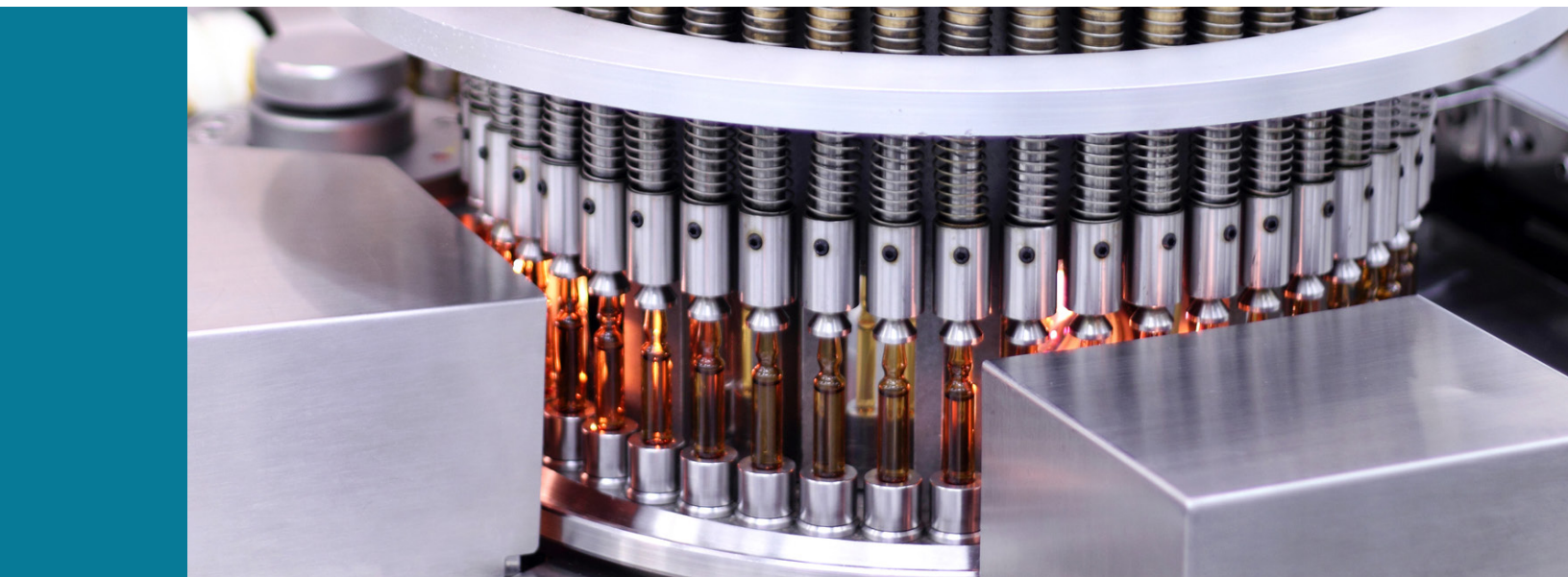


INDUSTRY SPOTLIGHT

The supply chain planning cure for everything from product expirations to patent cliffs



kinaxis®



Supply chains in the life sciences sector are about as complex as they come.

Biomedical advancements can trigger a continuous stream of new product introductions. Mergers and acquisitions (M&A) constantly reshape the competitive landscape while governments at all levels roll out new regulations. The promise of tenders and perils of patent cliffs are ever-present.

Today's life sciences leaders face a new pack of challenges, due to both internal and external factors. A number of trends are pushing leaders to think about their supply chains differently.

Key forces driving change for life sciences companies



Pricing pressure

- > US\$251 billion in drug revenues are at risk from patent expiries (2018-2024)
- Higher generic drug demand as governments worldwide boost patient access to affordable medicines
- Amplified pricing pressure and accessibility to healthcare is essential due to COVID-19
- Increased competition from China, Southeast Asia, Eastern European and South American markets



Increased M&A activity

- M&A activity and valuations are expected to be high and strategic in 2021 due to five mega deals and COVID-related demand
- Five mega M&As in 2020: AstraZeneca and Alexion, Gilead and Immunomedics, Siemens and Varian Medical, Bristol Myers Squibb and MyoKardia, Johnson & Johnson and Momenta Pharma
- Resulting complexity with systems and supply chain footprint



