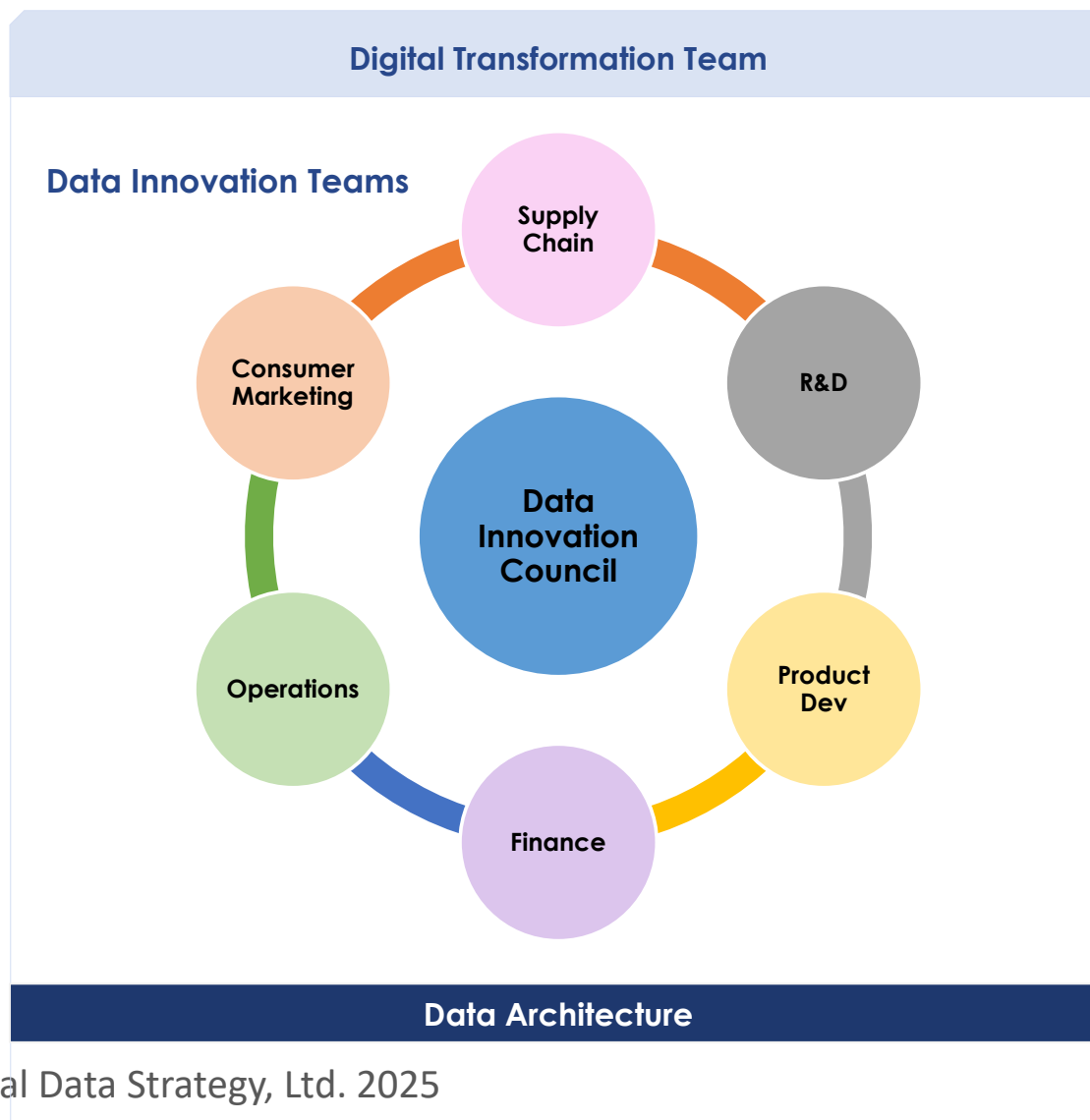**e.g. From Plan to Production to Sales & Distribution**

