KIBO®

Composable Commerce:

What, Why, and How



A Primer on Composable Commerce

Composable commerce allows you to create a best-of-breed eCommerce platform customized exactly to your needs. It's flexible, future-proof, and lets you scale without limitations.

A composable commerce approach views each component of your commerce framework as a self-contained unit that can be deployed, updated, and replaced independently of the others. It takes headless and modular architecture to the next level, giving you the freedom to choose the best solution for each individual problem, without being locked into a single vendor.

In this guide, we'll cover:

What is Composable Commerce?

The Difference Between Headless and Composable Commerce

The 4 pillars of Composable Commerce

Why Move to Composable Commerce as a Strategy

How Composable Commerce Creates a Better Customer Experience

How Composability Fosters Cross-Organizational Relationships

Business Goals Achievable with Composable Commerce

Considerations When Moving to Composable Commerce

Preparing Your Organization for Composable Commerce

What to Look for in a Vendor

Composable for OMS

Kibo's Approach to Composable Commerce

What is Composable Commerce?

Composability, as defined by Gartner, means "creating a business made from interchangeable building blocks." It's the foundational concept behind any composable technology, including composable commerce.

Basically, it's the ability to piece together different software components to create a complete solution that meets your specific needs. From the perspective of a digital commerce organization, composability allows each function of the business to work autonomously but in sync. **From a team perspective, this looks like:**

1

BUSINESS AND NON-TECHNICAL TEAMS
Daily users like marketing and merchandizing experts can make changes without IT intervention. That's because each business function is decoupled from the others, so changes in one area don't break things in another.

2

TECHNICAL/IT TEAMS
Developers and technical users can focus on developing mission-critical features instead of managing an inflexible platform. Since the technical delivery is microservices built, API-first, cloud-native, and fully headless, there is no need for a "templating" solution that would traditionally be used to stitch together a presentation layer. The focus can be on what differentiates the business, not on managing an eCommerce platform.

3

C-SUITE *(the financial impact)*
Because composability lowers the total cost of ownership (TCO) and speeds time-to-market, it's a major selling point to decision-makers. A composable platform is flexible, future-proof, and gives you the ability to scale. It's built around the capabilities specific to your business, with the end goal being to deliver a seamless customer experience across all channels.

The Difference Between Headless and Composable Commerce

The terms "headless" and "composable" are often used interchangeably to describe a microservices-based, API-first approach to commerce. However, there is a distinct difference between the two.

HEADLESS

Headless involves decoupling the frontend (the presentation layer) of the system from the backend (the infrastructure, functionality, and data layer). Since the frontend operates independently, changes don't affect the backend. Headless systems deliver services and content via API calls that communicate and send instructions between the two ends.

Headless commerce is more flexible than monolithic platforms where the frontend and backend aren't separate. But keep in mind, you can have a monolithic frontend and a separate monolithic backend (e.g., "fake headless").

COMPOSABLE

Composable commerce takes a modular approach to commerce by using packaged business capabilities (PBCs) to group microservices together. PBCs, a pillar of composable commerce, form independent components of the larger commerce system.

With this approach, each feature of the system is a separate application—the checkout, order management system, product information management system, etc.—which together form a cohesive whole. The modularity of the system gives you more control over the individual components and how they work together.

Where headless is focused only on the frontend, composable is focused on both. Remember, you can have a headless frontend on a monolith, but you can't have a composable frontend without a composable backend.

The 4 Pillars of Composable Commerce

Composable commerce systems are built using MACH (Microservices based, API-first, Cloud-native SaaS and Headless) architecture and other modern technologies like Jamstack so they can be flexible, fast, secure, and developer friendly, while also keeping business users in mind. There are four key pillars of composable commerce which include:

1. **Composable architecture**
2. **PBCs for modularity**
3. **Business centricity**
4. **Interoperability**

1

Composable architecture

Like LEGO bricks, the pieces of a composable system are independent and can be combined in different ways to create a custom solution. They're pluggable, swappable, and replaceable. This makes the system flexible—and much simpler to build and scale than traditional systems when it comes to managing and upgrading.

2

PBCs for modularity

PBCs can be added to an existing system or cherry picked to create a new one. They make it (much) easier to incorporate new or custom functionality versus traditional monolithic systems. PBCs also make it possible to rapidly scale a system, since they can be replicated without having to duplicate the underlying code.

3

Business centricity

The composable system is built around meeting business needs, allowing you to adapt features and functionality quickly, based on customer feedback, changes in the market, or internal initiatives. For example, you might want to launch a new customer rewards program that pulls historical and new customer data. With a composable system, you can add the relevant PBC and it will work with the rest of the system.

