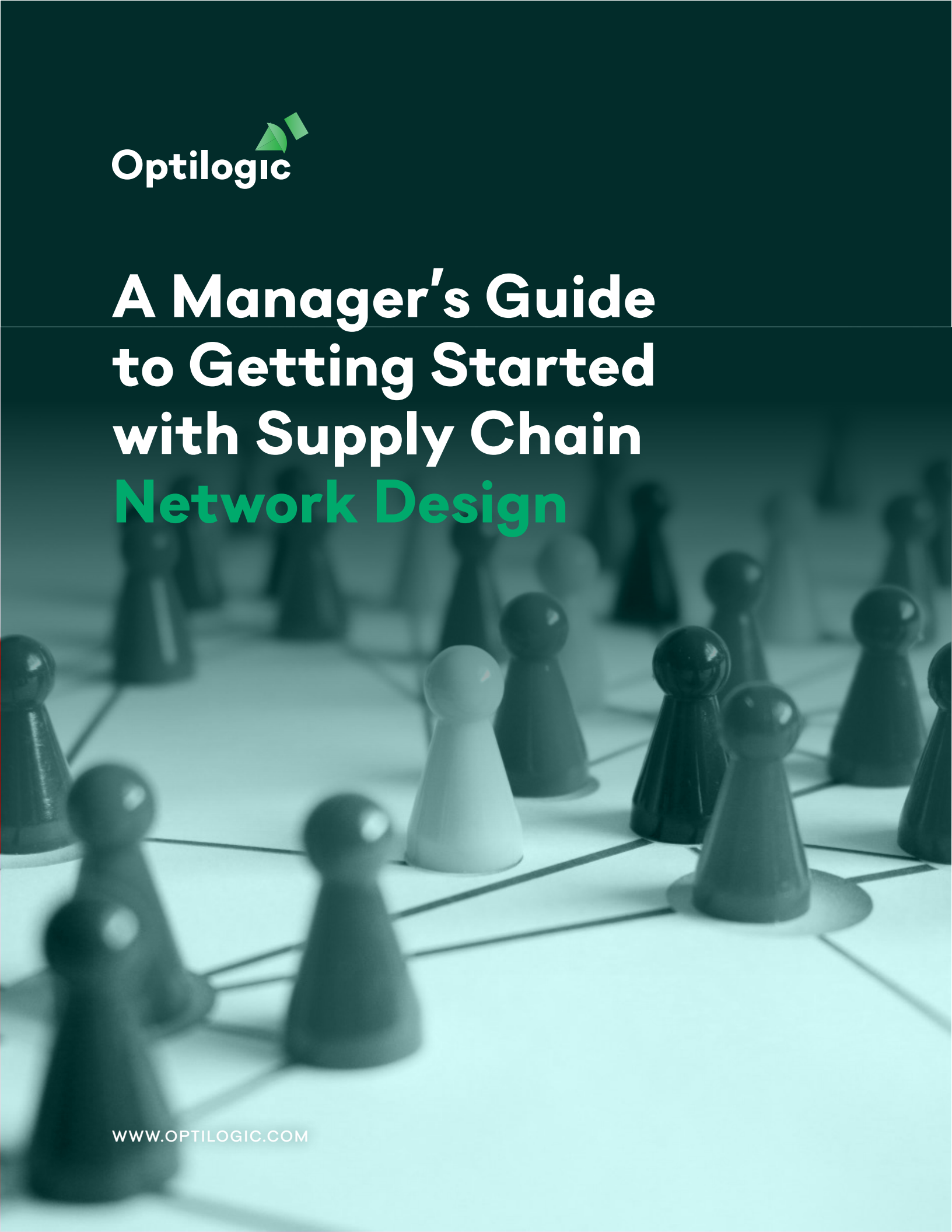
Optilogic

A Manager's Guide to Getting Started with Supply Chain Network Design



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For companies with a physical supply chain, supply chain network design is central to your success. By understanding and optimizing supply chain network design, you positively impact every aspect of your business.

If you manage a supply chain function and are considering adopting network design, you've come to the right place. We've compiled the goals, benefits, and best practices of supply chain network design that will help your organization thrive.