Drive to connect with CMOs and patients

- Only 1/3 of manufacturing is estimated to be conducted in-house
- Need to build more strategic, long-term partnerships with CMOs and CDMOs to streamline the supply chain
- Patient-driven services/solutions that are coordinated, convenient and customized (home monitoring)
- Well-being management through technology (IoT)



R&D productivity is under pressure

- Research and development (R&D) returns are falling to lowest levels to 1.9% (2018) for largest companies compared to 10.1% (2010)
- Delay clinical trials of non-COVID-19 vaccine and treatments
- More than \$150 billion is spent on R&D by companies annually but only a small percentage gain regulatory approval
- Small niche companies, where a majority of new drugs are discovered, appear to be driving innovation

Three process and technology challenges in life sciences supply chains

We partnered with International Data Corporation (IDC) to survey over 300 industry professionals to study current and future pressures on supply chain planning and how modern digital technologies are driving supply chain transformation initiatives. This survey was conducted across six industries, with life sciences being one of them.

Based on this data, we identified three key trends we believe are shaping the future of supply chains for life sciences companies.

1 Life sciences companies need more resilience in their supply chain.

Over 75% of companies reported that their supply chain can adapt to new business models and product requirements. This is great progress in the right direction, but companies should not lose focus just yet. To maximize the benefits of resilience, companies should align their supply chain transformation goals with the overall company vision. 30% of companies reported that their transformation goals are poorly defined, and efforts are inconsistent – the highest percentage across the six industries researched. Companies need to drive alignment to see long-term transformation success.

2 Life sciences companies still rely on legacy systems for their planning needs.

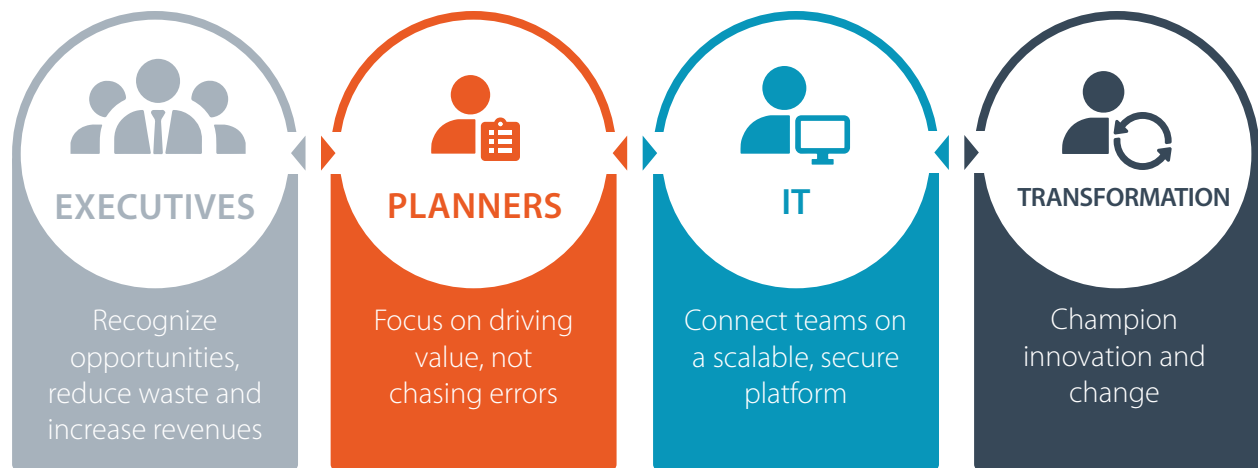
Life sciences companies lack the technological innovation in their supply chains to create a sustainable competitive advantage. Life sciences companies were most likely to still use spreadsheets alone for their planning needs and least likely to use an integrated supply chain suite. With the right software solution as a foundation, it becomes easier for companies to leverage technology that can help their supply chain, such as machine learning (ML), artificial intelligence (AI) and analytics. Among companies surveyed, 65% reported using AI/ML sometimes just for priority cases, whereas 10% reported being unsure how to go about integrating these tools into their supply chain. It's important for all companies to invest in the latest technology to make more confident decisions.

3 Life sciences companies are struggling to break down barriers.

Overall integrated business planning was described as “integrated” by only 23% of survey respondents, while 32% cited this process as operating in “silos”. Even processes that have otherwise been reported as being best-in-class for the industry – demand planning, control tower and S&OP – are being reported as siloed processes. This shows that even the best performing functions stand to gain from greater integration. It's important for all stakeholders to proactively collaborate and tackle issues as they arise in real time.