4

Interoperability

Composable systems are designed to work with other systems and data sources, both inside and outside the organization. This makes them much more flexible than traditional systems, which are often siloed and difficult or cumbersome to integrate. For example, a composable commerce system might be integrated with an order management system (OMS) or a content management system (CMS).

Why Move to Composable Commerce as a Strategy

Composability allows retailers to be agile and flexible. By building your platform from capabilities that you need, you save on the total cost of ownership (TCO). You're also not tied to a specific vendor since you can mix-and-match capabilities from different providers.

The benefits of composable commerce include:



Freedom from the monolith: Gartner notes that all digital experiences will eventually be built in a composable fashion. Monolithic platforms simply cannot keep pace with the speed of change and are becoming a liability for companies who want to be agile. Even headless systems don't offer the flexibility of composable, because headless essentially gives you two monoliths - one at the frontend and one at the backend.



An open ecosystem: In a composable ecosystem, the best solution wins—not the one that's proprietary to a specific vendor. This leads to more innovation and better solutions for customers. An open system means that you're not locked into a specific vendor, framework, or programming language. It gives your developers and business users more choice and flexibility when it comes to the technologies you use.

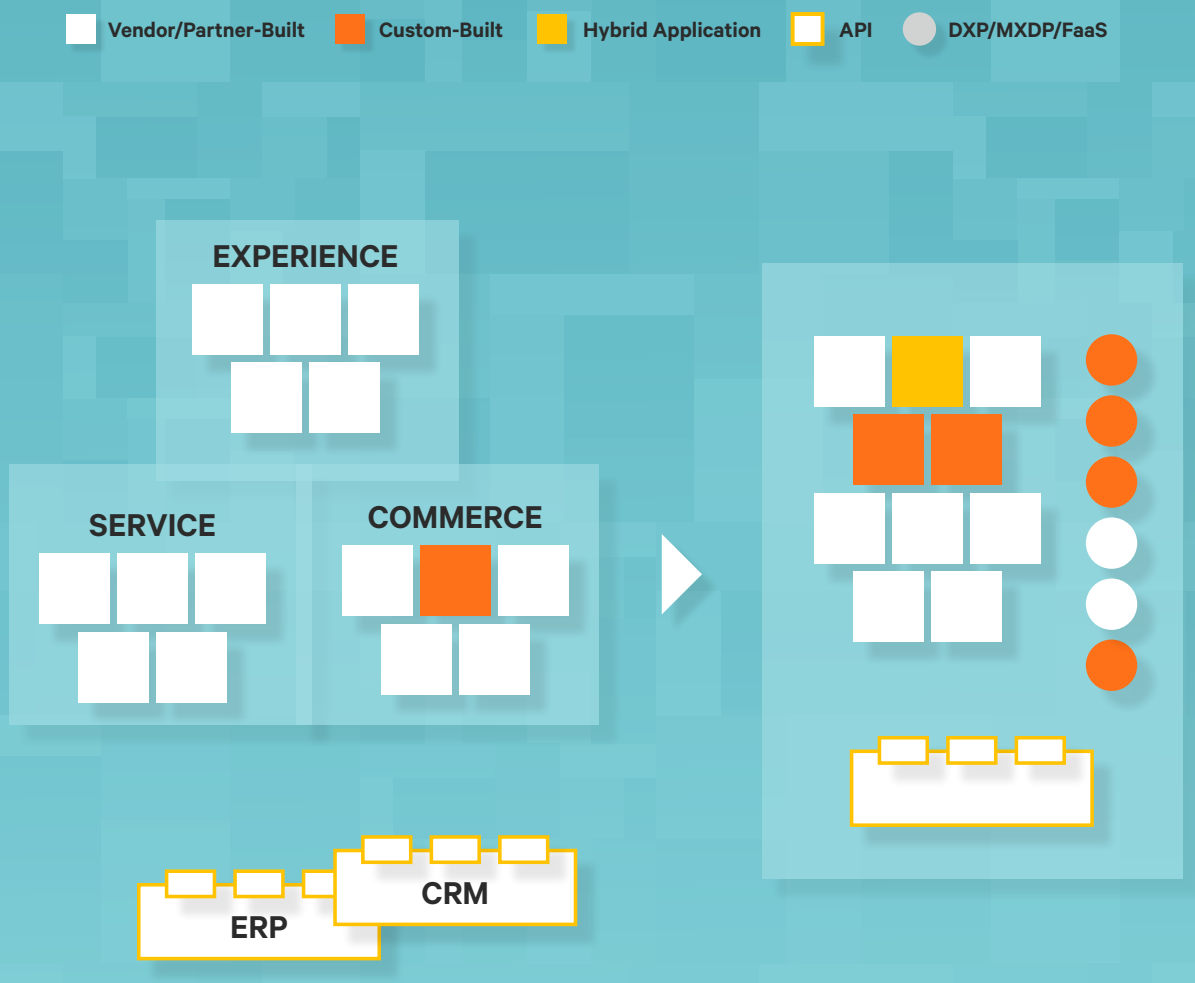


Total cost of ownership: Composable systems provide a lower TCO because you only pay for the capabilities you need. PBCs allow you to cherry pick capabilities from formerly monolithic systems and connect them to your commerce platform. So, instead of connecting the entire ERP and CRM to the commerce platform, you can use PBCs to integrate the pieces of each tool in a way that works for your business.



