

A man with short, graying hair, wearing a red polo shirt, is shown from the chest up. He is sitting at a desk with a silver laptop in front of him. He has a wide, enthusiastic smile and is raising his right fist in a celebratory gesture. The background is a plain, light-colored wall.

# DEMAND PLANNING

4 ways to outplay your competition

## GAME ON

It's the same old storyline. Customers want what they want when they want it. But a growing trend toward customization, flexible delivery and return options, and increased transparency into the ethical and environmental impact of purchases, means more complexity for your supply chain. Don't struggle under the strain of seemingly limitless customer demands. Level up your demand planning and experience revolutionary breakthroughs in supply chain performance, planning and profitability.

Improved demand planning starts with setting your game plan — recognizing who the players are, what the end goal looks like and which path you're going to take to get there.

When it comes to who's involved, the answer is both simple and complicated — everyone. Everyone inside and outside your organization who influences the supply chain has a role to play. Sales and marketing help provide forecast inputs based on projected sales, promotions and knowledge of industry trends. Executives and finance make sure you're aligning to the overall corporate strategy. Supply chain managers collaborate to overcome issues with supply, capacity (including constraints) and inventory. Suppliers, contract manufacturers, distributors and logistics

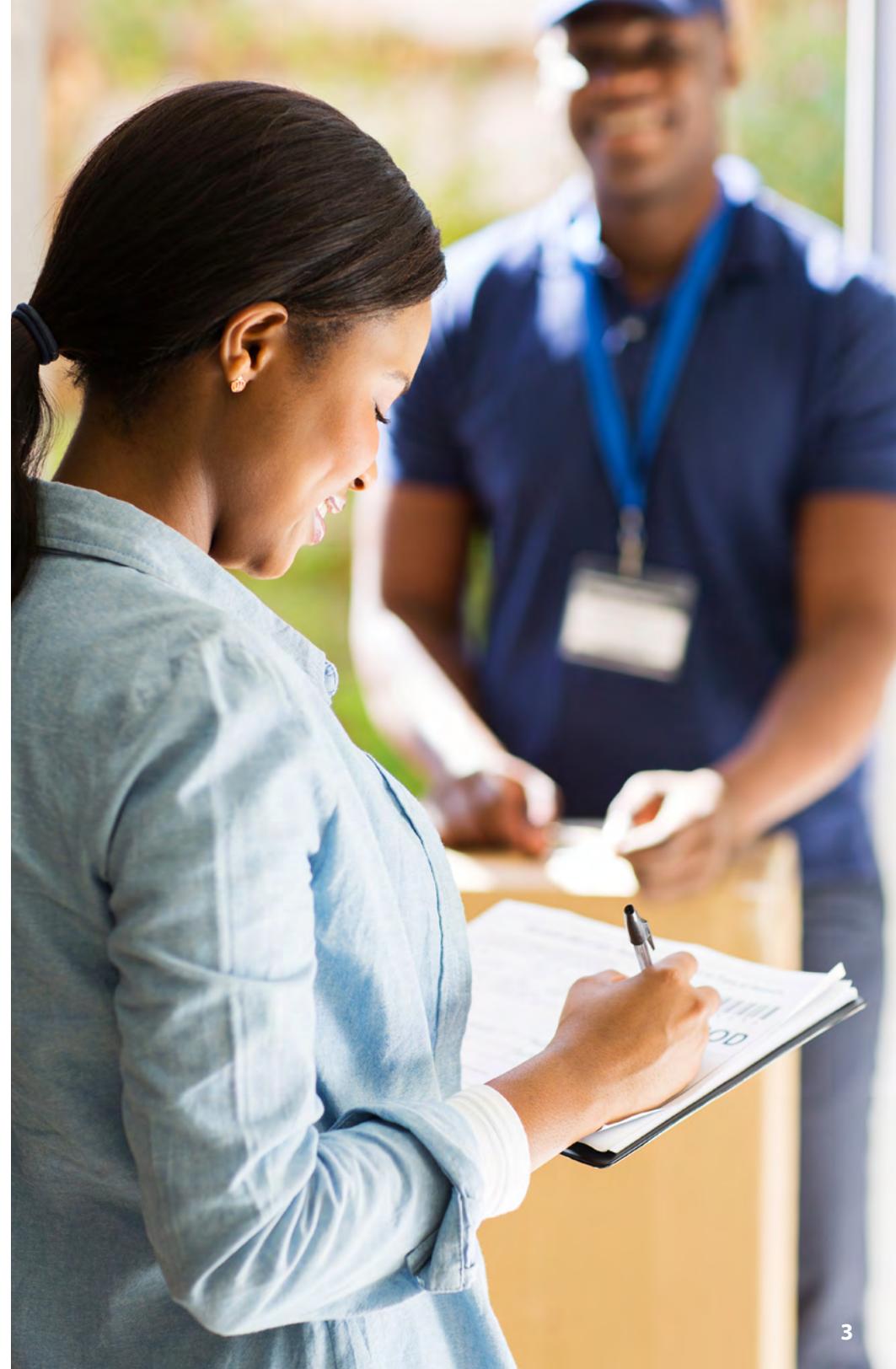


providers also have direct influence on whether or not you win in terms of customer satisfaction, representing potential gating issues on the way to delivering the right product to the right person at the right time.

However, the most important players in demand planning are the end consumers. They're the ones you have to satisfy, and who will ultimately determine what your end goal looks like, and the path you're going to take to get there. The goal could be providing same-day delivery or environmentally-friendly products. The path will almost certainly be omni-channel. Your supply chain has to be agile enough to allow for cross-channel options. Ordering online, and picking up at a brick and mortar store is just one option consumers want to have. Others include ordering online with next-day home delivery; ordering online but returning in-store; purchasing at one in-store location, but returning at another; and so on.

