Qlik

DATA INTEGRATION

TEXTRON
SPECIALIZED VEHICLES

Textron uses Qlik and Databricks to drive innovation and manufacturing insights from SAP data

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Sondra Gillespie, IT Data Operations Manager, Textron Specialized Vehicles

Supporting architecture for a major ERP upgrade

Textron Specialized Vehicles (TSV) manufactures a wide range of vehicles for consumer and B2B customers in various industries. In the process, TSV generates vast amounts of manufacturing and sales data across its business lines.

TSV decided to migrate from SAP ERP Central Component (SAP ECC) to SAP S/4HANA, in order to standardize its SAP environment across various business units and upgrade the extract, load, transform (ELT) process.

"Our transition to SAP S/4HANA primarily affected two business units," explains Brandon Haddock, Director of Communications at Textron Specialized Vehicles. "Those two businesses shared a particular instance of SAP ECC that we wanted to migrate as part of a long-term plan to consolidate all our businesses onto a single enterprise resource planning (ERP) system and environment."

As TSV transitioned to SAP S/4HANA, it needed to be able to extract data directly from this new platform. But TSV also wanted to deliver data to business users for various purposes, including analytics on the Qlik platform.

"Our SAP S/4HANA system is a complete order-to-cash ERP," explains Sondra Gillespie, IT Data Operations Manager at Textron Specialized Vehicles. "It draws IT and OT data from multiple sources. We needed to be sure that when we made the transition to a new ERP, we were supporting that platform with technology that would allow our business users to continue accessing and analyzing data as freely as before."

Solution Overview

Customer Name
Textron Specialized Vehicles

Industry
Manufacturing

Geography
Providence, Rhode Island

Function
IT

Challenges
- Enable a standardized SAP environment
- Deliver for various purposes, including analytics
- Consolidate data in one place in real time

Solution
TSV migrated to Databricks Data Intelligence Platform and Qlik Data Integration to transform data from SAP S/4HANA and enable near-real time updates for business users.

Results
- Company can now stream data every few minutes
- Work hours saved and compute costs lowered
- Team now spends less than 10% of its time on data replication

A single source of truth for a diverse business

TSV evaluated several potential solutions for broadening data access; however, these options did not meet TSV's desire to consolidate its data in one place in real time. TSV then explored the Databricks Data Intelligence Platform and discovered that using it alongside Qlik Data Integration, specifically Qlik Replicate®, would provide a powerful way forward.

"Although our top priority with this project was to support our manufacturing businesses, we have data coming in from a wide variety of systems," Gillespie remarks. "Moving to the Databricks Data Intelligence Platform built on lakehouse architecture made it easy to collect all our data in one place and have it accessible for all possible business purposes."

After going live on the Databricks Data Intelligence Platform, TSV set up an architecture designed to give business users flexibility while implementing rigorous security. Qlik uses change data capture calls to SAP and replicates data into the data lake. Databricks Delta Live Tables then performs the data transformation and applies software engineering best practices like testing, monitoring and documentation to deploy reliable pipelines at scale. This process produces silver-level tables in Delta format and puts the tables in a location where the data lake can access them. Along the way, rules in Qlik help normalize the SAP data table names.

"Some of the rules in Qlik enhance our data as we're ingesting it and make it easier to provide reliable data to our end users," Gillespie notes. "For example, we eliminate characters that could disrupt our data further down in the pipeline. If we were to turn off that feature, we might have records that aren't read properly, resulting in bad data."

Streaming data meets needs with less human involvement

TSV's goal is to make data available to business users in near-real time. With Databricks and Qlik, the company now streams data throughout the day.

"The biggest wins we've seen out of this project are performance and timing," Gillespie reports. "We're now connecting Qlik Replicate to new data every few minutes."

Previously, TSV's business data was only available to users in batches upon request. The new process involving Databricks and Qlik is helping the company save man-hours and lower compute costs. TSV hopes to reduce the amount of time its team spends running and maintaining the data replication process from 80% to less than 10%.

"We're finally seeing the light at the end of the tunnel," says Gillespie. "We're down to about 60% of time spent on running and maintenance, which is already a 25% improvement. In the long run, our team will be able to spend much more time on productive activities that serve our business and help generate revenue."

With Databricks Data Intelligence Platform and Qlik Cloud® Data Integration, TSV plans to continue maximizing the efficiency of its operations so it can deliver more of the revolutionary technology its customers want. After establishing a single source of truth for its SAP data, the company is well on its way.

"Databricks Data Intelligence Platform and Qlik Cloud Data Integration have given us the systematic data operations process that we've always needed," Gillespie concludes. "As a result, we've been able to increase the robustness our operations and gain valuable insights into how our products are used so that we can continually improve. We're excited to continue this partnership."

The keys to success

Minutes
to refresh business data for end users

25%
reduction in time spent running and managing data replication

"Databricks Data Intelligence Platform and Qlik are the backbone of our new data architecture supporting SAP S/4HANA. These solutions are driving easier data access and improved reliability across our business."

Sondra Gillespie, IT Data Operations Manager, Textron Specialized Vehicles

Qlik

About Qlik

Qlik transforms complex data landscapes into actionable insights, driving strategic business outcomes. Serving over 40,000 global customers, our portfolio leverages advanced, enterprise-grade AI/ML and pervasive data quality.
We excel in data integration and governance, offering comprehensive solutions that work with diverse data sources. Intuitive and real-time analytics from Qlik uncover hidden patterns, empowering teams to address complex challenges and seize new opportunities. Our AI/ML tools, both practical and scalable, lead to better decisions, faster. As strategic partners, our platform-agnostic technology and expertise make our customers more competitive.

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