KINAXIS®
KNOW SOONER. ACT FASTER.

Key Differentiators: Control Tower for Orchestration

Revolutionize your collaborative business processes to become an industry leader

Orchestrate your Multi-Enterprise Supply Chain
Collaboration made easy

Scour the market and you'll soon realize, there are many Control Tower options available, but they don't all offer the same capabilities. Some solutions are purely analytic, others are operational, and few actually span the end-to-end supply chain. **In today's increasingly demanding and evolving climate, it's particularly crucial for businesses to select a Control Tower that will enable systems and data unification, network-wide collaboration, and process convergence.**

These trio of features reflect the greater trend toward Supply Chain Orchestration: A holistic form of management that leverages a unified Collaboration made easy platform to maximize speed and efficiency, control costs, and optimize processes between extensive, often international partnerships. While most Control Tower solutions offer visibility and control over a limited sector of the supply chain – usually logistics and transportation management – the Control Tower for Orchestration spans across every function, as well as every stage of an order's lifecycle.

In this way, the Control Tower for Orchestration is a game-changer for enterprises of all sizes. The levels of agility, flexibility, and optimization gained from unifying the entire network and converging processes empower businesses to quickly mature from adapters to disruptors.

Disruption is often equated with major industry shifts, such as Uber or Netflix. But most shifts aren't seismic; they constitute incremental changes to the standard, like overnight shipping.

Brands that master efficiency and the art of collaboration are simply better positioned to take risks, to experiment and push the envelope of customer delight and customized product and service offerings.

It isn't a lack of imagination that holds brands back from getting creative, but rigid frameworks that don't support experimentation, cost leaks that eat up funds, and performance issues that make innovative endeavors ineffective. It's a vicious cycle, but one that's easy to break free of.

Once businesses can build and maintain lucrative partnerships, engage in dynamic supply chain modeling, and excel at standard fulfillment models, they are better able to mature and scale.

While modern Control Towers are indeed designed to improve efficiency and build greater resilience to disruption, they tend to address the issue on a narrow scale. The Control Tower for Orchestration is natively designed to not only overcome the challenges of the modern supply chain, but to revolutionize – wholesale – the way companies leverage their partnerships and work to become leaders and innovators in their industries.

This white paper will outline the Control Tower for Orchestration's key differentiators and offer insight into what makes this one-of-a-kind solution and its underlying capabilities so unique.

The Control Tower for Orchestration spans across every function, as well as every stage of an order's lifecycle.

Single, Unified Platform for Complex Product Flows

As companies build networks and accrue disparate systems, they also amass silos.

The modern supply chain is an ecosystem. A company's network extends across a wide array of partners, including raw material suppliers, manufacturers, distributors, and logistics service providers. While most modern Control Towers will help practitioners better "manage" one or a few of these relationships, businesses with complex and wide-spanning supply chains require a solution that covers more than a single side of operations.

As companies build networks and accrue disparate systems, they also amass silos. Control Towers are often purchased to connect this fragmented architecture, but unless the solution spans the full supply chain, beyond just transportation, and joins all systems through a single unified platform, that issue is only partially and weakly resolved.

Organizational silos are another overlooked problem. As an ecosystem, no single flow, process, or function exists in a vacuum – though they are often treated as such. For instance, order visibility and control tend to be isolated by type (purchase, sales, return), so their associated processes are traditionally managed separately. Inbound, outbound, and after-sales flows are also handled on their own, as are reverse logistics and repairs processes. However, upstream and downstream flows impact one another, and by failing to converge processes and flows, businesses miss out on extraordinary opportunities for optimization, such as order splitting and consolidation and dynamic inventory sourcing.

To eliminate unnecessary silos, the Control Tower for Orchestration operates on a single, unified cloud-platform. Unlike most solutions, it integrates the disparate systems of a company's entire network – including suppliers, contract manufacturers, VMI specialists, 3PLs, and warehouses – providing contextual insight and superior operational control that far exceeds standard freight status monitoring.

By spanning networkwide without segregating orders and processes, the Control Tower for Orchestration can provide both granular visibility into all flows, including outbound, interplant, returns, repairs, and rebalance flows, as well as large-scale insight into how previously isolated flows and processes affect one another.

Businesses can therefore make highly informed and strategic decisions that consistently benefit all partnerships and areas of the supply chain.

