

Fargo

HOW DATA SCIENCE BUILDS SMARTER SUPPLY CHAINS

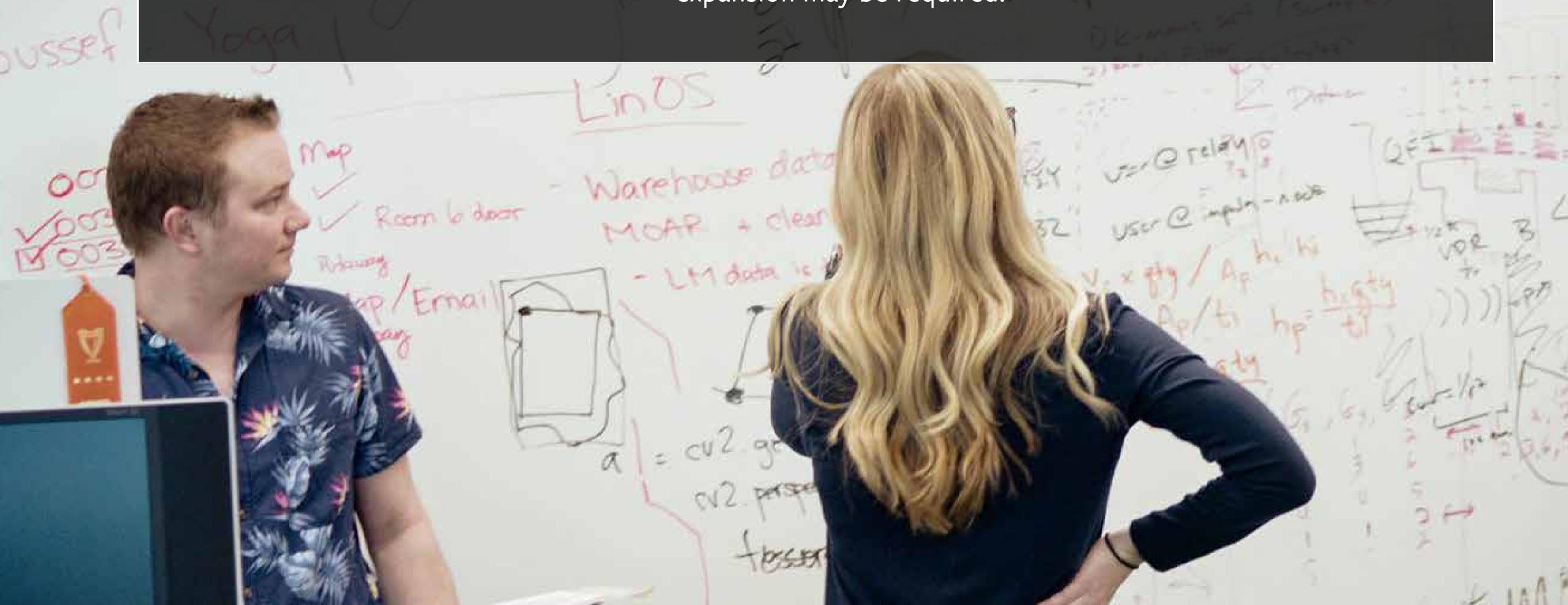
A NETWORK ANALYSIS STORY

In the cold chain, every second counts. Decisions must be strategic, and supply chains seamless. Recently, a large U.S. importer asked Lineage for a distribution and facility network design that supported their business needs today and could scale up with them as they continue to grow. Lineage jumped in with an analysis-driven solution that could help the customer save up to \$2 million annually.

COAHUILA

THE CHALLENGE

This customer is experiencing capacity issues in the Northeast, which creates bottlenecks within their supply chain. Their current model imports products through key ports in the Northeast, Southeast and West Coast with a 3DC model to support their customers. They ask Lineage to look at their data and help streamline their supply chain to reduce bottlenecks and prepare for their projected growth objectives, knowing that a new market expansion may be required.



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ATAILORED APPROACH

Lineage's in-house data science team brings deep expertise in data, mathematics and other disciplines to apply a unique methodology to assess and innovate our customers' supply chains. After they gather and rigorously review our customers' data with advanced modeling, they prepare a proposal. This transportation and facility analysis identifies appropriate DCs to deploy inventory and freight lanes to create efficiencies from production facilities and points of entry to retail shelves.

DATA USED FOR ANALYSES

- Historical shipment data
 - Supplier and retailer locations
 - Transportation rates
 - Manufacturing locations
 - Warehouse locationsPorts of entry or departure

symmetric

scale osd(psd, dt):

CRITICAL FINDINGS

After assessing the historical shipment data, our team determines that if the customer expands their network to four distribution centers and considers new markets with more capacity, it could drive down annual transportation costs significantly.

The Lineage data science team recommends new ports of discharge to drive further cost efficiency with new distribution center locations. By moving their inventory to these markets that are closer to their product's final destination and that have better capacity, the customer could relieve their bottlenecks, lower their transportation costs, and improve delivery service levels.



THE RESULT

DC locations shift, the customer could yield up to

With our recommended port and

SALUAL IN ANNUAL

TRANSPORTATION

COST SAVINGS.

The challenges our customers face are not one-size-fits-all. We've developed a suite of analyses that address and execute on pain points across your supply chain. While a

MANY WAYS TO SOLVE

of analyses that address and execute on pain points across your supply chain. While a Transportation and Facility Network analysis worked best for this specific customer, our data science team can tackle your cold chain challenges head on with a tailored approach.

SEEKING... NEW

FOR CUSTOMERS



BUILDS

CONSISTENT

INVENTORY

STREAMLINED

DISTRIBUTION

AUTOMATION

a **Greenfield analysis** to pinpoint

optimal location(s) for a new,

supply chain.

automated building, tailored to your

WE CAN PERFORM...

Inventory Forecasting to predict

and places your inventory to

ensure business continuity without disruption during seasonal peaks or business growth.

an Optimal Facility Location

analysis, pairing your data with

our network to determine the most

a Transportation Network
Optimization analysis to
identify appropriate DC locations,



NETWORK EFFICIENCIES

modes and packing to optimize efficiencies—from production facilities to retail shelves.

Freezer: 3 Row: 11 Section: 116

An efficient cold chain is more than a time and cost saver. The safety of your food depends on it. While other providers will say they can work up a solution, only Lineage has the capabilities to home in on crucial insights and implement a solution that'll have your cold chain running at peak efficiency.

DATA-POWERED AND PROVEN

24 weeks | 10°F