Designing Org Structures for Data-Centric Efforts
e.g. Aligning Data Governance to Individual Culture
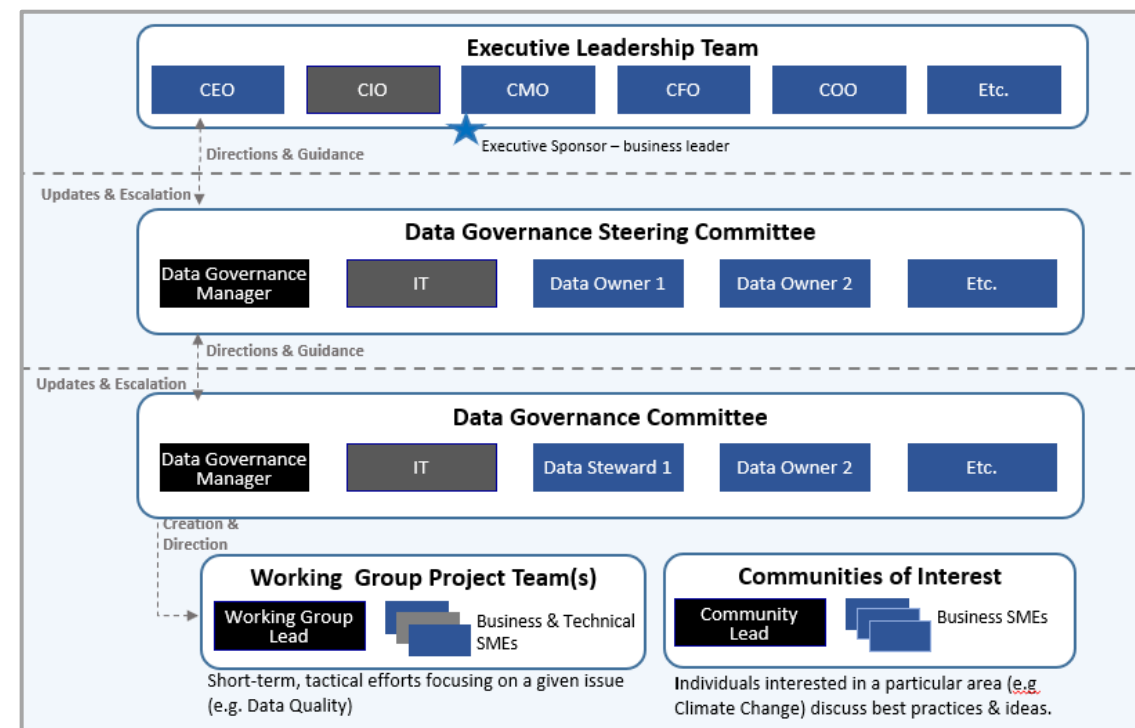
No "One Size Fits All" Data Governance Approach

Federated Approach with Agile Development Lifecyle
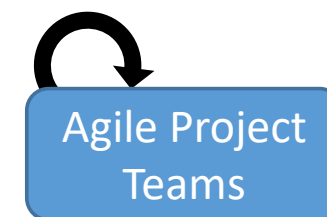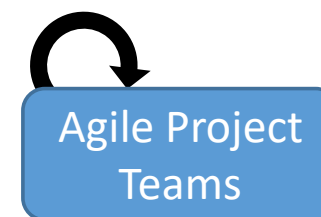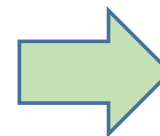
Designing the Right Architecture – Fit for Purpose Solutions

Data Platform Evolution

Data Technology & Platforms continue to evolve

There are a wide range of database technologies to choose from:

- Relational Databases (on-premises & Cloud)
- Graph databases
- NoSQL databases
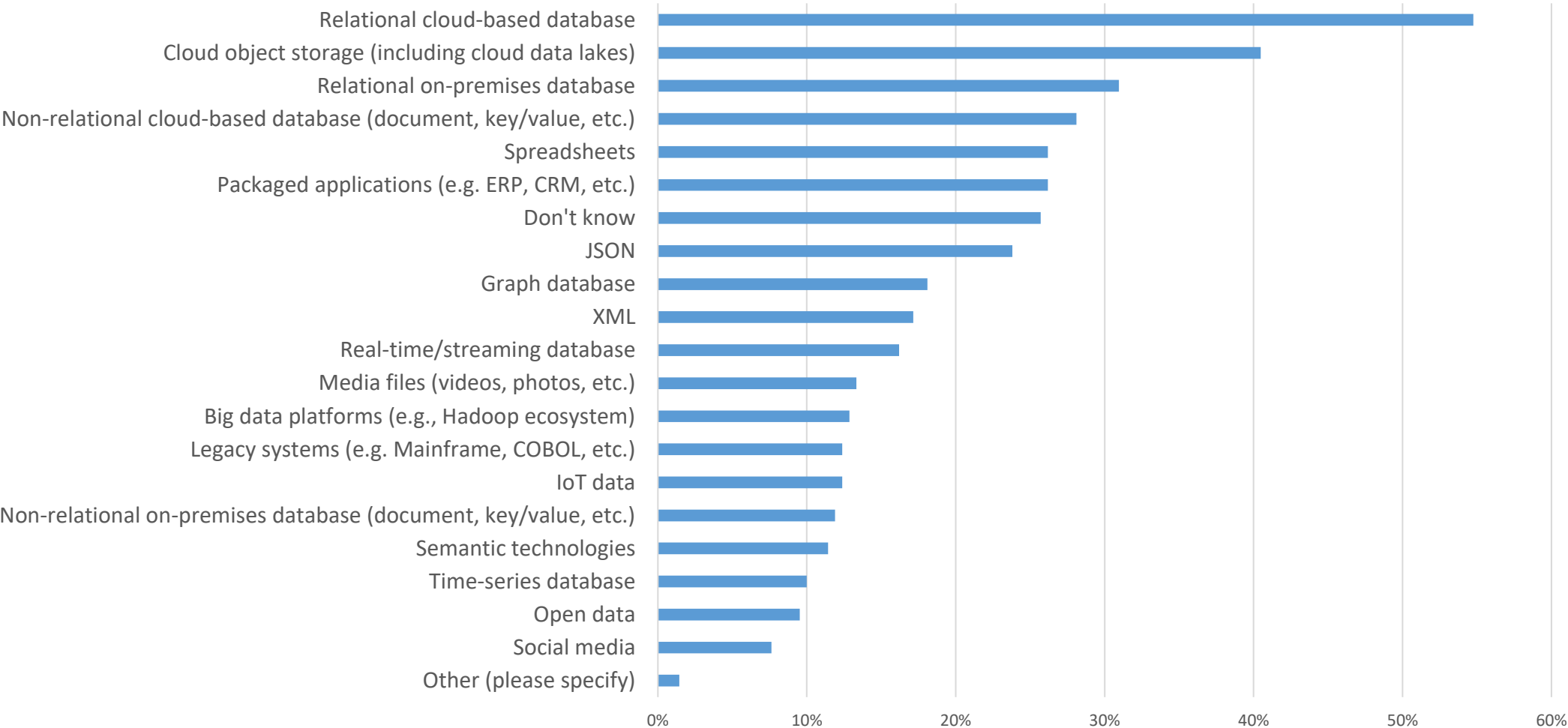- Big Data …. and more

