Excellent data performance for logistics handling 862 million packages

INFOMOTION

INFOMOTION supported GLS IT Services GmbH in ensuring the BI infrastructure of the GLS group was prepared for the technology of the future, significantly improving data performance throughout every area of the company. Existing on-premises database systems were migrated to the cloud through close collaboration, creating the basis for near real-time reporting and reducing costs.

The challenge

- Existing BI solution was too slow and not flexible for self-service/data mesh

- Data could not be updated multiple times a day or even on an hourly basis

- Life cycle of the existing data warehouse system was drawing to an end

- On-premises solution made it more difficult to implement a "cloud-first" strategy

The customer

Developed as an internal service provider for the GLS Group, GLS IT Services GmbH is responsible for all information technology for the seamless exchange of data along the entire pallet logistics process sequence, for around 862 million packages per year in roughly 40 countries throughout Europe and North America. Founded in 2003 as a subsidiary of GLS Deutschland, GLS IT Services is the IT service provider for over 22,000 GLS employees worldwide, and is headquartered in Neuenstein with a location in Eschborn near Frankfurt.

GLS.

The performance of the existing data warehouse system based on on-premises databases was not sufficient to meet the growing demands for data availability and up-to-date data in all areas of the company. Long loading times and system instability prevented near real-time reporting.

From a technological standpoint, the existing system was nearing the end of its life cycle, necessitating a preemptive search for a successor solution fit for the future. The transformation was also intended to replace the existing on-premises solution with a cloud-based system.

The goal was to find the best solution available on the market for the requirements of GLS IT Services, based on the best-of-breed principle, then implement it gradually within the company. In addition, the company needed to establish the necessary professional expertise to productively implement the new solution as quickly as possible and anchor its use within the company for the long-term.

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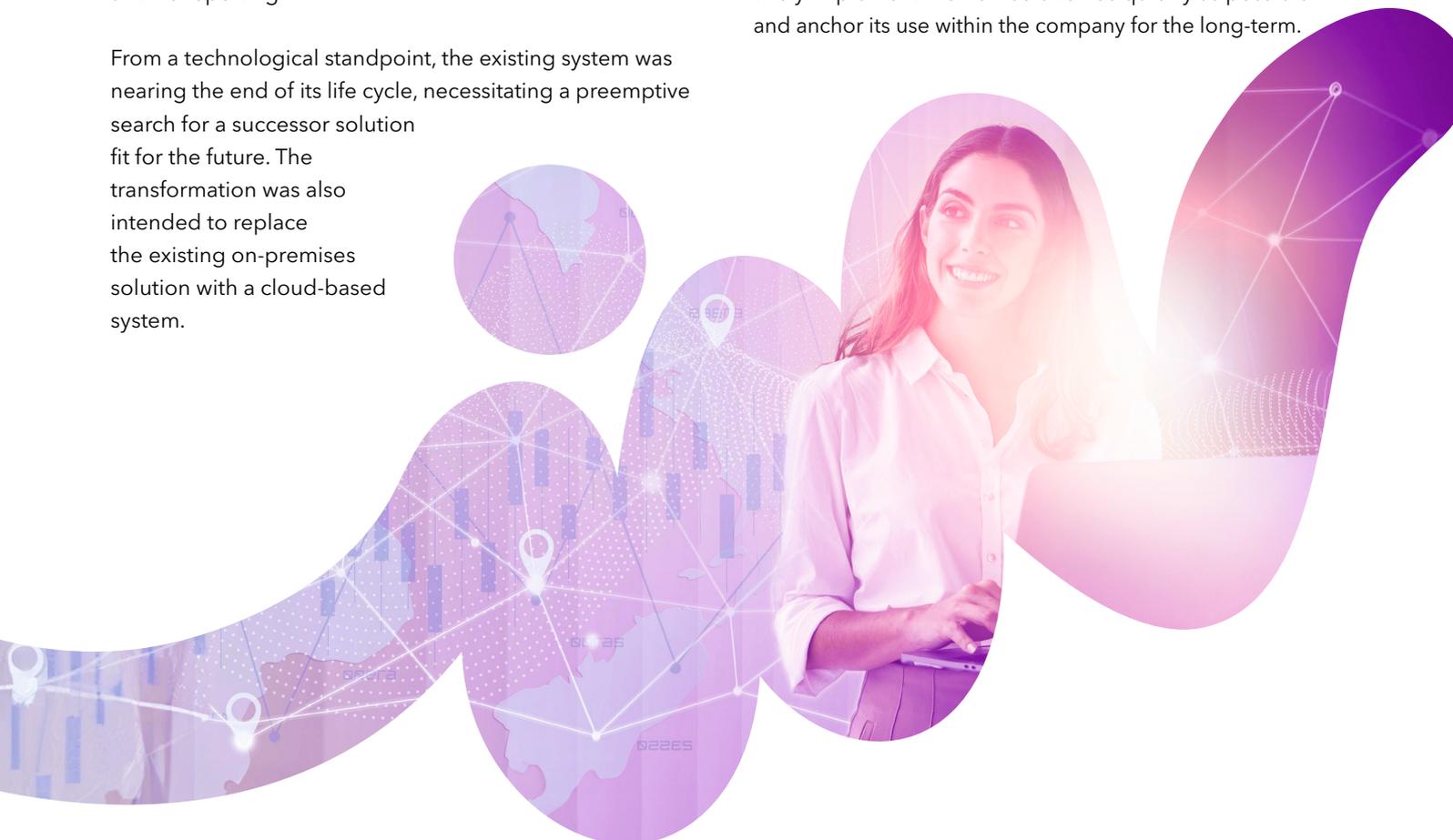
The solution