Customer demands aren't exclusive to those whose end consumer is someone shopping at the retail level. Tier one and contract manufacturers face the same challenges when providing parts or components to their business partners. In some cases, manufacturers are driven to bottom up forecasting, focusing on the raw materials.

No matter who your customer is, or what you're supplying to them, the growing number of potential combinations means your supply chain has to be ready to respond. When it comes to demand planning, you'll need to be faster, smarter and more flexible if you want to outplay your competition.





## FOUR WAYS TO LEVEL UP YOUR DEMAND PLANNING

Keeping up with current demand planning challenges while still using dated processes is like trying to play the latest gaming craze on a system designed and built in the '80s. While you once may have considered those older systems and processes cutting edge, their time has passed. They just don't have the capabilities required to support today's complexity.

Current demand planning processes are slow, siloed and inefficient. It takes weeks to make critical decisions when plans don't align with reality, and when changes do happen, communication between business functions often falters, meaning you don't see the fallout to your demand plans until it's too late. Or vice versa for other planning functions if you're the one making the change. It's not a great way to improve efficiency, productivity or your bottom line.

Isn't it time you leveled up your demand planning processes? These four pointers can help you figure out how.



## FORECASTING

### STOP CHASING THE PERFECT SCORE

When it comes to demand planning, there's no such thing as the perfect score. No matter how hard you work at it or how many resources you sink into achieving it, 100% forecast accuracy just doesn't exist. Chasing perfection could actually be hindering your supply chain if it's the only thing you're focused on.

It's not that there isn't value in improving forecast accuracy. There is. But forecasting alone can't account for unanticipated supply chain risks — those game-changing events you just never see coming. Things like natural disasters, shifts in political landscapes or tier one suppliers going dark.

Solely relying on forecast accuracy to help you avert crises is foolhardy at best; game over for your supply chain and your business at worst. You need to have the ability to plan, monitor and respond simultaneously and continuously so you're better prepared when changes arise.