Single, Unified Platform for Complex Product Flows

They can weigh their on-time, in-full commitments against other goals, such as keeping inventory down and balancing costs against customer service levels. Without a bird's-eye view of the entire ecosystem, companies increase their risk of negatively impacting some areas of the supply chain as they optimize others.

Take the High-Tech industry, for example, where end-to-end orchestration involves a complex matrix of partners in varying sectors. These partners tend to serve a range of customers, from engineers to service technicians. They rely on forward stocking locations (FSL), as well as central distribution centers (CDC) for inventory – which are often replenished by external suppliers or a VMI hub, and they also connect with repair centers. Given the complexity of this diverse network, flows are multi-directional and can vary widely depending on supply and demand.

On the outbound side, flows can run from the CDC, FSL, or even the VMI hub directly to the customer, depending on their location. Inventory replenishment, meanwhile, runs from the CDC to the FSL, and back to the CDC if there is excess. On the inbound side, external suppliers provide items to the CDC, or replenishment comes directly from the VMI hub. When returns arise, the defective part is sent to the CDC or repair center then back to the CDC for storage as a repaired or refurbished item.

Holistically speaking, the end-to-end scope of a company's supply chain can get incredibly complex. Most Control Towers tend to focus on the supply side, and even those that seem to incorporate demand, leave out crucial elements like repair centers and returns processes. Businesses must typically choose which piece of the matrix they want the Control Tower to focus on. With the Control Tower for Orchestration, companies no longer need to choose. The solution offers totalizing coverage over these processes – as well as any new ones a business undertakes when disruption occurs or it eventually needs to scale.

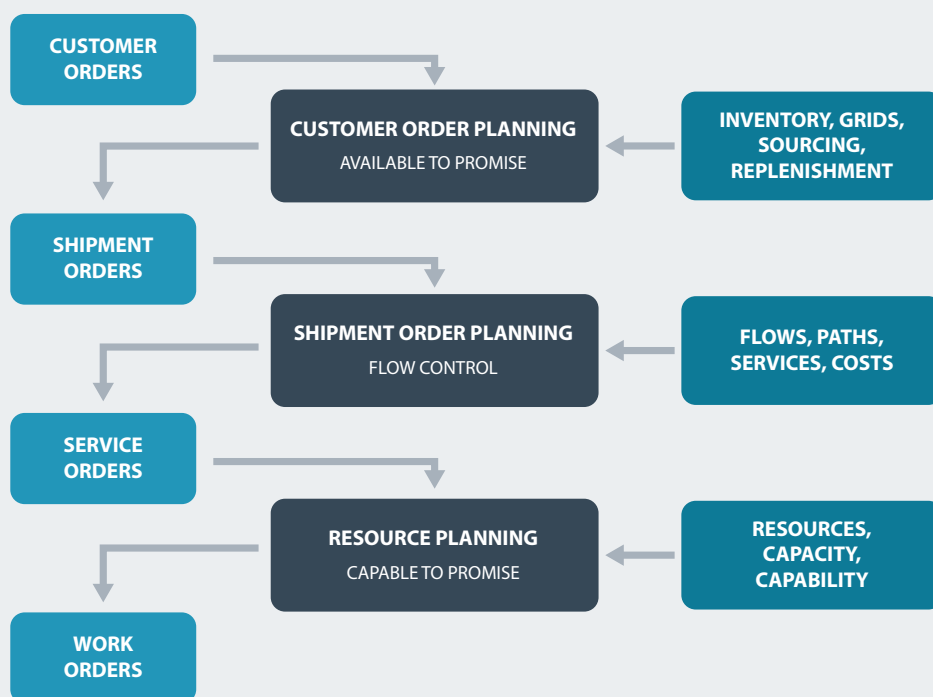## Order-Centric for Multi-Level Order Management

Orchestration towers are holistic: They manage both supply and demand, from customer order to delivery.

Orders – whether sales, purchase, or return – lie at the heart of all customer interactions. The order type specifies the customer's need, and the details define the fulfillment requirements. Orders therefore hold the 'DNA' or instructions on how to deliver the perfect order, yet few processes center around them. In fact, most companies invest a lot of time designing ways to bring an order in from an SAP or another ERP, as every enterprise and system implementation is different. There is no universal adapter.

