

CASE STUDY

From Manual to Modern: A Transportation Transformation

The Early Stages

INTRODUCTION

East Penn Manufacturing partnered with JBF Consulting to modernize its transportation and logistics operations, transitioning from manual routing, fragmented policies, and limited tools to an integrated technology solution built on the Descartes TMS suite and custom software.

INDUSTRY

Manufacturing (Industrial and Automotive)

SERVICE

Program-level orchestration, strategic planning, and direct implementation support

RESULTS

- Careful balance of policy reforms, process improvements, and deployment of technology created a structure that associates could build from to enable long-term scalability
- Knowledge transfer empowered super users and planners to sustain adoption and best practices
- Enabled fleet tracking & visibility and improved capture of operational data

» Executive Summary

East Penn Manufacturing embarked on a multi-year supply chain journey to upgrade and replace manual transportation processes with a more modern digital platform. The company based their transformation on Descartes' Transportation Management System (TMS), a suite of technologies consisting of third-party order processing and common carrier optimization using Transportation Manager (TM), fleet routing & resource planning with Route Planner (RP), and dispatch & execution based on their Mobile application.

As a long-term partner, JBF guided the overall design and implementation of the TMS, ensuring enterprise-level integration was efficient and user-friendly, and that the organizational structure supported the transformation. JBF helped craft policy updates, trained & transferred knowledge to associates, and

“JBF is more than just a consulting company – they are a trusted partner and true extension of our team.”

— Harry Ziff,
VP, Corporate Logistics

established processes to better handle master data maintenance, continuous improvement, and system version upgrades. The outcome: streamlined operations, readiness for future upgrades, and a scalable infrastructure to support growth.

» Customer Profile

East Penn is a national manufacturer with a diverse portfolio serving automotive, industrial, reserve power, and mobile technology markets. Operating a complex distribution network across plants, smelters, and regional DCs, its logistics team manages fleet, truckload, LTL, intermodal, and product reclamation flows. Service, reliability, cost control, and visibility are critical given the scale of operations. To remain competitive and enable future growth, East Penn initiated a digital transformation program centered on the Descartes TMS technologies and supported by a custom Fulfillment Planning Application (FPA), coded internally and designed in partnership with JBF.

» The Challenge

East Penn's historic transportation approach, while very much service-oriented, relied heavily on manual processes. This manual work had to be duplicated at regional DCs, with no path to centralizing route planning nor visibility functions. Aligning transportation with upstream fulfillment systems was a time-intensive process.

These challenges had cost and workload implications, underscoring the need for an experienced partner to bring guidance in Transportation Management System implementations and to support a long-term vision for the transformation effort.

“JBF provides a depth of knowledge and experience that has been fundamental to our success.”

— Jim Cornelius,
Transportation Director

» The Solution

The initial stages of the transformation aimed to enhance data quality, build a strong base for the transportation planning team to leverage the new technology, and enable more holistic decision-making across the enterprise.

JBF Consulting partnered with East Penn to orchestrate a comprehensive program spanning enterprise design, implementation project planning, and change management:

- **Data Management:** Helped define naming conventions, appropriate master data repositories, audit cadence & procedures, and new customer onboarding processes.
- **Policy Standardization:** Conducted a thorough evaluation of sales and warehousing policies to simplify the number of transportation order scenarios, as well as include automation in the custom application.
- **Customized Software:** Identified need for improved order visibility and method of applying service-level policies. Worked closely with manufacturer's IT and operations teams to design and implement a combined middleware & fulfillment planning application.

- **Change Management:** Led training & adoption for custom fulfillment planning application, carrier load planning, and route planning teams.
- **Organizational Structure:** Recommended organizational structures, including super user roles and centralized routing support.
- **Standard Operating Procedure:** Developed documentation outlining precise steps to execute, as well as a methodology for controlling and modifying as necessary.

» Results and Impact

The engagement delivered measurable results that improved both near-term efficiency and long-term scalability:

- Increased operational resilience and efficiency by integrating the East Penn's legacy mainframe systems to the modern TMS solution.
- Created a scalable transportation model with standardized processes, repeatable testing & training approaches, a flexible middleware application, and documented plan for expansion across the remaining fleet, carrier, and DC operations.
- Improved order processing time by reducing the number of applied service-level agreements from over 80 to approximately 25, housing the configuration logic for super users to access, then automatically applying the rules to all orders.
- Enabled fleet tracking & data visibility through real-time location feedback and capture of operational metrics, routing exceptions, and used product reclamation information.
- Transferred knowledge effectively by equipping super users and operations teams to modify and improve configuration parameters, adjust order logic, and tune optimization models with limited support.

Together, these improvements enabled time and cost savings with improved visibility at all stages of the transportation planning & execution flow, while giving the organization confidence to scale its new digital transportation platform across the network.

» Lessons Learned and Next Steps

This transformation reinforced the importance of moving forward with change while still maintaining business continuity. Investing upfront in an extensive enterprise design created immediate wins that laid a flexible and scalable foundation. Next steps include extending the Regional DC rollouts, deploying improved optimization & routing, and leveraging continuous improvement cycles to refine analytics, drive additional cost savings, and further reduce manual workloads.

JBF Consulting helps manufacturers and logistics leaders transform transportation operations through practical design, rigorous testing, and a core understanding of the interaction where technology meets people, policy, and process.

Whether upgrading transportation platforms, rolling out RDCs, or designing custom software solutions, JBF provides the stewardship to de-risk investments and accelerate results.

Email us at contact@jbf-consulting.com or visit us at jbf-consulting.com