#### YOU CAN BETTER PREPARE FOR THE UNEXPECTED BY DEVELOPING:



##### End-to-end supply chain visibility

See the impact before you feel it



##### Robust scenario simulations

Ask 'what-if?' and get an immediate answer



##### Cross-functional collaboration

Make better decisions, faster

Concurrent planning provides those capabilities and more, with the ability to simultaneously and continuously plan, monitor and respond to supply chain changes in a harmonious environment. Concurrent planning bridges functional silos and connects all nodes in the supply chain. This enables cross-functional collaboration, and faster, more effective decision-making, resulting in improved analytics accuracy, reduced planning cycles, higher profitability and quicker response times.

Exceptions aren't always fast moving one-time events like shortages or change orders. They can be slow moving, coming to a boil over time — making spotting developing trends an invaluable capability. Taking action on those trends before plans fall out of tolerance is critical and involves using a system that alerts you when you're headed in the wrong direction.



By seamlessly connecting your entire network of data, processes and people, you can defeat the unexpected and boost your supply chain's agility across demand, inventory, supply, manufacturing constraints (across all tiers), supplier restrictions and transportation modes.

These supply chain capabilities will carry you beyond just dealing with unexpected challenges. They'll help you start working on contingency plans, including optimistic and pessimistic views of the forecast. By running multiple what-if scenarios, you'll be able to determine optimal timing on new product introductions or evaluate impacts of different end of life dates, making your plan more accurate.

Striking the right balance between chasing that perfect forecast accuracy and developing supply chain agility and flexibility is wholly dependent on the nature of your business. For some, like those in a make-to-stock environment, it's more a 50/50 split, but for organizations in highly customized, make-to-order environments, doing away with forecasts altogether is possible, albeit a little unconventional.

That's what railcar provider TrinityRail did. Faced with the need to have available capacity meet lead-time demands on uniquely configured products with a 30 to 50 year lifecycle and a two to three year backlog, the company realized the path forward wasn't through forecast accuracy, but the ability to sense and respond.

"Rather than trying to get better at forecasting, we decided just to figure out how to live without one [a forecast]," explained Mike Hegedus, Vice President, Supply Chain Management, Trinity Industries.<sup>1</sup>

By doing so, TrinityRail overcame planning processes that were manual, dispersed and time-consuming, virtually eliminating its reliance on spreadsheets and greatly reducing manual data transfer errors. The company was also able to shrink its days of inventory on-hand (DIOH) by an average of 12 days and respond to an industry recession by reducing its buyer team by more than 25% while still improving the on-time delivery (OTD) of inbound materials.

For most businesses, forecast accuracy still plays a role in the supply chain. It can help you better understand demand and align it with supply and capacity constraints. But you do still need to understand its biggest limitation — it can't predict everything.



## SEGMENTATION

### PLAY TO THE AUDIENCE

Like a gamer looking to customize their in-game character, consumers are increasingly demanding products made just for them (or as close as you can get if you're not in a make-to-order business). While some customizations are more popular than others, you still need to consider the more unique requests. That's where playing to your audience — better explained in supply chain terms as segmentation — comes in.

Many companies today have tens of thousands of SKUs, hundreds of suppliers and dozens of manufacturing plants and distribution centers dispersed across the globe. The sheer number of products and distribution channels adds a level of complexity only magnified by innovation and changing business models.

Supply chain segmentation helps you balance that complexity with efficiency and flexibility so you can deliver greater customer value. As Ernst & Young states, "... supply chain segmentation aligns specific corporate goals with focused virtual pathways through a larger, more complex supply chain."<sup>2</sup>

When it comes to segmentation, there isn't a one-size fits all approach. You'll have to weigh the demands of your customer base against corporate priorities, key performance indicators (KPIs) and goals. That could mean segmenting your supply chain based on a variety of factors, including:

- ▶ Product complexity
- ▶ Strategic importance
- ▶ Risk and resiliency
- ▶ Manufacturing process
- ▶ Customer service needs
- ▶ Market demands