The Control Tower for Orchestration consumes raw orders of any type directly from an organization's ERP and other planning systems, making integration easy. It is also order-centric – that is, designed to help companies effectively fulfill on each order's exact requirements. While most Control Towers only oversee the supply side, orchestration towers are holistic and therefore manage both supply and demand, from customer order to delivery.

The Control Tower for Orchestration weighs an order's details, such as required service levels, against available sourcing and fulfillment options and costs to provide the most optimal courses of action at every stage of operational planning and execution.

Multi-Level Order Managment

CUSTOMER ORDERS →

CUSTOMER ORDER PLANNING
AVAILABLE TO PROMISE
← INVENTORY, GRIDS, SOURCING, REPLENISHMENT

SHIPMENT ORDERS →

SHIPMENT ORDER PLANNING
FLOW CONTROL
← FLOWS, PATHS, SERVICES, COSTS

SERVICE ORDERS →

RESOURCE PLANNING
CAPABLE TO PROMISE
← RESOURCES, CAPACITY, CAPABILITY

WORK ORDERS

The Control Tower for Orchestration is the only one of its kind that can manage individual orders on multiple levels, decomposing itself into as many sub-orders as necessary to optimally execute on sourcing, warehousing, shipping, and service level requirements.

We will refer to this process as "multi-level order management." Through multi-level order management, businesses can factor in available resources and capacities to isolate and optimize each individual order.

In other words, they are able to automate key fulfillment concerns, such as:

- **Where** is the best place to source from?
- **What** is the best, most cost-effective way to move a product from point A to point B?
- **How** do I optimize each individual order according to its own service requirements?

The order-centric approach allows for extraordinary flexibility in planning and execution – a key missing link traditional Control Tower solutions. If an order must be fulfilled from multiple locations, it can be split into multiple shipments. If each shipment is best fulfilled by many different parties, then they can be split again, each with their own specific actions, such as warehouse dispatch and label printing. No matter how many times an order is broken apart practitioners maintain visibility into both the bird's eye view of the original order, as well as granular, drill-down visibility into the details of each split.

Multi-level order management is a game-changer, as it allows businesses to always choose the most cost-effective sourcing and execution options for every order, no matter the service level requirements.

Most Control Towers are designed for the transportation branch of the supply chain and are therefore shipment-centric. They offer visibility over batches of orders and are therefore unable to isolate exceptions. As a result, entire batches get unnecessarily expedited. The Control Tower for Orchestration offers visibility and control over each order, so businesses can apply standard shipping to anything having normal service levels and same-day or expedited service only to those that require it, like critical parts delivery.

In-App Management to Detect and Resolve Exceptions

The ability to take action from directly within the application is a strikingly rare feature.

Visibility is worth little if it isn't timely. The Control Tower for Orchestration offers real-time order and shipment status monitoring, with early warning alerts for immediate issue resolution. What sets this solution apart most, however, is the ability to take action from directly within the application – a strikingly rare but essential commodity in today's fast-track supply chains.

Despite being called a "Control" Tower, most issues are resolved manually. If an expedite situation arises, a practitioner might try calling or emailing a partner to divert and reroute another shipment if an inventory issue arises. Not only does this take a substantial amount of time, but practitioners must additionally log in to another system to coordinate that action.

A key differentiator of the Control Tower for Orchestration is its ability to resolve such issues swiftly and seamlessly from within the application. Take the above example. Attempting to reach a partner, waiting for their response, and then updating the new plan in a separate system causes delays and opens businesses to error.

With the Control Tower for Orchestration, companies can simply split an existing order directly within the application – as discussed in the previous section. Creating a new shipment order immediately isolates the exception and allows the remaining order items to continue on their original tracks. Practitioners can then assign the most optimal and cost-effective carrier or other party to execute on the exception's unique requirements and quickly solve the problem.

Companies vying to become leaders in their industries must focus on the end game: the perfect order. The Control Tower for Orchestration empowers practitioners to not only have visibility when something goes wrong, but to take action and deliver OTIF while still optimizing. This way, businesses lose as little as possible – if at all – during each exception.

Another part of the end game is network and process optimization. The Control Tower for Orchestration provides real-time KPI measurements for execution, so businesses can continuously track and improve supply chain and partner performance.