When business units align around a single source of truth, the entire organization becomes more strategic

An end-to-end planning platform creates seamless operations, from the board room to the data center to the factory floor.



Manage your company like never before. With better visibility and collaboration across business units, your company responds to volatility without wasting time or resources. Accurate, cross-network data improves forecasts, so you can monitor trends and maximize gains. The end result is a business that seizes on opportunities slow-moving, siloed companies can't even see.

Create smarter, more confident plans with a connected and collaborative network. Collapsed silos ease friction between teams while cross-company, synchronized data reduces errors and delays. Without these obstacles, planners spend less time troubleshooting and more time advancing business outcomes.

Outdated processes and software shouldn't slow your supply chain. On an end-to-end planning platform, you only need to make updates in one place. Built-in features keep data secure and up-to-date while customizations guarantee that a variety of user needs are met. Without multiple, disconnected systems, the IT organization can be confident it's driving lasting transformation.

Complacency in innovation can be destructive to your company. Stay competitive with end-to-end supply chain visibility so you can know sooner and act faster. Leveraging new technologies allows you to respond instantly and securely to change. Lay a foundation for best-in-class supply chain transformation, so you can operate efficiently and become more agile in a volatile marketplace.

Concurrent planning is the key for life sciences companies

Traditional, siloed planning is like playing a game of telephone: information gets passed from one person to the next and hopefully still makes sense by the time it reaches you. Concurrent planning is like being in a virtual meeting: everyone is part of the same conversation, boosting agility, speed and efficiency. Kinaxis® revolutionizes planning by delivering the agility you need to make fast, confident decisions in an unpredictable world. We combine human intelligence with AI and our unique concurrent planning technique so you can plan better, live better and change the world.



A recognized Leader by Gartner, Kinaxis offers an unmatched 12-week RapidStart go-live process that's proven to transform CFO and supply chain metrics for companies of all sizes.

Know sooner.

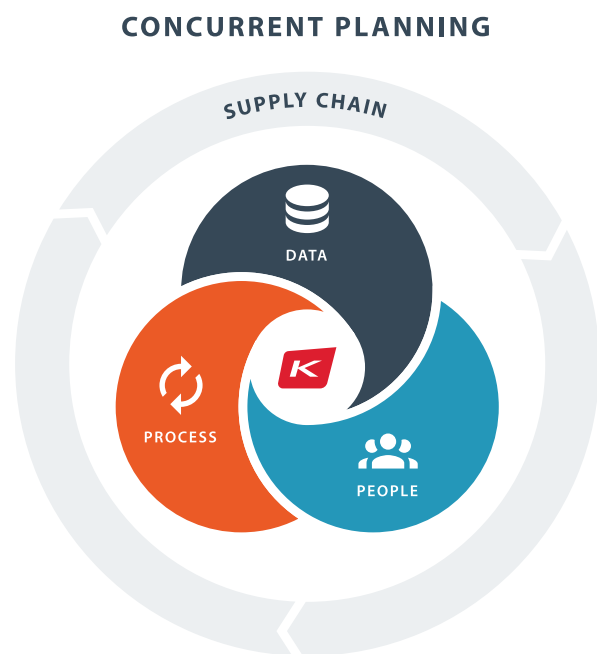
Break down silos, eliminate redundancies and cultivate trust with end-to-end visibility and transparency across your supply chain network.

Act faster.

Embrace volatility, build resiliency and seize opportunities with the agility to execute – no matter what comes your way.

Remove waste.

Leverage AI, machine learning and prescriptive automation to maximize efficiency and eradicate wasted time, resources and talent.





THE RAPIDRESPONSE DIFFERENCE

A more efficient, responsive way to manage your end-to-end supply chain, no matter what happens.

In today's volatile global market, traditional planning techniques are no match for the complexity and uncertainty that can occur at any time. Issues such as material shortages, logistics challenges and market volatility can quickly lead to massive supply chain disruptions. It can be impossible to reliably deliver on promises when you're locked into disconnected, cascaded planning processes that generate second-rate results.

Stop settling and start succeeding with a new, more intuitive way to plan. Our concurrent planning engine lets you instantly and continuously balance your end-to-end supply chain. With secure, cloud-based integration capabilities, you can connect all your internal and external supply chain data sources and algorithms.