According to a recent survey of global organizations[1]:

- **69%** are using relational databases on-premises
- **67%** are using cloud-based relational databases.
- **66%** are using spreadsheets as a data platform *(!?)*
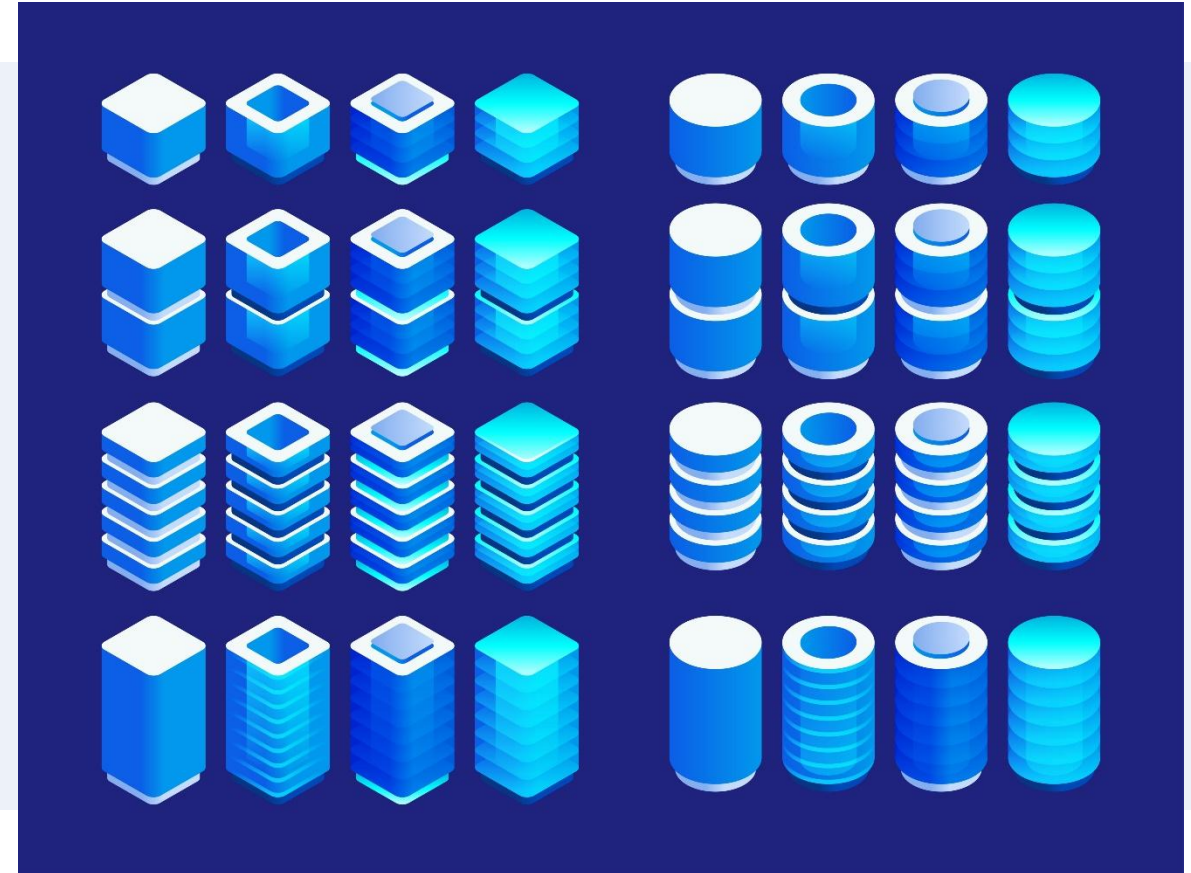
While relational databases remain the leading platform, new technologies are being added to the mix.

