

EBOOK

Data Fabrics:

Drive Strategic Business Outcomes. Reduce Data Complexity

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Four Key Benefits of Data Fabrics and DataOps

Today's enterprise data sprawls across your core, edge, and multiple clouds. Getting maximum value from those resources requires a modern data management framework that simplifies data integration and makes it easy to deliver and transform data for consumption.

Effective data management is the strong backbone your organization needs to modernize its data use and power its digital innovation. Combining a data fabric with integrated DataOps offers the confidence to accelerate your data-driven transformation. Together they provide:



Trust in Data through provenance validation, improved data quality, and traceable data lineage.

Unified views of trusted data from the edge to the cloud to the data center.



Privacy and protection for data at rest and in motion while enforcing regulatory compliance.

Open ecosystem that supports past, present, and future data ecosystem investments.







Trust in Data

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SUMMARY:

A state government in the US masters data governance by improving data quality and establishing data lineage. A single trusted version of all data makes it possible to automate workflows.

GOALS

Reduce data errors and automate state and local government operations to improve business performance

BARRIERS

Transparency and efficiency reduced by fragmented views and confusion about lineage and data quality

SOLUTION

Automate data discovery using machine learning to classify and populate a comprehensive data catalog across cloud platforms

BENEFITS

- Gained a unified, comprehensive view of all data across the organization
- Automated classification and enrichment of state and local government data
- Improved business user and citizen self-service
- Increased data usability for users and systems streamlined day-to-day operations and decision-making



Unified Views of Data

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SUMMARY:

A major US bank creates 360-degree views of customers leading to an enhanced, consistent experience for bank customers. Enables business users to innovate, driving cultural transformation, data-driven decision-making, and market expansion.

GOALS

Digitize customer operations and increase staff who can meaningfully innovate to create data-driven products without compromising quality or customer experience

BARRIERS

A massive, rapidly changing volume of siloed customer and reference information reduced data quality and hampered self-service search and publishing to Snowflake data cloud

SOLUTION

Application of machine learning to data classification accelerated creation of a unified data catalog across a hybrid cloud environment, expanding self-service search and visualization

BENEFITS

- Increases speed and accuracy while reducing operating costs
- Unified data across cloud, on-premises, and Snowflake data cloud
- Automated data quality assessment for accuracy, consistency, and completeness
- Non-technical business users can consume data using familiar business glossary lexicon

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Privacy and Protection

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SUMMARY:

A utility in the UK operating in multiple regulatory domains reduced its risk profile by tightening its data access and usage controls through data management. The company dramatically improved its confidence relative to regulatory compliance.

GOALS

Reduce risk and better enforce privacy and regulatory compliance across hundreds of data sources about millions of current and past customers

BARRIERS

Growing regulatory complexity for energy and consumer domains along with numerous data formats and lack of unified views made manual profiling and compliance impractical, increasing risk.

SOLUTION

Machine learning automated data discovery and classification processes increasing efficiency, improving enforcement, and supporting vastly more automated controls

BENEFITS

- Satisfied regulatory and privacy requirements for 10+ million energy customers
- Maintained updates continuously without significantly increasing costs or risks



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Open Ecosystem



SUMMARY:

Nationwide US bank was able to maximize its past and present investments in data catalogs and other tools and prepare for future requirements while speeding the availability of data to users without disrupting existing collaborative workflows.

GOALS

Expand precisely controlled access to customer and other sensitive data for business users

BARRIER

Data was tracked in three discrete catalogs maintained with manual data tagging, sharply limiting the amount of data published and making search disruptive and slow

SOLUTIONS

Duplication was eliminated through rationalization and AI-based tagging automated existing Collibra workflows, while REST APIs enabled integration with existing tools

BENEFITS

- Auto-tagging enables data to be available to users 300% faster.
- Familiar collaborative business processes remain intact for data consumers.



Why a **Data Fabric** Matters



A data fabric eliminates data silos, providing a uniform environment for accessing and collecting all data, no matter where it's located and how it's stored.

An Effective Data Fabric Unlocks the True Power of Data in three steps:

Avoids copying data to a central location while creating unified views across a diversity of data lakes, data warehouses, data hubs, databases, and other repositories and applications.

Based on the abstraction layer created in step 1, introduces new capabilities such as automated data pipelines; workflow management, orchestration and policy management; active metadata; machine learning-powered data management; enhanced data cataloging; data virtualization.

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Shields users from the intricacies of data storage, movement, transformation, security, and processing.