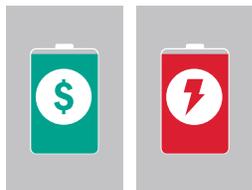
Segmentation lets you map what at times feels like an unlimited number of demand patterns. There are typically four main demand behaviors, which look like this:



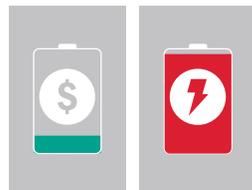
**High value, low volatility**



**Low value, low volatility**



**High value, high volatility**



**Low value, high volatility**

Segmentation adds value in determining the best forecasting and demand planning strategies. This feeds directly into the design of your supply chain. For example, the high value, low volatility items will drive you toward make-to-stock policies and the higher volatility products will take you toward a make-to-order design and postponement strategies.

Ultimately, demand segmentation helps you better understand your customer. Segmenting your supply chain improves customer service, new product introductions and your ability to optimize mix, model and promotion planning.

But as Oliver Wight points out, "... segmentation is not just about responding to the varying needs of consumers today. It's about anticipating long-term trends, thinking ahead of the game and predicting what customers want, even before they do ..."<sup>3</sup>

To do that, you must recognize demand segmentation as a core component of your overall business strategy and have a demand planning system that helps simplify statistical forecasting and automatically generates those forecasts based on the characteristics of your historical data. Segmentation can't happen in a silo, otherwise you'll never be able to move beyond the near term and focus on the future. Segmentation requires input from supply chain functions as well as sales and marketing. It has the power to drive innovation across product and market — helping guide research and development (R&D) projects into a profitable reality.



## COLLABORATION

### MAKE IT MULTIPLAYER

Making your demand planning processes multiplayer means everyone's playing the same game, on the same platform and working toward the same end goal. Unfortunately, many companies are still operating their supply chains in silos, with each department concentrating on separate goals and processes. The result is fractured functionality, instead of a seamless, responsive supply chain.

Planning in silos produces plans companies have little or no confidence in. The best demand plans include input from all stakeholders, including the people closest to the customer in sales and marketing, as well as those closest to suppliers in operations and finance. Together, these teams can balance market and customer needs against supply chain capabilities and risk. But that requires communication, collaboration and in some instances, compromise.

Without collaboration, making critical decisions takes time, which can lead to supply chain disruption and the inability to mitigate risks before they turn into game over. To be effective, collaboration needs to go beyond the tactical exchange of data. Key customers and suppliers must review information and contribute to the decision-making process. This means early warning notifications and working together to resolve supply chain risk issues. Companies need to bring together data, processes and people to improve supply chain flexibility and, ultimately, the profitability of the enterprise and satisfaction of the customer.

Collaboration lets you understand supply chain risks and limitations during the planning process, leading to plans that are more realistic and support common goals across the organization. However, effective supply chain collaboration isn't an overnight accomplishment and requires strong organizational change management (a challenge in itself). It's an ongoing commitment and requires creating a game plan allowing for adaptation and change.



## TECHNOLOGY

### GO NEXT-GEN

Technology has advanced by leaps and bounds over the past few decades, just look at how many iterations there are of your favorite gaming console. Yet when it comes to supply chain management, companies still seem to be stuck with the original Atari. Their supply chains are tied to spreadsheets, manual processes and broken down legacy ERP systems.

It's time supply chains, and demand planning practices, go next-gen as the notion of a digital supply chain becomes the norm, not the exception. As Matt Davies from SCM World points out, "Customers in 2020 will be picky. And they will know more about products, services and channels than many of us do today."<sup>4</sup> That means organizations will need technology that provides better information, faster analytics and automation to keep pace.

