

Automating Transportation Management Drives Growth

MSI

MSI, a leading North American supplier of flooring, countertop, wall tile, and hardscaping products, replaced outdated technology, reliance on tribal knowledge, and manual transportation management processes with the automated, integrated combination of Descartes Transportation Manager™ and Descartes Route Planner™. The wholesaler increased delivery efficiency, elevated the customer experience, and reduced costs to scale nationwide expansion.

“With integration into our warehouse management system, the combined Descartes solution provides the centralized visibility, accuracy, and efficiency our high-volume distribution operations demand—from load building, optimized truck utilization, and spot books to customer windows, to ETA predictions, and the ability to get signed PODs into our system right away. Being able to scale operations with consistency and stability has been a game changer, driving continued improvement in KPIs across the board.”

Meet Sanghvi

Senior Business Process Analyst - Driving Process Efficiency & Digital Transformation
MSI

Company

MS International (MSI)

Descartes Solutions

Descartes Transportation Manager™,
Descartes Route Planner™

About the Client

Founded in 1975, MSI is a leading supplier of flooring, countertop, wall tile, and hardscaping products in North America. Headquartered in Orange, CA, MSI maintains 50 state-of-the-art showrooms and distribution centers across the U.S. and Canada. MSI's product assortment includes engineered surfaces, LVT, tile, turf, natural stone, and porcelain products imported from more than 37 countries on six continents.

