

Eminent US-Based Company Streamlined Warehousing Operations by Revamping WMS Built on Legacy IBM i Technology



The Client

The client, headquartered in Dakota, has been a leading provider of warehousing management solutions for food distribution businesses for over two decades. Their solution is used by grocery distributors, food service distributors, c-store distributors, and produce distributors to create significant ROI through optimized warehouse operations.

The Challenge

The client struggled to manage warehousing operations efficiently owing to outdated technology infrastructure and manual, time-consuming processes. Their existing Warehouse Management System built using legacy IBM i technology created numerous challenges in managing day-to-day operations.

Here are the key problems encountered by the client:

- **Complex Processes:** The warehousing personnel had to manually confirm the inventory location and use a handheld device to record inventory operations. This was not only time-consuming but also susceptible to errors.
- **Inefficient Warehousing Operations:** Manual intervention at multiple stages resulted in various issues, such as missed appointments, extended trucking queues at warehouses, inventory overstocking and understocking, and poor-quality control and compliance.
- **High Onboarding Costs:** The initial cost of onboarding for the client was exorbitant due to their obsolete infrastructure and considerable technical debt.
- **Lack of Automation:** Existing WMS was not capable enough to keep pace with the changing warehousing requirements due to a lack of automation and an over-reliance on an outdated system.
- **Suboptimal Customer Experience (CX):** The user interface (UI) of the Warehousing Management System was not well-designed, making navigation difficult and processes complicated, resulting in a poor user experience.



Low productivity of the sales team



Lack of automation affected appointment scheduling, inventory management, and compliance



High customer acquisition cost due to legacy infrastructure



Poor user experience due to clunky interface

The Solution

Transformation of legacy Warehouse Management Solution by rearchitecting UI components, revamping features with a modern tech stack, and implementing brand-new functionalities with native app development

Modernized Legacy Application Layers

Damco re-architected and redesigned the existing IBM i system UI layer, API layers, and RPG components using cloud-native microservices-based architecture. We revamped the UI components with a contemporary design, and in line with the existing business requirements.

Developed a Responsive Web Application

Damco's qualified technology specialists developed a feature-rich, responsive web application for the Warehouse Management System in order to revamp its interface and ensure a superior user experience.

Modernized Features Using New Tech Stack

WMS features such as inventory management, product management, and replenishment were revamped using modern technologies like AWS Lambda, Python, Angular, PostgreSQL, RabbitMQ, and AWS API Gateway, making them more efficient and effective.

Built a Native Mobile App

Damco developed a native mobile app and implemented Barcoding/RFID features & functionalities to optimize warehouse management operations such as Selection, Cycle count, Put away, etc.

Developed a Platform for Handling Appointments

Damco's tech team created a Dock Door Scheduling platform and a mobile app for truck drivers, enabling them to manage their appointments and inbound logistics efficiently. The platform comes with drag-and-drop controls that make the handling of critical operations like appointment scheduling and queue management seamless.

Value Delivered

Improved Operational Efficiency, Reduced Customer Onboarding Expenses

- Automated warehouse operations by eliminating time-consuming manual checks; this resulted in a whopping 35% improvement in operational efficiency.
- Reduced the waiting time of arriving trucks from 1-8 hours to a mere 15-30 minutes.
- Revamped application led to a reduction in customer onboarding cost which resulted in a 48% boost in customer acquisition.
- Anticipated savings of US\$ 3.2 million in infrastructure costs over the next five years.



Be Future-Ready, Modernize Your Legacy Systems!

Talk to Our AS400 Expert

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 25+ years of leadership in software engineering and digital solutions, our mission has remain constant - complete client success.

Contact us for more information on Damco's Offerings.

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