Odyssey

Visibility to Know.
Insight to Act.

Network optimization—the path to
improving operations & reducing costs

Unlocking Data Unlocks Potential

It's a common scenario for many high-volume shippers: Data is siloed in disparate locations—often embedded across multiple spreadsheets—which puts supply chain decision-makers at a clear disadvantage. It's especially challenging for large global organizations looking to clearly understand if product mapping is poor, global standardization is lacking or various regions have different priorities and protocols for shipping.

69% of organizations do not have full visibility of their supply chains[1]

SILOED DATA
LEADS TO SILOED DECISIONS

Origins

Locations

SKUs

Volumes

Materials

Product Weight

Transportation Costs

Throughput Costs

1. Logistics Bureau, July 2020

Network Optimization Makes Data Visible and Actionable

Providing visibility into all of an organization's data is where network optimization starts. It's important to begin by harnessing all of the relevant data an organization has, then using business intelligence (BI) tools to analyze that data and provide a centralized and interactive understanding of the supply chain as it exists and as it is evolving.

From there, scenarios are analyzed to identify opportunities for better performance and cost savings. The final critical step—recommendations based on scenarios—provides an organization with holistic real-time data they can use to take action.

Businesses with optimal supply chains have 15% lower supply chain costs, less than 50% of the inventory holdings, and cash-to-cash cycles at least three times faster than those not focused on supply chain optimization.[2]

NETWORK OPTIMIZATION STEPS

– 1 –
Data Collection and Analysis
(Includes Digital Twin Creation)

– 2 –
Modeling: Baseline and Scenario Development

– 3 –
Marry Modeling Outputs with BI tool

– 4 –
Analyze Scenarios for Improvement

– 5 –
**Deliver Actionable Recommendations**

Bringing Data into Full View

Consolidating all of an organization's data seems like a daunting task. The key to streamlining the process is the creation of a "digital twin." This replication of all relevant supply chain data gives organizations the ability to gain a granular view of critical data elements, including locations, volumes, origins, materials, SKUs, product weight, transportation costs and throughput costs. Insight into this granularity empowers the customers to identify their true total cost to serve.

The digital twin must be kept up to date to deliver this power and information, otherwise it becomes a static picture of what once was—not an accurate view into how the data is continually changing and evolving. A digital twin enables supply chain managers to see lanes and flows in real-time — and it keeps them informed of what's happening in their businesses.

DIGITAL TWIN: HOW IT WORKS

Real Life

Scenario Modeling Tool

Destinations
Suppliers
Production
Modes
Costs
Time
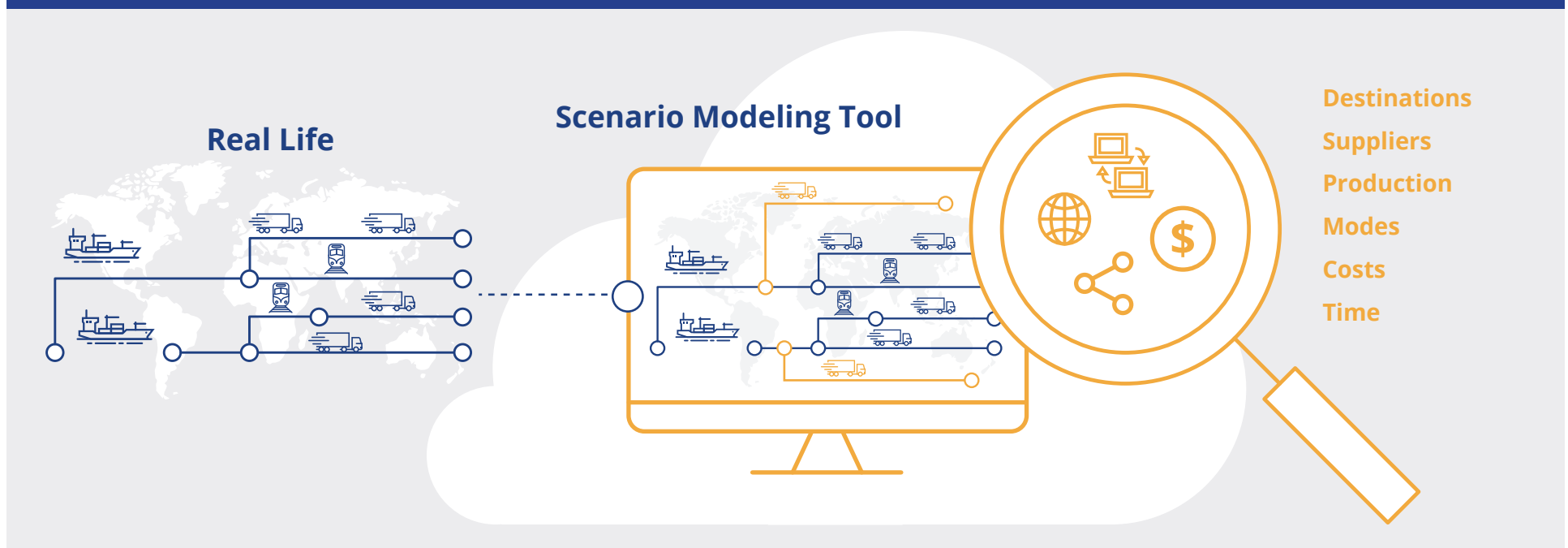
Making Data Actionable With Powerful BI Tools

