

Supply chains in flux? What to do now?

Kneejerk reactions to international disruption, like reshoring, may not be the whole answer to solving your supply chain challenges.

The disruption buzz

You've most likely heard the buzz in the media: onshoring, nearshoring, reshoring, regional supply chains, China plus 1. Is it real? Is this the strategy of the future? Is it right for your business?

After the dust of disruption settles, the instinct to bring everything back home must be tempered with the economics of a fiercely competitive market; it's important to remember the law of economic comparative advantage hasn't been repealed. The reality is that the world will remain a global marketplace, but the variables that lead to the best sourcing decisions are more numerous and, in some cases, more subtle. We have learned a lot since the offshoring wave that started at the beginning of the century and we now know chasing the lowest cost labor rate isn't the whole story.

Costs associated with total landed costs include:



Constructing a complete network analysis that includes all costs associated with total landed cost (i.e., materials, manufacturing cost, labor rates, logistics and transportation, selling, general and administrative expense (SG&A), and tariffs) is more important than ever as decision variables change rapidly. For example, trade relations with China are changing, as well as conditions inside the country. Labor costs continue to increase, and tariffs continue to

mount. Added to these hard variables like cost, are soft variables that have increased in importance, such as risk mitigation, simplification, cost and time to change and unique customer requirements.^[1]

China labor costs outpace Mexico's



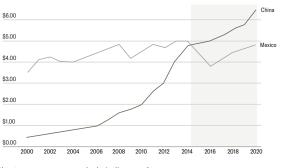


Chart source: www.supplychaindive.com/news

Moving beyond theory

So, what should a supply chain decision maker do? What actions should be taken? A decision maker needs data to evaluate, and good tools to make sense out of that data. Certainly, decision makers must act, but strategic decisions should be avoided until they can be predicted with confidence, or until the new normal settles - the latter of which takes an unknown amount of time and can be costly. These strategic decisions are complex and can be influenced by a myriad of hard and soft constraints.



and understanding.

Now is the time to get ahead of the pack and start preparing the foundation upon which to make those complex decisions.

Many leaders avoid quantitative decision support methods because of the difficulty in quantifying the drivers and uncertainties that make up the decision-making process. Supply chain quantitative decision support tools fall into one of two key approaches: 1) financial models and 2) supply chain math models. Financial models rely on static point estimates whereas math models are much more flexible and can incorporate both quantitative and qualitative inputs. Most math-model practitioners rely on off-the-shelf software that are one-size-fits-all with limits to their bias variables and tuning capabilities.

The approach that avoids these pitfalls, but still allows quantitative analysis to support critical decision, is to build a custom math model, that can be tailored to best represent the market constraints and goals, then allow decision makers to optimize their supply chains.

The model's objective and constraint formulation must be accessible to the builder so that it can be properly tuned to simulate decision variables and complex business rules (off-the-shelf software is a black box and the problem may need to be simplified, tricked or tuned through trial and error). This model should seek an optimal mix of competing goals and constraints to maximize business results at the lowest total cost. The model should allow rapid scenario analysis to test solution sensitivity to those hard-to-quantify decision variables and make visual the solution space that will build decision maker's intuition

When to get started

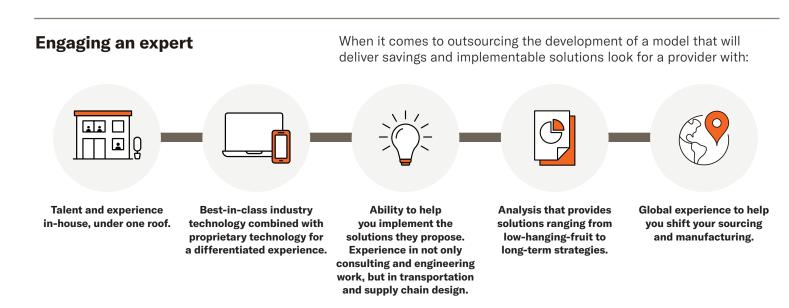
Model formulation

Peter Drucker's adage is still true: "You can't manage what you can't measure." To paraphrase: You can't know whether your strategy is successful unless you quantify the current and alternate approaches. Without a way to quantify different approaches and constraints,

decision makers must fall back on common sense and gut feel (i.e., experienced guessing). Custom math models aid in understanding where opportunities are emerging and allow you to be ready when it is time to make critical supply chain decisions.



Build your decision-making foundation now.



Schneider's capabilities and experience make us different than your standard consulting firm or lead logistics provider who will use off-the-shelf software to build your solution. Consulting firms may offer network analysis, engineering studies or modeling, but they cannot match the expertise of Schneider's supply chain engineering team. We understand the nuances of data (both domestic and global), situational analysis and related implementation work that comes as a result of modeling; we also know what pitfalls to watch for. We do more than handoff our findings, we are with you as they are successfully operationalized.

Futureproof your supply chain with a strategic plan and a living network model. Schneider can help.



Contact us at solutions@schneider.com