

## HERMAN MILLER, INC.

### Improving Domestic Outbound Freight Utilization

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**Herman Miller, Inc.**, a \$2.5B company, is a globally recognized leader in the design and manufacture of furniture, and the parent company to many notable furniture and home goods brands. The firm operates manufacturing and distribution sites in the US, UK and China. The Midwest Distribution Center (MWDC) in Holland, MI aggregates and distributes goods from all Herman Miller Group brands to all customers across the Americas. The MWDC sought to improve the utilization of truck-driven trailers, their primary mode of domestic product shipment, to reduce shipping costs.

Herman Miller's business model complicated this endeavor; their value proposition is founded on a high level of customer service and reduced costs derived from lean manufacturing principles. Herman Miller's logistics coordinators operated within the Customer Care department to ensure that customer requests - rapid order modification, exact times and days of delivery, maximum trailer quotas, and physical loading requirements - were met. Just-in-time manufacturing with no safety net of inventory also drastically constrained shipping timelines. These factors hampered logistics coordinators' ability to efficiently coordinate trailer loads, directly decreasing profitability, as the firm offered free domestic shipping. Coordinators relied on tribal knowledge and time-consuming manual processes to meet customer demands.

The Tauber team analyzed shipping patterns and identified frequently visited warehouses as prime targets for improving shipping efficiency. These customers which used these warehouses had relatively smooth demand profiles, predictable delivery preferences and an ability to unload densely packed trailers. Further analysis determined that the presence of such "high-traffic warehouses" could enable efficiency improvements for deliveries to nearby customers as well. The Tauber team programmed an automated tool to codify and improve upon coordinators' best practices and increase shipment efficiency to these clusters. The team also implemented several communication flow improvements, data quality control procedures, and statistical risk quantification and management processes to support these operational improvements.

The team successfully began implementing these tools and operational improvements. Herman Miller's expected annual savings are \$1.6M (4% of total shipping costs) with a 90% reduction in service level related risk and a 484 US tons (3.4%) reduction in CO2 emissions.