Davies' colleague Patrick Van Hull notes that supply chain digitization "is creating new opportunities for technology to enhance and/or replace traditional capabilities."<sup>5</sup> He explains four fundamentals for successful demand response that translate into the following technological capabilities:



**End-to-end visibility** — agile and efficient demand response capabilities requires the ability to see the flow of product upstream as it nears deliverability, and downstream to ensure product availability.



**Cross-functional collaboration** — connectivity between each possible node on the path to the customer, and the ability to bridge multiple tiers of actions helps create an agile and efficient response.



**Prescriptive analytics** — running what-if simulations based on a single comprehensive data set to see potential outcomes makes it possible to direct product flow at each step of the process based on future predictions, instead of current assumptions.



**Automation** — efficiency gains and optimization opportunities allow supply chains to identify programmable actions that can alleviate burdens on human players.

The right technology backbone for game-winning demand planning requires all of those capabilities, plus the ability to connect data, process and people with concurrent planning. That will enable you to know sooner when demands shift, and respond faster to ensure you're delivering on your promise to customers.



## HOW RAPIDRESPONSE POWERS UP DEMAND PLANNING

Kinaxis® RapidResponse® can help you reach a new level in your demand planning. Our Demand Planning application lets you create an unconstrained consensus demand forecast that combines the statistical forecast with multiple inputs from sales, marketing and finance. Since you're all using the same planning system, the result is a power up to your processes.

RapidResponse's concurrent planning capabilities let you combine demand planning with strategic capacity and supply management to continuously monitor and adjust the portions of the demand plan that present variance or risk.

### BENEFITS OF DEMAND PLANNING WITHIN RAPIDRESPONSE INCLUDE:

**Forecasting:** Improved forecast accuracy, reduced demand process cycle time and the agility and flexibility to quickly respond to unexpected changes

**Segmentation:** Increased analysis and scenario simulation to provide insight into customer segmentation options, including drilling down to details on specific products, customers, regions or SKUs

**Exception Management:** Better coordination and exception management capabilities to maximize revenue opportunities and proactively resolve demand and supply risks to minimize costs, including visibility, communication and execution of events planned by sales, marketing or finance

**Collaboration:** Enhanced collaboration and integration across functions (sales, marketing, finance, demand planning), including product lifecycle management

**Technology:** Seamless integration of all your supply chain planning functions on a single, easy-to-use platform designed to connect your data, process and people and provide continuous innovation and advancements for your supply chain

# WITH RAPIDRESPONSE, YOU'LL BE ABLE TO LEVEL UP DEMAND PLANNING WITH THE ABILITY TO:

- ▶ **Input forecasts from various constituents** (sales, marketing, finance, statistical forecast) and use disaggregation functionality to drive demand into saleable SKUs
- ▶ **Auto-generate statistical forecasts** using an advanced rules-based approach
- ▶ **Compare actuals, current demand plan, annual plan, aggregate supply plan, prior approved demand plan and the previous year's demand plan in a time-phased graphical view**
- ▶ **Monitor the forecast accuracy and value-add** for all forecasts, and focus your attention based on accuracy tracking signals
- ▶ **Auto-detect data errors, outliers and causals** and cleanse historical data to improve forecast accuracy
- ▶ **Define statistical forecast generation parameters** according to the different statistical models available

- ▶ **Define new product introductions** and end of life statistical forecast generation variables
- ▶ **Plan for the impact** of events, promotions and new-product cannibalization
- ▶ **Generate statistical forecast scenarios**
- ▶ **Edit combination of ratios** of various forecast categories
- ▶ **Adjust or override the calculated demand plan** for specific forecast items in specific date ranges
- ▶ **Publish consensus demand plan** to aggregate supply planning
- ▶ **Monitor progress against targets**
- ▶ **Manage assumptions**

