How Composable Architecture Streamlines B2B Order Management

GUIDE

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Following the surge of eCommerce adoption, B2B companies are faced with heightened customer expectations. However, many of these organizations are bogged down by legacy technology ecosystems that provide a poor foundation for streamlined, omnichannel buying journeys. According to McKinsey & Co., more than 70% of B2B buyers are moving to remote or digital purchases – putting pressure on B2B companies to adopt modern technology to serve customers in their desired channels.

Today's B2B commerce landscape demands a more specialized approach, shifting the spotlight to composable order management systems to address the intricacies of modern order fulfillment, inventory visibility, and customer experience.

In this guide, we'll explore the benefits of composable architecture and how the right order management system can help B2B businesses expand their eCommerce footprint while building strong customer relationships and achieving operational excellence.

Why B2B Companies Can No Longer Rely on Their ERP Systems to Manage Orders

Historically, the ERP was intended to be an internally facing system for manufacturers to manage their manufacturing processes – down to the raw materials needed to create products.

Over time, additional functionalities such as financial accounting and HR were integrated into ERPs, solidifying their role as critical business management systems. Companies within the manufacturing and wholesaler sectors, in particular, found value in leveraging ERPs for end-to-end operation management, including order routing and fulfillment.

But as businesses expand their fulfillment networks and B2B customers heighten their buying process expectations, these companies are encountering growing complexities.

Once the order is placed, various steps must be followed, including price verification, inventory availability checks, confirmation emails to customers, and the allocation of products to different customers. This complex process culminates in warehouse instructions, packing, and shipping, all while ensuring smooth customer tracking.

Limitations of Traditional ERP Systems

ERPs were never built to handle customer-facing processes, and their limitations are quickly becoming apparent. Here are a few examples:



Lack of Flexibility and Adaptability

ERP systems are typically built on a monolithic architecture, which poses significant challenges when adding or updating specific modules. Changes that seem straightforward frequently escalate into extensive customizations, resulting in a rigid framework. This inflexibility makes modifications complex, time-consuming, and disruptive to the entire system.

Inventory Management

One of the fundamental challenges in providing accurate fulfillment dates is having real-time inventory visibility across channels, stores, warehouses, and distribution centers. To estimate when the product will be available to the shopper, the system needs to first determine inventory availability, quantity, and the locations with available inventory.

Limited Scalability

For a smooth order fulfillment process, businesses typically need integrations with systems like warehouse systems, CRM, PIM, shipping, logistics, and more. However, connecting these to the ERP is costly and time-consuming – forcing teams to manually reconcile between systems.

Additionally, as B2B companies scale their commerce operations, it can be difficult to integrate data from various sources into an ERP system to ensure consistent buying experiences and streamlined fulfillment. Expanding into new channels, like B2B marketplaces, social, and ecommerce sites, only exasperates the issue. Unable to unify orders from all channels into the ERP, teams must check various systems to understand demand and fulfill orders smoothly.



Fragmented Inventory Data

ERPs were never designed to unify inventory data from across warehouses, distribution centers, suppliers, etc. Without real-time inventory visibility, it's difficult to manage demand spikes and dips, optimize fulfillment, and ensure accurate future available to promise. It's critical for the sales team to have access to real-time inventory data to ensure they do not undersell or oversell products. At the same time, more buyers are expecting to see inventory availability online—the same as they would when shopping online as consumers.

Lack of Visibility Into SLAs

B2B companies use SLAs, or service level agreements, to specify what products a customer wants, when they will receive them, and how often. Failure to meet these contractual requirements can damage a customer relationship and cost the company an account. ERPs lack the capabilities to track orders and automate workflows to ensure orders are processed on time.



Understanding Composable Architecture

Composable architecture equips B2B companies with the agility and scalability needed to adapt to growth, market changes, and evolving customer requirements. Below are the main tenets of composable architecture.

Modularity and Flexibility

Businesses can break down an order management system into smaller, independent microservices, such as inventory visibility or order routing. This modularity makes it easier to scale individual components, whether it's expanding to new markets, adding new fulfillment options, or accommodating a new business model like subscriptions. Each microservice can be scaled independently, ensuring efficient resource allocation.

API Integration

The API-first approach in composable architecture facilitates seamless integration with partners, suppliers, and customers. Organizations can quickly connect with new partners or platforms, enabling them to expand their reach and offer more diverse services.



Cloud-Native Infrastructure

Embracing cloud-native solutions allows companies to scale the IT infrastructure as needed. Businesses can easily add or remove resources to match fluctuations in demand, avoiding overprovisioning and reducing operational costs. This flexibility enables them to efficiently handle increased workloads during growth periods.

Headless

A headless approach separates the front-end presentation layer from the back-end commerce engine. This allows businesses to customize and adapt customer interfaces quickly and experiment with new channels or user experiences. As they expand and cater to diverse customer needs, headless architecture provides the flexibility to deliver tailored experiences without overhauling the entire system.