In-app management gives businesses the agility they need to adapt to problems and consistently deliver the perfect order – which means not only satisfying customer requirements consistently, but also cost-effectively. Many companies prioritize customer service and will hustle to deliver on-time and in-full (OTIF) under any circumstance. However, they do so to their own detriment.

"One To Many" and "Many To Many" Order Management

The platform offers both: Holistic Visibility and Granular Visibility

The **Customer Order** offers the total view of all related shipment orders and service orders.

Every Customer Order can be broken down into one or many **Shipment Orders**, which have their own granular view.

Every Shipment Order can be broken down into one or many **Service Orders**, which have their own granular view.

Multi-Modal, Multi-Leg for Global Operations

Every leg of the shipment can be isolated, optimized, and monitored by partners worldwide through real-time status updates.

Supply chains are increasingly handled on a global scale, which is shifting even the core demands of modern Control Towers. Today's international businesses must be able to handle many types of orders across all regions and modes. Because of their diverse customers and complex product flows, this must include everything from heavy weight air transportation to parcel and courier options. Shipment and status visibility must be comprehensive and accessible to all worldwide users. Solutions need to provide early warning alerts for off-track shipments and enable effective, in-app recovery plans – which may involve switching modes – to make up for lost time during transit.

Most solutions out there today are mode-centric, which poses a major challenge to practitioners as their needs evolve. Companies are often forced to purchase additional systems to handle new modes or carrier types. However, solutions that are narrowly focused and not native to a single platform create a fragmented architecture that is prone to errors, sub-optimal decision-making, and delays. When attempting to optimize flows or handle exceptions, practitioners struggle to tie individual legs and modes together to form a complete picture. Even supply chain suites that promise unity are equally fragmented when they are a product of mergers and acquisitions.

A key differentiator of the Control Tower for Orchestration is that it belongs to a single, consolidated platform. Because it is order-centric, it does not favor any particular mode and, because it offers visibility and control via multi-level order management, every leg of the shipment can be isolated, optimized, and monitored by partners worldwide through real-time status updates.

Visibility and control over which modes are optimal to use during each leg of an order's journey can be therefore leveraged on both a micro and macro level. On the micro level, all modes, legs, and providers may be handled separately – whether heavy weight air, parcel, courier, or other – while maintaining one complete (macro) picture of these cumulative events on a unified platform. The granular view of each 'micro' supply chain allows businesses to monitor the fulfillment of every order detail, as well as effectively correct issues at any stage, by isolating and optimizing exceptions. No matter how many times an order is split into discrete modes and legs, every separate shipment – or micro supply chain – ties back to the original order for a bird's eye view of the entire operation, placing every move and decision into context.

A natively multi-mode solution offers businesses extraordinary opportunities to take 'safe' risks and innovate. Practitioners can experiment with various carrier, route, and mode selections on a micro scale to test what combinations are best without overturning the rest of their status-quo operations. The incredible flexibility and fluidity of the control tower orchestration platform allows businesses to grow and scale with speed, ease, and minimal disruption. After an expansion, it's far easier to adapt the unique flows of new customers and regions and go to market faster to stay one step ahead of competitors.

As a mode-agnostic solution, practitioners are not bound to any one manner of fulfillment. Rather, they are free to always choose options that best deliver on service level requirements cost-effectively. This means that carriers, costs, and service levels can be meticulously modeled without any mode constraints – in whatever ways are optimal to their specific parameters – whether by air, truck, ocean, or parcel.

Cost-to-Serve for Continuous Improvement

By placing the invoice process at the heart of supply chain operations, businesses capture the expense of day-to-day complexities and exceptions.

Now that businesses have become networks, companies must be especially meticulous about preventing unnecessary cost leaks when collaborating. Efficiency issues, such as buffering and safety stocks, compound at each link in the supply chain, from the raw materials in manufacturing all the way though product inventories within multiple warehouses and distribution centers.

Logistics costs are another major supply chain expense, yet most companies have limited control over their entire spend. It's common for a range of component costs to remain hidden, such as inbound materials, transfers, deliveries, and returns.

With scant visibility, companies are left managing finance at a static, enterprise-centric ERP level and can't thoroughly check an invoice's validity. The invoice matching process also tends to be manual, which makes checking discrepancies and catching incorrect charges that much harder.