Based on research from a 2024 DATAVERSITY survey on "Trends in Data Management" by Donna Burbank and Michelle Knight

Top Data Platforms Planned in Future (2025-2026)

Which of the following data platform/data storage technologies do you plan to use in the next 1-2 years? (select all that apply)

From Trends in Data Management 2024, a DATAVERSITY Report, by Donna Burbank and Michelle Knight

Enterprise Data Management
Part of a Data Strategy is Defining Fit for Purpose Solutions

DATA ARCHITECTURE STRATEGIES

Operational Data

CRM — Customer X orders Product Y at 2pm on Oct 24, 2017 — Sales

CRM — Customer X calls Support at 1pm on Nov 1, 2017 — Customer Care

ERP — Inventory consists of x number of Product X components on Oct 24, 2017 — Supply Chain

Product Team

IoT — Customer turns on foot warmer at 11pm on Oct 30, 2017 — Customer

Reporting & Analytics

Enterprise Historical Reporting
DW — What were total sales for Product X in 2016 by region? — ELT Managers

Analytics & Discovery
Lake — What variables most influence customer repeat purchases? — Analytics Team

Operational Reporting
CRM & other systems — How many support calls are currently open? — Managers

Limited Personal Use
Limited ad hoc analysis for small data sets.

Excel / Access / SAS

❌ Not recommended for enterprise data management.

Master & Reference Data

"Golden Record" for Customer, Product, etc.
UCM / UPM — Mary Smith lives on 101 Main ST, Detroit, MI and has been a customer since 2011

Product 720 has a product code of SS720 & a suggested retail price of $11,000 USD. — Applications — DW Etc

Reference Data
Valid Return Codes are "X, Y, & Z" State Codes include MA, MD MI … — DW Etc

Hierarchies
The Sales management reporting hierarchy is structured as follows. — DW Etc

Metadata

Business & Technical Context & Descriptions

Business Glossary — How is Total Sales calculated? What is a Qualified Lead? — Business Users / Developers

Data Models — How do we uniquely identify a customer? Can a customer have more than 1 email? — Business Users / Developers

Data Dictionary — What is this DW table used for? The standard length for customer ID is CHAR(12) — Developers

Data Lineage — How was this field calculated? What will break downstream if I make a change? — Developers

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Find a Balance in Implementing Data Management
Focus on Business Value

- Find the Right Balance
  - Data Management projects can have the reputation for being overly "academic", long, expensive, etc.
  - No architecture at all can cause chaos.
  - When done correctly, Data Management helps improve efficiency and better align with business priorities

Too Academic, nothing gets done

Business Value

Too "Wild West", nothing gets done - chaos
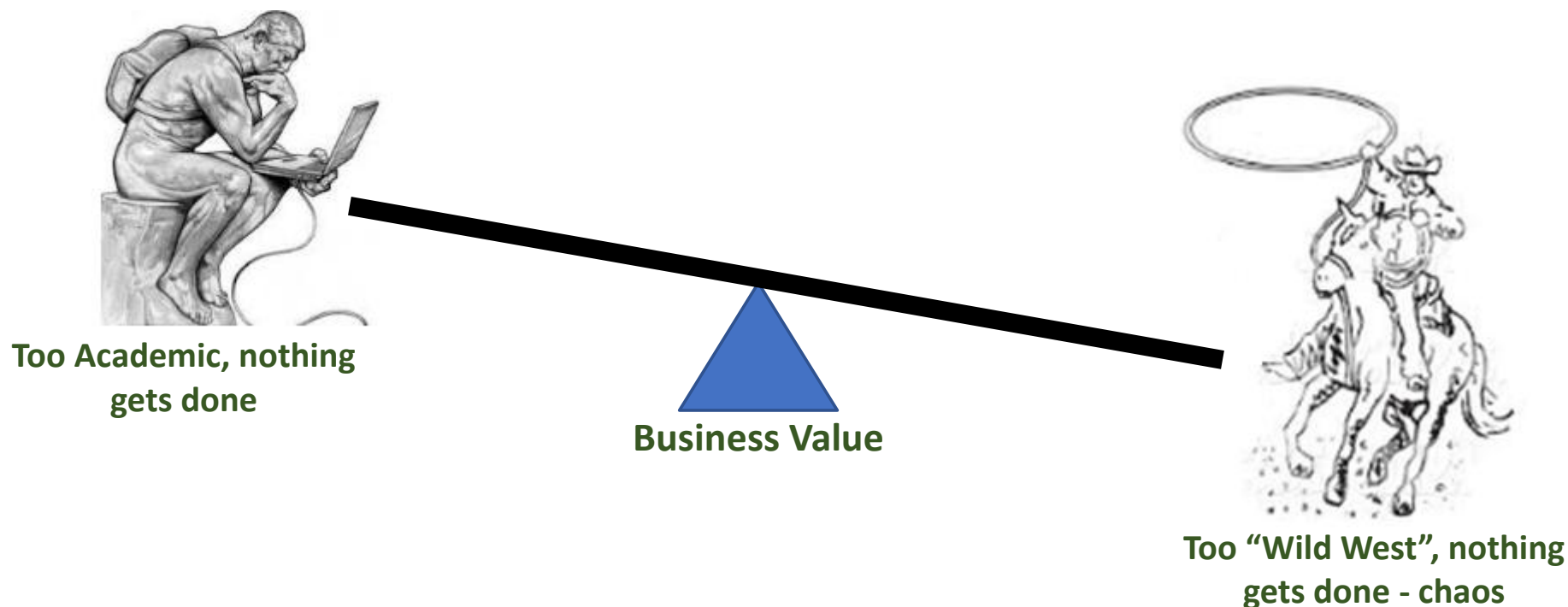
Building the Roadmap – Making Sense out of Chaos

Building Blocks to an Effective Roadmap

Why?

