



What Does it Mean to Be a Data-Driven Organization?

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Global Data Strategy, Ltd.
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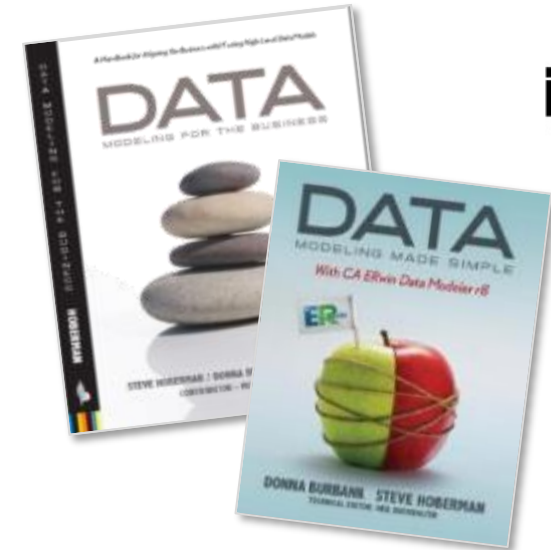
Donna is a recognized industry expert in data management with over 25 years of experience in data strategy, data governance, data modeling, metadata management, and enterprise architecture. Her background is multi-faceted across consulting, product development, product management, brand strategy, marketing, 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** Emerging Trends in Data Architecture – What's the Next Big Thing?
- **February** Building a Data Strategy - Practical Steps for Aligning with Business Goals
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- **August** Data Quality Best Practices (with Nigel Turner)
- **September** Best Practices in Metadata Management
- **October** Enterprise Architecture vs. Data Architecture
- **December** The Business Benefits of Data Modeling



What We'll Cover Today

- There is a lot of buzz in the industry about the benefits of becoming a **data-driven organization**.
- **What does data-driven mean for various industries** from for-profit to non-profit firms?
- **What roles make sense in a data-driven organization**, and what are the benefits that working together to increase data literacy can achieve?
- This webinar discusses **how a modern Data Architecture can support the data-driven organization**.

