

Emerging Trends in Data Architecture: What's the Next Big Thing?



Donna Burbank Global Data Strategy, Ltd. January 25, 2024



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 <u>donna.burbank@globaldatastrategy.com</u> Donna is based in Boulder, Colorado, US.





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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
March	Master Data Management - Aligning Data, Process, and Governance
• April	How do Data Governance & Data Architecture Support Each Other?
• May	The Role of the Chief Data Officer (CDO) in Business Transformation
• June	What Does It Mean to be a Data-Driven Organization?
• July	Data Architect vs. Data Engineer vs. Data Scientist – Making Sense of Roles ir Today's Data-Centric Organization
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





- With technological innovation and change occurring at an ever-increasing rate...
- ...it's hard to keep track of what's hype and what can provide practical value for your organization.
- This webinar will share the results of a recent survey on emerging trends in Data Architecture, along with practical commentary & advice.



The Research

- Each year, DATAVERSITY and Global Data Strategy partner to conduct a research survey & accompanying paper on Trends in Data Management.
- This paper provides insight on the data management trends over time and a look into the future.
- Available for free download on
 - Dataversity.net
 - Globaldatastrategy.com





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The survey had a total of 285 participants, from 35 countries, and over 25 industries.

The Rise of the Data-Driven Business





Home World U.S. Politics Economy **Business** Tech Markets Opinion Arts Life Real Estate CIO JOURNAL.

Challenges and Opportunities Confront the Data-Driven Business

Most companies capture a small fraction of their data's value



Data Management Spans a Wide Variety of Industries





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Data as a Corporate Asset



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Offense or Defense?





"Offense"

- Focus on Opportunity
- Highlight Benefits
- Growth Mindset



"Defense"

- Focus on Regulation
- Highlight Risk Reduction
- Mindset of Caution

What's Driving the Need for Data Management?



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What are your Main Business Goals and Drivers for implementing Data Management in your organization? (Select all that apply)



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What's Driving the Need for Data Management?



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Now for Some Anecdata...

Dictionary Definitions from <u>Oxford Languages</u> · <u>Learn more</u>



an·ec·da·ta

/'anək dadə, anək dādə/

noun

information or evidence that is based on personal experience or observation rather than systematic research or analysis.

"this is just anecdata, so I was pleased to find a paper that adds some rigor to my reflections"

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"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



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

On which end of the spectrum is your organization?



The Data Management Community Says...



When data management professionals at DATAVERSITY events are asked whether their organization is focused on Offense (Carrot) vs. Defense (Stick) the response is typically:

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The Role of the Data Professional in the Data-Driven Business



- In the current environment of data-driven business, Data Professionals have an opportunity to have a "seat at the table"
 - Finding new opportunities to leverage data for business benefit
 - Creating efficiencies & business process optimization
 - Integrating data from disparate sources for new business insights
 - Supporting organizational change
- Look for business opportunity ... Don't always be the "downer"...





Who is Driving Data Management in an Organization?

It Takes a Village...

Who is driving Data Management in your organization?

(Select all that apply)



The Data Governance Lead has an increasingly important role



Collaborating with a wide range of Business and Technical Roles



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From Trends in Data Management 2023, a DATAVERSITY Report, by Donna Burbank and Michelle Knight

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Data Architecture Supports Cross-Functional Collaboration





How Has a Defined Data Architecture Helped Your Organization?

■ 2022 ■ 2023



From Trends in Data Management 2023, a DATAVERSITY Report, by Donna Burbank and Michelle Knight

40%

Data Governance



Data Governance Is Widespread, but in a Lower Level of Maturity

Which of the following best describes your company's state of Data Governance?



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Top 10 Future Initiatives Planned

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Which of the Following Are You Planning on Implementing in the Next 1-2 Years?



From Trends in Data Management 2023, a DATAVERSITY Report, by Donna Burbank and Michelle Knight

(Select all that apply)

Reporting & Analytics Continue to Drive Current Adoption

Which of the Following are you Currently Implementing? (Top 10)



(Select all that apply)

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Data Warehouses, Data Lakes, and Data Lakehouses, Oh My!





Are You Implementing a Data Lake?



Top 10 Data Platforms & Sources - 2023



Which of the Following Data Sources or Platforms are you Using Today?





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Top 10 Data Platforms & Sources – 2024-25



Which of the Following Data Sources or Platforms are you planning on using in the next 1-2 years? (Select all that apply)





So...What's the "Next Big Thing?" - Fundamentals Still Apply





- Gaining Insights through Reporting & Analytics
- ... supported by Data Governance
- ... with Cross-Functional Business & IT Alignment
- ... underpinned by a Solid Data Architecture
- ... run on a mix of Relational and Lake storage increasingly stored on the Cloud







Get the fundamentals down and the level of everything you do will rise

— Michael Jordan —

AZQUOTES



Summary – Emerging Trends in Data Architecture



- Business insights and analytics continue to be a driver as organizations seek to use data as a strategic differentiator
- An "Offense" approach to data management is growing, with a focus on business value.
- A need for trusted data is driving the growth of data governance, data quality, metadata, and more... as organizations think more strategically about data
- While a wide range of tools and technologies are available, relational databases continue to be a foundation of organizational data architecture – tools are evolving to a more best of breed approach.





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Who We Are: Business-Focused Data Strategy



Maximize the Organizational Value of Your Data Investment



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

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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 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

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Thoughts? Ideas? Questions?