

Lufthansa Cargo Soars with Data-Driven Processes

As one of the world's leading air freight companies, Lufthansa Cargo plays a pivotal role in global trade. With a network spanning more than 300 destinations in over 100 countries, the dedicated cargo division of airline giant Lufthansa handles everything from general goods to live animals, vaccines, and even life support systems for astronauts.

Lufthansa Cargo operates an extensive fleet of freight aircraft and utilizes the storage capacity of Lufthansa passenger planes. Managing such diverse and critical operations requires more than logistical expertise. It demands a unified, transparent, and scalable approach to data.



Lufthansa

Key Facts About Lufthansa Cargo



€3 billion in annual revenue



530,000 tons of freight flown per year around the world



7.5 billion freight tons transported



300+ destinations in 100+ countries



4,100+ employees

The Challenge: Solving Complexity in Motion

Lufthansa Cargo faces a unique challenge in terms of product complexity due to the diverse range of items it handles. In addition to transporting general goods, it is entrusted with the shipment of living beings such as cats, dogs, and horses, as well as delicate cargo like vaccines and flowers. The company even transported highly sensitive life support systems for astronauts in 2018 that were sent to the ISS space station.

The intricate nature of Lufthansa Cargo's operations is reflective of its data landscape and requires meticulous tracking and management of a vast array of data. The company handles data from more than 100 sources in real-time, which presented significant hurdles, such as:

- **Fragmented systems.** Analytics and business intelligence (BI) platforms lacked synchronization, leading to data overlaps, disjointed documentation, and process inefficiencies.
- **Limited data access.** Teams faced difficulties accessing the critical data assets they needed, which limited their ability to build data hypotheses, models, and use cases.
- **Governance gaps.** A lack of clear data governance roles across data teams led to confusion over responsibilities, resulting in data and communication barriers between IT and business teams.

To maintain its position as an industry leader, Lufthansa Cargo established a bold goal—to become a fully data-driven organization by 2025 (Figure 1). To achieve this, the company needed to integrate data from multiple sources in real time, bringing it together into a single platform. In addition, Lufthansa Cargo also placed a high priority on democratizing data access for all employees, establishing clear governance frameworks, and promoting data literacy to bridge the gap between IT and business teams.

Recognizing the criticality of the situation, Lufthansa Cargo identified the need for a data catalog as the vital bridge between its analytics and BI platforms.

A Goal to Be a Data-Driven Company by 2025

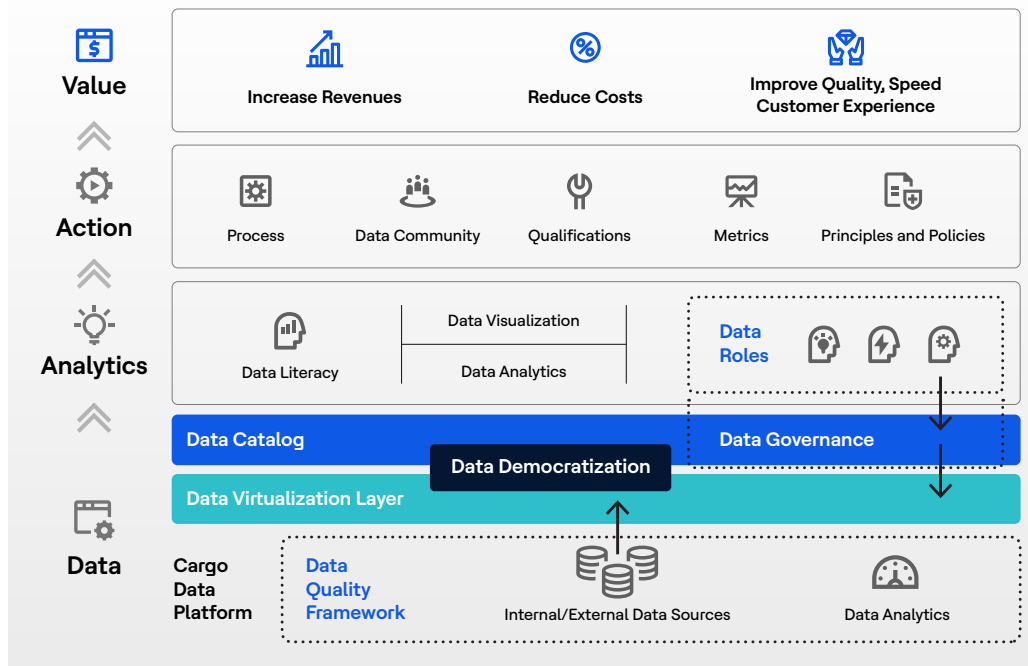


Figure 1: A Road Map to Becoming a Data-Driven Company

The Solution: Implementing a Data Discovery Platform and Catalog

Implementing a data catalog was deemed essential to optimize the data landscape, ensure seamless connectivity, and harmonize both the IT and business teams. After evaluating potential data solutions, Lufthansa Cargo selected the Actian Data Intelligence Platform and its data catalog for their ability to modernize the data ecosystem.