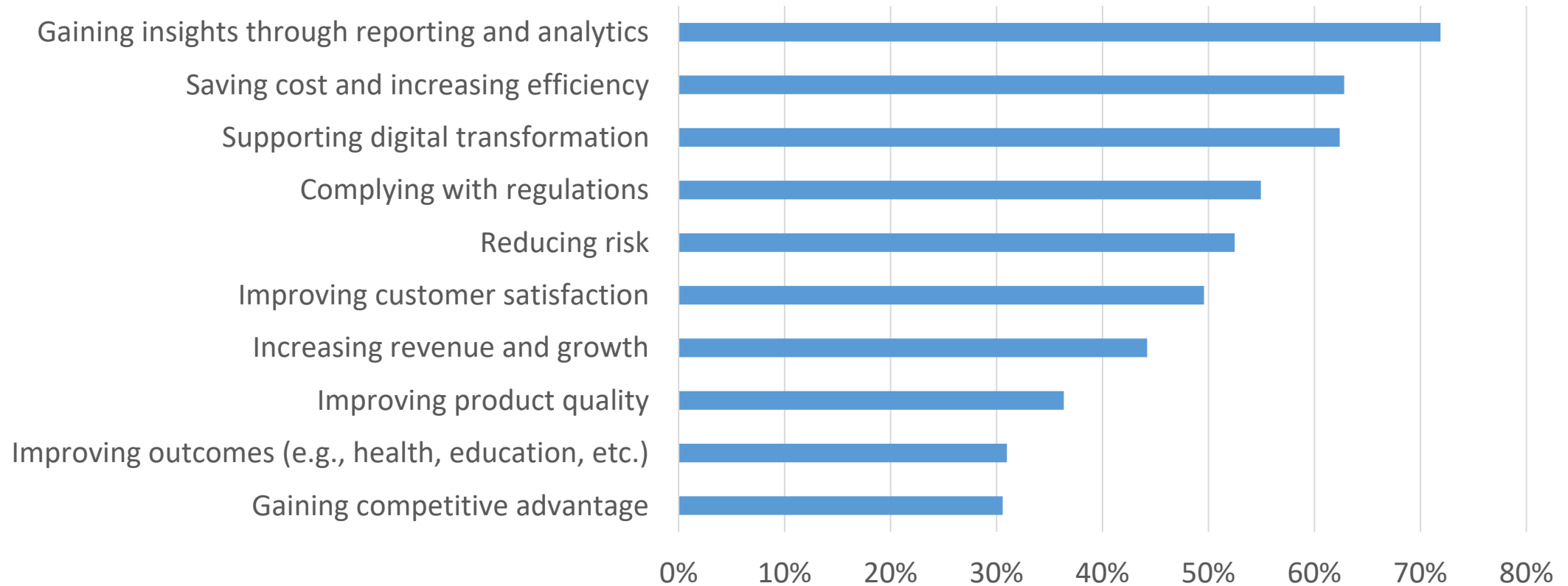


Business Goals for Data Management

Key Business Drivers include both Analytic and Operational Use Cases.

What are Your Main Business Goals & Drivers for Implementing Data Management in Your Organization?

(Select all that apply)

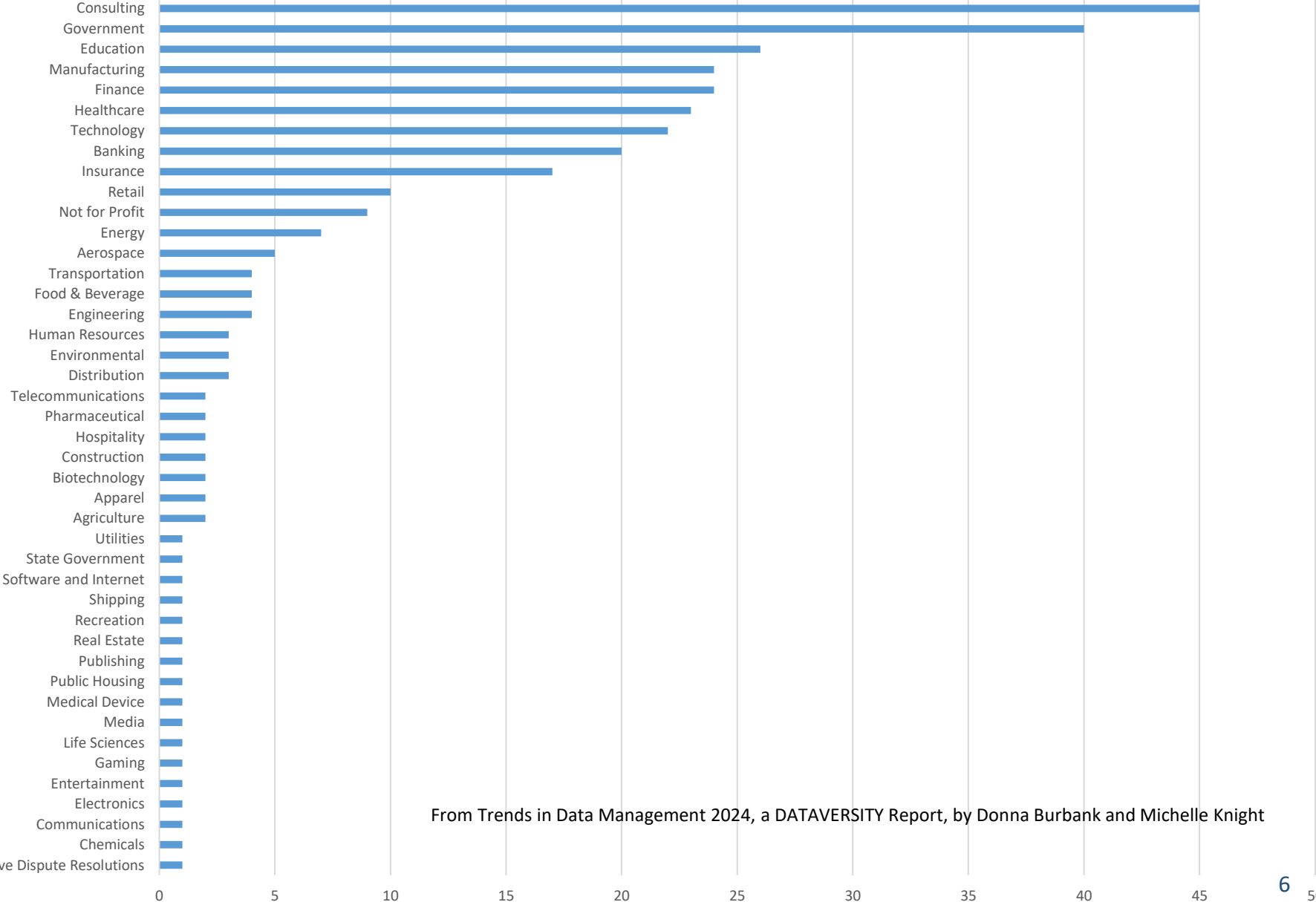


What Industries Are Data-Driven?

