DAMCO
Ensuring Your Success, Always.

Maritime Logistics Leader Modernizes Operations with Artificial Intelligence

Transforming maritime operations digitally with AI, cloud, and process automation at scale

Launch Your AI Transformation

The Client

A world leader in marine logistics with a significant presence in North and Latin America. The organization runs large ports, has cargo fleets in operation, and coordinates complex land logistics. Voluminous in its operations, the business was hindered by divergent systems, isolated information, and obsolete workflows that would not allow it to respond to market demands promptly and accurately.

The Challenge

As volumes grew and client needs evolved, weaknesses in legacy infrastructure became more apparent. The client had several operational and strategic impediments:

- **Splintered Systems within Operations-** Port handling, fleet tracking, and cargo booking were operated via separate legacy systems, leading to redundant work and contradictory information.

- **Slow and Manual Reporting-** Business-critical decisions were delayed due to spreadsheet-heavy reporting, tedious reconciliation, and distinct data flows between teams.

- **Lack of Predictive Intelligence-** The firm had limited capacity to actively monitor shipment delays, ETAs, and fleet health, leading to reactive situational responses.

- **No Coordination Between Vessel and Land-based Operations-** Land-based logistics frequently operated separately from sea operation, which led to delays in transferring cargo and unsatisfactory planning of resources.

- **Customer Communication Gaps-** There was no single digital interface through which customers could book cargo, track shipments, or see documentation in real time.

- Disconnected systems created duplicate work and data mismatches

- Manual reporting delayed key decisions

- No visibility into shipment delays or fleet health

- Disjointed sea and land operations slowed cargo transfers

- Customers lacked real-time access to bookings and documents

The Solution

Damco teamed up with the client to lead a holistic digital transformation powered by AI, cloud-native architecture, and automation of processes:

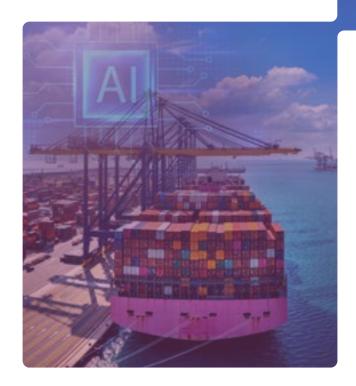|	
Cloud-Native ERP Modernization	• The traditional ERP mainline was re-architected based on microservices and container-based deployment for flexibility and resilience. • This enabled faster rollouts, simplified maintenance, and seamless integration across business units.
Artificial-Intelligence-Powered Fleet Tracking & ETA Estimation	• IoT sensors on vessels captured real real-time movements. • Azure AI was applied to estimate ETAs, detect anomalies, and mark risks, improving planning across shipping and inland transport.
Integrated Customer Experience Portal	• It provided a self-service portal through which customers could manage their bookings, cargo tracking, download invoices, and upload shipment documents. • This reduced dependence on back-office teams and provided better around-the-clock access.
Work Automation & RPA	• EDI flow, invoices, shipment manifests, and day-to-day paperwork was automated by employing RPA bots and workflow orchestration. • This freed internal teams from time-consuming and error-prone work.
Real-Time Executive Dashboards	• Azure Synapse-driven Power BI dashboards provided leaders with near real-time access to port activity, ship performance, and land-based logistics. • Decision-making was faster, data-driven, and less reliant on paper-based reports.

The Benefits

The transformation initiative yielded quantifiable outcomes in operating effectiveness, customer experience, and strategic planning:

- **99% estimation accuracy rate for ETA**, significantly improving customer visibility

- **30% cost reduction** by predictive maintenance enabled by AI

- **85% automation of manual work** procedures, reducing turnaround time and errors

- **24x7 cargo tracking** that led to increased client happiness and retention

- **2.5 X quicker executive-level decision-making,** facilitated by real-time logistics dashboards

AI-Powered Logistics Starts with the Right Strategy.

Talk To Our Experts

About Damco

Damco Solutions is a trusted technology and digital transformation partner for businesses around the globe. We engineer software products, create new digital experiences, modernize applications and automate business processes for greater agility and business growth. With 29+ years of leadership in software engineering and digital solutions, our mission has remain constant - complete client success.

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Contact us for more information on Damco's Offerings.

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