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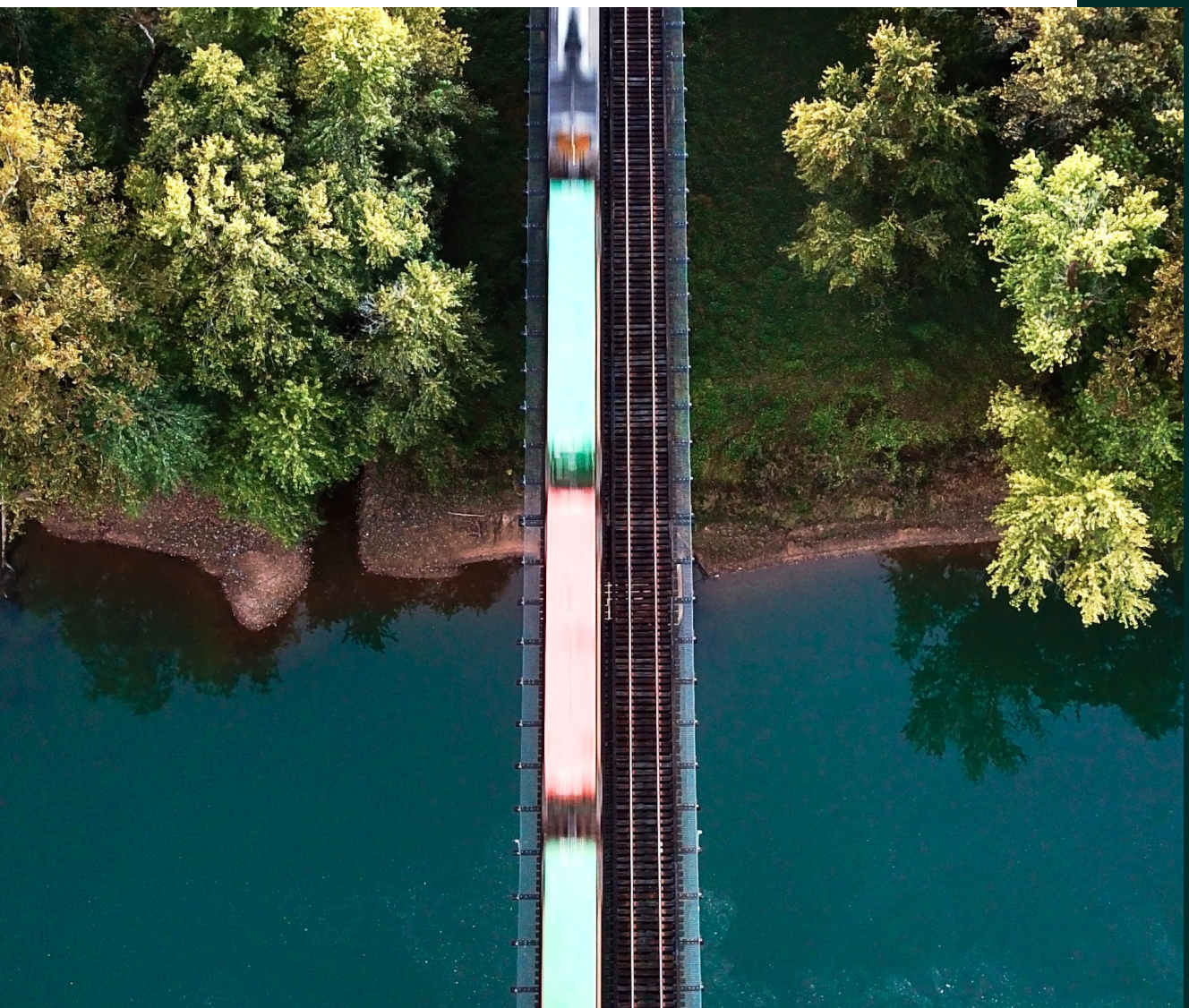


The Goal of Supply Chain Network Design

The goal of supply chain network design is to evaluate your supply chain and identify where you can make improvements or optimize for cost avoidance.

Your supply chain network and needs are as unique as your business. Some variables and constraints can be changed to enhance your network design, and some can't. Optilogic can identify both to determine areas of optimization within your supply chain and guide you forward.

> Our mission at Optilogic is to help organizations improve the processes and cost efficiencies within their supply chain while identifying and evaluating constraints.

Benefits of Supply Chain Network Design

When executed strategically, supply chain design (SCD) provides immeasurable value and benefits to your business by enabling you to:

- ✔ Identify areas that can be streamlined, resulting in cost savings
- ✔ Reduce purchase and inventory costs
- ✔ Reduce working capital
- ✔ Reduce transportation costs
- ✔ Optimize transportation routes according to time, cost, and environmental impact
- ✔ Reduce fixed costs, including facility and equipment costs
- ✔ Reduce variable costs, including labor and 3PL costs
- ✔ Optimize service levels and delivery dates to improve customer satisfaction
- ✔ Understand cost visibility across your network
- ✔ Compare capabilities and costs against benchmark data

Many organizations structure supply chain networks using antiquated systems like spreadsheets or rely on historical data or instinct to make these crucial decisions. In today's marketplace, you need modern SCD solutions that keep up with the ever-changing fluctuations and disruptions in the global supply chain. Modern SCD platform utilization allows you to reap all the benefits above — and more.