All of the Cool Kids Are Doing It!



What Industry Are You In?



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

Key Factors in Data-Driven Business Optimization

Business Optimization Drives Value the Following Areas:



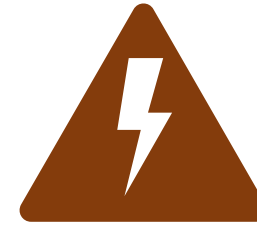
Decreasing Costs

- **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'**

Retail

- **Business Intelligence Dashboarding**
 - Customer Spend by Region
 - High Spend Customers
 - Profitability Analysis Over Time
 - Top Used Product Features
- **Advanced Analytics**
 - Market Basket Analysis
 - Suggestion Engines
 - Footfall Analytics
- **Master Data Management**
 - Product Catalog / Hierarchies
 - Customer
 - Supplier
 - Location



Transportation

- **Business Intelligence Dashboarding**
 - Driver Costs
 - Route Efficiency
 - Revenue per Route
 - Customer Spend by Haul Type
- **Advanced Analytics**
 - Employee Turnover Predictive Models
 - Predictive Maintenance
- **Real-time streaming**
 - Vehicle Speed
 - Location Tracking
- **Master Data Management**
 - Vehicle
 - Driver
 - Route



Social Services

- **Business Intelligence Dashboarding**
 - How many individuals are we serving?
 - What are the demographics of our clients?
 - What is the cost per service?
 - Top Donors by year
- **Advanced Analytics**
 - What is the impact of our services over time?
 - Forecasting for future service usage
- **Master Data Management**
 - Client / Individual
 - Family
 - Service
 - Staff



Higher Education

- **Business Intelligence Dashboarding**
 - How many students are we serving?
 - Cost per facility
 - Enrollment by discipline
- **Advanced Analytics**
 - What factors influence academic success?
 - Which are the predictive factors that influence enrollment from high school?
- **Real-time streaming**
 - Cell Phone Alerts
 - Footfall Analytics
- **Master Data Management**
 - Student
 - Course
 - Location
 - Faculty



Manufacturing

- **Business Intelligence Dashboarding**
 - Top Suppliers by Quality / Defects
 - Production Line Productivity Rate
 - Top Output per Employee
- **Advanced Analytics**
 - Predictive Maintenance
 - “Next Best Action” for Operational Efficiency
- **Real-time streaming**
 - Production Monitoring
- **Master Data Management**
 - Part
 - Component
 - Product
 - Supplier
 - Customer