Once the data is consolidated in a digital twin, the next critical step is network optimization modeling. These modeling outputs are then input into sophisticated BI tools, resulting in an easily consumable, visual digital representation of improvement targets. These digital models are then used to assess and compare trade-offs of potential changes to a supply chain network. This process empowers an organization going through a network optimization to quickly separate opportunities for measurable improvement from activities that result in no real gains — or even losses. The visualization tools make it easy to select the scenarios, view possible strategies and calculate outcomes.

The recommended frequency for reviewing digital twin models depends on the industry and the make-up of the shipper's organization. An e-commerce organization with high demand volatility, for example, should review and adjust every three to six months. A large chemical company with less volatility in demand might choose to review scenarios and make improvements on an annual basis. In either case, the process functions as validation between formal reviews to ensure an organization is extracting maximum value from its supply chain.
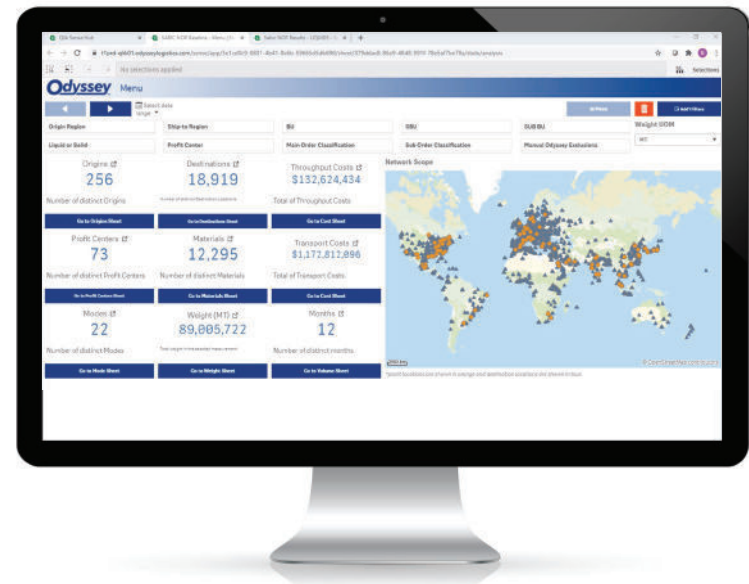
CASE STUDY

Measurable Success for a Global Manufacturer

A global manufacturer viewed as a powerhouse in its industry, delivering 12,000 different types of materials to 19,000 customers across six continents determined it was spending more than $1 billion annually on shipping and a great deal of that spend was wasted. But simply looking at all of its disparate data didn't provide the insights needed to make the right changes.

The manufacturer turned to Odyssey Logistics & Technology, one of their key operational partners, to conduct a network optimization study. After creating a digital twin that integrated the manufacturer's most relevant data, Odyssey applied advanced modeling software to analyze scenarios, identify areas for improvement and make actionable recommendations. All of this was done remotely during the COVID-19 pandemic, saving the manufacturer at least $150,000 in travel costs.

Network optimization can be done virtually whether there's a pandemic or not.

COMPANY PROFILE

SIX Continents

200+ facilities across the globe

19,000 customers

12,000 different materials

$1Billion+ transportation spend

The Big Reveal–What Network Visibility Uncovered

You can't change what you don't know. The manufacturer had production plants on both coasts of the country where it is headquartered, shipping the same products to different regions. There were no strict processes in place for sourcing customers in different regions, booking shipping costs globally and managing lead times.

The interactive presentation of the company's data by Odyssey was the defining moment the manufacturer needed. Supply chain leaders in the company saw their global inefficiencies clearly through actionable data and scenarios that provided clear opportunities for improvement. This gave the manufacturer the insight it needed to correct inefficiencies and optimize its global supply chain network.

