



OVERVIEW

Regardless of the industry one is in, maintaining scalability with new systems implementations can be challenging. In an ever-changing market, it is important for companies to not only have quality data readily available through automated processes, but one needs the ability to roll this technology out among all business units.

This case study reviews a multi-year project with a global retail client. With billions of dollars in sales, this client had a critical need to have faster reporting capabilities with accurate data. While a new solution for a data warehouse was needed, the client simultaneously wanted to implement a new accounting system.

CHALLENGES



Integration Complexity

Simultaneously implementing a new data warehouse and accounting system requires careful coordination.



Global Operations

Coordinating operations across time zones poses logistical challenges.



Currency Conversion

Real-time currency conversion adds complexity due to fluctuating exchange rates.



Scalability Demands

Adapting solutions for anticipated business growth is crucial to avoid bottlenecks.



Predictive Analytics

Overcoming data analysis challenges for accurate forecasting is a key focus.

SOLUTION

Our client, facing challenges common to many organizations, grappled with collecting vast amounts of data through a semimanual process, leading to unreliable insights and hindered sales forecasting and inventory planning. The need for a new data warehouse and accounting system prompted them to collaborate with Theoris to establish more efficient platforms and processes.

Our initial focus centered on integrating new data warehouse feeds during the D365 implementation, concurrent with the migration from on-premises (SSIS) to cloud-native (Azure Data Factory and Synapse Analytics). The transition included essential steps such as cleansing data, refining load transformation processes, and optimizing cloud spend. Through Azure Cloud management and robust data governance, we achieved predictable operating costs and a seamless shift to 'real-time' operations via micro-batch processing.

To instill confidence in data-driven decision-making, we prioritized cleansing data feeds and realigning both the data model and transformation processes. Adopting Microsoft Dynamics for data feeds allowed for system enhancements and facilitated a transition to a 24-hour micro-batch processing cycle, streamlining operational efficiency.

Visualizing this refined data landscape, we expanded and enhanced Power BI dashboards, introducing Synapse Analytics to support the new system and global business expansion. This provided our client with instant 360-degree views of sales, inventory, promotions, and gift card utilization, all normalized across various locations and time zones.

A pivotal point in this transformation journey was the availability of better data, empowering our client to swiftly plan future inventory and capitalize on demand driven by events analytics. This strategic approach to planning buying trends has proven to be a game-changer, ensuring maximized profitability through efficient materials procurement and optimized production.

In summary, our solution eliminated five-hour delays in inventory and sales reporting, enhanced data warehouse architecture resilience, and improved batch-cycle efficiency. The integration of new, more accurate reporting not only exposed cross-sell opportunities but also positioned the retail customer for easy scalability amid acquisitions and partnerships. The technology transition from SSIS to Azure Data Factory, coupled with Microsoft D365 Finance and Operations, marked a successful shift from on-premises to cloud adoption, showcasing our commitment to delivering innovative and impactful solutions.



THE RESULT



Elimination of Delays

Five-hour delays in inventory and sales reporting were eradicated through improvements to data warehouse architecture, resilience, and batchcycle, enhancing planning efficiency.



Revenue Generation

Accurate reporting exposed cross-sell opportunities, generating additional revenue.



Improved Scalability

The transformation positioned the retail customer for easy scalability during acquisitions and partnerships.

TECHNOLOGIES

- SSIS to Azure Data Factory
- Microsoft D365 Finance and Operations (Dynamics AX)
- On Prem to Cloud Adoption
- Power BI | Synapse Analytics





Microsoft Dynamics 365 Finance & Operations





Azure
Synapse Analytics