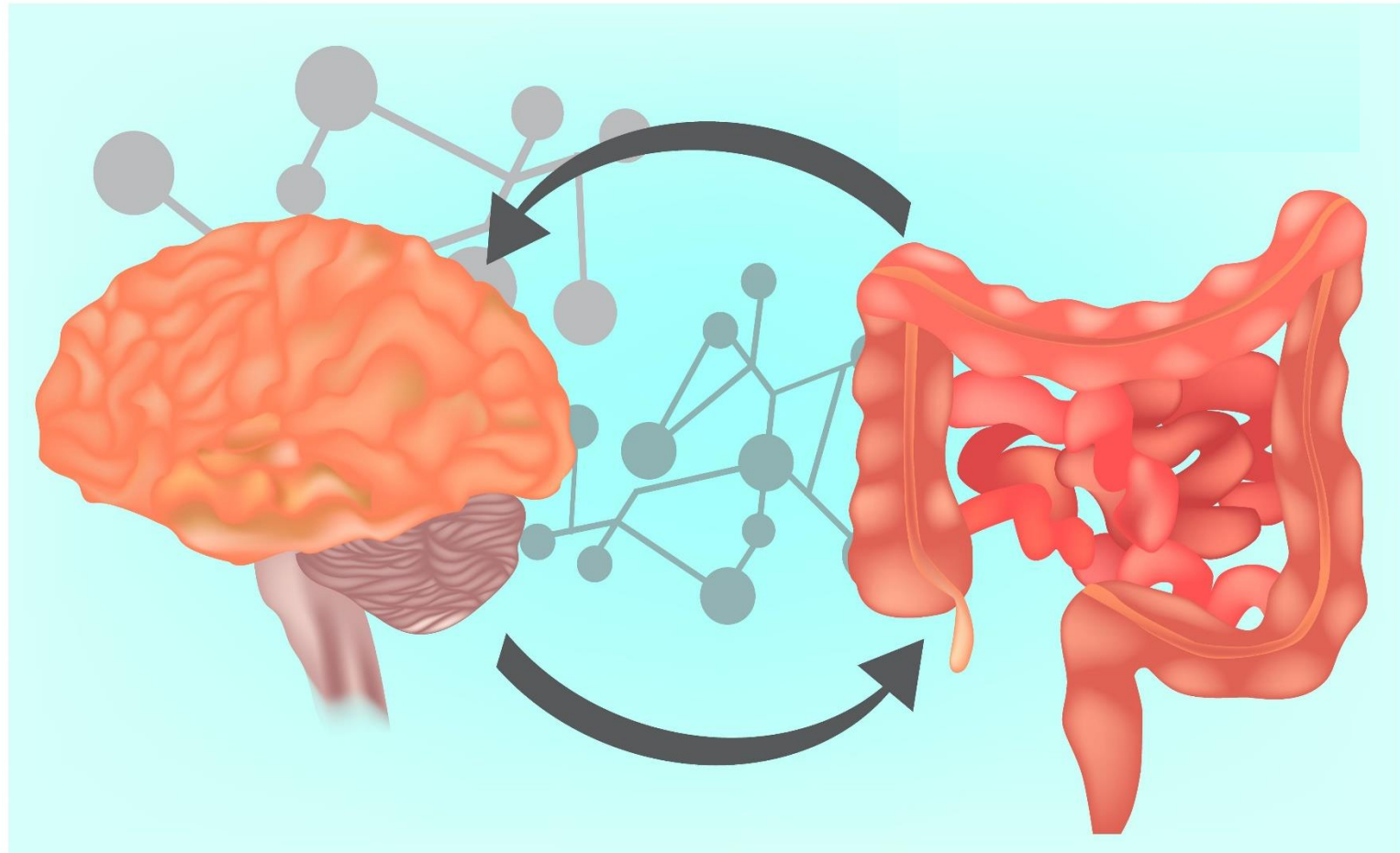


Data-Driven vs. “Going with Your Gut”

Have You Heard ...

- “I just know my customers”
- “Don’t tell me how to run my business”
- “I’ve been doing this for 20 years – I don’t need a dashboard to tell me what to do”

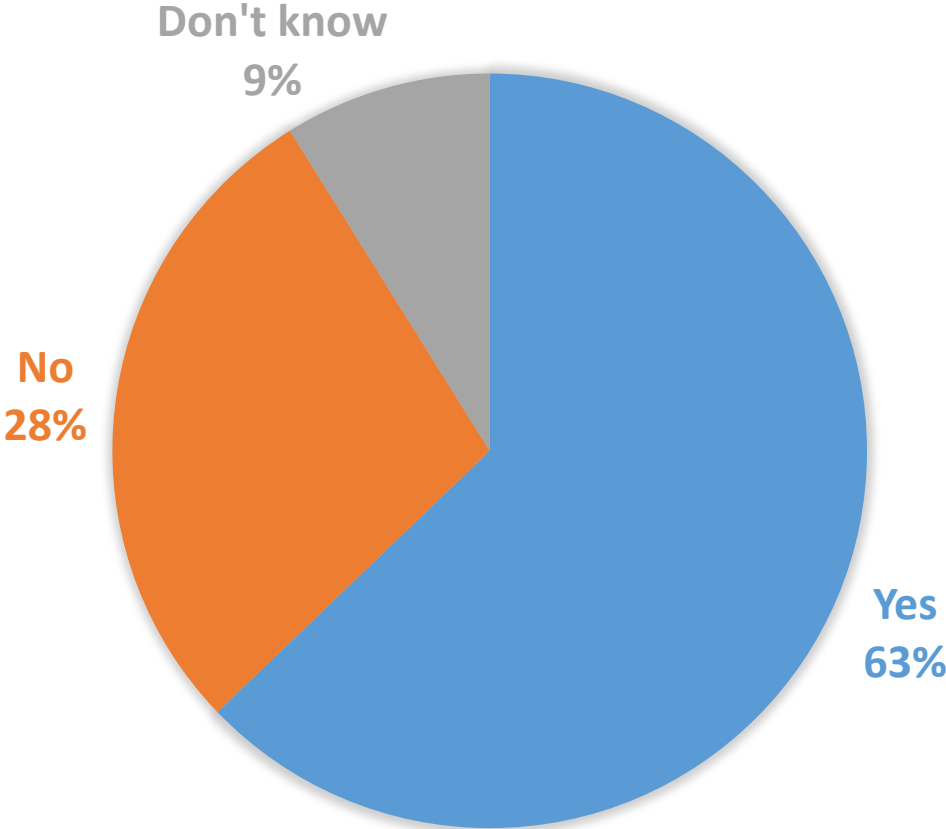
- “I don’t trust the data”
- “That doesn’t feel right”
- “That’s not the calculation/definition I use ... “