The Biggest Trend in Supply Chain Network Design? Speed to Solution

Supply chains have become increasingly fragile, with disruptions possible at every juncture. Companies must implement network design solutions that provide a high-level view of their supply chain, highlighting areas for improvement and optimization. And they need this data fast.

Optilogic's platform enables hyperscaling to run hundreds of scenarios simultaneously. Instead of waiting weeks for results, you can view network design scenarios nearly instantly.

But speed-to-solution supply chain design is more than running an application and compiling data. The information is useless until it's distributed across your organization so the appropriate parties can put that data to use.

Optilogic allows dashboards to populate for individuals within your organization without requiring them to understand the application run. Instead of waiting on a modeler to assemble the information, digest it, and communicate it within your organization, your team receives instant results from Optilogic's scenario modeling solutions.

Best Practices for Supply Chain Network Design

1. Ease of Entry and Platform Capabilities

Organizations need SCD solutions that provide ease of entry. If your platforms aren't accessible, they'll be useless to your team. You need supply chain network design with ease of entry that meets your unique needs, and you want a platform that can preemptively deliver the design solutions you seek.

You can only optimize your supply chain insofar as your platform can provide the solutions and answers you seek. What questions can your SCD platform answer?

2. An Established Center of Excellence

The most effective companies have an established center of excellence. This team provides leadership, best practices, research, support, and training for your organization. In many ways, your center of excellence (COE) drives your organization's culture and success, so it's crucial that you strategically create and develop your team.

Building your COE

Your center of excellence is not merely a group of analysts that know how to model or write code. Effective COEs require in-depth business knowledge and expertise from various backgrounds and experiences within your industry, e.g., individuals from finance, transportation, and production working together to contribute to your COE.

Once you've identified experts within your organization, teaching them to model for SCD allows you to create a holistic powerhouse of expertise.

Establish authority and trust across your organization

The advantage of utilizing in-house experts means you have access to the business knowledge required to succeed within your market. And when it's time to present this back within the organization, you gain tremendous credibility. Because your COE members have proven themselves within their field, they can engage and communicate with authority, and you can achieve the solution much more efficiently and effectively. You don't have to validate the findings with every department because you include respected and proven experts within your COE.

How to Build Your Center of Excellence

- Establish authority and trust across your organization
- Provide training opportunities
- Provide career advancement within your COE
- Data analysis, extraction, and manipulation

Provide training opportunities and career advancement

Once you've established your COE, you must provide training opportunities for members to gain experience in modeling at a realistic and sustainable pace.

These individuals understand the business side of what you do. And now that they know the process necessary to change processes (and make those changes), they provide even more value to your business. Providing career advancement opportunities for COE members can enhance your organization at every level.

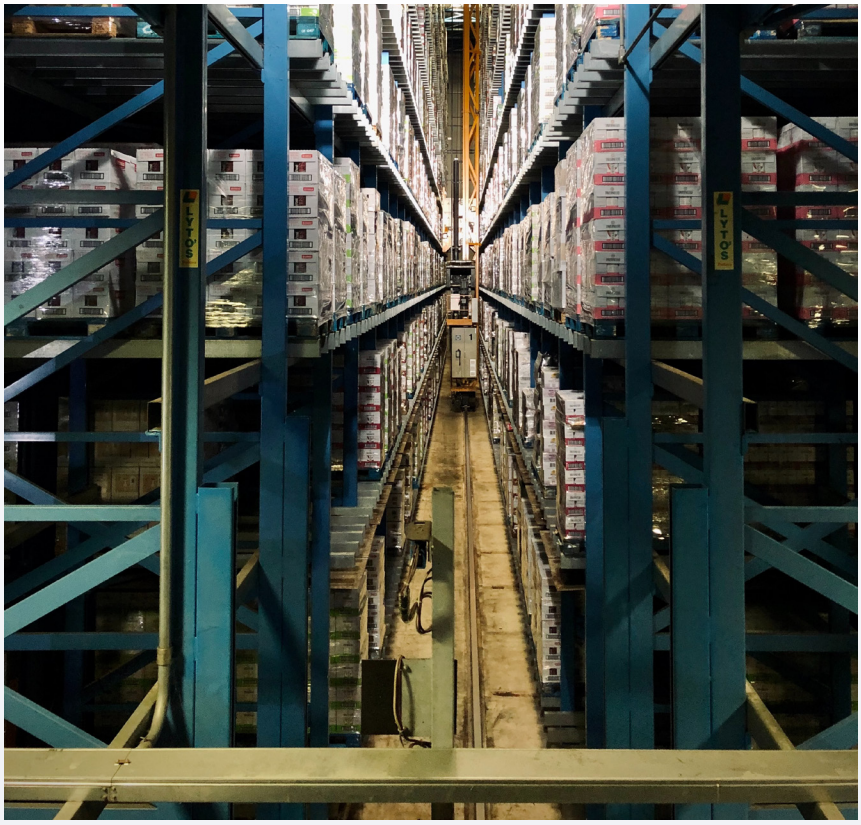
Data analysis, extraction, and manipulation