- **Modern BI solution based on Snowflake Data Cloud and Apache Kafka**

- **Migration of existing databases into the new, cloud-based system**

- **Rapid software evaluation, PoC for "Power-Users", Sales Controlling and Last Mile Analytics**

- **INFOMOTION as technological enabler (consulting and implementation)**

"Data, and professional data processing, are the key to an excellent customer experience. We strive to deliver that experience to win over our customers, including shippers and recipients alike, for the long-term.
By introducing more comprehensive data processing, we are improving the customer experience with a focus on the future and a focus on our needs. Thanks to the support of INFOMOTION's experts, today we have a modern, high-performing BI infrastructure that facilitates flexible reporting almost in real-time for all areas of the company."

Dirk Herzog, Senior Manager Product Management Business Analytics at GLS IT Services GmbH

The Snowflake Data Cloud, combined with Apache Kafka for processing data streams, has proven to be a powerful and flexible BI solution for excellent data performance in multiple projects. The company's goal was to consider using this solution as well for the technological realignment of the data warehouse at GLS.

Various use cases were created in reporting and then tested intensively for several months for the proof of concept. The results from the Self-Service for "Power users," Sales Controlling and Last Mile Analytics areas were convincing, so it was possible to evaluate other alternative technologies without a proof of concept.

The existing databases were migrated to the Snowflake Data Cloud with the support of INFOMOTION and the cloud was connected to Kafka. The data architecture was adapted to Snowflake, and data delivery was converted from a relational structure to Journal (JSON/Kafka) via automated loading routines.

The result

- **Technological basis created for self-service data platform (data mesh)**

- **Data performance significantly improved through more frequent data updates**

- **Loading times for providing data reduced by a factor of up to 12**

- **Performance/speed of queries increased significantly**

- **Maintenance work reduced significantly (near zero maintenance)**

- **Costs for software licenses and server maintenance almost cut in half**

- **Improvement in IT security through Snowflake Data Cloud**

The Data Performance Company

INFOMOTION

The technological foundation needed for outstanding data performance in business intelligence was laid through close collaboration. Today, GLS has a cloud-based system ready to meet growing requirements and flexible enough to respond to the technological innovations of the future.

Thanks to significantly shorter loading times and a higher frequency for data updates within the system, the time needed to prepare reports, for instance for the last mile analysis, was reduced from 12 hours to one hour, and the time for monthly statements in sales was reduced from 1 day to 2 hours – an impressive improvement.

Migrating the databases to the cloud made it possible to reduce costs for software licenses and server maintenance by 50 %. In addition, regular expenses for maintaining on-premises systems on the company's own servers were also significantly reduced. Taken with the cost savings, this greatly boosted the economic efficiency of the change.

One positive side effect of migrating to the Snowflake Data Cloud is the improvement in IT security for GLS's data warehouse, since Snowflake offers a very high level of data security even on the lowest licensing level. This allowed the company to not only significantly improve data performance and efficiency, but security as well.

"Thanks to INFOMOTION's experience and pragmatic approach, we succeeded in charting a course for the technological realignment of our data warehouse very quickly, with professional support."

Alexander Dembowski, Data Warehouse Architect Product Management Business Analytics at GLS IT Services GmbH

92 %
Reduction in time required to create reports

50 %
Reduction of costs for software licenses and server maintenance

The project

- **Ability to gain maximum added value from data improved**

- **Frequency of data updates increased significantly**

- **BI technology realigned**

- **Licensing and maintenance costs cut in half**

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INFOMOTION GmbH is the leading consulting company for data performance in German-speaking countries. Our portfolio of services for your transformation into a data-driven company ranges from strategic advising to designing, implementing and operating long-term solutions, and even training your employees.

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