Benefits of Composable B2B Order Management

For high-volume manufacturers, distributors, and wholesalers, order management serves as a critical pillar of the composable tech stack. For those operating multichannel, omnichannel, or multisite operations, the benefits that can be derived from a tightly integrated order management solution rivals that of other more visible areas of the commerce experience, such as search and the digital experience layer. This is because order management capabilities have the potential to impact top-line costs, bottom-line growth, back-office efficiency, and the customer experience.

Order management unlocks point-in-time visibility across a business's entire catalog. This, in turn, creates tangible business value. For complex orders, the bill of materials (BOM) can be assembled to be routed from the nearest warehouse or distribution center to reduce fulfillment costs per order. In cases where individual SKUs have been depleted, the BOM can also be picked from multiple DCs, fulfilled separately, and tracked individually to reduce backorders and improve customer satisfaction. This same mechanism can alert the business to low inventory levels to trigger replenishment thereby avoiding stockouts. Conversely, a better grip on inventory levels can also rein in costly overstocks.



With real-time inventory visibility, businesses can deliver better customer service and cut costs. Self-service tools, either served from within the commerce platform or an AI-assisted chatbot reduce cost per contact dramatically versus human-centered interactions. At the same time, customer service reps are better empowered to resolve issues for customers who prefer direct contact and have more of their available time free to address higher level activities.

The efficiency improvements and cost savings go beyond those tied to fulfillment costs and customer service operations. B2B organizations that implement order management capabilities can automate and streamline manual processes. This reduces the time spent per transaction while also reducing errors related to manual entry. With this type of automation in place, order processing can approach 100% accuracy.

Intelligent order management can also impact inventory costs. Inventory holding costs can run between 20%-30% of inventory value, but with smart inventory management costs associated with owned and leased can be reduced and quantities on hand can be managed more accurately. For manufacturers, this can translate to lower component and raw material costs. For all enterprise B2B businesses, intelligent order management facilitates contractual compliance to avoid fulfillment-related penalties.



Implementing a Composable Order Management System

Organizations adopting a composable commerce approach are ideally positioned to add order management to augment their digital capabilities and business operations. In general terms, adopting composable architecture means creating a tech stack where each component is connected, yet independent of each other. With connections accomplished largely via microservices and API hooks, this allows each component to be interchangeable without disrupting the entire system.

With a composable approach, gone are the days of the resource intensive, all-or-nothing lift and shift projects. Often using what is known in tech circles as a “strangler pattern” features and functionality are gradually transitioned to microservices and built around the existing system. This allows changes to be measured and incremental. Composable enables businesses to replace any given component in their tech stack based on the business value it provides, while leaving other elements alone. It also allows them to add what features they need and no more. With this modular approach, the business can also more easily layer in additional tech solutions to broaden their digital capabilities and improve customer experience.



For many B2B organizations, their ERP sits at the core of their business. The ERP system is called upon to do the heavy lifting for many of their back-office processes. Many ERP systems do have basic order management functionality and will always be relied upon to be the system of record for accounting and financial reconciliation. However, as businesses grow, channels proliferate, and processes grow more complex, limitations in these workhorse systems can stifle efficiency and drag on profitability. This can be particularly true for order processing and inventory management. Going composable allows organizations to add an order management solution and take some of the load off their ERP.

Most ERP systems are set to reconcile asynchronously, often one per day. This is not acceptable for today's 24/7, omnichannel commerce operations. Integrating an order management system with the ERP (and commerce platform) can enable synchronous updating and real-time inventory visibility across all sources. OMS integration can also enable more agile order routing than traditional ERPs can handle. This provides both back-office users and customers with better data to make informed decisions and can help convert orders that may otherwise be lost with less sophisticated systems. Taking a composable approach makes this all possible without affecting business continuity.



Conclusion

Composable architecture revolutionizes B2B order management by offering unparalleled flexibility, scalability, and efficiency. Composable order management solutions not only enhance order fulfillment and inventory visibility but also empower businesses to provide superior customer experiences and streamline their operations. As the B2B digital commerce landscape continues to evolve, embracing composable order management systems will be crucial for B2B companies looking to maintain a competitive edge, foster strong customer relationships, and achieve sustained operational excellence.





About Kibo Commerce

Kibo Commerce is a composable commerce platform for retailers, manufacturers, distributors, and wholesalers who want to simplify the complexity in their businesses and deliver modern customer experiences. Kibo is the only modular commerce platform supporting experiences that span Order Management, eCommerce, and Subscriptions. Companies like Zwilling, Ace Hardware, Boscov's, Nivel, and REEDS Jewelers trust Kibo to bring simplicity and sophistication to commerce operations and exceed customer expectations. Learn more at kibocommerce.com.



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