What are the key business drivers?

Think both "Offense" & "Defense"

Who?

Who are the key stakeholders who will benefit?

Who are the Data Stewards who can be "discovered" in the organization?

When?

When will you roll this out?

What is the timing and cadence or actions and deliverables?

Are there other key initiatives it's important to align with?

How?

How will you organize the Data Governance team(s)?

What Data Architecture will you put into place?

What?

What data needs to be managed?

Is this structured or unstructured?

Real-time or batch?

Data Lake and/or Warehouse – or Fabric?

Tell the Story – Explain Vision and the Journey to Get There

- Storytelling and vision-building is a key part to any strategy.

  - Build a sense of excitement

  - Provide a vision for what the future will look like

  - Show the journey and the effort required

  - Explain the steps to achieve the journey

  - Clarify everyone's role in the journey – where do they fit, and what skills do they need?

# Assess Organizational Maturity

- Perform a realistic maturity assessment of the organization's data management capabilities:

  - Current state by discipline

  - Future Goals

  - Gaps that need to be filled

Current vs. Target Maturity

—— Current State —— Future Maturity

1. Strategy
2. Data Governance & Collaboration
3. Master Data Management
4. Data Warehousing
5. Business Intelligence
6. Data Analytics
7. Data Quality
8. Data Architecture & Modeling
9. Data Asset Planning & Inventory
10. Data Compliance & Security
11. Data Integration
12. Metadata Management

Global Data Strategy's Data Management Maturity Assessment

Find Your "Quick Wins"

- It's important to show early value for the Data Strategy effort

- … and continue to deliver iterative value over time.
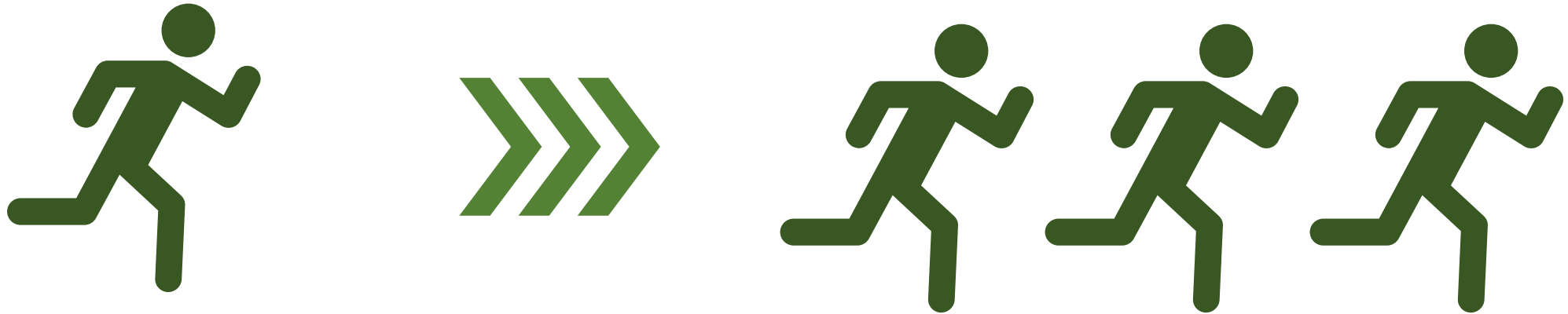
A "Quick Win" is Not a "Quick Fix"

A Quick Win is not a sloppy, "quick fix" that will not scale for future use.

A Quick Win is well-planned first step to build a strong foundation for future efforts.

NO

YES

A Roadmap is Not a Laundry List

- A common error is to create a roadmap that reads like a "Laundry List" of activities

  - Create "themes" for each stage that tie into the vision

  - Call-out "quick wins" and value for each activity

  - Consider the WIIFM – what do key stakeholders care about?

Implementation Roadmap

Define Roadmap & Staffing for Executing the Strategy

- Define your roadmap with key activities timed to align with key business initiatives.
- Align with necessary staffing and training.

