INTECH Drives 75% Performance Boost for Global Manufacturer with Cloud Data Warehouse Migration



Summary

A leading global manufacturer specializing in motorcycles, boats, and electric products faced challenges managing massive datasets across its growing operations.

INTECH partnered with the client to migrate their data infrastructure to Snowflake, a cloud-based data warehouse. This migration led to a 75% improved performance and 4x faster data accessibility.

This helped the client in proactive decision-making, improved team collaboration, and laid the foundation for scalable growth.

About the Client

The client is a global leader in the mobility sector, known for producing motorcycles, boats, and electric products. With operations across multiple countries, they serve millions of customers worldwide.

In recent years, the company expanded into financial services, offering finance cards, installment plans, and protection packages. This evolution helped them build a stronger ecosystem and deepen customer loyalty.

However, as operations scaled, managing data across regions and business units became increasingly complex. Thus, they turned to INTECH to solve these business challenges efficiently.

Client Challenges: Outdated Infrastructure Slowing Growth

As the client's operations scaled globally, so did their reliance on fast, data-driven decisions.

However, their existing on-premise Oracle infrastructure couldn't keep up. What began as minor delays soon turned into operational bottlenecks, impacting everything from visibility to reporting.

Key challenges included:

Slow Data Processing and Limited Accessibility

As the operations expanded, managing large volumes of data became more complex. With the existing Oracle system, the teams struggled to access real-time insights, leading to delayed decisions and reduced responsiveness across operations.

Rising Costs and Management Complexities

Maintaining the aging infrastructure required significant investment in hardware, storage, and manual oversight. As data grew, so did inefficiencies, making it increasingly difficult to scale operations without ballooning costs.

Concerns About Cloud Migration

Although the benefits of moving to the cloud were clear, the client was hesitant. They handled sensitive data, including product designs, financial records, and operational KPIs, with a fear that even a minor misstep could compromise business continuity. Without in-house cloud migration experience, teams lacked the confidence to move forward.

The client needed a solution that could modernize their data environment without disrupting operations.

That's when INTECH came in.

INTECH's Solution: Centralized Cloud Data Warehouse

INTECH evaluated the best solution in collaboration with the client and implemented Snowflake, a centralized cloud data warehouse platform. The goal was to address the client's growing needs for scalability, performance, and security.

Working closely with the client's IT and data teams, INTECH designed the solution with four key pillars:

Real-Time Data Access

With Snowflake, all business units gained centralized access to data in real time. This eliminated silos, enabled faster collaboration across teams, and empowered departments to make timely decisions.

Cost-Effective Scalability

Snowflake's flexible cloud infrastructure easily scaled to accommodate the client's expanding operations. This shift to a pay-as-you-grow model significantly reduced capital expenditures while future-proofing the client's data operations.

Enhanced Security

Security was non-negotiable. INTECH leveraged Snowflake's built-in encryption, compliance controls, and role-based access features to protect sensitive data. The client maintained full control over who accessed what, ensuring a secure environment even during the migration process.

Integration with BI Tools

Snowflake was seamlessly integrated with the client's existing business intelligence (BI) tools. This integration enhanced analytics capabilities, providing deeper data visibility into key metrics. It also helped the client's team to identify trends and respond quickly to changing market demands.

INTECH managed the entire migration process, ensuring smooth execution and minimal downtime.

Implementation Process

To ensure a successful and secure transition to Snowflake, INTECH followed a well-defined implementation approach:

Strategic Planning

INTECH began with a phased migration roadmap designed to minimize downtime. We worked closely with the client's IT and operations teams to assess their existing Oracle data, identify mission-critical sources, and prioritize workflows for migration to Snowflake.

2 Security Implementation

Robust security measures were implemented from day one. This included enterprise-grade data encryption and role-based access controls to safeguard sensitive information and ensure compliance throughout the migration.

Testing and Optimization

Once the data was live on Snowflake, we ran rigorous tests using Snowflake's Query Profiler and performance optimization tools. This helped us quickly identify and resolve the issues. We also used cloud infrastructure to scale storage and computing resources dynamically, ensuring consistent performance.

4 Training Sessions

INTECH conducted training sessions to provide the client's team with the necessary knowledge and tools to fully utilize the new system. These sessions empowered the client's teams to navigate and maximize their potential.

INTECH led the end-to-end implementation, from architecture planning to execution. The migration was completed with zero data loss and minimal disruption to operations.

Key Outcomes

The shift to Snowflake transformed the client's entire data infrastructure. Real-time access to data enables faster and more accurate decisions.

Data management became more streamlined, reducing delays and freeing up time for higher-value tasks. This boost in operational efficiency gave the team more space to focus on strategy and growth.

These improvements not only enhanced day-to-day operations but also brought clear business benefits, such as:

75% boost in system performance, leading to faster processing and smoother workflows.

24% reduction in data infrastructure costs, helping optimize budgets.

4x faster access to critical data, enabling teams to act on insights without delay.

To achieve these outcomes, we used a set of efficient tools and technology along with the right strategy.

Tools and Technologies Used

To build a secure and scalable data infrastructure, INTECH used a combination of advanced tools and technologies:

- Snowflake: A cloud-based data warehouse platform that centralizes fragmented data sources into a unified platform. It enabled real-time analytics, handled large data volumes, and provided enterprise-grade security.
- Oracle: INTECH migrated historical data from the client's existing Oracle system into Snowflake to improve query speed, storage
 efficiency, and system responsiveness.
- Cloud Infrastructure: Cloud computing offers flexible storage and computing, reducing the need for physical servers and maintenance overhead. It also allowed for easy scalability to meet growing business demands.
- Encryption and Role-Based Access: These features protected sensitive data during and after migration. Encryption ensured data security both in transit and at rest, while role-based access limited data visibility to authorized users only. This helped in preserving compliance and preventing breaches.