OUTCOMES

Actionable, real-time data

Reduced wasted spend

Uncovered better processes for:
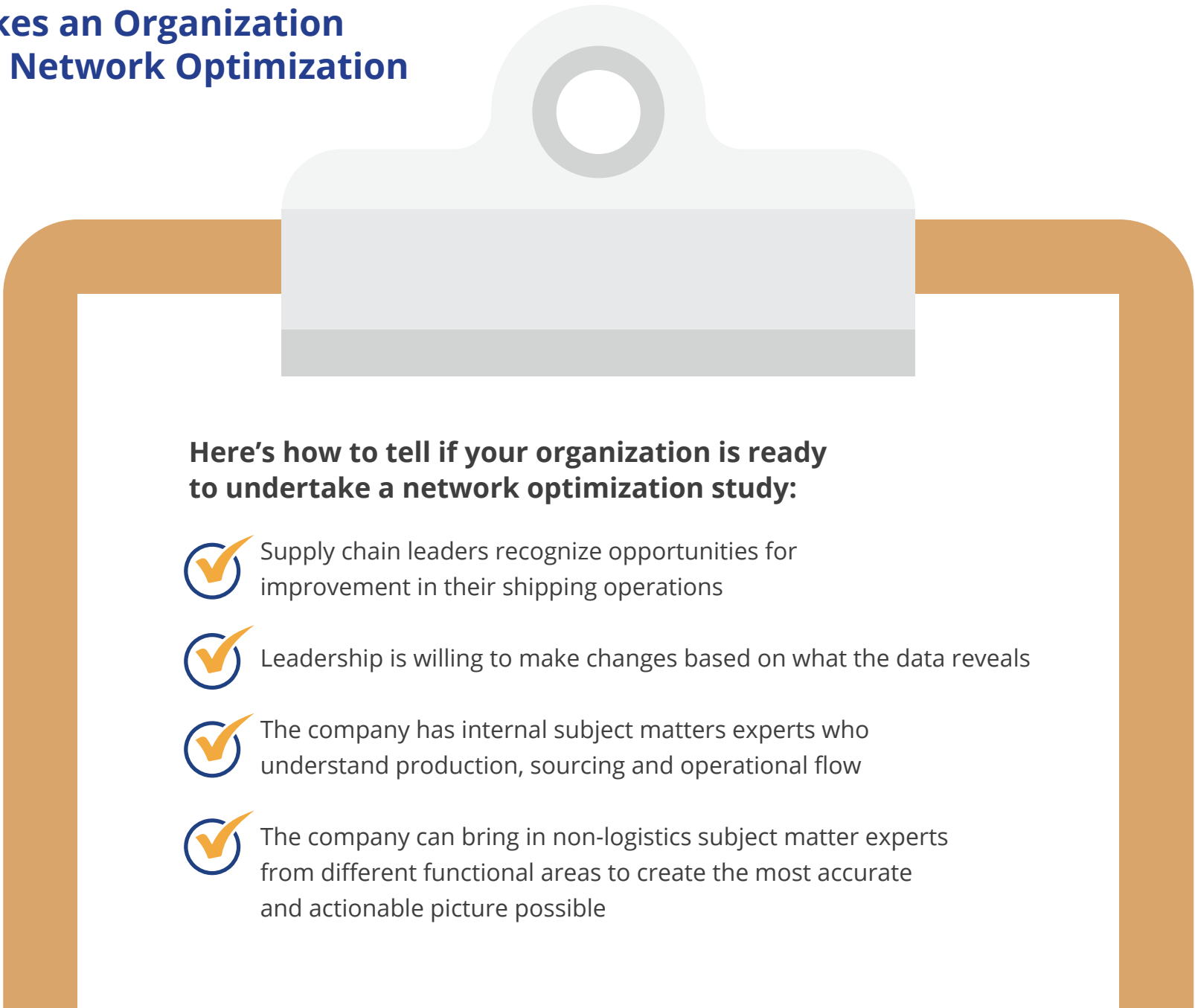- sourcing customers in different regions
- booking shipping costs globally
- managing lead times

The manufacturer has the opportunity to
SAVE $60 MILLION
and improve operations through its network optimization study with Odyssey Logistics & Technology

What Makes an Organization Ready for Network Optimization

Here's how to tell if your organization is ready to undertake a network optimization study:

