

Achieve Uninterrupted Operations with Expert Software Managed Services



How Freight Forwarding Has Changed Over Time?

INTECH assisted DP World, a global logistics leader, in addressing inefficiencies caused by their fragmented data systems.

Our team of experienced data architects and engineers implemented a centralized data warehouse strategy to streamline daily port operations, boost productivity, and enhance decision-making.

About the Client

DP World, headquartered in Dubai, United Arab Emirates, is a multinational logistics company with a key service range covering cargo logistics, port terminal operations, maritime services, and free trade zones.

DP World is at the forefront of global trade, operating in over 40 countries and managing 57 terminals worldwide. They handle a significant share of global container traffic, and play a key role in facilitating worldwide trade.

Client's Challenge

The client faced significant challenges in managing their complex operations due to fragmented data systems and lack of a centralized solution.

The lack of a centralized data system led to:

1. Inefficient Yard Space Management:

Without a unified system to track and allocate yard space, terminals struggled to optimize utilization, leading to congestion and slower container handling times.

2. Complex Truck Visit Arrangements:

Lengthy manual processes for scheduling and managing truck visits caused delays, increasing turnaround times and reducing operational throughput.

3. Ineffective Cargo Tracking:

Delayed and inaccurate data flow disrupted the tracking of cargo, affecting service reliability and customer satisfaction.

4. Billing Discrepancies:

Disjointed data management practices caused errors in billing, leading to financial inconsistencies and strained client relationships.

5. Lack of Synchronized Processes:

The absence of unified data governance across terminals resulted in inconsistent operations, creating inefficiencies that impacted the company's overall productivity.

The Solution

INTECH created a centralized and governed data environment for DP World, streamlining data management across all their ports.

We established a unified, secure, and consistent data repository by consolidating data from diverse systems such as SAP, Oracle, terminal operating systems (TOS), and eCommerce platforms.

This approach improved overall operational efficiency and empowered better decision-making.

Key Features

- ▶ The solution unifies data from multiple sources into one system.
- ▶ The **Data Lake Storage** provided reliable and scalable data storage.
- ▶ We enabled robust and advanced data analytics to extract actionable insights.
- ▶ Interactive dashboards offered real-time insights into KPIs and performance metrics.
- ▶ Provided user-friendly access to custom applications and ensured intuitive access to the data.

Implementation Approach

1. Requirement Analysis:

Collaborated with DP World's stakeholders to understand operational challenges, existing systems, and desired outcomes.

2. System Integration:

Consolidated data from various sources, including SAP, Oracle, terminal operating systems (TOS), and eCommerce platforms, into a unified data repository.

3. Data Warehouse Design:

Architected a secure and scalable data warehouse to provide consistent and reliable access to real-time business insights.

4. Governance Framework:

Implemented robust data governance protocols to ensure accuracy, consistency, and compliance across all ports.

5. Testing & Validation:

Conducted rigorous testing to validate system functionality, data integrity, and seamless integration with existing workflows.

6. Deployment & Training:

Rolled out the solution across multiple ports and provided comprehensive training to DP World's teams for smooth adoption.

Key Outcomes

Operational Efficiency Improved by 75%

Container Moves Decreased by 35%

Yard Utilization Improved by 60%

Results

DP World achieved remarkable improvements across its global operations. Here's how:

- ✦ **Centralized Governance for all Ports:** A unified platform now governs and manages data across multiple ports.
- ✦ **Better Yard Utilization:** Optimized yard space usage through enhanced data-driven systems.
- ✦ **Operational Efficiency:** Simplified truck visits, cargo tracking, and resource allocation for smoother daily operations.
- ✦ **Better Resource Utilization:** Real-time data ensures efficient staff and equipment use, boosting productivity.
- ✦ **Enhanced Decision-Making:** KPIs and performance metrics enable smarter decisions and strategic planning.
- ✦ **Reduced Overhead:** Improved efficiency and streamlined processes significantly lowered costs.

Tools and Technologies Used

- ▶ **BryteFlow:** For efficient data integration.
- ▶ **Azure Databricks:** For advanced data analytics.
- ▶ **PowerApps:** To enable user-friendly data access.
- ▶ **Azure Data Factory:** To streamline data transformation.
- ▶ **Azure Data Lake Storage (ADLS):** For robust data storage.
- ▶ **Power BI:** For smart data visualization for informed decisions.