



From High-Risk to Highly Strategic:

Mastering Your B2B Digital Experience Migration



Authors:

Natalija Pavic, Shannon Abel

Table of Contents

Executive Summary	03
Migration Approaches	03
Modern Migration Considerations	04
<hr/>	
Planning a Digital Experience Migration from Custom Home Grown to Platform Approach	04
What to Migrate from ERP to OMS and What to Keep in ERP	06
ERP vs. OMS: A Comparison	06
<hr/>	
Planning a Commerce Migration	07
Key Elements of Pre-Migration Planning	07
1. Defining Goals and Objectives:	07
2. Data Migration Strategy	08
3. SEO Preservation	08
4. Integrations and Customizations	08
5. User Experience and Functionality Testing	09
6. Stakeholder Alignment and Communication	09
<hr/>	
Types of Digital Migrations	09
1. Big Bang Migration	10
2. Phased Migration	10
Flavors of Phased Migration	11
1. Functional Phasing	11
2. Geographic Phasing	11
3. Customer-Based Phasing	12
4. Strangler Fig Pattern	12
Analytical Comparison	14
<hr/>	
Transforming Commerce Migrations with Modularity	14
Modular Commerce: A Lego Set for Ecommerce	15
Key Principles of a Modular Commerce Platform	15
Why is it Gaining Traction?	16
Why Modular Platforms are Ideal for Migration	17
Leveraging Integrated Modularity for Strangler Pattern Migrations	19
How it Works	19
KIBO for Unified Commerce	20
A Closer Look at the KIBO Platform	21
The Role of Agentic Commerce	22
Migration Considerations	23
KIBO's Agentic Layer: The Next Leap in Commerce	24
<hr/>	
In Summary	24

Executive Summary

Today's B2B buyers have evolved, with over 70% of them being Millennials and Gen Z who demand to be served on their terms. This shift is putting immense pressure on manufacturers and wholesalers to modernize their sales channels. Yet, many still rely on outdated, manual processes or ERPs with stitched-on portals.

The outdated "pen and paper" approach hindered efficiency. Sellers were mired in follow-ups instead of sales, and buyers faced constant friction. Similarly, ERP-focused portals haven't solved core B2B challenges. They rely on slow batch processes, which means there's no real-time inventory visibility. This fragmentation hinders agility and makes order changes costly, directly impacting profit.

While organizations often focus on the front-end of the digital experience—the commerce part—they also need to consider how crucial order management is to supporting and extending their operations. A successful migration demands a modern, strategic approach that addresses both. A modular platform, when built on a single data model, solves this problem by bringing together commerce, intelligent order orchestration, and agentic AI to create a unified, adaptive foundation. This approach eliminates the need for a risky "rip and replace" of core ERP systems.

KIBO's B2B Commerce Platform, for example, enables a modern digital experience with real-time inventory and modern order orchestration combined with demand forecasting, allowing for "touchless orders" that free sales teams for high-value activities and provide buyers with the

necessary business agility. Ultimately, it delivers faster revenue capture, higher customer loyalty, and a lower cost-to-serve, transforming operational complexity into a competitive advantage.

Migration Approaches

When it's time to move to a new commerce platform, you'll need to decide which path makes the most sense for your business. There are two primary approaches, each with its own set of trade-offs. The right choice depends on your organization's complexity, risk tolerance, and the health of your existing systems.

- **Big Bang:** A high-risk, all-at-once switch. The entire system is shut down and replaced over a short period. It's faster, but with no way to revert if something goes wrong. It's not recommended for complex B2B operations.
- **Phased:** A gradual, lower-risk move. It allows for continuous testing and less downtime. This is the clear preference for B2B organizations, as it can be broken into smaller strategies like functional, geographic, or customer-based phasing.

A Better Approach: Modular Commerce

A modern architectural style, modular commerce platform is a better option for migrations. When built with MACH principles (Microservices, API-first, Cloud-native, Headless), you can pick individual, modular parts (or microservices), such as catalog or inventory visibility, and connect them with APIs. This setup supports phased migrations, decreases reliance on a single vendor, and provides unmatched flexibility and scalability. It allows you to deliver a B2C-like experience without sacrificing the unique complexity of your B2B operations.

Modern Migration Considerations

Agentic commerce isn't just a buzzword; it's a strategic investment for the future of your business. As AI transforms how buyers research and purchase products, incorporating these capabilities into your migration plans becomes essential.

For new migrations, you should consider agentic commerce as a core component of your platform. AI-powered agents, like [KIBO's Buyer or Merchandiser Agent](#), help automate and personalize tasks, boosting productivity. A modular, API-first architecture is vital for bringing in these agents, providing long-term benefits like reduced operational costs and improved efficiency.

This guide will walk you through the key considerations, strategies, and modern technologies needed to execute a successful B2B commerce migration.

Planning a Digital Experience Migration from Custom Home Grown to Platform Approach

Migrating from a legacy, homegrown system is a unique challenge. Unlike replacing a pre-built platform, you are moving to a custom architecture that was likely developed over years with specific business logic and patches. As a result, this gives your company an opportunity to modernize both technology and the entire B2B buyer journey. This process is like uncovering the "Iceberg of Digital Experience", where the customer-facing commerce storefront is merely the visible tip. Below the surface are the essential operational systems, like order management (OMS), which handle the core fulfillment, inventory, and logistics. A successful transition requires addressing both the front-end experience and the critical, submerged operational components.

Planning a successful migration from a custom, homegrown system starts with a strategic roadmap. You must identify what parts of your system are working, what needs to be replaced, and where the most significant business value lies. The goal is to move beyond a disjointed architecture to a unified, modern platform. This involves:

- **Mapping the "Iceberg":** Start by mapping your entire digital ecosystem. This means not only the storefront but also your ERP, inventory systems, pricing engines, and custom fulfillment workflows (the submerged mass). You must account for how each component will interact with your new commerce and OMS platforms.
- **Prioritizing Business Functions:** Determine which business functions, like quoting, complex pricing, or real-time inventory visibility, are most critical for your business. These should be the first to be migrated to a new, modern platform.
- **Embracing Modularity:** A modular platform allows you to replace components one by one, rather than all at once. You can start by implementing a modern order management system and then layer in commerce capabilities. This phased approach reduces risk and allows you to deliver value incrementally.

The Digital Experience Iceberg In B2B

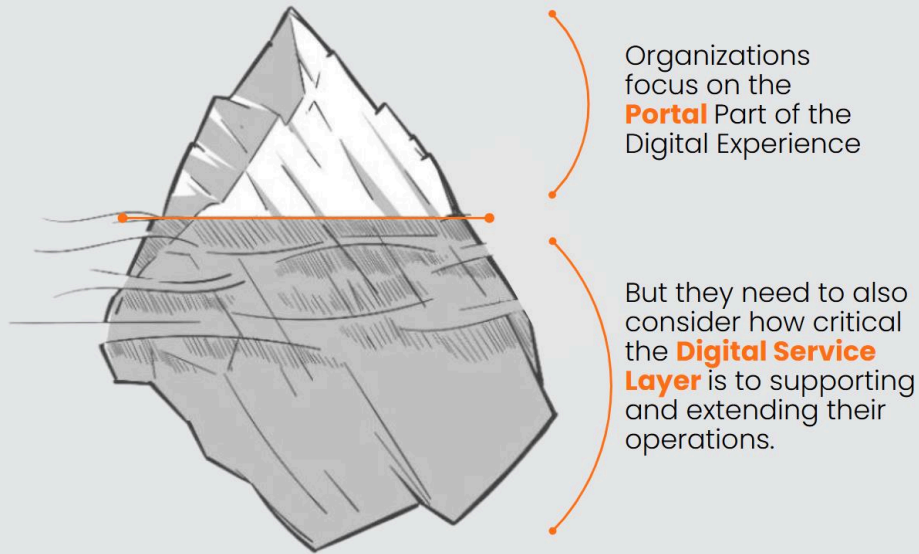


Fig. 1 Many B2B companies only see the tip of the digital commerce iceberg: a simple portal. They neglect the crucial digital services layer hidden beneath the surface. Today, core functions like inventory, fulfillment, and order orchestration reside in slow ERP systems. This bottleneck prevents real-time responsiveness. KIBO Commerce changes the equation. It surfaces critical functionality, providing the speed and flexibility needed to support modern portal operations and drive dramatic operational efficiency.

