



LUFTHANSA CARGO AG

An airport-to-airport airfreight company and the subsidiary of Deutsche Lufthansa, the German national airline.

Industry: Transportation and Logistics
Geography: Europe

Deployment Summary

- TIBCO's business integration software supports migration from legacy systems and enables a flexible connection between partners' and customers' systems.
- TIBCO business management software supports the modeling and execution of business processes with workflow technology.

Benefits

- The new EAI architecture has enabled lower operating costs by minimizing the complexity and maintenance of interfaces, and a faster time to market for new products and services.
- The EAI solution reduced the risks and costs associated with development.
- The optimization and simplification of certain processes, such as accounts or order entry, speeds up their completion and makes accounting processes much easier.



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Kamilla Strass, Process and IT Project Leader, Lufthansa Cargo

TIBCO Moves Lufthansa Cargo from a Legacy System to a Flexible Future

Lufthansa Cargo AG (LCAG) is the freight subsidiary of Deutsche Lufthansa AG, the German national airline. Although its core business is the processing of airport-to-airport airfreight, the company offers several services using a global network of routes to 493 destinations. In the international scheduled airfreight business, Lufthansa Cargo is the front-runner among the International Air Transportation Association (IATA) carriers.

Optimized Processes

In the logistics business, process optimization is considered one of the most important factors contributing to success and achieving competitive differentiation. In practice, this implies that process and IT management dovetail closely, and that IT management has a direct influence over the quality, flexibility, operational efficiency, and cost of business processes.

Lufthansa Cargo's IT systems have grown over the years into a complex and heterogeneous spaghetti structure. They are centered around the host-based MOSAIK application, which dates back to the seventies.

MOSAIK enables access to product information, bookings, reservations, and shipment tracking, as well as the exchange of waybill data via electronic data interchange (EDI). Developing add-ons and adaptations to this system costs time and money, but is necessary for the optimal support of Lufthansa Cargo's time-definite services. These services respond to the customers' need for the rapid shipment of specific types of goods within a precisely defined time frame.

Objectives with TIBCO and EAI

In addition to reducing operating costs by simplifying the complexity of interfaces and maintenance, the new architecture will enable Lufthansa Cargo to accelerate the time to market of its new products and services. Enterprise and business application integration will play key roles as a facilitator, connector, and control system. Most applications have traditionally communicated directly with each other, but in the future all applications will communicate via a shared integration layer. The enterprise application integration (EAI) architecture will replace the current spaghetti structure and will be easier and more cost-effective

to maintain. It consists of the TIBCO Information Bus® as the backbone, together with the applications, web services, and interfaces connected to it. These elements form an efficient architecture for running business processes in real time.

"TIBCO's software reduces development risks and costs, and makes it easier for us to integrate customers' and partners' systems. Performance bottlenecks will soon be a thing of the past," says Strass. Certain processes, such as account and order entry, can be optimized to run faster, and billing and account settlements are simplified.

Criteria and Procedure for EAI Software Selection

"We had the choice between making it and buying it," explains Strass. In the end, the company chose a combination of the two: Lufthansa Cargo is planning the extension of existing applications; the customized development of new ones; and the purchase, adaptation, and implementation of standard software. One of the new elements is TIBCO's software.

Lufthansa Cargo conducted a proof-of-technology (POT) test, during which it evaluated each vendor's software for two weeks. It tested their suitability for the infrastructure by carrying out realistic tasks and scenarios, during which different business units and teams were involved in the testing to familiarize themselves with the new technology.

TIBCO fulfilled all the requirements, partly because of its central information bus – which acts as the integration layer – and its tools, which are compliant with standards such as Java 2 Enterprise Edition (J2EE) and XML. With TIBCO's comprehensive support for web services technology (SOAP, WSDL, and UDDI), Lufthansa Cargo can easily and cost-effectively connect applications and processes, such as workflow.

Current Status of the EAI Project

Lufthansa Cargo has already completed two EAI projects: TrackIT and Chase. TrackIT is used to proactively supply customer information about the current status of freight transport, and drive the introduction of a status reporting system. Chase is an extension of the existing customer relationship management (CRM) system and is used to efficiently manage customer requirements and complaints. The Siebel CRM application has already been connected to the system, and at least ten additional systems will be connected over the next two to three years, including SAP and MOSAIK.

Lufthansa's Implementation Experience

Using an integration layer for EAI – in this case, TIBCO's business integration software – reduces the time and effort required for implementation and maintenance, according to Stephan Madlung, the EAI team leader at Lufthansa Systems AS. But even with industry-standard tools, integration is still a complex undertaking. Intensive technical and business-related tests, performed in realistic situations, are still necessary.

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"Experienced tool experts should always be on hand for guidance and knowledge transfer, so that the new tools can be mastered by a core team in the user company," recommends Madlung. "The right integration design is essential to good performance because the scalability of integration servers is not limitless. The performance requirements for messaging components and process or workflow components also need to be evaluated separately."

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In the near future, Lufthansa Cargo plans to implement Web services to connect customers' and partners' systems using newly agreed-upon standards (SOAP 1.2) to increase security.



TIBCO Software Inc. (NASDAQ: TIBX) is a provider of infrastructure software for companies to use on-premise or as part of cloud computing environments. Whether it's optimizing claims, processing trades, cross-selling products based on real-time customer behavior, or averting a crisis before it happens, TIBCO provides companies the two-second advantage™ – the ability to capture the right information at the right time and act on it preemptively for a competitive advantage. More than 4,000 customers worldwide rely on TIBCO to manage information, decisions, processes and applications in real time. Learn more at www.tibco.com

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Global Headquarters
3303 Hillview Avenue
Palo Alto, CA 94304

Tel: +1 650-846-1000
+1 800-420-8450
Fax: +1 650-846-1005