With Kinaxis RapidResponse®, it's easy to implement and meld your existing resources into a configuration that works best for you. Use RapidResponse to run one or more of our customer-proven supply chain planning applications, even if you have existing enterprise resources planning (ERP) instances. Or, build your own custom apps and embedded algorithms, with or without code using our developer capabilities. We give you the flexibility you need to create the supply chain you want. If you can dream it, we can build it.

Life sciences-focused functions

The unique challenges in the life sciences industry call for very specific planning solutions. Life sciences companies have to keep up with all of the driving forces, while upholding the highest commitments to safety, efficacy and affordability to meet patient needs.

Here's how Kinaxis helps you support a healthy life sciences supply chain:



Tender management and evaluation

- Probability of the tender
- Can we meet the requirements?
If not, why not?
- Rapid tender evaluation



Campaign and lot-for-lot planning

- Reduced setups improve equipment utilization
- Reduce costs and complexity of traceability requirements



Concurrent planning

- Global end-to-end visibility and transparency with disruption resolution (e.g. sourcing trade-offs)
- Break down organizational silos
- Ubiquitous scenarios and contextual collaboration
- Plan and execute simultaneously (S&OP with S&OE)



Collaborative launch management

- Across clinical, regulatory and commercial



Jurisdictional control

- Respect regulatory restrictions with attribute-based planning
- Risk evaluation and recovery

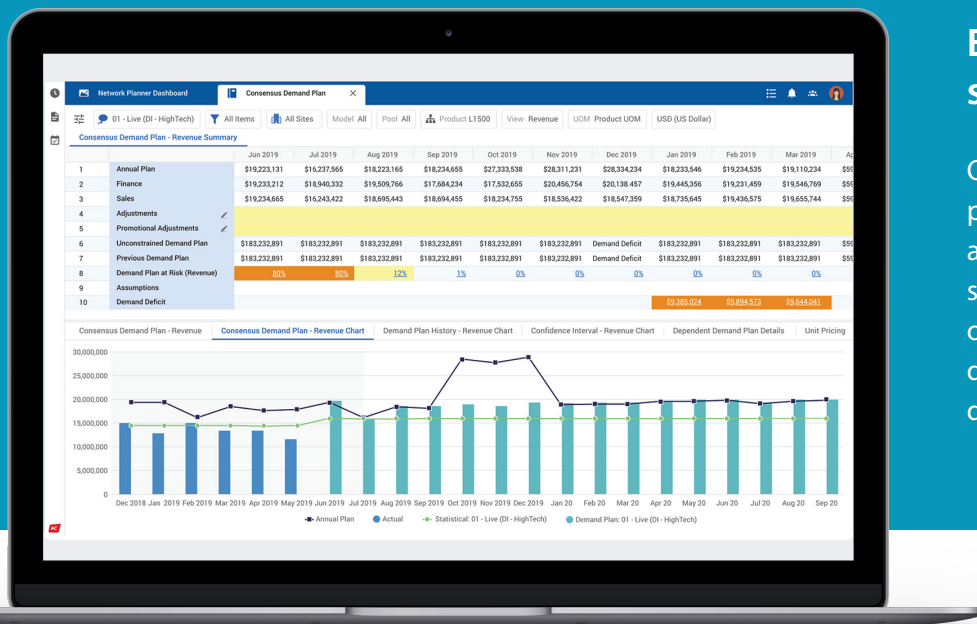


Expiry management

- Respect region/customer specific sell-by dates
- Balance long supply lead time and shifting demand
- Market specific expiry and shelf-life capability