Stages of B2B Commerce Mapped to KIBO Features

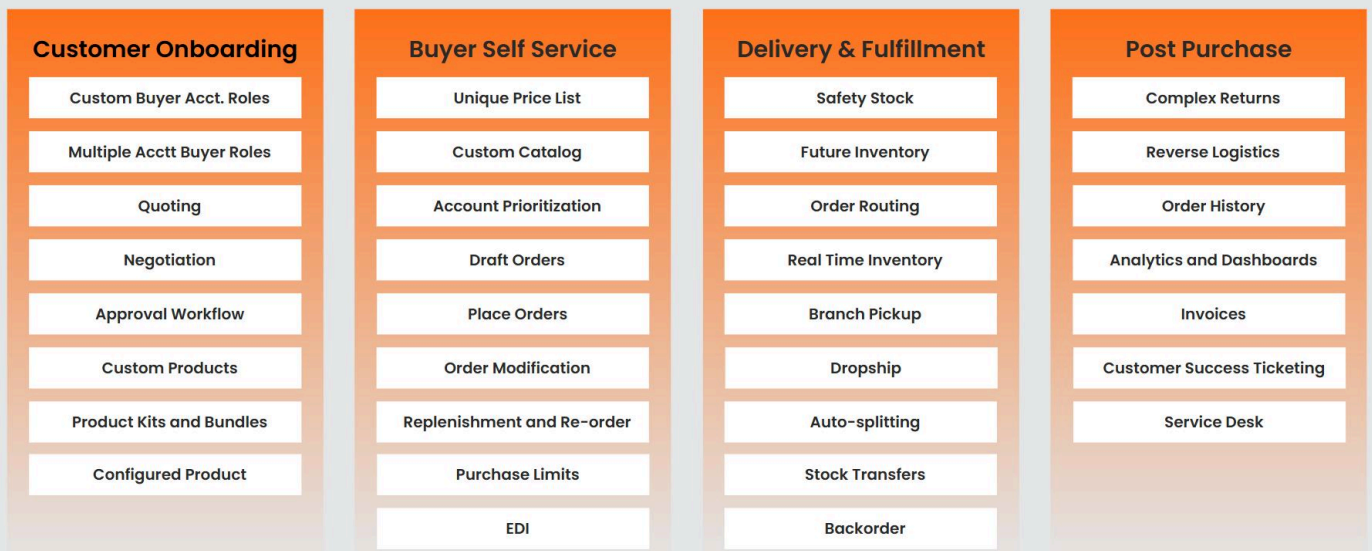


Fig 2. KIBO Commerce capabilities are mapped across the B2B customer journey. Helping you optimize every part of the experience from onboarding to post purchase.

What to Migrate from ERP to OMS and What to Keep in ERP

For businesses facing the complexities of B2B commerce, an OMS is a powerful tool to address the limitations of traditional ERP systems. An OMS centralizes and streamlines order processing, provides real-time inventory visibility, and enables seamless omnichannel fulfillment. It's a key solution for improving a business's operational efficiency, enhancing the customer experience, and ultimately driving growth.

In modern B2B commerce, speed is critical. ERPs, with their slower, batch-based processes, fall short. An OMS like KIBO, by contrast, is a solution built for the real-time, event-driven pace that today's market demands. It automates key tasks like order entry and routing, maintains real-time inventory accuracy across all channels, and gives buyers the power of self-service. The result is a dramatic acceleration of the entire order-to-fulfillment lifecycle, allowing businesses to operate with greater agility and efficiency.

ERP vs. OMS: A Comparison

The primary distinction between an ERP and an OMS lies in their purpose and functionality. An ERP is a rigid, all-encompassing system that handles a company's core operations, but often lacks the agility required for modern, complex commerce. On the other hand, an OMS is a specialized, adaptable solution designed to focus specifically on the complexities of order fulfillment and the customer-facing aspects of the business.

Functionality	ERP (Enterprise Resource Planning)	OMS (Order Management System)
Core Purpose	Manages a company's entire operation, including finance, human resources, and manufacturing.	Manages the complete order lifecycle from placement to fulfillment and post-sale service.
Flexibility	Rigid and difficult to customize, with changes often being costly and time-consuming.	When built with an adaptable and modular architecture, it's easier to scale and add new business models.
Inventory Visibility	Often relies on batch processing, leading to delayed or inaccurate inventory data.	Provides real-time, unified stock levels across multiple locations.
Order Processing	Can be cumbersome and inefficient, with manual reconciliation required between systems.	Centralizes orders into a single, reliable source, streamlining processes and reducing errors.
Omnichannel & Routing	May have basic order management functions but struggles with complex omnichannel fulfillment and order orchestration.	Serves as a central repository for orders across channels and automates order routing based on flexible rules.
Integrations	Integrations can be costly and time-consuming to maintain.	Built with an API-first approach for seamless integration with various systems and partners.
Customer Experience	Can lead to a poor customer experience, with support agents struggling to access accurate data across siloed systems.	Empowers customer service with a single source of truth and offers self-service portals for buyers.

The Ideal B2B Customer Experience Stack

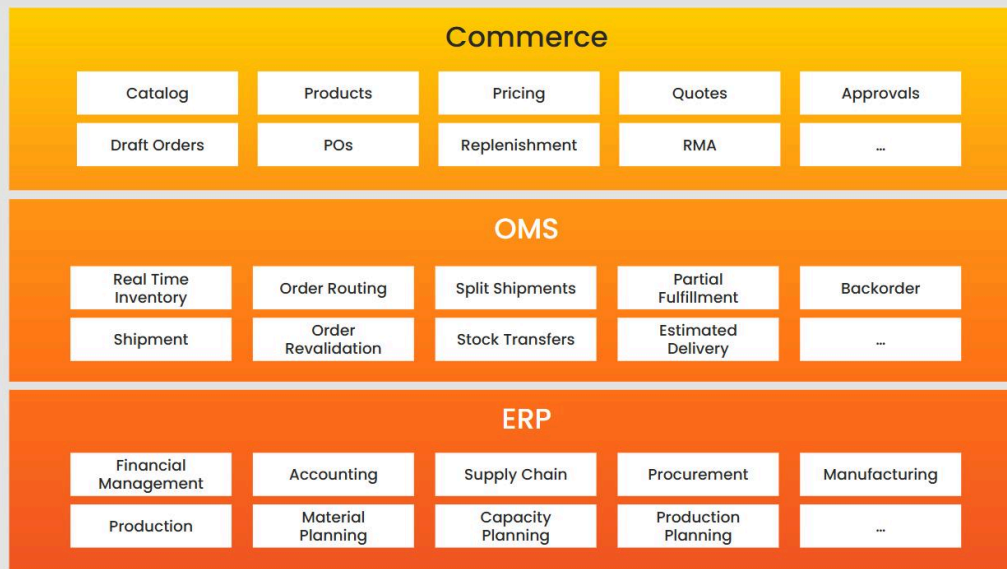


Fig 3. The ideal B2B customer experience requires a precise functional architecture. Your ERP must remain dedicated to core operations: manufacturing, production, and financials. The core stays stable. KIBO's Order Management Solution (OMS) serves as the Digital Services Layer. It forms the critical connection. This layer instantly retrieves vital operational data—including inventory and account specifics—from the ERP. Therefore, the OMS ensures the customer-facing portal receives necessary information and delivers it at the speed modern B2B buyers now expect.