The Control Tower for Orchestration places the invoice process at the heart of supply chain operations to capture day-to-day complexities and exceptions. Since orders aren't bundled but ungrouped and decomposed through multi-level order management, no details or costs remain hidden. Rather, each leg of an order's journey is documented.

If an order requires multiple shipments, the Control Tower splits the original order into multiple shipment orders. If these then require multiple carriers, those shipment orders get split into multiple service orders. In this way, there is a document generated for each move through the supply chain that individually chronicles the SLAs and actual performance, as well as any agreed upon tariffs, contracts, and prices.

Since all of these branching shipment and service orders tie back to the original order, the individual costs are aggregated to arrive at a total. Discrepancies are also easy to trace and review for accuracy and rate compliance. Moreover, automating payment and cost allocation reduces processing costs and eliminates errors.

The Control Tower for Orchestration ensures that all logistic spend arrives at a cost-to-serve figure, as the aim is to not only save, but to continuously improve performance. Organizations gain insight into exactly what they spend on logistics, by mode and category, as well as where hidden costs lurk within their supply chains.

By meticulously monitoring every detail of execution, it's easier to pinpoint precisely what went wrong, where, how, and with whom, and understand what changes are required to control these expenditures going forward, as well as how to enhance customer service.

As such, subcontractor performance reporting is an integral part of the tool. Organizations manage compliance with core partners through a system of KPIs and performance audits.

The Control Tower for Orchestration ensures that all logistic spend arrives at a cost-to-serve figure, as the aim is to not only save, but to continuously improve performance.

The supply chain is ever-evolving not by chance, but because more and more businesses are seizing on extraordinary opportunities to optimize operations and innovate to offer their customers new and exciting possibilities.

Like athletes, brands must build their core strength and create a flexible and agile environment that will allow them to push their limits. For as long as a company's supply chain operation remains a burden or a cost leak or rampant with inefficiency, they won't have the focus, resources, or robustness to take on more than the status quo.

Control Towers are meant to be the solution which unites multi-enterprise business networks and helps companies achieve operational excellence through effective and efficient collaboration and intelligent response. However, they tend to be solutions only for particular functions – such as the control tower for TMS. Therefore, at best, they help achieve excellence in one branch of a greater ecosystem. The Control Tower for Orchestration is the only solution that is natively designed to treat the supply chain holistically. It is not built for any one function, but to converge functions and processes for maximal efficiency, profitability, and service gains.

The Control Tower for Orchestration is action oriented. Practitioners are empowered to coordinate between partners, direct flows, and mobilize and adapt to disruptions from within the application.

It is the only solution that resides on a single, unified platform to eliminate silos and proffer visibility and control over every order type across every stage of operational planning and execution.

As a holistic solution, it is not mode-or shipment-centric. Rather, the primary point of focus is on the order, the universal touch point between all partnerships, and the very heart of any process that all brands are trying to perfect.

Orchestration is a process requiring direct engagement. To orchestrate is not to simply oversee, and so orchestration solutions move beyond visibility.

To orchestrate is to arrange, mobilize, coordinate, direct, and adapt. As a Control Tower for Orchestration, the solution is action oriented. Practitioners are empowered to coordinate between partners, direct flows, and mobilize and adapt to disruptions from within the application.

Once operations are streamlined and optimized, the Control Tower for Orchestration enables supply chain leaders to innovate through dynamic modeling and risk-taking. Most ideas – no matter how brilliant – must be tested, tweaked, and perfected. With visibility and control into every order detail and the flexibility to split and isolate flows, businesses can quickly and easily alter and adapt strategies to experiment with their supply chains, discover the most successful and popular approaches, and continuously improve their operations to become the leaders and trendsetters in their markets.

About Kinaxis Inc.

Everyday volatility and uncertainty demand quick action. Kinaxis delivers the agility to make fast, confident decisions across integrated business planning and the digital supply chain. People can plan better, live better and change the world. Trusted by innovative brands, we combine human intelligence with AI and concurrent planning to help companies plan for any future, monitor risks and opportunities and respond at the pace of change. Powered by an extensible, cloud-based platform, Kinaxis delivers industry-proven applications so everyone can know sooner, act faster and remove waste. Don't believe us? Ask us to prove it. Learn more at Kinaxis.com.

KINAXIS®

www.kinaxis.com