For more information, please visit

www.msisurfaces.com

Quick Overview

Challenge

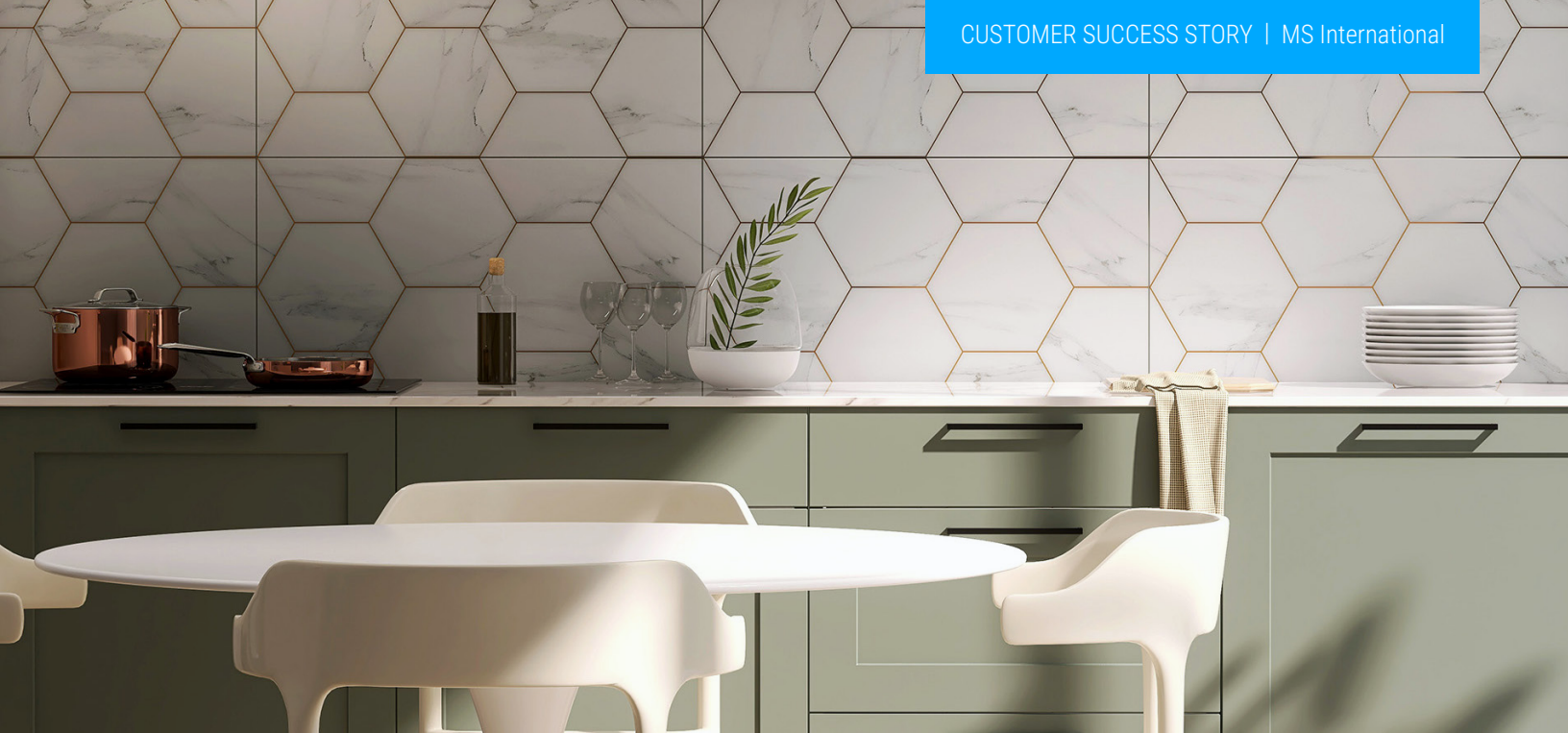
Manual Practices Stifle Efficiency

Solution

Automation Boosts Delivery Performance and Customer Satisfaction

Results

- Scalable Growth
- Cost Control
- Improved Efficiency
- Smarter Decision-making



Challenge: Manual Practices Stifle Efficiency

Boasting an extensive distribution network, MSI operates 50 state-of-the-art showrooms and distribution centers across the U.S. and Canada stocked with hundreds of millions sq. ft. of inventory and 5,000 product SKUs. The distributor relies on a diverse carrier network and its own fleet of 350 delivery vehicles to meet its delivery promise for business-to-business (B2B) customer deliveries across North America. MSI also manages internal transfers between distribution centers to rebalance inventory.

Prior to Descartes, MSI was relying on tribal knowledge, manual practices (e.g., spreadsheets, Google Maps), and a truck builder with limited functionality to manage transportation operations. The distributor lacked visibility into carriers, service levels, and load consolidation and had no process for spot quotes. Inefficient, decentralized manual routing for last mile delivery offered limited visibility across the distribution network and was incapable of effectively satisfying regionalization requirements at scale.

"In addition to efficiency roadblocks and lack of visibility across our transport operations, we were having downstream issues. For example, we weren't able to provide trucks with proper pick-up appointments, so they were creating a traffic bottleneck at the warehouse," said Meet Sanghvi, Senior Business Process Analyst - Driving Process Efficiency & Digital Transformation at MSI. "Plus, shipping costs were adding up and we were unable to maximize our full truckload (FTL) shipments."

Solution: Automation Boosts Delivery Performance and Customer Satisfaction

MSI operates a hub-and-spoke distribution model, delivering products to a range of clients—flooring and hardscaping retailers, building supply centers, kitchen and bath dealers, trade professionals, hotels—across the U.S. and Canada. To streamline the expansion of distribution centers to support its growing customer base, MSI replaced legacy technology and manual transportation management (TM) and logistics practices with Descartes Transportation Manager and Descartes Route Planner.

Integrated with MSI's in-house warehouse management system, the scalable automated solution strengthened operational control and increased delivery productivity as volumes grew, while enhancing decision-making through real-time visibility and granular data capture. "With Descartes Transportation Manager, we've automated tendering—including spot quotes which are an indispensable first for us—follow-ups, and exception handling so we can manage increasing order volumes without friction," said Sanghvi.

"And with visibility into carrier options, we no longer need to rely on a limited set of carriers or lane knowledge that lives in someone's head," added Sanghvi. "We've created a diverse carrier network comprised of both large tech-enabled carriers and old-school mom-and-pop trucking companies, building lane-level carrier relationships for repeatable, cost-effective delivery success."

On the last-mile front, the Descartes route planning solution automatically builds the most time-efficient and cost-effective delivery routes that adhere to promised time windows and service expectations across MSI's two primary product paths: the countertop business and the floor, wall and hardscape material business.

"Our evolving product lines include items of varying sizes and weights and different requirements for type of delivery vehicle, loading, and offloading. Coupled with regional differences, this variation creates unique distribution challenges," said Ryan Potter, Operations Director, National Transportation and Operations at MSI.

"Being able to customize each individual route based on product types or service level needs has enabled us to say yes to our customers in a much more automated way. For example, when we have a delivery of large-format tile, Descartes Route Planner automatically filters delivery assets for selection, showing only trucks that can actually service that material, to ensure a successful delivery."

"With Descartes, we've centralized dispatch operations, internal transportation operations, and data collection but are still able to provide the regionalization customization our customers expect," added Potter. "Plus, with visibility into truck capacity and loads, we're now able to maximize truck utilization to deliver more products, faster and on time. We save time and money but, more importantly, our customers are happy."

Results:



Scalable Growth

By eliminating time-consuming and labor-intensive manual TM and route planning processes, MSI was able to scale operations seamlessly and cost-effectively to manage increasing volumes of orders and deliveries across a growing number of distribution centers.



Cost Control

MSI can compare carriers in real time, maximize FTL shipments, and access spot quotes to increase cost efficiency and reduce the transportation spend. Centralizing transport operations and data collection eliminated redundancies and trimmed costs.



Smarter Decision-making

With real-time visibility, customized reports, and centralized data collection, MSI has turned tracking data into actionable insights, increasing KPIs (e.g., weight per truck, miles per route) to boost delivery productivity, reduce costs, and enhance customer satisfaction.



Improved Efficiency

The solution helped MSI increase delivery efficiency by driving fewer miles and optimizing truck capacity and load consolidation while accelerating order-to-cash cycles with electronic proof-of-delivery (POD).