Planning a Commerce Migration

A successful migration isn't about luck; it's about meticulous planning. The work you do before a single line of code is moved will be the most critical part of the entire process. This pre-migration assessment and planning phase is crucial because it sets the foundation for a successful transition and helps to prevent major issues later on.

Key Elements of Pre-Migration Planning

The planning phase of a commerce migration is comprehensive and involves many moving parts. Here's a breakdown of the key elements you must consider:

1 Defining Goals and Objectives:

Before you do anything else, you need to clearly articulate why you're migrating. Is it to enhance the buyer experience, reduce the burden on your sales team, or improve the accuracy of your order-to-cash process? By defining your goals, you can choose the right platform and measure the project's success. Common goals include improving site speed, empowering buyers with self-service tools, and increasing scalability to handle high-volume orders.

2 Data Migration Strategy

Your data is the lifeblood of your commerce store. A successful migration depends on transferring all critical data accurately and securely from your old platform to the new one. This includes:

- **Customer data:** Company profiles, user accounts, tiered pricing, and historical order data.
- **Product data:** Complex product catalogs, technical specifications, and real-time inventory levels.
- **Order data:** Historical records, custom quotes, payment terms, and fulfillment history.
- **Content:** Support documentation, technical specs, and marketing materials.
- **Contracts & Pricing:** Homegrown pricing rules, contract-specific pricing, and custom discount structures.

You should have a plan for data cleansing to remove duplicates or outdated entries and a backup strategy in case something goes wrong.

3 SEO Preservation

A poorly executed migration can tank your search engine rankings and organic traffic. You must have a robust plan to maintain your search engine optimization (SEO) value. This is especially important for publicly available sites. For ecommerce sites behind a login screen, SEO is not a factor. For public sites, this includes:

- **Redirects:** Setting up 301 redirects for all old URLs to point to their new locations.
- **URL mapping:** Creating a comprehensive list of old URLs and their corresponding new URLs.
- **Monitoring:** Keeping a close eye on your site's performance in search engines before and after the migration.

4 Integrations and Customizations

Modern B2B commerce platforms rely on deep integrations with third-party systems like ERPs, CRMs, and financial systems. You need to audit your current tech stack and ensure that all existing integrations are compatible with the new platform. If they're not, you'll need to plan for new integrations or custom development work.

A strategic approach is to partner with a platform that offers pre-built integrations. This kind of solution provides a significant advantage by allowing you to rapidly scale your business with minimal custom development. Instead of building complex point-to-point connections, you can leverage a unified API approach, which masks complex systems behind a single API endpoint. This not only accelerates the integration process but also simplifies ongoing maintenance.

5 User Experience and Functionality Testing

The new site must provide a seamless purchasing experience for your buyers and a streamlined workflow for your internal teams. Thorough testing is non-negotiable. This involves:

- **Functional testing:** Checking that all features, like account-specific pricing, custom quotes, and real-time order tracking, work as expected.
- **User acceptance testing (UAT):** Having key stakeholders from sales, operations, and customer service test the site to ensure it meets business needs and user expectations.
- **Performance testing:** Making sure the site can handle expected traffic volumes without slowing down or crashing.

6 Stakeholder Alignment and Communication

A migration is a company-wide effort, not just an IT project. All key stakeholders, including marketing, sales, customer service, and even finance teams, must be involved and informed. A clear communication plan helps manage expectations and ensures everyone is aligned on the project goals and timeline.



Types of Digital Migrations

When you're ready to migrate your commerce platform, choosing the right approach is a major determinant of your project's success. Let's dive into the two most common strategies and explore when each makes the most sense for your business: **Big Bang Migration** and **Phased Migration**.

Big Bang Migration

This approach involves a single, all-at-once switch from your old commerce platform to the new one. The entire migration of data, systems, and processes is completed in a very short, pre-defined window, often over a weekend or during a period of low traffic. When the new system goes live, the old one is completely shut down.

Best for:

Businesses with tight deadlines and desire, or when the legacy system has critical, unfixable flaws that require an immediate transition to address technology gaps and meet goals.

Advantages:

- **Faster Deployment:** The new site is launched quickly, allowing you to realize the benefits of the new platform sooner.
- **Lower Initial Costs:** You avoid the resources and costs associated with maintaining and synchronizing two systems in parallel.
- **Simplicity:** The process is a single, focused event, which can be easier to manage from a project coordination standpoint.

Disadvantages:

- **High Risk:** A single failure can be catastrophic, leading to a complete system outage and significant data loss. There is no fallback to the old system if something goes wrong.
- **Limited Testing:** Real-world testing with live traffic and user behavior is not possible before the final launch.
- **Intense Pressure:** The short timeline and high stakes place immense pressure on the migration team to execute a flawless plan.

Phased Migration

Also known as a trickle migration or staged migration, this approach involves a gradual transition. The old and new platforms run simultaneously for a period, and different components—such as customer data, products, or specific site functionalities—are migrated in a series of manageable phases.

Best for:

Complex B2B companies with vast data, intricate pricing, and many integrations. This method is ideal for businesses needing fast deployment and zero downtime that must roll out a new platform incrementally.

Advantages:

- **Lower Risk:** By moving in stages, you can identify and resolve issues as they arise without impacting the entire system.
- **Reduced Downtime:** Business operations are not interrupted, as the old system remains active until the new one is fully functional and stable.
- **Enhanced Testing:** Each phase can be thoroughly tested with real-world users, allowing for continuous improvement.

Disadvantages:

- **Increased Complexity:** Managing and synchronizing two live systems simultaneously is technically challenging and requires careful planning to prevent data inconsistencies.
- **Higher Costs:** You may incur higher costs for a longer period due to the maintenance and licensing of both the old and new platforms.
- **Extended Timeline:** The entire migration process takes significantly longer to complete, delaying the full realization of the new platform's benefits.

The choice between these two approaches is a strategic one that should be made after a careful assessment of your business needs, risk tolerance, and available resources.

Flavors of Phased Migration

A phased migration is a strategic approach that offers a way to modernize your platform without the high stakes of an all-at-once switch. However, this isn't a one-size-fits-all solution; it's a flexible strategy with several distinct "flavors" that can be tailored to your specific business needs and risk tolerance. Understanding these different approaches is key to building a migration plan that delivers continuous value while minimizing disruption.

Functional Phasing

This approach involves migrating one specific business function at a time. It's often used when a business has a complex, monolithic platform and wants to replace individual components without overhauling the entire system at once.

Pros:

- **Reduced Risk:** Issues can be isolated to a single function, making them easier to manage and fix without affecting the entire site.
- **Continuous Improvement:** You can deliver new functionality and features to users as soon as a phase is complete, providing a steady stream of value.
- **Specialized Expertise:** This approach allows teams to focus on one function at a time, leveraging specialized expertise for each phase.

Cons:

- **Increased Complexity:** The old and new systems must coexist and be carefully synchronized, which can be technically challenging and requires robust data mapping.
- **Longer Project Timeline:** The overall project takes longer to complete due to the staggered nature of the releases.

