A new technology stack to consolidate all data in a single data warehouse for a manufacturing solutions provider

Case Study

infinite™

About the Client

The client is a global provider of manufacturing solutions to improve process performance and productivity. The client faced challenges making timely business decisions due to data silos and manual processes, which were time-consuming and hindered access to historical data. The client sought to deploy a new technology stack that would consolidate all data in a single data warehouse to simplify accessibility, maintenance, and processing for users across all departments.

© Infinite Computer Solutions, 2026

Challenges

The client faced several challenges that hindered the extraction of historical analytics and reports required to predict future business trends and make timely business decisions. These included:

Fragmented Data Ecosystem:
Client's data spanning 15 global markets was captured and stored in different formats across multiple disparate, siloed systems

---

Lack of a Single Version of Truth and Poor Data Accuracy:
Absence of standardized data definitions and governance led to inconsistent and unreliable reports. Without a single version of truth, management lacked confidence in analytical insights, and data validation from source to report was complex. Managing and analyzing historical data spanning 5 to 10 years was also challenging.

Inefficient Manual Processes:
The client relied heavily on Microsoft Excel for current reporting and historical data. This manual approach was tedious, error-prone, and time-consuming.

Difficulty with Historical Analysis for Smart Factory Planning:
Management struggled to identify long-term trends or predict future business needs for their smart factory initiatives

© Infinite Computer Solutions, 2026

Solution Provided

To help the client, Infinite implemented its Analytics Enabler framework to serve five functional areas of the business - Operations, Sales, Services, Quality, and Inventory. Infinite approached the client's challenges holistically, using a mix of Microsoft SQL Server, Informatica 9.6.1, Tableau, SAP HANA 2.0, SAP Business Objects, and SAP Analytics Cloud to build and deploy a data warehousing and analytics solution. Some of the key tasks performed were-

The project was completed in phases, providing each functional area with unique key performance indicators (KPIs) to enable users to quickly search and access data in the formats they need for their reports.
Integration of all the client's data from 15 distinct sources into a single, consolidated data warehouse to make it easier to connect and control both current and historical data.

Developed robust and scalable Extract, Transform & Load (ETL) architecture, with design and data modeling capabilities

Provided a consolidated view of over 150 dashboards with custom visualizations and increased granularity

Built a scalable enterprise warehouse solution that supports end-to-end data reconciliation

Established a system for differential diagnosis to assess databases and ETL health to support auto-correction of errors and easy data integration

© Infinite Computer Solutions, 2026

Business Benefits

The company significantly improved its user experience in accessing and managing reports and historical data through role-based data security, enabling accurate and timely business analytics

The new analytics system automatically transforms data into user-specific formats, allowing all functional areas to access a single, consistent version of the truth

With a comprehensive global view of five years of historical data, management can generate insights that support better production planning and faster product launches

Reduced time-to-market by approximately four weeks within each six-month product development cycle, increasing responsiveness to customer needs and market trends

Operations managers can easily retrieve turnaround-time metrics for customer service activities, helping identify process improvements and enhance customer experience

Increased productivity by eliminating manual tasks, resulting in reduced manual efforts by 12% for every 11,000 person-hours spent

Achieved savings of approximately US$33,000 for every US$300,000 spent

Increased data accuracy and reliability

To support the client's future roadmap, Infinite continues to work on data profiling, quality, and reliability projects, as well as on evaluating new technologies to simplify data processing and maintenance.

© Infinite Computer Solutions, 2026

For more information, Please Visit us at www.infinite.com

Copyright © 2026 Infinite. All rights reserved. The case study published is for informational purposes only. Infinite acknowledges the rights of the Intellectual Property holders. Any unauthorized use of this document is prohibited.