

## Buyer's Guide for Supply Chain Network Design Software

Finding the right enabling technology to support growth and foster agility in your supply chain network

## **About this Report**

The world's most profitable companies have built their success on an effective and responsive supply chain network. A network that reacts swiftly to changing business conditions, adapts to customer preferences and can flex for fast growth. This type of network has become a north star for many supply chain organizations. But achieving this is easier said than done. Network design as a discipline is complex and too many businesses are still relying on spreadsheets to design and optimize their supply chain. As a result, most organizations struggle to answer network design questions or test hypotheses in weeks. Let alone days, and certainly not hours. Proactive risk assessment of disruptions like trade disputes, unexpected supplier issues and extreme weather events are rarely executed. Reactive assessment post- event is the norm.

This Buyer's Guide helps you find easy-to-use technology to become more proactive and less reactive when it comes to network design and optimization. It presents the findings of a recent network maturity quiz carried out among dozens of supply chain professionals and draws on Supply Chain Insights' research findings on this topic. Read on to uncover how you can provide a happy path for your team to master network design and analytics.

#### About AIMMS

AIMMS is a forward thinking platform provider democratizing the use of supply chain analytics so everyone is self-enabled to make better decisions.

#### Who is this guide for?

You will find this guide useful if you:

- Have an existing appreciation for network design
- Have overextended the use of spreadsheets in your organization
- Feel like you're spending too much time gathering and structuring data
- Have a distaste for drawn-out and tedious network design studies
- Would like to learn how advanced analytics, and specifically prescriptive analytics, can help you generate scenarios, test hypotheses, and optimize your network

## A handy checklist for software selection

Don't use a tick box RFP approach, take time to define your needs and the capabilities required to support these and then ask vendors to describe how their solution enables those capabilities
Identify and share your pain points and opportunity areas
Choose what is right for youdo you want to be self-enabled or do you prefer a solution to be implemented by 3rd parties?
Form a team that will participate in software selection
Research available suppliers via analyst recommendations, reports, etc.
Get demos and pricing structure
Sign an NDA and share selective data with your preferred candidate(s). They should be prepared to use this to build a POC model, the output from which can be used to support your business case
Work closely with your leading candidate to truly understand fit, your level of data maturity and a project plan
Confirm accountabilities across your business and get timeline and resource information
Get started and capture benefits



## Network Design Maturity: what do supply chain pros say?

Gartner's Optimize Supply Chain Network Capacity Utilization for Manufacturing Competitiveness, 2018 claims that organizations will require new ways of managing capacity across multiple assets and recommends generating scenarios using advanced analytics. To what degree are supply chain professionals progressing from Excel and embracing these new opportunities?

#### Decision making approach

Our research shows that the vast majority rely on a combination of spreadsheets (nearly 60%), gut feel (15%) and previous experience (46%) to make supply chain network decisions. Nearly 53% of professionals who took our quiz pull the data they need from spreadsheets, and only 30% pull data from multiple systems automatically. None of the respondents share data across multiple applications to manage inventory, network design and S&OP in an integrated way.





#### Advanced analytics

Nearly 60% of the professionals assessed indicated that they did not use some form of advanced analytics to support their network design process.



#### Agility

Are teams able to react quickly to disruptions and changes in their supply chain network?

Most respondents answered that it took weeks (38%) or days (30%) to get the answers they need to address network design questions. A few, 18%, said it took months. Only 13% finds the answers they need in a matter of hours.



#### Typical use of SC Network Design

More than half of respondents stated that they use network design on a project or periodicalbasis. 26% of participants stated that they use network design as part of an ongoing effort to provide design support, and 18% leverage it for tactical planning on a monthly basis.



#### Who's involved?

The quiz showed that network optimization is performed by supply chain professionals at nearly 68% of organizations. Roughly 17% depend on external consultants, 28% on specialists/modelers, and 11% on IT to execute on this process.



#### Frequency

When it comes to evaluating network improvements, less than 10% of respondents perform assessments on a weekly basis. A combined majority of 52% does so in an annual or quarterly basis, and 23% does so every few years.





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#### **Greatest benefits**

Becoming "more proactive and less reactive in network decision making" was seen as the biggest benefit gained from network optimization, by 39% of respondents. This was followed by "getting more transparency across your network" - at 22%.





#### In-house experience

In general, our maturity quiz found that most professionals consider themselves "advanced beginners" in using supply chain network design technologies (nearly 40%), followed by "competent" (32%), "novice" (11%), and "expert" at 8%.



# The network design technology market: what's out there?

Let's take a closer look at supply chain professionals' perception of the technology market for network design. A 2017 study performed by Supply Chain Insights found that spreadsheets are the most commonly used tool (65% of respondents said they used them), supporting our own research results this year.