Geographic Phasing

This strategy involves migrating your ecommerce platform one geographic region or country at a time. For international businesses, this is a low-risk way to test a new platform's viability and localize your operations step by step.

Pros:

- **Lower Risk:** A failure in one market will not affect your business in other regions, protecting your primary revenue streams.
- **Controlled Testing:** You can test the new platform's localization, payment gateways, and shipping integrations in a smaller, less critical market before a global rollout.
- **Scalable Lessons:** You can apply the lessons learned from the initial launch to subsequent migrations in other markets.

Cons:

- **Management Overhead:** It requires the management of multiple teams and staggered timelines, which can be administratively complex.
- **Data Consistency:** Maintaining data consistency across different instances of the platform for various regions can be challenging.

Customer-Based Phasing

Customer-based phasing segments your customer base and migrates them to the new platform in waves. It's a great method for managing risk and gathering early, valuable feedback from a controlled group of users before a full-scale launch.

Pros:

- **Reduced Customer Impact:** Any issues that arise will only affect a small portion of your customer base.
- **Early Feedback:** You can gather valuable feedback from a specific user segment and make improvements before a full-scale launch.
- **Better User Experience:** By addressing feedback in real time, you can ensure a much smoother and more positive experience for the majority of your users.

Cons:

- **Technical Complexity:** It requires a technically sophisticated system to manage and segment different customer groups and route them to the correct platform.
- **Data Synchronization:** You must ensure that all data (e.g., customer history, loyalty points) is accurately synced across both platforms for customers who haven't been migrated yet.

Strangler Fig Pattern

The Strangler Fig Pattern is a common phased migration approach that involves gradually replacing a monolithic system's functionality with new microservices. Named after the strangler fig vine that grows around a host tree, this strategy allows the new system to "strangle" and eventually replace the old one without a high-risk, all-at-once migration.

Pros:

- **Reduced Risk:** It's an incremental, low-risk approach. You can test and refine new features in a live environment without impacting the entire site. If a new service fails, you can simply revert back to the old one.
- **Continuous Improvement:** You can deliver new value to customers as you build each service, rather than waiting for a complete replatforming project to finish.
- **Incremental Investment:** You can spread the cost and effort of the migration over time, focusing on one part of the system at a time.

Cons:

- **Increased Complexity:** You must manage and maintain both the old and new systems simultaneously, which can lead to complex routing logic and integration challenges.
- **Extended Timeline:** The migration process takes a long time to complete because you are replacing the system piece by piece.
- **Potential for Bottlenecks:** The old system's core dependencies can become a bottleneck if not properly managed during the transition.

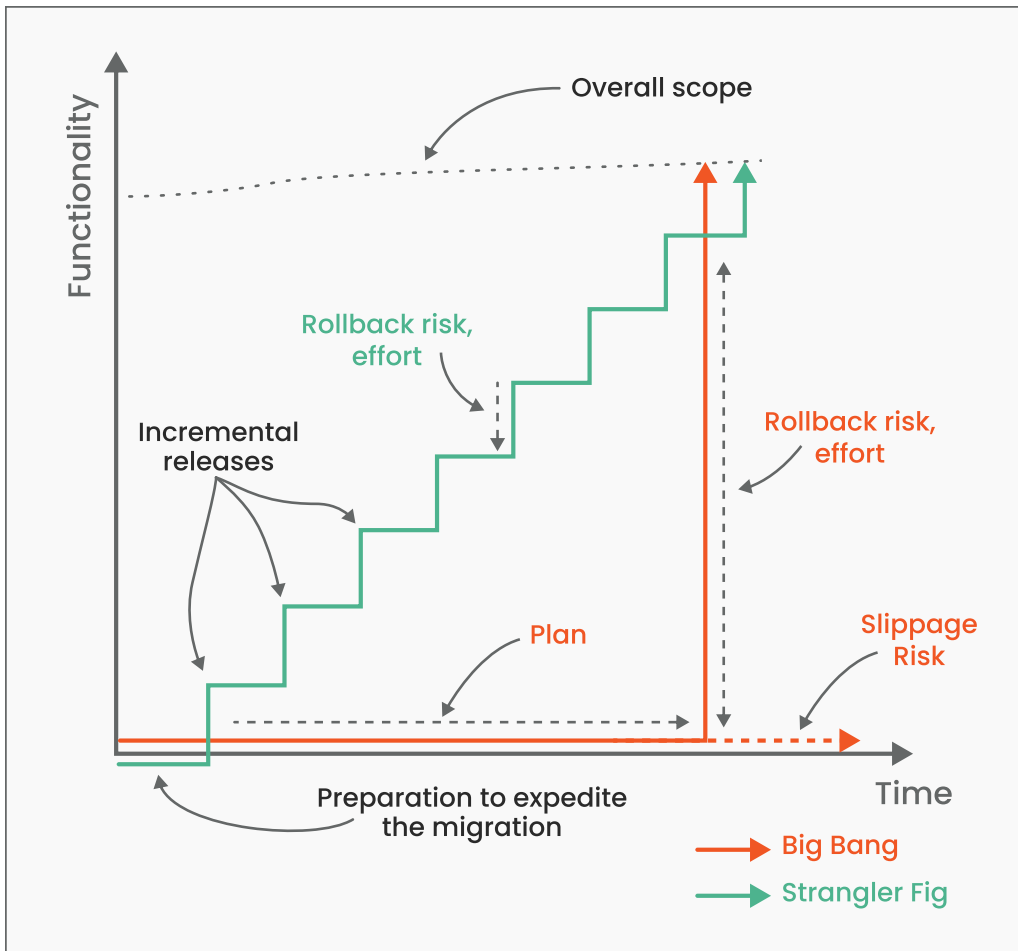


Fig 4. The above image is an illustrative example of steps taken with a Big Bang approach vs. the Strangler Approach. Big Bang and Strangler approaches illustrate different paths to digital transformation. A Big Bang approach involves a long implementation cycle to build a complete new system, followed by a single, high-risk launch that replaces the old system entirely. In contrast, the Strangler approach allows for a phased rollout, where new functionalities are introduced incrementally to replace parts of the legacy platform over time. This reduces risk but also means the transition to the new platform is piecemeal rather than a single, sweeping change. Diagram sourced from thoughtworks.com