Implementation Roadmap for Key Activities by Functional Area
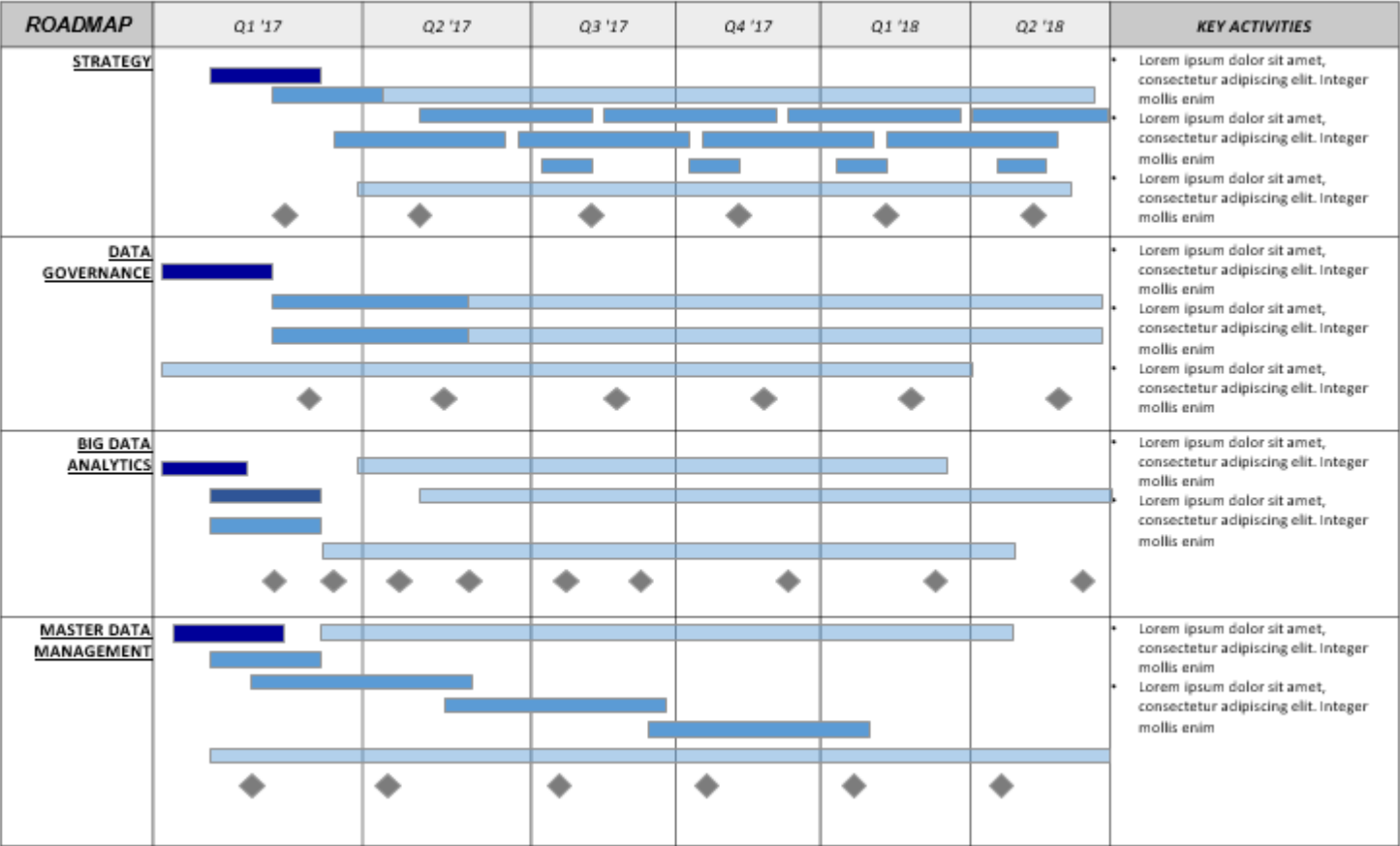
Staffing & Training Recommendations

'Culture eats strategy for breakfast.'