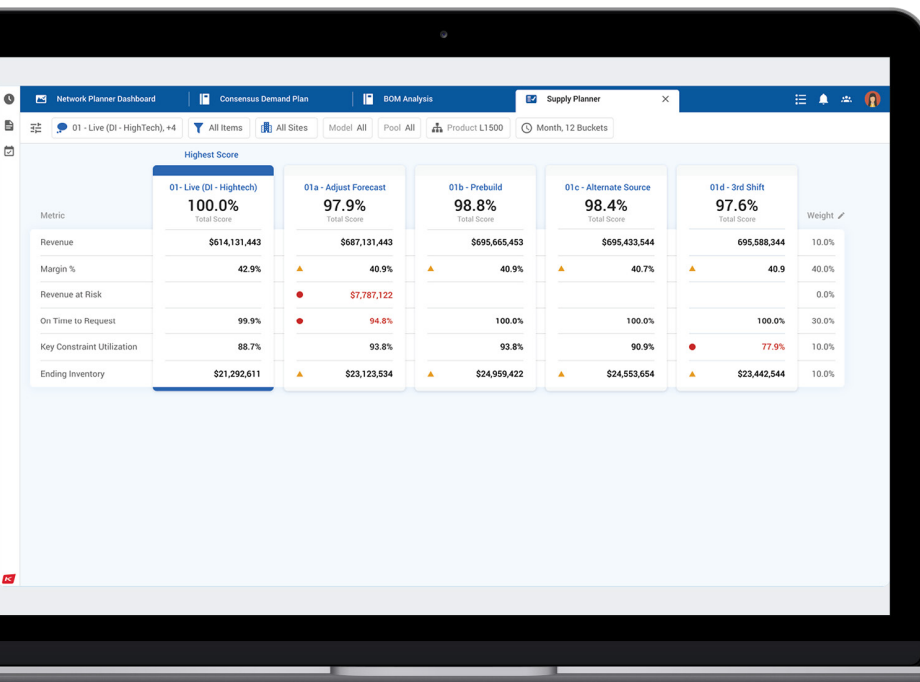
A platform built to support strong performance

From data synchronization, smart collaboration and AI-enabled “always learning” algorithms, you can do more with your supply chain planning processes than ever before. Craft and test elaborate “what-next” scenarios and make decisions in real-time with partners so every challenge is met and not a single opportunity is missed.



End-to-end synchronization

Our single cloud-based platform, code base and data model let you synchronize all aspects of your supply chain for dynamic supply and demand balancing.

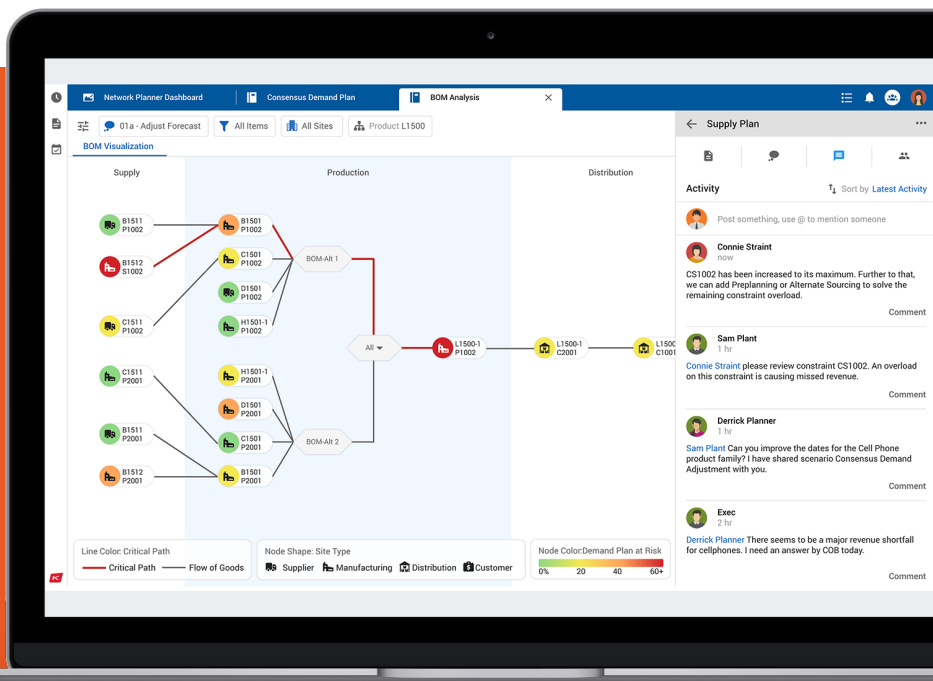


What-next scenarios

Run any number of scenarios, create infinite supply chain digital twins and capture historical context in seconds for accountable decision-making based on key performance indicators (KPIs).

Smart collaboration

Our responsibility matrix shows you who to work with, delivers the context you need and archives your decisions – all within the platform – for faster, smarter collaboration.