Several key platform benefits guided the decision:

- **Data discoverability.** The Actian Data Intelligence Platform’s emphasis on intuitive data discovery and data cataloging simplifies the process of finding and accessing data assets, regardless of employees’ roles within the organization. Easy implementation, no steep learning curve for users, and barrier-free integration eliminate the risk of becoming entangled in governance intricacies.
- **A user-friendly design.** Built with usability in mind, the platform’s interface prioritizes user-friendliness and accessibility, steering away from solely technical features. The platform offers robust full-text search capabilities, empowering users to swiftly locate specific data assets by leveraging relevant keywords.

Additionally, the platform provides visual and graphical components that aid in understanding complex information. These intuitive and visually-driven features enhance users’ understanding of data relationships and promote efficient data exploration within Lufthansa Cargo’s data ecosystem.

- **Ability to adapt and customize.** The Actian data catalog offers a simple yet scalable metamodel, allowing Lufthansa Cargo to customize and adapt the solution to specific requirements. The inclusion of import and export functionalities, alongside APIs, ensures effortless integration with diverse systems and data sources. This seamless integration not only improves data accessibility but also automates documentation tasks, enhancing overall operational efficiency.
- **Community-driven innovation.** Lufthansa Cargo valued Actian’s commitment to continuous improvement through community-driven enhancements. Constant improvements, informed by user feedback and industry best practices, ensure that the Actian Data Intelligence Platform stays ahead of Lufthansa Cargo’s evolving needs by incorporating new features and capabilities.

Shaping the Data Landscape

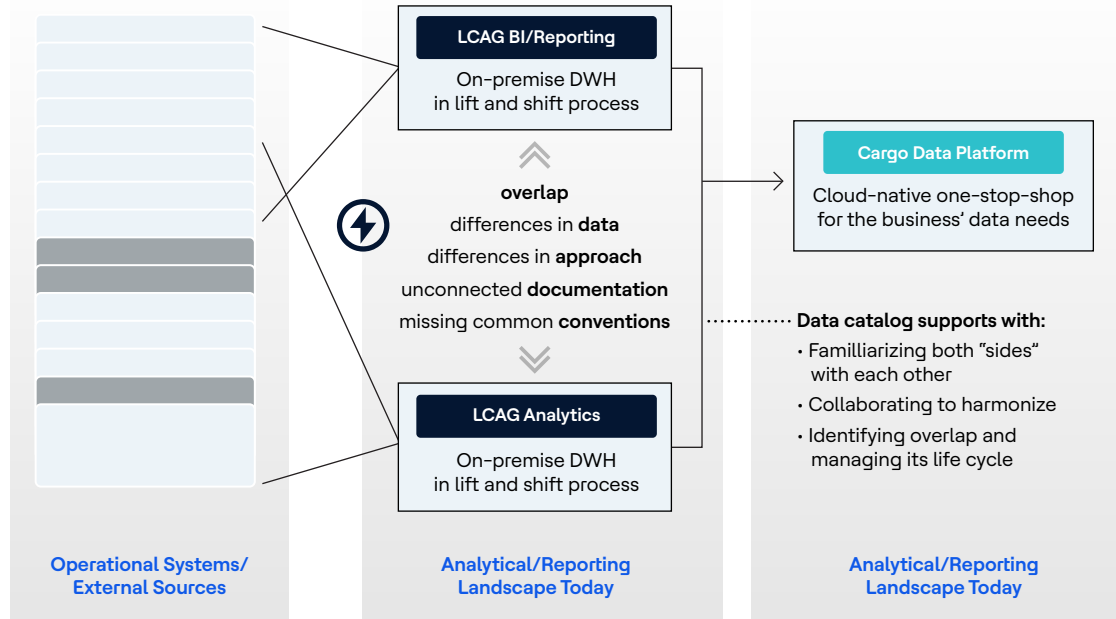


Figure 2: Reaching Goals with a Data Catalog

- **Cost-effective scalability.** The platform’s pricing model aligns with Lufthansa Cargo’s needs. The initial investment was small, making it more accessible for adoption. The pricing model scaled accordingly as Lufthansa Cargo’s user base and data catalog usage grew. Plus, the inclusion of additional scanners at no extra cost and ongoing customer support added further value to the investment. By selecting the Actian Data Intelligence Platform, Lufthansa Cargo took a strategic step toward modernizing its data ecosystem and driving greater efficiency across operations. With a focus on intuitive usability, seamless integration, and community-driven innovation, the platform empowers Lufthansa Cargo to harness the full potential of its data while fostering collaboration between IT and business teams, allowing the company to shape its data landscape (Figure 2).