Using spreadsheets is convenient, as they are inexpensive and familiar. But the more complex the network, the harder it is to make them work. Spreadsheets are known for being error-prone. In fact, as Market Watch reports, close to 90% of spreadsheet documents contain errors. They don't support robust optimization and they are also unsustainable. If the person who initially created the spreadsheet leaves the company, it's often harder for other users to understand the built-in logic.

Point solutions that only address the network design and optimization question may solve the immediate problem of advancing from Excel, but it's important to consider how they fit into a holistic supply chain planning eco system. For example, demand planning decisions should not be taken in isolation from how they impact on network design, how they flow into inventory decisions and then how they reconcile back to the overall financial plan and business objectives. Solutions on a common platform, sharing common data, and a common user interface are much more effective at providing complete insights. They are also more effective in supporting associated business processes. Then there's the matter of fit and configurability.





55% of respondents in the Supply Chain Insights study prefer configurability. Only 11% prefer standardization. Most point solutions are feature-rich, but often cannot accommodate unique constraints faced by the business. In fact, the complexity that arises from having all this functionality often leads to a lack of adoption of the tools, apart from by a small group of expert users. It's also harder for users to understand the model output with off-the-shelf tools, as they lack transparency into the underlying technology.



But perhaps the biggest drawback of commonly used solutions is their price. 84% of respondents want an affordable network design solution, but only 54% of them thought available tools meet their price expectation. Ease of use, speed and data exchange are also becoming increasingly important.



This shows a clear market need for affordable, easy-to use solutions.



# Key characteristics to look for when choosing a network design technology

As a rule of thumb, we recommend that you look for technology solutions with the following:

→ Fast implementation times, so you can start using the system quickly and get some immediate benefits.

→ Robust optimization capabilities to model your base case network, evaluate scenarios and assess how changes in the supply chain network impact costs.

→ As your process matures, you'll also need to extend the breadth of capabilities offered by the system. Therefore, you should look for technology that is substantial at the outset but will continue to grow in features and functionality.

→ SaaS solutions are the new normal, it's important to ensure the subscription includes ongoing innovation.

#### Learn from the best:

"AIMMS SC Navigator provides outstanding value. It allows us to quickly answer very specific questions affecting our business. The benefits from optimizing our business based on those answers provides a great ROI for Fresenius Medical Care NA."

- Bill Hargrave VP IT, Global Manufacturing and Quality at Fresenius Medical Care North America





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In addition, keep the following criteria in mind. Your network design solution should:



## What you can achieve with AIMMS Network Design Navigator

AIMMS has been used as a prescriptive analytics modeling platform to assist customers with Network Design for almost 30 years. With the launch of Network Design Navigator, we made this even easier.

AIMMS Network Design Navigator is software conceived for supply chain professionals by supply chain professionals. It offers the sophistication to make breakthrough decisions while shedding the wasteful complexity of traditional solutions. Total cost of ownership is an order of magnitude lower than traditional vendors. Our software is priced at the level supply chain technology should always have been, all-inclusive and quick to implement. It's everything on your wish list to help you get things done and save time.

	AIMMS SC Navigator	Spreadsheets	Traditional Packaged Software	Custom Analytics Solution
Embedded Prescriptive Analytics	$\bigcirc$	$\bigotimes$	$\bigcirc$	$\bigcirc$
Guided Experience	$\bigcirc$	$\bigotimes$	$\bigotimes$	$\bigotimes$
Price	-	Į.		Į,
Implementation time			<u></u>	<u></u>
Accesible anywhere on any device	$\bigcirc$	$\bigcirc$	$\bigotimes$	$\bigotimes$

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## AIMMS Network Design Navigator allows you to:



#### Take action:

Our supply chain experts have been on your side of the table and would love to learn about your supply chain challenges and introduce you to AIMMS SC Navigator™.





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Start a conversation





Self-Service Supply Chain Analytics A platform to help your team solve problems and uncover opportunities, providing more breakthroughs from more people

AIMMS Network Design Navigator is part of AIMMS SC Navigator, supply chain software that provides a happy path to mastering supply chain analytics and digital transformation. It helps supply chain teams leverage prescriptive analytics to make the break through.

Beyond a point solution, it's an established platform that includes a growing quantity of next-gen applications from Network Design through S&OP and Inventory Management – all connected, intuitive and accessible.

### AIMMS SC Navigator<sup>™</sup> Suite keeps growing!



Data Navigator



Lifecycle Navigator



Network Design Navigator



Multi-Echelon Inventory Optimization



Center Of Gravity Navigator



S&OP Navigator



Secondary Transport Costing



S&OE Navigator

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