

USE CASE 3

Data Observability in the data mesh

The organisation has made the strategic decision to establish a centralised data mesh, offering capabilities and domain-specific data as a product. In order to effectively manage this data mesh, they recognise the need to go beyond the capabilities of current data governance tools, which primarily provide attribute and structural information.

To avoid data platforms becoming "swamps" with little visibility or control, it is crucial to have a comprehensive understanding of the data itself, including its content and ownership. By knowing the nature of the data and its origin, the organisation can increase data awareness and strengthen data governance practices.

The Ask

When implementing a new data mesh, the client faced challenges with limited visibility on the arrival and consumption of data within the mesh. As a result, answering even simple queries, such as determining when certain legal entities were received, could take up to four days. Recognising the need for improved data observability and understanding, as well as rapid query response times, the client sought a solution.

Despite utilising metadata tools to understand attribute definitions and descriptions, the client encountered limitations in gaining insights into the actual content and nature of the data within their data mesh. The metadata tools only provided indications of where the data could potentially be found, without offering any visibility into the data itself. As a result, a manual search for the data values became necessary, leaving the client effectively unaware to the data present in the mesh.

dataSense Approach

Enable data observability and asset search

dataSense is a comprehensive solution that enables capturing and management of data in motion, data at rest, and data in use. By leveraging dataSense, organisations can effectively handle data events as they occur, ensuring data governance and providing valuable insights into the data content across multiple catalogs serving different data domains.

With dataSense, data owners have the ability to gain visibility on the data within the mesh, including its origin, arrival and departure timestamps. This visibility empowers data owners to track the data's journey, understand its lineage, and ensure data provenance. They can easily search for specific data content using familiar language and explore the relationships between different data assets, all without the need to build an additional reporting platform.

By leveraging dataSense's capabilities, organisations can observe operational data with trust. They can access a unified view of data assets, enabling them to make informed decisions based on reliable and up-to-date information. This eliminates the need for manual processes or complex reporting structures, streamlining data exploration and analysis.

Make data accessible

By enabling data owners, support teams, and business processes access to relevant and critical operational data, dataSense strengthens their trust in the data. It ensures that the data is presented as-is, without any processing, mappings or modifications applied. This transparency builds confidence in the data quality and reliability.

A key aspect of dataSense is increasing data literacy and awareness within the organisation. By removing complexity and providing a user-friendly interface, dataSense helps users understand the data. Greater understanding allows for extraction of greater value, leverage the assets and not spending time just processing.

With dataSense, critical data searches that took days are now delivered within minutes. Users can quickly retrieve the information they need, saving time, enabling rapid and quality decision-making. Understanding how the data flows and data domains are sourced becomes second nature within the data mesh. This familiarity with data flows facilitates data-driven investigations and eliminates the need for manual mappings between attributes to comprehend data movements.

The seamless integration of dataSense within the organisation's data ecosystem enables users to navigate and explore data flows effortlessly. It provides a clear visualisation of data domains, their relationships, and the overall data landscape. This visibility promotes efficient data analysis, troubleshooting, data duplications and optimisation of business processes.



Data becomes the common language

In the data mesh, the focus is on the data itself, rather than passive metadata, structures, or models. With dataSense, references to data contributors or consumers are expressed in the same data language, providing a deeper level of understanding and context. It goes beyond traditional metadata management by being proactive and offering data with context and data lineage.

The shift towards data-centric approaches has led to changes in industry perspectives.

Gartner, for example, removed their magic quadrant for metadata management, acknowledging the importance of embracing data with context rather than solely descriptive changes to metadata.

dataSense represents the future of data management by taking a leap forward from active metadata to active data content. It goes beyond simply capturing and managing metadata to provide insights and context about the actual data itself. This includes its content, relationships, transformations, and lineage.

By incorporating dataSense into the data mesh, organisations can unlock the full potential of their data. They can understand not only the attributes and structure of the data but also its content and context. This enables more informed decision-making, improved data governance, and the ability to derive meaningful insights from the data.

dataSense represents a progressive approach to data management within the data mesh. It goes beyond passive metadata management, providing data with context, lineage, and a deeper understanding of its content. By embracing active data content, organisations can leverage the full potential of their data assets and drive innovation in their data-driven initiatives. The future is data with context not descriptive changes of metadata^{4,5}.

dataSense takes the leap forward from active metadata to active data content.