Data is never perfect, and it's always fragmented. Organizations must stitch information together in a way that makes sense to the organization and utilize it to answer questions and guide decision-making.

As you consider data management, ask yourself the following:

- What questions are you trying to answer?
- How can you align existing data to answer those questions?

If you approach data within SCD this way, you manage expectations once you run scenarios and acquire analytics.



Optilogic makes it simple to use fragmented data to run a simple SCD model. If you're beginning to explore SCD and don't have access to a high volume of data, our platform can transform even basic data to deliver analytics that can guide you to the next best step for your organization.

3. Scenario Modeling in Supply Chain Design

When you solve supply chain models, you explore various supply chain scenarios. By removing constraints from your baseline or historical view, you can explore how altering those restrictions will affect your costs, volumes, and profits.

Scenario modeling allows you to create a utopian view of your supply chain to visualize various scenarios for your organization's supply chain network. Then when you add different constraints, you can see how those constraints affect cost. Are some of your existing controls able to be altered? If so, how can that affect your bottom line?

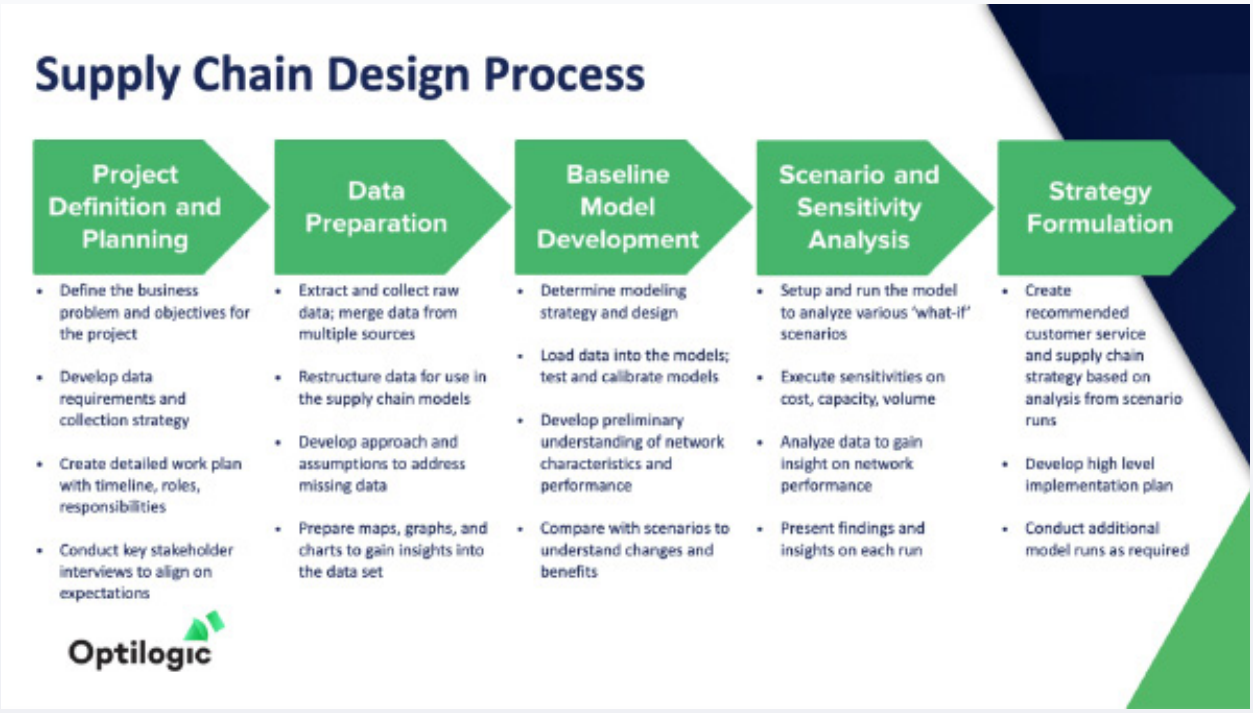
Supply chain simulation within SCD provides total network perspective and highlights areas where you can improve your practices.