Performance and agility: Composable systems are inherently pluggable and flexible, allowing you to quickly adapt to market changes and customer needs. They're also highly scalable, so you can start small and build/optimize the system using PBCs tied to business goals.

PBCs Allow Organizations to Compose Modular, Hybrid Experience Applications



How Composable Commerce Creates a Better Customer Experience

Composable systems are designed to be customer-centric, but also business-centric. These are two important elements of managing the entirety of a customer's digital experience.

A composable system allows you to align IT functions with business functions by connecting the capabilities that matter most to your customers. In a composable system, individual capabilities can be added, removed, or changed without affecting the rest of the system. This gives you the agility to respond to customer needs in real-time and create exceptional digital experiences that drive conversions and loyalty.

CX-focused use cases for composable commerce:



Add new commerce touchpoints to your stack: Easily incorporate new service or commerce-based features like a chatbot or voice-activated assistant.



Create a new customer profile: Add a new customer profile type, such as B2B or B2C, to expand your reach without having to make changes to the underlying code.



Build a loyalty program: Launch a loyalty program with features like points, rewards, and status tiers.



Scale order management capabilities: Composable order management lets you connect to new sales channels, partners, and marketplaces. You can also offer more fulfillment options like in-store pickup, curbside delivery, and drop shipping.

But composability also equips business users with low-code and no-code solutions that allow them to make changes that enhance the customer experience without involving IT. Business users can make these changes without affecting the stability of the system—and without needing technical expertise.

Composable systems are also designed to be interoperable, so they can easily connect with the tools and technologies that support your business goals. This includes things like ERP, CRM, marketing automation, and analytics tools. Interoperability gives you a complete view of the customer journey, so you can rapidly identify and address pain points.

How Composability Fosters Cross-Organizational Relationships

Moving to a composable framework isn't just about the technology. It requires a whole-business mindset, since all teams and departments are impacted by how you develop, implement, and use your commerce system.

Composability demands (and fosters) next-level team collaboration—what Gartner calls "fusion teams" to ensure successful development and implementation.

Instead of thinking about the technology, fusion teams shift their focus on how larger components work together to drive business initiatives. This can be a challenge, but it's essential for making the switch from monolith to true composability.

Business Goals Achievable with Composable Commerce

Composable systems allow you to commoditize your commerce capabilities, integrating them with analytics, content, search, order management, and more.

By orchestrating and integrating the moving parts needed to support and facilitate the customer journey, businesses can achieve the following:

- Improved customer experience and engagement
- Increased agility and responsiveness to market changes
- Lower total cost of ownership
- Enhanced scalability and performance
- Improved business efficiency
- Increased customer loyalty
- More seamless integration of features and technologies
- Enhanced compliance and better security
- Improved team collaboration

Considerations When Moving to Composable Commerce

Composability isn't right for every retailer. While the benefits are clear, there are a few things to consider before making the switch.

It requires a different approach to development.

In a composable system, you're not starting with a blank slate. You're working in a microservices environment that requires a team that's comfortable integrating disparate systems.

It requires the right development tools.

Your team will need to access and work with development tools like an API management platform, an integration platform, and a low-code/no-code solution for business users. If you don't have the expertise available in-house to work with and manage the system, you'll need to outsource to a partner who does.

It requires a new perspective about technology.

Composability isn't just about building an eCommerce website. It's about creating a connected ecosystem of capabilities that work together to orchestrate optimal customer experiences. This means rethinking the role of technology in your organization and how it supports your business goals.

It requires patience.

Composable commerce isn't a quick fix. It's a slow journey and requires thoughtful and dedicated planning to properly execute. But when done right, the benefits—for your customers and your business—are well worth the effort.

Here's a short list of things to ask yourself when determining if composable commerce is right for your business. If you answer yes to any of these questions, then composability is likely a good strategy for you.

Do you need to support multiple channels - online and off?

Is your business growing and changing quickly?

Do you need more flexibility to differentiate the customer experience?

Do you want better control of your data by integrating multiple backend systems?

Do you already have a microservices infrastructure or are moving in that direction?

Do you want to move away from a monolithic or legacy eCommerce platform?