Peter Drucker, Management Strategist & Consultant
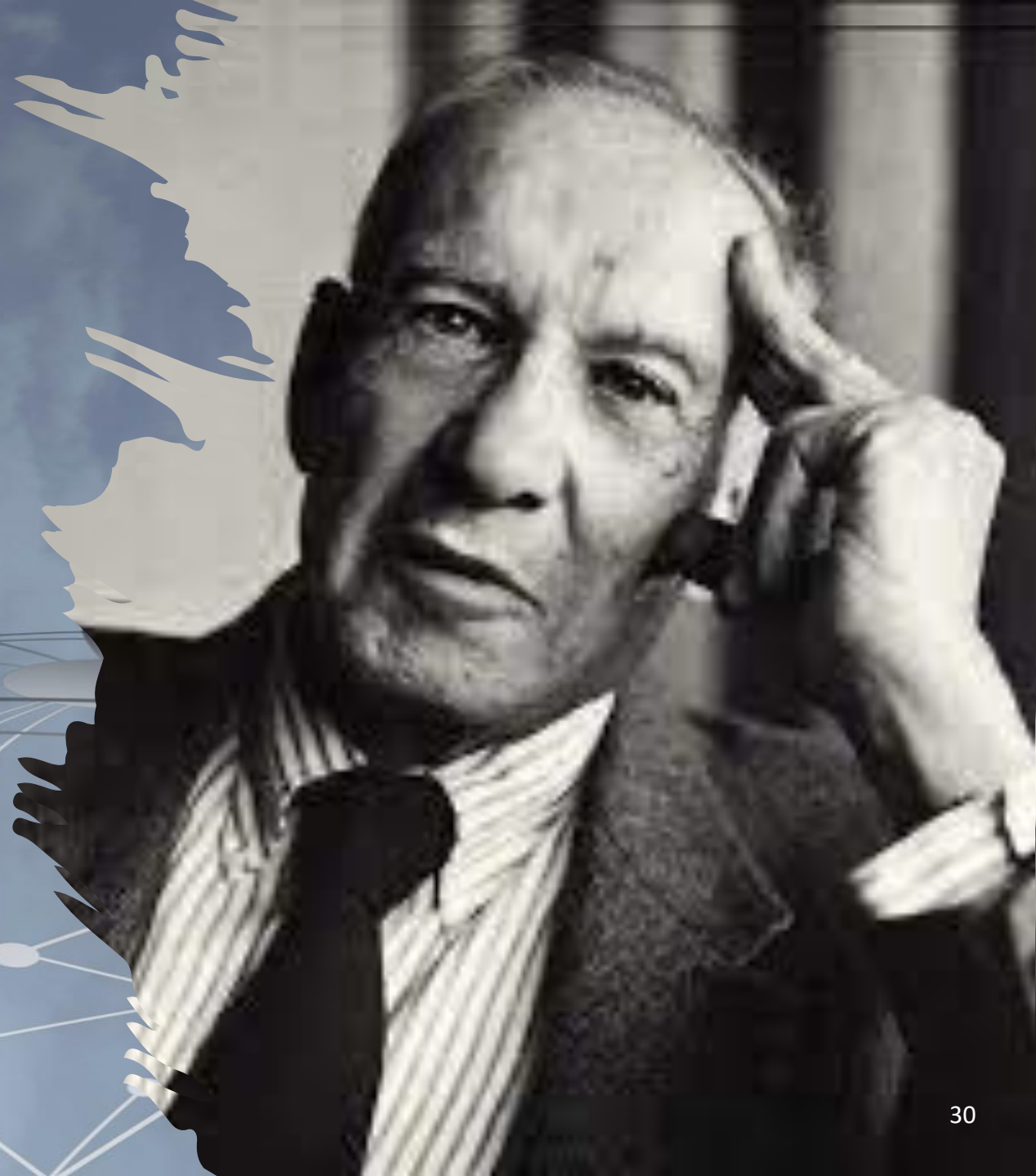
Organizational Culture and Organizational Change Management

Organizational Culture:

> "Organizational culture is the personality of the organization". [1]

Organizational Change Management:

> Organizational change refers to the actions in which a **company or business alters a major component of its organization, such as its culture**, the underlying technologies or infrastructure it uses to operate, or its internal processes.
>
> Organizational change management is the method of leveraging change to bring about a successful resolution.   - Harvard Business School
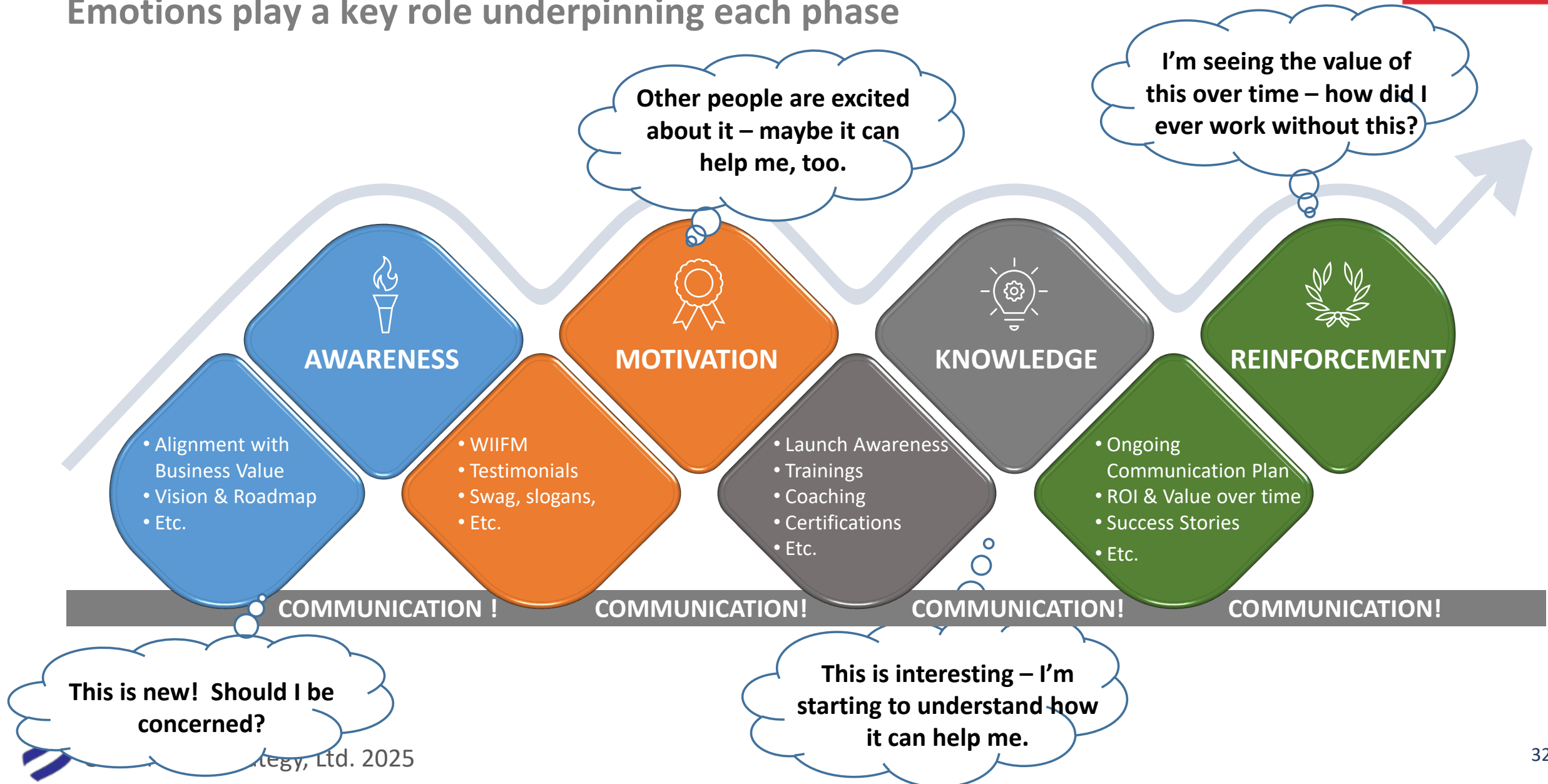
[1] https://managementhelp.org/organizations/culture.htm