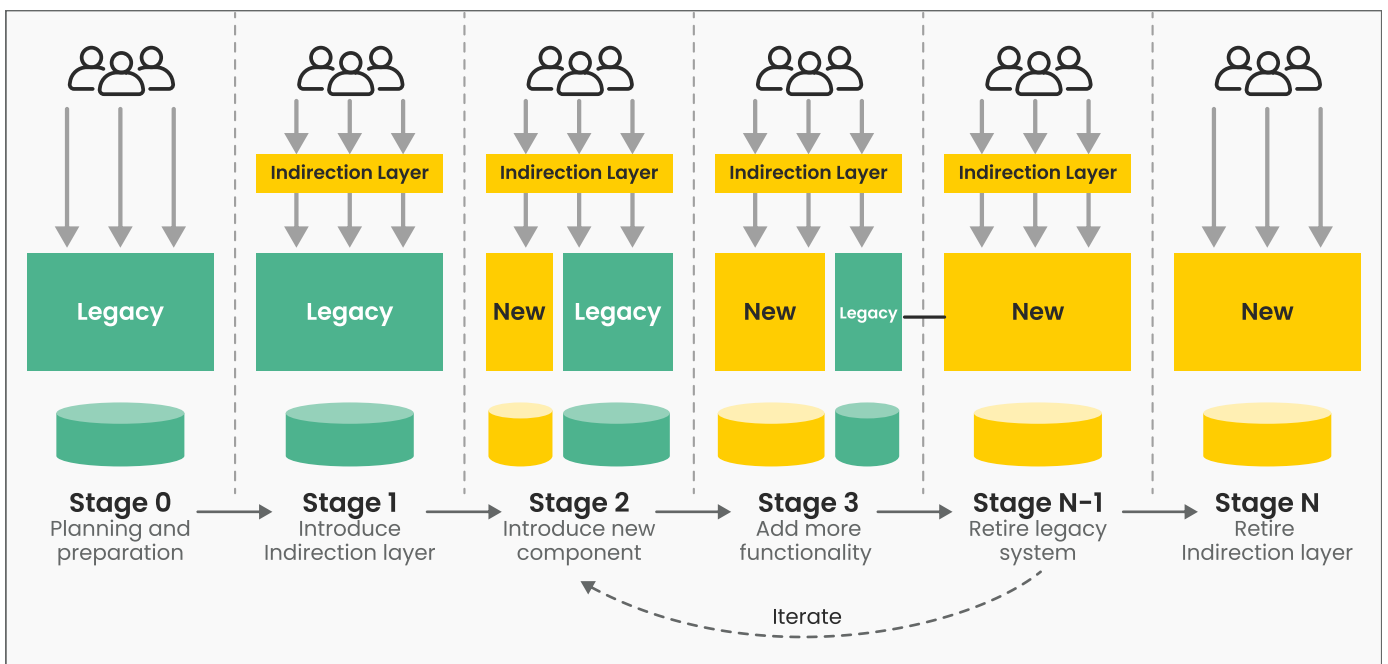


Fig 5. The Strangler approach offers a methodical path for platform migration by incrementally replacing your legacy system. By introducing an Interaction Layer, you can stabilize the process, gradually shifting specific functionalities to a new modular platform. This method allows for continuous deployment and testing in a live environment, providing the opportunity to refine features and optimize performance as you go, without the need to build an entire new system before launch. Diagram sourced from thoughtworks.com

Analytical Comparison

Approach	Pros	Cons	Best for
Functional	Reduced risk, continuous improvement, specialized focus	Increased complexity, longer timeline	Businesses with a monolithic architecture that want to replace components incrementally.
Geographic	Lower risk, controlled testing, scalable lessons learned	Management overhead, potential data inconsistencies	International businesses with operations in multiple regions.
Customer-Based	Reduced customer impact, early user feedback, better UX	High technical complexity, data synchronization challenges	Businesses with a large, segmented customer base that want to test functionality.
Strangler Fig Pattern	Reduced risk, continuous delivery, incremental investment	Increased complexity, long timeline, potential bottlenecks	Companies with a monolithic legacy system that is too risky or expensive to replace all at once.

Transforming Commerce Migrations with Modularity

Modular commerce represents a paradigm shift in how businesses build and manage their digital presence, moving away from rigid, all-in-one platforms toward a flexible, microservices-based architecture that puts you in complete control. This fundamental change transforms a typical ecommerce migration from a high-risk, all-or-nothing event into a strategic, low-risk process. By enabling businesses to select and integrate best-of-breed components as needed, modular commerce vendors, like KIBO, provide the agility and control necessary to modernize your technology stack on your own terms.

Modular Commerce: A Lego Set for Ecommerce

Imagine building a Lego model. A traditional monolithic platform is like a pre-packaged Lego set with a specific design and a fixed set of bricks. You can build that one model, but if you want to create something different or swap out a piece, it's difficult and often requires you to start over.

Modular commerce, on the other hand, is like having a giant bucket of Lego bricks. Each brick is a specialized, high-quality piece (e.g., a specific type of wheel, a unique character, a special roof tile). You can pick and choose the exact pieces you need to build your ideal solution, and if you want to change one part, you simply swap that one brick out without affecting the rest of the structure.

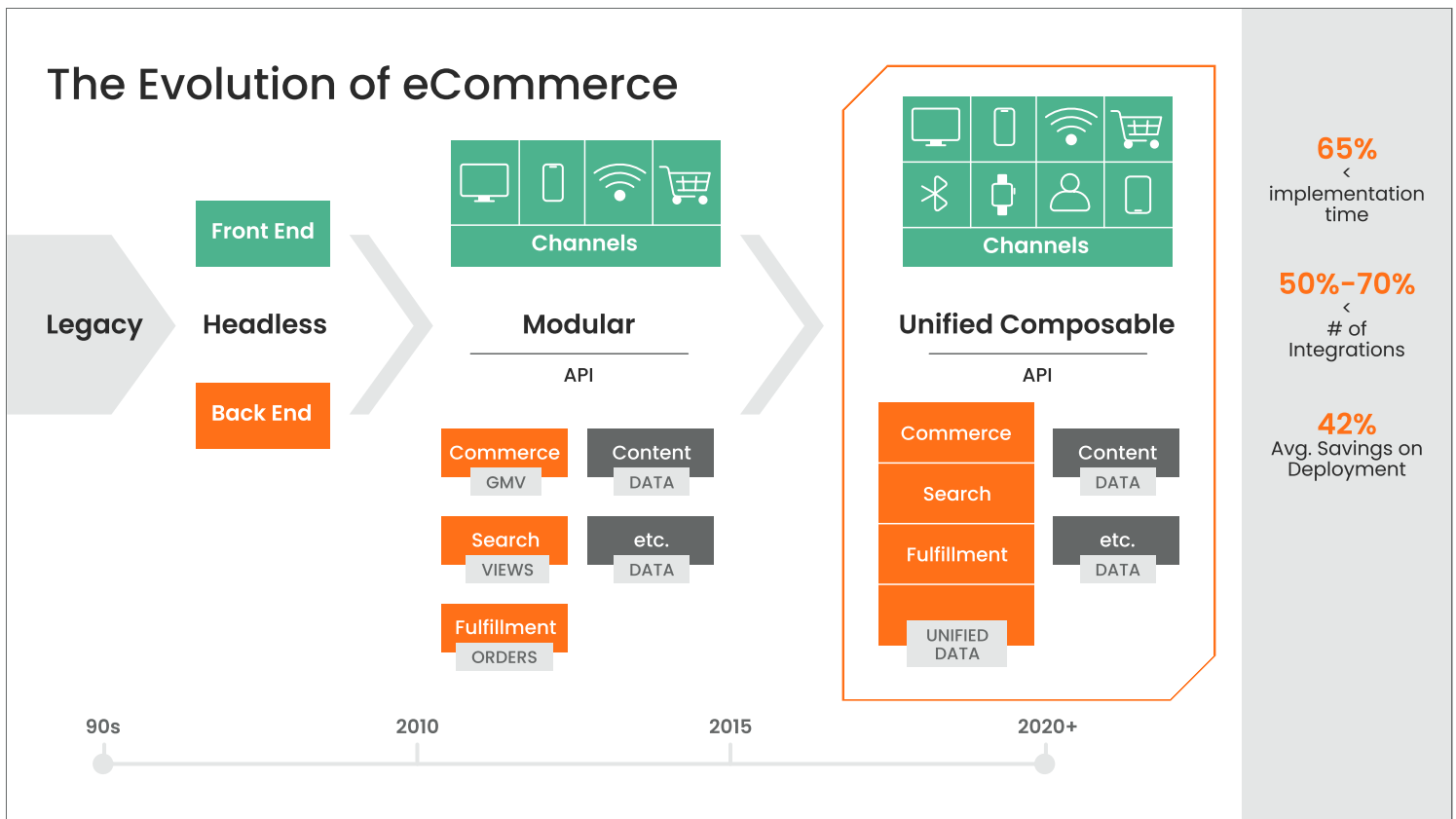


Key Principles of a Modular Commerce Platform

This modular approach is built on several key principles, often referred to by the acronym MACH:

- **Microservices:** Instead of a single, massive application, the commerce platform is broken down into a collection of small, independent services. Each service handles a specific business function (e.g., a service for product catalog, another for search, one for promotions, and so on). This allows for individual development, deployment, and scaling of each service.
- **API-First:** All of these microservices communicate with each other and with external systems through Application Programming Interfaces (APIs). This "API-first" approach ensures that the different components are not tied to a specific technology or programming language, making them highly flexible and interoperable.
- **Cloud-Native:** Composable commerce solutions are built and deployed on the cloud, leveraging the power of cloud computing for infinite scalability, high availability, and real-time updates. This allows businesses to handle traffic spikes and growth without managing their own servers.
- **Headless:** This is a crucial concept. "Headless" means decoupling the front-end (the customer-facing interface, or "head") from the back-end (the commerce logic). With a headless setup, you can use any front-end technology to build a website, mobile app, smart kiosk, or any other customer touchpoint, all while using the same back-end commerce engine.

The Evolution of eCommerce



65%
<
implementation
time

50%-70%
<
of
Integrations

42%
Avg. Savings on
Deployment

Fig 6. Illustrated here is the transformative nature of the evolution of headless and modular commerce. The headless era focused on separating the front-end from the back-end, allowing for greater flexibility. This was followed by the modular era, which broke down the back-end into individual, interchangeable components. Now, with solutions like KIBO, these advancements are unified. The platform offers a complete suite of modular components along with a robust front-end, enabling businesses to create a seamless, true multichannel experience by bringing all elements together.

Why is it Gaining Traction?

The rise of modular commerce solutions is a direct response to the limitations of traditional, monolithic platforms. In today's dynamic digital landscape, businesses need to:

- **Innovate Faster:** Modularity allows for a rapid time-to-market. When a new feature or a new channel is needed, you can develop and deploy a single component without a full-scale replatforming project.
- **Offer Unique Experiences:** With the "best-of-breed" approach, you can create a highly tailored and personalized customer experience by integrating the most advanced solutions for search, personalization, and content.
- **Remain Agile:** The ability to swap out components means you are not locked into a single vendor's roadmap. If a new technology emerges that is better than what you are using, you can adopt it with relative ease, future-proofing your business.

In essence, modular commerce is not just a technology trend; it's a strategic shift that puts the business in control of its digital future, empowering it to build a highly customized, scalable, and adaptable platform that can evolve at the pace of modern commerce.

Why Modular Platforms are Ideal for Migration

When it comes to the complex task of migration, modular platforms offer a strategic advantage over traditional monolithic systems. Their flexible, modular design makes the journey less risky and more efficient, ultimately setting you up for long-term success.

A modular platform is a superior choice for a B2B commerce migration for several key reasons, primarily centered on its flexibility, agility, and long-term viability. When compared to a traditional monolithic platform, which is a single, tightly integrated system, a modular approach offers a more strategic and less disruptive path to a modern commerce solution.

Here's a breakdown of why a modular platform is more advantageous for a commerce migration:

1 Phased and Less Risky Migration

A monolithic system often requires a "big bang" migration, where the entire platform is replaced at once. This is a high-risk strategy because any errors or issues affect the entire site, leading to potential downtime and lost revenue.

In contrast, a modular platform, with its flexible architecture, allows for a phased migration. You can migrate specific functions or "microservices" one at a time, such as your pricing, discounts, cart and checkout, real-time inventory visibility, Product Information Management (PIM) system or your Content Management System (CMS). This approach, what we referred to earlier as the "strangler pattern," allows you to:

- **Minimize risk:** You can test and validate each new component in a live environment before fully committing to the migration. If a component doesn't work as expected, you can roll it back without impacting the rest of your business.
- **Reduce disruption:** You can run your old and new systems in parallel, gradually shifting traffic and functionality to the new platform, ensuring a smooth transition for your customers.

2 "Best-of-Breed" Solutions

Monolithic platforms often force you to use the features and integrations provided by a single vendor. While this may be convenient at first, it can limit your ability to innovate and stay competitive. Modular commerce is built on a "best-of-breed" approach. This means you can select the best possible solution for each specific business need from different vendors. For example, you can choose:

- A PIM system for managing complex product data, including technical specs and compliance information.
- A robust pricing engine that handles custom, contract-based pricing rules and tiered discounts.
- A real-time inventory management solution to prevent stockouts and missed commitments.
- An ERP system connector for seamless order and customer data synchronization.

This allows you to create a technology stack that is perfectly tailored to your unique business requirements, rather than settling for a "good enough" solution.

3 Agility and Faster Time-to-Market

In a monolithic system, making a change to one part of the platform can have unintended consequences on other parts, leading to lengthy and complex development cycles. A modular platform's decoupled nature allows for unparalleled agility. Each component is independent, communicating with others through APIs. This means:

- **Faster innovation:** You can quickly and independently develop and deploy new features, such as a new checkout flow or a mobile app for sales reps, without having to rebuild the entire system.
- **Rapid response to market changes:** You can easily adopt new technologies or swap out old components for better ones to keep up with evolving buyer expectations and market trends.
- **Empowered teams:** Empowered teams: Different development teams can work on separate components simultaneously, streamlining workflows and accelerating the pace of innovation.

4 Scalability and Cost Efficiency

Scaling a monolithic platform often means scaling the entire system, even parts that aren't under heavy load, which can be inefficient and costly. With a modular architecture, you can scale individual components as needed. For example, during a peak season, you can allocate more resources to your search or checkout components to handle the surge in traffic, while keeping other parts of your system at their normal capacity. This "pay-for-what-you-use" model helps optimize costs and improve performance.

5 Future-Proofing and Reduced Vendor Lock-in

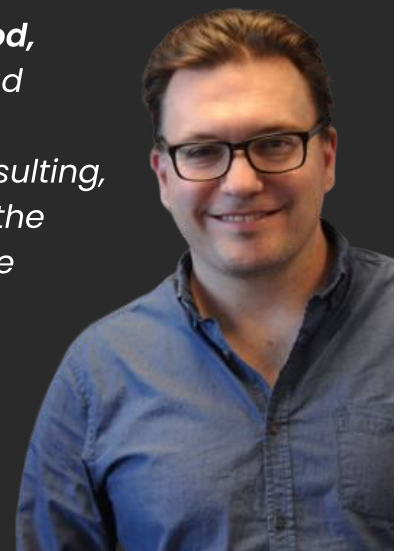
A monolithic platform often leads to "vendor lock-in," where you are tied to a single vendor's roadmap and technology. If the platform doesn't evolve as you need it to, you are faced with another costly and disruptive replatforming project.

A modular platform gives you the freedom to choose and switch vendors for specific components. This reduces your dependence on any one vendor and allows you to continuously evolve your technology stack to meet future needs, making it a truly future-proof solution.



I think that headless commerce or [modular] commerce... are actually going to end up being more impactful, more highly deployed, more consequential in the B2B ecommerce space than they ever have been and probably ever will be in the B2C and D2C world.

Jason Greenwood,
*Founder and Lead
Consultant of
Greenwood Consulting,
Podcast Host of the
Ecommerce Edge*



Leveraging Integrated Modularity for Strangler Pattern Migrations

Integrated modularity directly supports the strangler migration pattern by providing a practical, low-risk way to replace a legacy system's functionality piece by piece. Instead of a costly, high-risk "big bang" overhaul, this approach allows you to strategically add modern, modular components to your existing platform.