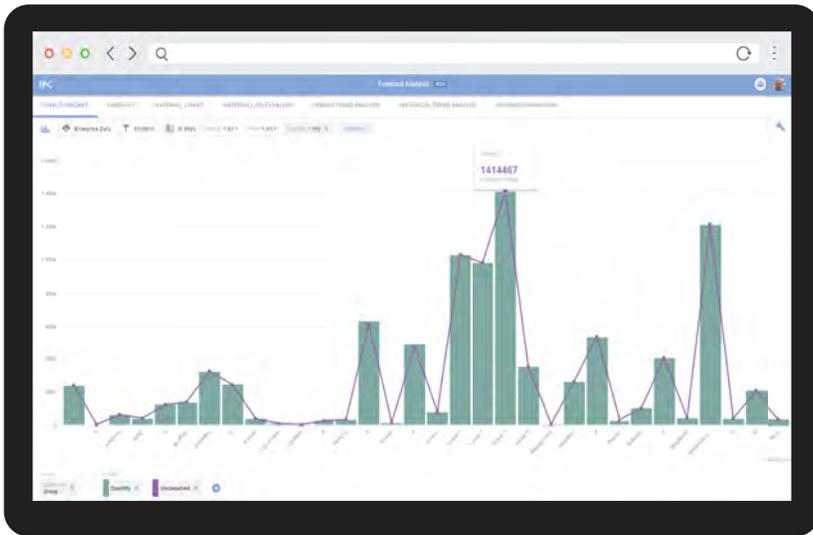


## Cross-Functional Supply Chain Visibility

“RapidResponse provides much better visibility to global supply and demand across operating groups and ERP systems.”

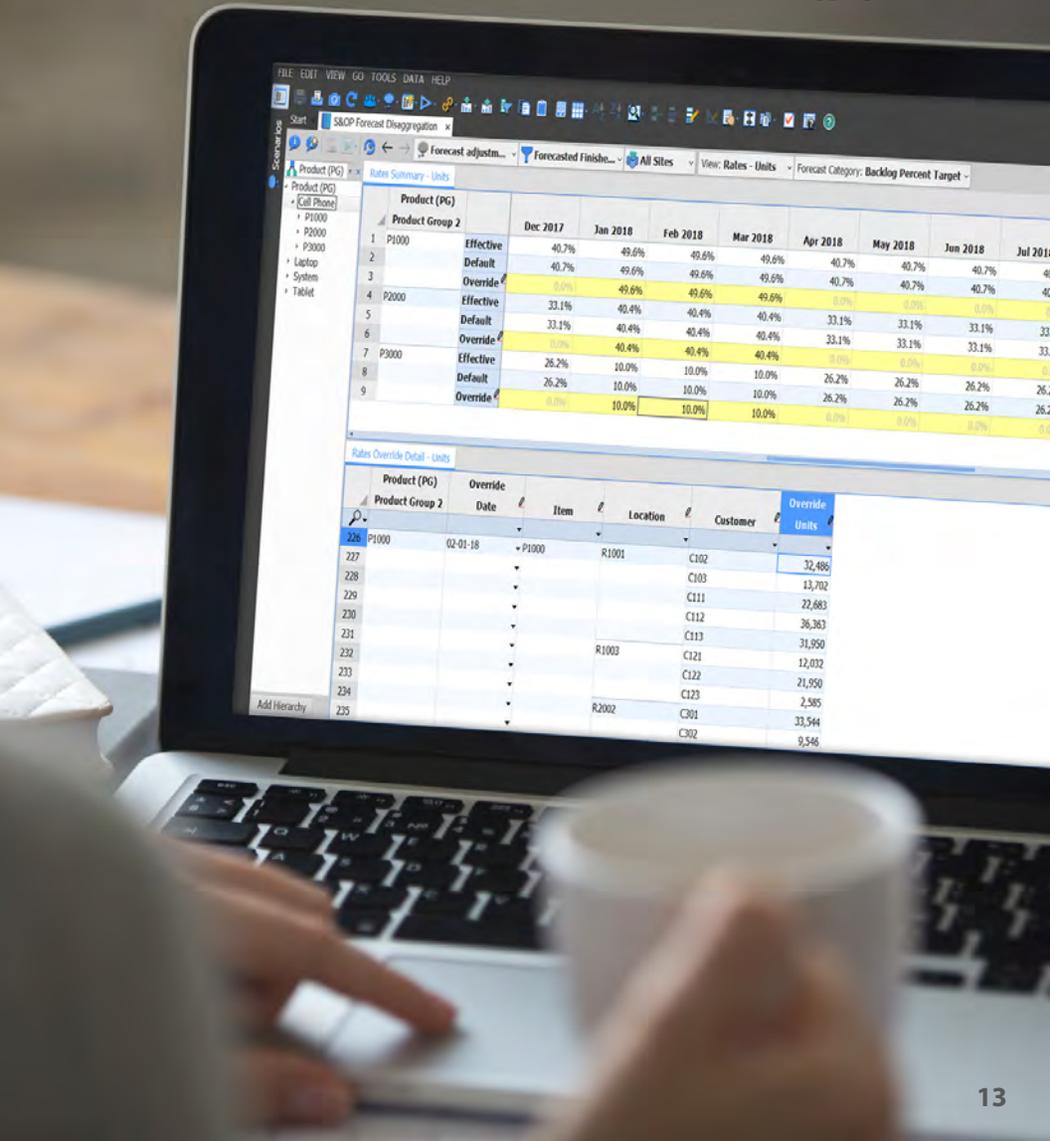
— Application Manager, Large Enterprise Aerospace & Defense Company

