

Cemex connects 1,800+ global facilities in real-time

The global building materials company evolves how data is collected and managed in a modular ecosystem using Fivetran and Snowflake.



Business challenge

Cemex, a leading global construction materials company, needed to evolve how data was managed across its extensive network of over 1,800 facilities to achieve near real-time insights into its global sales and commercial operations. The company aimed to improve the scalability and flexibility of its data infrastructure, which was predominantly SAP-centric until 2017.

They required a data integration solution that could handle a diverse range of data — from IoT sensors to supply chain information — and support advanced AI/ML models, all while shifting from daily batch-based data replication to more frequent updates.

Cemex needed a solution that could:

- Offer the scalability and flexibility of cloud-based architectures to support a modular, best-of-breed data lake
- Improve data delivery from its SAP systems and other data sources from days and weeks to near real-time
- Support a diverse set of data, ranging from IoT sensors to supply chain data to forward-thinking AI/ML models

Industry: Manufacturing

Company size: 46,000+

Use cases: SAP, data lake, sales and customer success analytics, AI/ML

Pipeline: Fivetran

Destination: Snowflake

Transformations: dbt

Business intelligence: Power BI

Data sources: SAP ECC and SAP HANA, ServiceNow, Dynamics 365, Qualtrics, JIRA

"Fivetran has revolutionized our global SAP data delivery, reducing time to insights from days to minutes. We can react swiftly to market changes and track our sustainability efforts at any moment."

Gerardo S. Reyna Caamaño

Global Data Architecture Manager at Cemex

Fivetran solution

Cemex uses Fivetran to move data into Snowflake, providing business analysts with near real-time visibility for over 4,000 tables. This fast access to global SAP data offers actionable insights for Cemex's international business. The new architecture powered by Fivetran gives a comprehensive overview of customer interactions, order history, and delivery data. They can now track resource consumption, production, reception, and delivery globally and staff can provide personalized experiences using purchase and interaction history.

Centralizing data from various systems enabled the creation of their Customer Visibility application, a fully automated customer experience with near real-time supply chain and order visibility. Cemex has also built a CO2 data model to track emissions across all facilities, receiving recognition from Snowflake for its environmental impact. Lastly, the new architecture is powering over 10 pilot AI/ML projects across various business areas.

“With Fivetran, we are getting data out of our 7 global SAP ECC and HANA instances. In 2 minutes or less, we can gather raw data that allows the business to quickly and easily analyze any territory.”

— Gerardo S. Reyna Caamaño, Global Data Architecture Manager at Cemex

Key business results

- Rapidly integrated over 4,000 tables in SAP for data streaming, processing, and alerting
- Reduced data processing time from weeks to near real-time
- 90% reduction in manual data ingestion setup and maintenance work
- 25% of its global workforce (10,000+ users) now using data to drive daily decisions
- Built a CO2 data model that calculates and monitors emissions across all facilities, aligning with sustainability goals and regulatory requirements



<2 mins

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