Data As a Corporate Asset

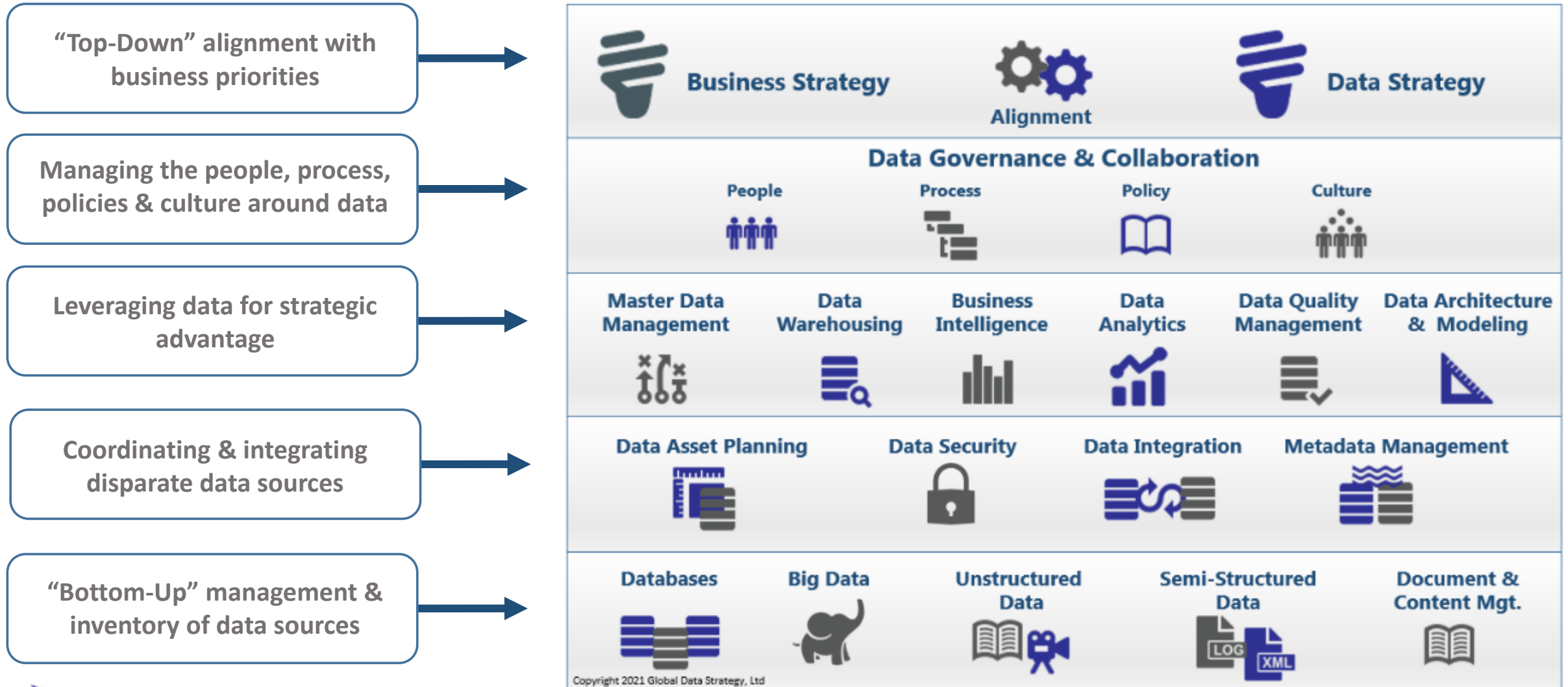
Survey Results

Does Your Organization Treat Data as a Corporate Asset?