Organizational Change Happens at Three Levels

An organizational move to a future state requires individuals to reach their own future state

Data Strategy directly impacts the culture of an organization

"IN WHAT WAYS ARE MY CURRENT RESPONSIBILITIES AFFECTED"?

"WHO ARE THE IMPACTED GROUPS AND HOW DO WE SUPPORT THEM"?

"HOW DO WE SUCCESSFULLY ACHIEVE LARGE SCALE TRANSFORMATION"?

INDIVIDUAL

Enable people's success by supporting them through the dimensions of change

PROJECT

Increase outcomes and ROI by integrating activities into the project plan that help prepare, manage, and reinforce change and results in adoption and usage

ORGANIZATION

Affect culture changes in the enterprise by embedding Change Management into every Data Governance initiative

"The achievements of an organization are the results of the combined effort of each individual".
Vince Lombardi

Reference PROSCI for methodology content

Garnering Excitement - Engage Marketing & Branding

- It's beneficial to engage with your internal Marketing organization and/or an external agency
- Include a number of activities and materials in your communication and marketing plan. Here are a few ideas:

  - Video Testimonial from users/stakeholders
  - Executive sponsor video
  - Lunch and learn sessions
  - Roadshows
  - Training sessions
  - Newsletters
  - Website for data initiative

  - Data initiative slogan
  - "Swag" – t-shirts, stickers, mugs, etc.
  - Posters
  - Badges and awards

Avoid Data Jargon – use Business Language!

What do you think is the biggest fear of change that you'll face?

What would be the biggest excitement/opportunity driver?

A Structured Approach to Data Strategy: Getting Key Questions Answered

DATA ARCHITECTURE STRATEGIES

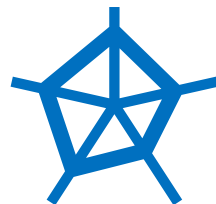| Business Goals & Strategy | Current State Assessment | Proposed Future State | Implementation Roadmap |

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Summary

- **Aligning Data Strategy with business drivers** & goals is key to success

- Orchestrate the people, process, technology, & culture required through a robust **Data Governance** program.

- Define a right-sized **Data Architecture** to manage technological change

- **Your roadmap should tell a story** and show an evolution from the current state.

- **Culture building and organizational change** are critical to success

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Who We Are: Business-Focused Data Strategy
Maximize the Organizational Value of Your Data Investment

In today's business environment, showing **rapid time to value** for any technical investment is critical.

But technology and data can be complex. At Global Data Strategy, **we help demystify technical complexity** to help you:

- Demonstrate the ROI and **business value of data.**

- Build a data strategy **at your pace to match your unique culture** and organizational style.

- Create an **actionable roadmap for "quick wins"**, which building towards a long-term scalable architecture.

Global Data Strategy shares experience from some of the largest international organizations scaled to the pace of your unique team.

Global Data Strategy has worked with organizations globally in the following industries:

Finance · Retail · Social Services · Health Care · Education · Manufacturing · Government · Public Utilities · Construction · Media & Entertainment · Insurance …. and more

?

Thoughts? Ideas?
Questions?

40