With our new intelligent forecast model selection, you'll know the statistical model you've chosen is the right one to help drive value across your business. Plus, you can now improve the accuracy of your consensus plan by defining demand planning ratios according to the time period that best aligns to the focus of each forecast stream.



Demand planning dashboard

Forecast disaggregation



## Forecast accuracy — waterfall reporting

Of Date	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017
01-16	1,014,972	1,039,221	1,038,762	1,060,126	1,064,456	1,084,086	1,074,148
01-16	1,010,854	1,012,446	1,038,161	1,037,221	1,053,955	1,061,227	1,093,421
03-16	840,311	1,013,213	1,026,730	1,041,075	1,035,528	1,061,101	1,062,501
01-16	840,311	1,060,830	1,011,691	1,007,894	1,038,782	1,041,433	1,060,530
01-16	840,311	1,060,830	860,631	1,020,199	1,016,672	1,035,071	1,036,056
02-17	840,311	1,060,830	860,631	1,086,836	1,013,250	1,009,557	1,033,741
01-17	840,311	1,060,830	860,631	1,086,836	880,799	1,020,438	1,014,016
01-17	840,311	1,060,830	860,631	1,086,836	880,799	760,126	1,023,891
03-17	840,311	1,060,830	860,631	1,086,836	880,799	760,126	937,459
05-17	840,311	1,060,830	860,631	1,086,836	880,799	760,126	937,459

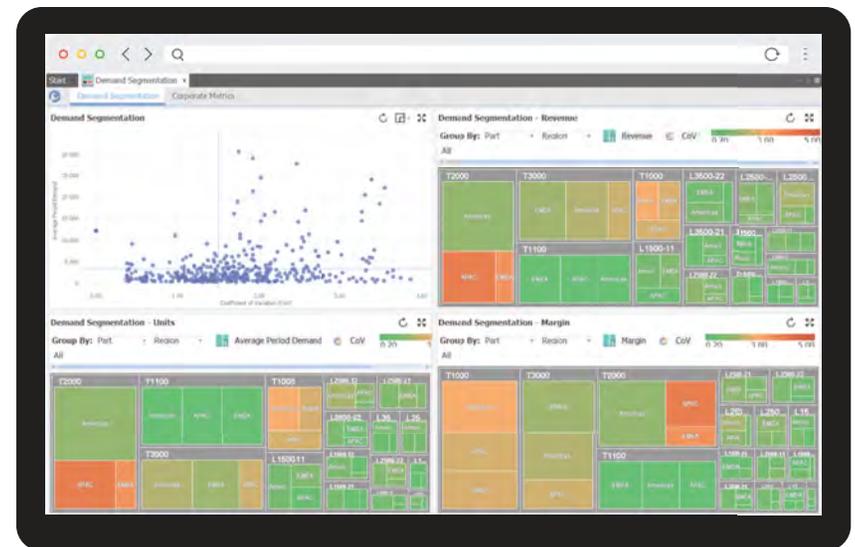
RapidResponse allows you to concurrently plan, monitor and respond on one platform, across business functions. With a single data model and analytics engine, we offer an array of supply chain applications all easily accessible through a common user interface. Using our single product, instead of individual disparate software solutions, you'll gain end-to-end supply visibility and the agility to respond quickly to changing conditions. The result is significant operating and cost efficiencies, and the ability to out play your competition with a faster, smarter and more flexible supply chain.