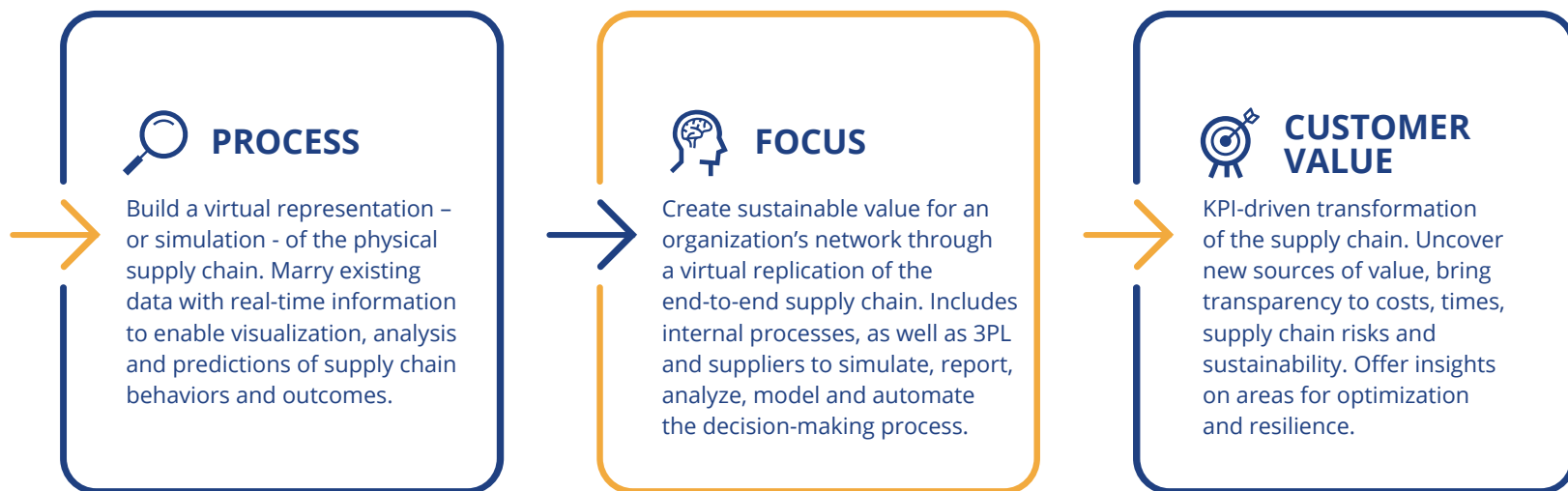- Supply chain leaders recognize opportunities for improvement in their shipping operations

- Leadership is willing to make changes based on what the data reveals

- The company has internal subject matters experts who understand production, sourcing and operational flow

- The company can bring in non-logistics subject matter experts from different functional areas to create the most accurate and actionable picture possible

The Odyssey Logistics Process to Optimize Supply Chain Networks

Odyssey Logistics & Technology offers expert network optimization services to help shippers drive performance and improve bottom-line results. We approach network optimization as both a consultant and an operator — and we're able to provide this service remotely or onsite in your facilities. Network optimization is particularly successful for organizations willing to make changes to improve their operations and reduce costs.

Our process begins by creating a digital twin that rationalizes all of your disparate data to gain and provide granular views of the data as a whole. Once the digital twin is created, we analyze relevant data with our business intelligence (BI) platform to provide a picture that is clear, concise and actionable. From there, we analyze scenarios to identify opportunities for better performance and cost savings, then present final recommendations to your organization. In the end, you have actionable strategies that are easy to deploy, manage and measure.

PROCESS

Build a virtual representation – or simulation - of the physical supply chain. Marry existing data with real-time information to enable visualization, analysis and predictions of supply chain behaviors and outcomes.

FOCUS

Create sustainable value for an organization's network through a virtual replication of the end-to-end supply chain. Includes internal processes, as well as 3PL and suppliers to simulate, report, analyze, model and automate the decision-making process.

CUSTOMER VALUE

KPI-driven transformation of the supply chain. Uncover new sources of value, bring transparency to costs, times, supply chain risks and sustainability. Offer insights on areas for optimization and resilience.

About Odyssey Logistics

Organizations with diverse and complex transportation needs rely on Odyssey's innovative technologies to deliver thorough, high value logistics strategies.

Our clients benefit from expert tailored solutions across multiple transportation modes, backed by the power of our freight network exceeding $3B globally.

At Odyssey, we have assembled a diverse **portfolio of solutions** that we make available to our clients in multiple ways. Regardless of the method, Odyssey delivers high-quality, integrated or individual services that optimize costs and sustain value, informing and elevating our clients' decision-making and processes outcomes.

For more information about Odyssey Logistics and its offerings – including network optimization and beyond – visit us at **odysseylogistics.com/mls**

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