How it Works

As mentioned earlier in the guide, the strangler pattern is a phased migration technique where you incrementally "strangle" an old, monolithic system by redirecting traffic to new, standalone microservices. Integrated modularity provides the perfect toolset for this.

This approach works by building a new service for a specific function and then redirecting traffic for that function to the new system. The old system remains in place for all other functions. As you build and deploy more new services, you redirect more and more traffic, slowly replacing the old monolith's capabilities until it can be safely retired.

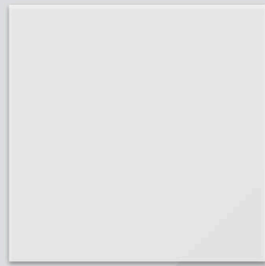
For example, a platform like KIBO can co-exist with your existing system while phasing in new functionality using robust APIs. You could implement a new order management system (OMS) in a phased approach, first adding in a microservice for inventory visibility, then a separate one for order routing, and so on. This allows you to:

- **Replace Functionality:** The new module handles a specific function, allowing you to gradually turn off or "strangle" the corresponding feature in your old system.
- **Reduce Risk:** You can test each new module in a live environment without impacting the rest of your business. If a new module doesn't perform as expected, you can revert to the legacy system with minimal disruption.
- **Enable Incremental Investment:** You can spread the cost and effort of migration over time by investing in one module at a time, continuously adding new capabilities and moving toward a fully modernized architecture at your own pace.

Essentially, integrated modularity makes the strangler pattern a reality. It offers a practical middle ground between a rigid monolith and a complex, all-in-one modular stack. You get the stability of your legacy system while gaining the agility and innovation of modern, modular components.

Composability is a spectrum

There is no “one-size fits all”



All-In-One Solution

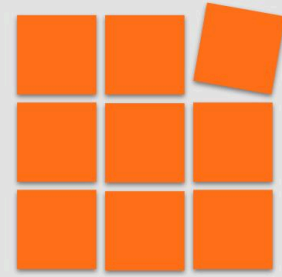
Monolith, unintegrated



Integrated Composable

Monolith, with several composable modules

KIBO UNIFIED COMMERCE



Fully Composable

Completely modular with fully replaceable systems



Fig 7. Composability exists on a spectrum, offering flexibility beyond a complete platform migration. Many companies can benefit from a middle-ground approach by integrating modular point solutions with their existing systems. KIBO's platform is so modular, it enables customers to strategically acquire and deploy specific components to augment and extend the life of their current technology stack. This allows for targeted innovation without the disruption of a full-scale overhaul.

KIBO for Unified Commerce

The KIBO platform is fully modular, giving businesses the flexibility to adopt a unified commerce strategy by leveraging all of KIBO's components. This means that while the platform remains modular under the hood, all of its capabilities run on the same underlying tech stack, providing a single, cohesive, and seamless solution.

This shared foundation is a significant advantage. Because KIBO's entire platform is built on the same architecture, there are no acquisitions to integrate and no complex integrations required between products. Businesses can select the functionality they need most, confident that it will work seamlessly with their existing stack.

This approach offers distinct benefits for Integrated Modularity:

- **Flexible Deployment:** Pick and choose only the functionality you need.
- **Innovation Without Overhaul:** Extend your platform without a risky, expensive replatforming.
- **Incremental Migration:** Modernize your stack with a painless, step-by-step approach.

A Closer Look at the KIBO Platform

Composable Microservices You Can Deploy Incrementally

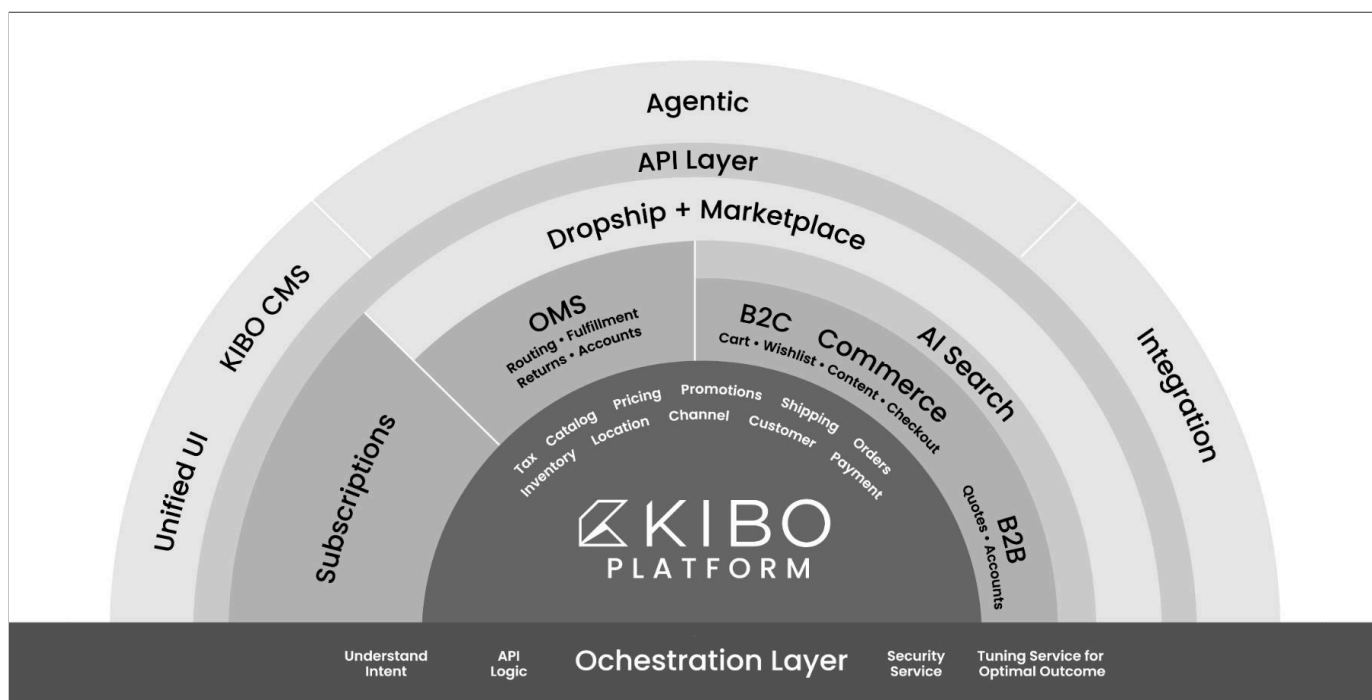


Fig 8. KIBO's products are built on a modular foundation of microservices, allowing new functionality to be unlocked by simply extending the existing framework. Each product uses a shared set of objects and microservices, so no complex integrations or connectors are needed. This unified approach gives customers a broad range of solutions to grow their commerce operations seamlessly on a single platform.

The KIBO platform's true power lies in its **modular and shared-service nature**. At its core are shared objects and microservices that form a foundational layer across all products. As customers build their infrastructure, they can seamlessly extend their capabilities. For instance, if you have your product catalog and pricing established for ecommerce, adding a new function like real-time inventory management or order routing is as simple as layering new microservices onto the existing ones. This shared architecture significantly accelerates implementation time for new products.

We've also developed specific solutions that build on this foundation. Our Dropship and Marketplace capabilities, for example, are extensions of our core commerce platform. We've created an EDI layer to integrate third-party logistics (3PL) into traditional OMS functions, enabling real-time inventory and complex order routing. For marketplaces, we provide vendor and supplier portals to manage your third-party vendors as an extra commerce experience.