Want to learn more about how RapidResponse can help you improve your demand planning game? Visit the [Kinaxis website](#) or reach out today!

## Forecast response times cut in half

“With RapidResponse, our forecast response to the customer has improved by at least 50 percent. It has also enabled customer planning collaboration, thus improved forecast planning..”

— IT Manager, Large Enterprise Electronics Company

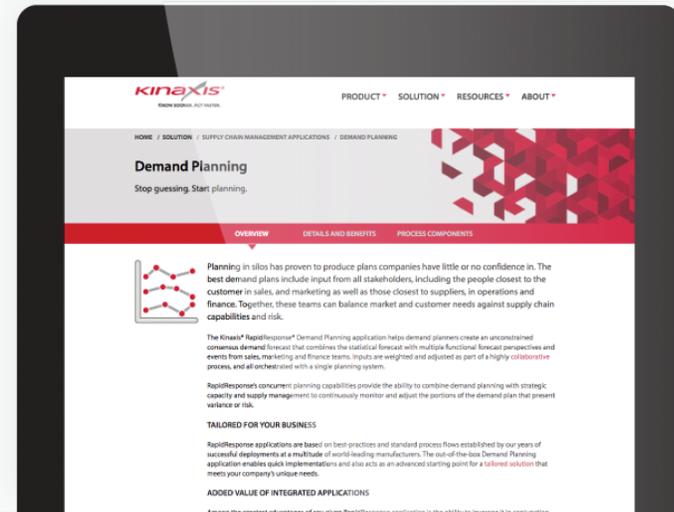


Demand segmentation

# WANT TO LEARN MORE?

Kinaxis RapidResponse can provide a demand planning solution tailored to meet the specific needs of your business, no matter how challenging.

LEARN MORE



## ENDNOTES

- <sup>1</sup> [Where's the easy button? Enabling a sense and respond supply chain](#), Kinaxis, November 2017.
- <sup>2</sup> [Supply chain segmentation](#), Ernst & Young, August 2014.
- <sup>3</sup> Bowen-Heaton, D. & Ferguson, T., [Demand segmentation: Ahead of the curve](#), Oliver Wight, 2017.
- <sup>4</sup> Davies, M., [Demand Management 2020](#), SCM World, March 2014.
- <sup>5</sup> Van Hull, P., [Demand Response: How Digitalizing Supply Chains Gives Customers What They Want](#), SCM World, August 2017.

# ABOUT KINAXIS

Offering the industry's only concurrent planning solution, [Kinaxis](#) helps organizations around the world revolutionize their supply chain planning. [Kinaxis RapidResponse](#), our cloud-based supply chain management software, connects your data, processes and people into a single, harmonious environment. With a consolidated view of the entire supply chain, you can plan expected performance, monitor progress and respond to disconnects when reality hits. RapidResponse lets you know sooner and act faster, leading to reduced decision latency, and improved operational and financial performance. We can prove it. From implementation to expansion, we're here to help our customers with every step of their supply chain journey.

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