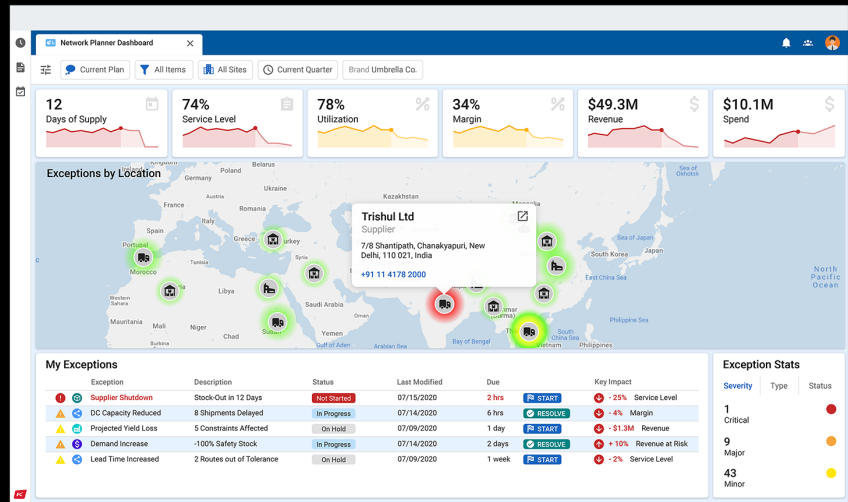


Planning and execution alignment

Our ERP-agnostic planning solution lets you connect all internal and external data sources, including multiple ERPs, without duplication. The result is a unified, connected digital enterprise.

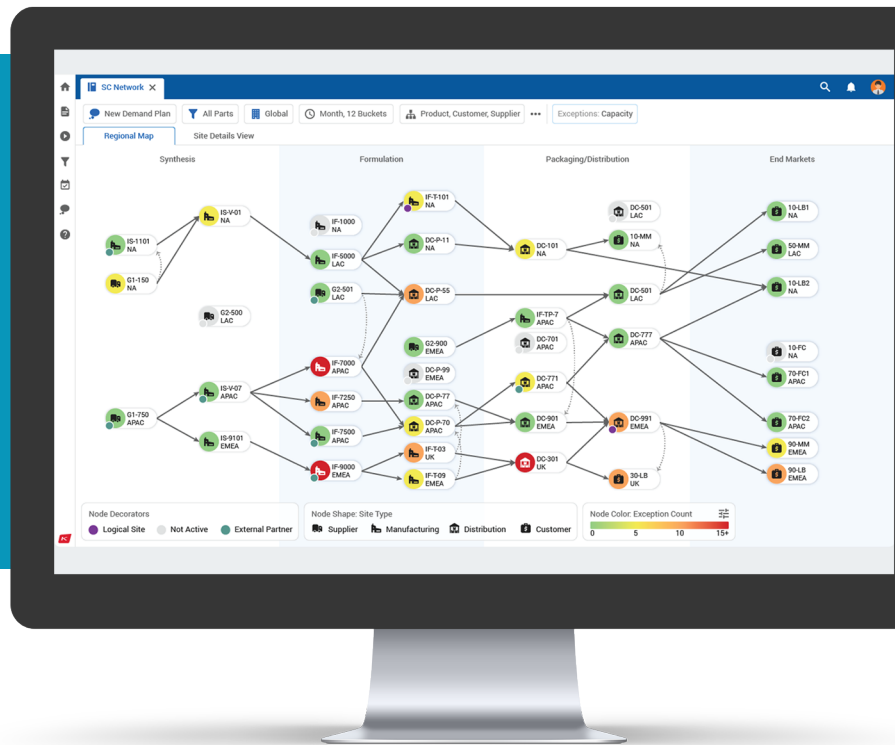
Automated intelligence

Automate routine tasks and escalate exceptions with AI and predictive algorithms that are always on, always learning and always synchronized. Let machines do the heavy lifting so you can focus on what really matters.



Personalized user experience

Our responsive role-based user interface lets you tailor metrics and data, and guides you through your day with personalized workflows, playbooks and alerts.



INDUSTRY LEADERS DEPEND ON KINAXIS FOR CONCURRENT SUPPLY CHAIN PLANNING

Dr.Reddy's

IPSEN
Innovation for patient care

MSD

Santen

Kinaxis delivers the agility you need to build resiliency into your life sciences supply chain. Get started now with the fastest, successful end-to-end advanced planning go-lives on the market. Learn more at www.kinaxis.com.

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