All of this functionality is unified by a robust API architecture that allows you to "plug and play" KIBO into any existing environment. This means you can keep your ERPs, CRMs, and other essential systems in place while KIBO provides the modern commerce layer that connects everything and streamlines your operations.

The Role of Agentic Commerce

The future of commerce is intelligent and autonomous. As you plan your migration, you need to consider how your new platform will support the next generation of customer experiences, powered by AI-driven ["agentic commerce."](#)

Agentic commerce moves beyond simple automation to create intelligent, autonomous agents that can act on a user's behalf. This includes everything from a conversational AI that can complete a purchase from start to finish to an intelligent reordering system that anticipates a customer's needs.

This technology is not a bolt-on feature; it fundamentally changes the customer experience by:

- **Customizing the Experience:** Agents can learn from account history, past purchases, and user behavior to proactively offer hyper-relevant product recommendations or suggest reordering parts, for example, based on a buyer's typical consumption cycle.
- **Automating Tasks:** They can handle routine tasks like order status inquiries (WISMO), product returns, and reordering without human intervention. This frees up your sales and customer service teams to focus on high-value activities.
- **Driving Proactive Engagement:** Agents can initiate conversations with buyers, provide timely updates on large orders, and even anticipate a need for a new quote before it's expressed.



Now, for the very first time, when B2Bs implement commerce technology, it is going to be AI first. It's going to be AI ready. It's going to be AI enabled.

***Jason Greenwood**, Founder and Lead Consultant of Greenwood Consulting, Podcast Host of the Ecommerce Edge*



Migration Considerations

When migrating to a new platform, it's crucial to assess how it will enable or hinder your move towards agentic commerce.

1. API-First and Headless Architecture

Agentic commerce relies on a seamless connection between the AI layer and the core commerce system. A headless and API-first architecture is essential. The AI agent (the "head") needs to be able to access all the business logic and data (the "body")—such as product information, inventory levels, and customer profiles—through robust APIs. A traditional, monolithic platform with tightly coupled front-end and back-end will make it difficult, if not impossible, to integrate these intelligent agents effectively.

2. Data and Analytics

Agents are only as smart as the data they are trained on. A successful migration should include a strategy for collecting, cleaning, and structuring data to feed these AI models. Consider:

- a. Data Consolidation:** Will the new platform allow you to unify data from all touchpoints into a single source of truth?
- b. Real-time Data Access:** Can the AI agents access real-time data to make instant decisions on inventory, pricing, or product availability?
- c. Data Security and Privacy:** How will the new platform handle sensitive customer data to ensure it complies with privacy regulations?

3. Modular vs. Monolithic Platforms

When migrating, one of the most significant choices you'll make is selecting an architecture—a decision

that will determine how easily you can adopt future technologies like agentic commerce.

- a. Modular Platforms:** A modular architecture is an ideal fit for agentic commerce. Its flexible, best-of-breed nature allows you to plug in a specialized AI engine or an automation tool as a microservice. You can experiment with different agents and easily swap them out as the technology evolves without needing a full replatform.
- b. Monolithic Platforms:** These systems are often rigid and limit your ability to integrate cutting-edge AI. You may be forced to use the platform's native (and often limited) AI capabilities or undertake a complex and costly custom integration.

4. Total Cost of Ownership (TCO)

While a modular, agentic-ready platform may have a higher initial setup cost, it can lead to significant long-term savings. The ability to automate tasks and optimize experiences with AI agents can:

- a. Reduce operational costs:** Less need for human intervention in customer service and manual tasks.
- b. Increase revenue:** Enhanced personalization leads to higher conversion rates and customer loyalty.
- c. Improve efficiency:** Faster, more accurate transactions powered by AI.

In summary, the consideration of agentic commerce should be a core component of any modern commerce migration plan. It's a key factor in future-proofing your business and ensuring your new platform can support the next generation of buyer experiences.

KIBO's Agentic Layer: The Next Leap in Commerce

Further enhancing the modular experience is KIBO's Agentic Layer. This multi-agent approach provides modular AI agents for every part of the KIBO platform to help you accelerate innovation. The agentic layer is accessible to all objects and microservices, with existing and planned rollouts for a variety of functions, including:



Buyer



Customer Success



Merchandising



Pricing/Promotions



Order Routing



Forecasting



Fulfillment



Reverse Logistics

These agents operate on a spectrum of capabilities, from the ability to engage with users and explain data, to boosting productivity and, most critically, leveraging AI to tune and optimize your system. For example, if you have specific safety stock metrics set by the store, an optimization agent can automatically adjust those parameters against your business goals.

A crucial underpinning of these agents is our powerful search engine. Many retailers make the mistake of deploying an agentic solution that relies on a simple synonym or keyword-based search. This approach is limited. [KIBO's vector AI search](#) dramatically increases the accuracy of agent responses by incorporating all product attributes in your catalog. This ensures the agent not only understands what you're asking for but can also deliver precise and accurate results.

In Summary

For a successful B2B commerce migration, you need careful pre-planning and a strategic approach. Companies must choose between a high-risk, all-at-once Big Bang strategy and a lower-risk, gradual Phased migration. The latter is far more suited to the complexities of B2B.

Modern commerce is moving towards a modular architecture built on MACH principles. This provides the agility, scalability, and flexibility needed to support those phased approaches. Looking ahead, this modular foundation is also key for adding agentic commerce. This means using AI-powered agents to automate tasks and personalize the buyer experience. Ultimately, this helps future-proof your platform and drives long-term efficiency and growth.

About KIBO

KIBO is a composable commerce platform for retailers, manufacturers, distributors, and wholesalers who want to simplify complexity and deliver modern customer experiences. KIBO is the only modular commerce platform supporting unified experiences across Order Management, eCommerce, and Subscriptions. Companies like Zwilling, Ace Hardware, Boscov's, Nivel, and REEDS Jewelers trust KIBO to bring sophistication and simplicity to their commerce operations. Learn more at <https://kibocommerce.com>.

About KIBO B2B Commerce

KIBO's B2B Commerce Platform provides a unified, modular foundation for manufacturers, wholesalers, and distributors seeking digital growth. Our solution merges B2B commerce, intelligent order orchestration, and agentic AI capabilities into a single data model, eliminating system sprawl and enabling real-time operations. Designed to simplify complex B2B needs, KIBO offers features like dynamic pricing, customizable catalogs, and sophisticated quoting and approval workflows. KIBO also addresses the lack of real-time visibility in many legacy systems by providing a single view of inventory and order status across multiple locations and fulfillment partners. Learn more about [KIBO's B2B Commerce solution](#).

About the Authors:



Natalija Pavić

Senior Director of Product Marketing at KIBO

Natalija Pavić is the Product Marketing Leader at KIBO Commerce where her team handles product market messaging including content, social, public relations, and analyst relations. She is an ecommerce expert and a thought leader on the topic of the future of ecommerce and has been featured on numerous podcasts including Martalks, OmniTalk, Ecommerce Coffee Break, Retail Checks and Balances, Digital Shelf Institute, and AI with Sacha. She is also an AI expert and inventor with a patent on generative promotions and is patent pending on two more AI innovations.



Shannon Abel

Sr. Corporate Marketing Manager

For over seven years, Shannon has worked in the commerce technology industry—first with Blue Acorn iCi, then joined KIBO in 2022. As the corporate marketing manager, she manages KIBO's content, PR, and brand strategies. Shannon graduated from Clemson University in 2014 and enjoys spending her free time with her husband, two dogs, and horse in Charleston, SC.