The Benefits: Creating a Unified Data Landscape

Lufthansa Cargo’s implementation of the Actian Data Intelligence Platform and its data catalog delivered sustainable and transformative results. Outcomes included:

- **Centralized data.** Analytics and BI data are now centralized into a single platform, creating one trusted source of truth.
- **Enhanced accessibility.** The Explorer app enables business users to discover and leverage relevant data for their specific use cases. The Studio app provides clarity and transparency for data architects and stewards.
- **Improved collaboration.** Lufthansa Cargo fosters a culture of data collaboration by promoting catalog adoption across teams, bringing together IT and business stakeholders.
- **Future-ready systems.** With plans to integrate additional systems and enrich its data ecosystem, Lufthansa Cargo is well-prepared for the demands of tomorrow’s data challenges.

LCAG and Actian: Achievements and Future Ideas

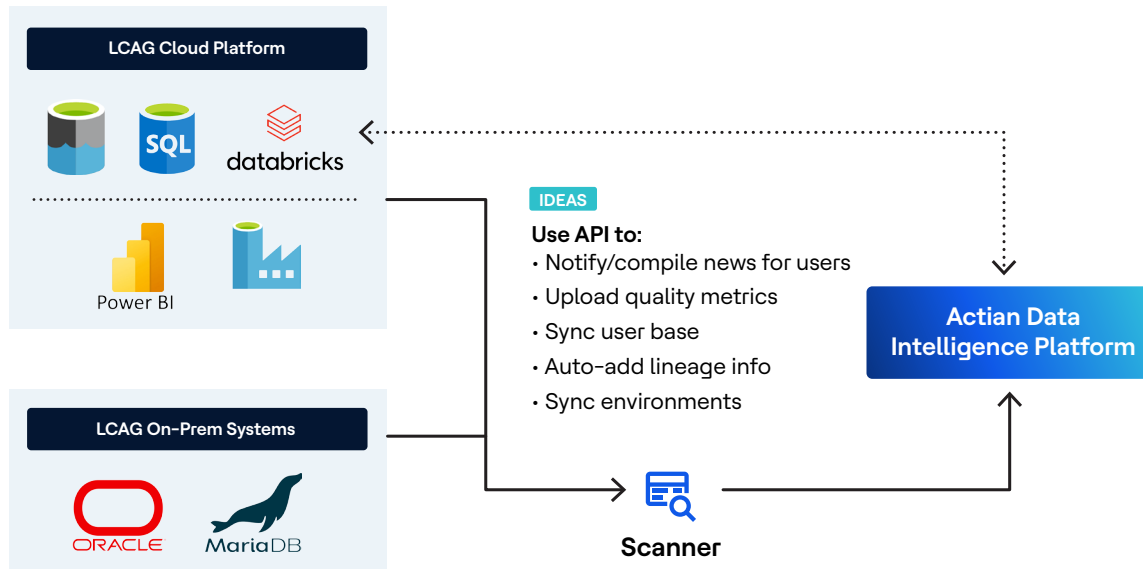


Figure 3: A Future-Ready Foundation

A Data Foundation for Sustainable Success

Lufthansa Cargo has ambitious plans to integrate additional technical systems using the Actian Data Intelligence Platform. The company has a robust expansion pipeline in place, aiming to import a broader range of analytical data through connectors and APIs. This strategic move will enhance its technical framework and enrich its data ecosystem.

Furthermore, Lufthansa Cargo is actively promoting catalog adoption among the more technical teams within the organization. By fostering data collaboration across the entire data community, the company can demonstrate the value of the Actian solution to data management processes. This concerted effort aligns with its vision of maximizing the benefits and potential of data assets throughout the company (Figure 3).

By harnessing the data discovery power of the Actian Data Intelligence Platform, Lufthansa Cargo has built the foundation for its vision to become a truly data-driven organization. With improved data transparency, streamlined operations, and a culture of collaboration, the company is set to soar to new heights in innovation and efficiency.

Main Data Sources

- Databricks
- Azure Data Factory
- MariaDB
- Oracle
- Azure SQL Database

Stakeholders Using the Data Discovery Platform

- Data architects
- Data owners
- Data stewards
- Data officers
- Technical data stewards
- Business users



“ With Actian, we centralized our analytics and BI data into a single solution. The Studio app enabled data transparency and clarity in documentation, while the Explorer app empowered end users to find the right data for their use cases. This represented a significant advantage for Lufthansa Cargo.”

- Bettina Berg, Data Architect, Lufthansa Cargo

About Actian

Actian empowers enterprises to confidently manage and govern data at scale. Organizations trust Actian data management and data intelligence solutions to streamline complex data environments and accelerate the delivery of AI-ready data. Designed to be flexible, Actian solutions integrate seamlessly and perform reliably across on-premises, cloud and hybrid environments. Learn more about Actian, the data division of HCLSoftware, at actian.com.