4. Considering Risk in Supply Chain Network Design

Widening your lens to consider potential risks to your network allows decision-making that addresses financial and resiliency business objectives. Cosmic Frog provides a risk rating on every scenario, enabling users to measure and quantify risks at the Supplier, Facility, Customer, and Network levels.

Steps to Follow to Get Your Team Started

Embarking on a supply chain modeling strategy requires intentionality. You won't drift into results-driven supply chain modeling. Below, we outline the best first steps for getting your team started with supply chain design and modeling.



1. Identify a Champion within the Organization

Organizations must create a solid foundation for their supply chain modeling. Identifying and assigning an executive sponsor is the first step to creating a solid supply chain. The executive sponsor will support the efforts, fund the actions, and be a champion for the work within the business.

2. Prioritize Initiatives

As organizations embark on supply chain modeling, there's an endless list of questions to ask and potential models that can be built.

You must understand the expected value of a project or initiative and the time it takes to develop the initiative to inform the questions you ask of the model. Consider the potential achievable value and the time you have to achieve it. From there, look for quick wins and choices or avenues that can achieve value quickly.

3. Assign the Right People and Skills to Your Team

Identify the right people in the organization to execute your supply chain modeling. This team needs to have the skills and talent to manage your supply chain tasks. Most businesses must invest in skills training to ensure all contributors have the knowledge and capability to handle supply chain modeling needs.

Supply chain initiatives often require cross-functional alignment across various departments within your organization. Establishing your team and investing in skills training ensures your supply chain strategy and modeling practices deliver the results you're looking for.

Many companies will take the next step and build a supply chain design center of excellence (see previous section).

4. Collect Data

Collecting data is the first step in creating your initial supply chain model. However, data collection can potentially transform into a never-ending search for perfect, complete data sets. The relentless pursuit of perfect data will slow your organization down, and it's unnecessary to begin modeling for your supply chain.

Collect data that's readily accessible. Find available data, gathering as much as you can as quickly as possible. You'll likely have gaps in your organizational data. If and when that happens, make educated decisions based on historical or sample data so you can promptly begin modeling.

If you look for perfect data, you'll waste time. Collect what you can then move forward.

5. Establish a Functioning Baseline Model

Once you've completed the initial steps to establish a foundation for supply chain modeling, you can create your baseline model.

This may be the first time you see your supply chain come to life outside of spreadsheets or a scribbled drawing on the whiteboard.

You can now visualize your supply chain by seeing all your nodes and flows on the map. You will see the locations of your customers, distribution centers, plants, and factories, as well as business rules that govern flows between those nodes.

6. Run Various Scenarios

Once you've established the baseline, it's time to test and run scenarios.

You should expect and prepare to run many scenarios and tests. Some will work, bringing you closer to your optimal supply chain, and some won't. Asking various questions of your model gives you a more complete, high-level view of your supply chain, empowering you to balance service, risk, and cost at every juncture.

Optilogic's platform supports and facilitates this high-volume scenario modeling. Utilizing our cloud-native platform, you can hyperscale to run hundreds of scenarios simultaneously, exploring virtually unlimited supply chain options while balancing cost, service, and risk.

The more testing and modeling you run, the more insights you can access that drive decisions for your organization. You can then market your success internally based on the value those models identify. Internal marketing campaigns will build support for the next initiative, garnering more support, funding, and people for your projects.

Optilogic

Join the New Era of Supply Chain Design

Cosmic Frog is the only supply chain network design platform that balances financials, service, and risk—in a 100% SaaS-based environment.

3-in-1 Design Platform

Optimization, simulation, and risk analysis across an end-to-end supply chain in a single platform, equipping businesses to make more informed decisions beyond just cost.

Get Up and Running in Minutes

3, 2, 1, blast off! We offer professional grade-solving technology for optimization, simulation, risk, and advanced analytics – with ZERO installation or lengthy configuration.

Risk Rating for Every Scenario

Cosmic Frog provides a risk rating on every scenario run to help companies proactively minimize risk and volatility.

Access from Anywhere and Collaborate with Ease

Whether you need a fresh set of eyes to review your models or you're ready to lead your next stakeholders meeting with confidence, our platform allows you to easily work together on projects and share models enterprise-wide.

Sign Up for Free