Aligning Business Strategy with Data Strategy

A Successful Data Strategy links Business Goals with Technology Solutions



Data Roles: Business-Led, Tech-Supported

A Successful Data-driven Organization is Business-led, Tech Supported

Data Owners & Data Stewards are the decision-makers and key consumers of data



- Accounting
- Sales
- Supply Chain
- Etc...

“The Business”



- Driver

“The Business”



- Teacher

“The Business”



- Plant / Assembly Operator

“The Business”



- Chef / Menu Designer

“The Business”

These roles need a strong data foundation to support them, enabled by a data-centric technical team.

Data Roles: Business-Led, Tech-Supported - Analytical



“The Business”



Self-Service Reporting

Reporting & Analytics



Business Intelligence Reporting



Data Scientist

Business Requirements & Architecture



Data Analyst



Data Architect



Metadata Manager

Technical Requirements & Architecture



Data Engineer



Data Architect



Platform Engineer

Data Roles: Business-Led, Tech-Supported – Operational



“The Business”



Business Usage & Data Input (Master Data & Operational Data)

Business Requirements & Architecture



Data Analyst



Data Architect



Business Process
Workflow Analyst



Metadata Manager

Technical Requirements & Architecture



Data Engineer



Data Architect



Application
Owner/Developer
(e.g. ERP, CRM, etc.)



Master Data Engineer
/ Tool Developer



Platform Engineer

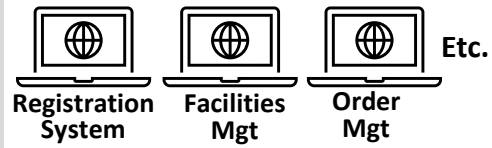
Key Components of a Modern Data Architecture



Data Catalog & Metadata Management – data lineage, data dictionary, business glossary, etc.

Operational Data

- Structured/Relational Data Storage



- Sensor Data
- Log files
- Social Media
- Video

Data Lake/ Raw Landing

- Structured Data Storage
- Unstructured Data Storage

ELT
Streaming



• Publish & Subscribe



- Core data cleansed & governed for reuse (Customer, Product, Vendor)

Structured Data Storage

- Structured format for trending over time
- Facts & Dimensions (often)

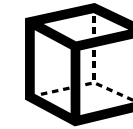
• Transformation



• Discovery & Analysis

Semantic Layer

- Business-friendly view
- Common terms & calculations
- Ability to easily “slice & dice”



Reporting

- Business Intelligence Reporting




Advanced Analytics

- AI & ML
- LLM
- Graph Relationships
- Etc...

Key Components of a Modern Data Architecture

Show me Product Sales Trends Over Time.

 **Data Catalog & Metadata Management** – data lineage, data dictionary, business glossary, etc.

Operational Data

- Structured/Relational Data Storage
 - Registration System
 - Facilities Mgt
 - Order Mgt
 - Etc.
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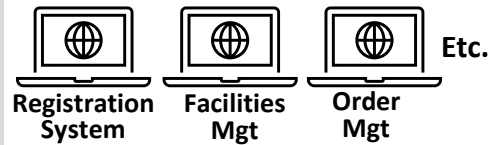
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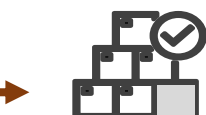
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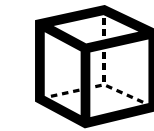
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Reporting

- Business Intelligence Reporting



Advanced Analytics

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- LLM
- Graph Relationships
- Etc...

Summary

- Organizations of all types can be Data-Driven.
- Data-driven techniques include both Analytical and Operational benefits.
- “Gut Feel” can both hamper and support a data-driven organization.
- A data-driven organization is business-led, and IT supported.
- Collaboration between business and tech roles is critical, typically enabled through data governance.



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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** to your management
- 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's 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?