Do you need to better align your business, IT, marketing, and customer service teams?

Preparing Your Organization for Composable Commerce

Before you can look for a vendor or platform, you need to understand your organization's needs. This means taking a close look at your current commerce approach, evaluating your infrastructure, and identifying the gaps.

Three steps to preparing your business for composability:

1

GET STAKEHOLDER BUY-IN

You'll need the support of your entire organization—from the c-suite on down. This means getting everyone on board with the idea of composable commerce and what it can do for your business.

2

UNDERSTAND THE COSTS

You'll need to consider licensing fees, support, maintenance, and integration costs. Make sure you factor in the cost of adding staff, hiring consultants, and ramping up training.

3

DETERMINE ROI

You'll need a clear understanding of your return on investment. A standard SWOT-analysis approach is a good way to do this (e.g., strengths, weaknesses, opportunities, threats). Factor in the benefits of composable commerce and forecast how it impacts your top- and bottom-line. Weigh up-front costs against the long-term benefits to determine if it's the right move for your business.

What to Look for in a Vendor

Here's a list of questions you should address when evaluating composable commerce vendors:

Who needs to be involved in the decision process?
You'll need to involve key stakeholders from across the organization—IT, marketing, customer service, product management, etc. Write a list and touch base with all teams prior to reaching out to vendors.

What are the questions you need answered?
Include a chart of top areas to look for and questions to ask in a vendor assessment. Things like MACH-first, cloud-native, packaging structure, APIs, and catalog structure should be considered.

What is your timeline?
When building out your timeline, factor in what components you already have and can add to and what new capabilities you need. Since composable is scalable, list the most important PBCs first, and create an incremental timeline that adds functionality in order of importance and need.

What are the use cases specific to your business?
Map out the customer journeys specific to your business and look for a platform that can support them. Use cases are particularly helpful when creating RFPs because they help you compare apples to apples.

What is your budget?
Consider all costs associated with switching to a composable commerce framework—licensing, support, integration, etc. Outline immediate versus long-term needs and tie each to a budget line item, so you have a full understanding of what your budget should look like now and in the future.

What resources do you need?
Composable commerce is not a plug-and-play solution. You'll need to dedicate resources—time, money, staff—to make it work. Planning your resource needs upfront will help you set realistic expectations and avoid budget overruns.

What are the risks?
Consider the risks associated with composable commerce before making a decision. These include technical risks, like platform instability and lack of integrations, as well as business risks, like customer experience issues and organizational silos.



Composable for OMS

A composable order management system (OMS) is a good example of how retailers can leverage the composable commerce framework to enhance their existing capabilities and improve customer experiences.

Post-pandemic consumers use a variety of different shopping channels and tools to purchase items and obtain their order. Things like buy online pick up in store (BOPIS), buy online pick up at curb (BOPAC), and home delivery of local and same-day merchandise have become the new normal. This means that retailers need to support a variety of order types and fulfillments across all channels.

A composable OMS gives retailers the ability to quickly add or remove capabilities as customer needs change. With a composable OMS, you can:

- Gain a real-time view of inventory across channels
- Enable omnichannel order management
- Support multiple sales channels with a single platform
- Connect to any fulfillment provider
- Achieve rapid time-to-market for new features and functionality
- Use distributed order routing to optimize fulfillment

Kibo's Approach to Composable Commerce

Kibo's composable commerce platform is based on a microservices architecture, so each capability can be deployed and scaled independently. This allows us to offer a true SaaS solution that can be quickly implemented and easily upgraded without the need for extensive IT resources.

Our modular approach also means that you can start with the capabilities you need today and add more as your business grows. Each capability is packaged as a self-contained unit, so you can easily add or remove functionality without affecting the rest of the system, such as cart and checkout, order management, or subscriptions management.

Our platform is designed to be highly interoperable. It seamlessly integrates existing commerce systems and platforms. We also offer pre-built connectors for popular ERP, OMS, and POS systems.

Finally, Kibo's platform is designed to be business-centric, so you can manage your commerce operations from a single system. This approach provides a consistent view of customer data and inventory across all channels, allowing you to align your technology ecosystem with your business goals.

To learn more about how composable commerce can benefit your business, request a Kibo demo today.



KIBO®

Kibo is the catalyst for modern commerce transformation. As the only composable yet unified commerce platform, Kibo enables retailers and brands to customize their commerce stack to satisfy business needs. Kibo combines AI-driven personalization from industry leaders Monetate and Certona, with analyst-leading composable commerce and enterprise-grade order management. Global clients like Reebok, Office Depot, and Lufthansa Group rely on our API-first architecture that empowers organizations to grow their commerce capabilities at the speed of digital transformation.

kibocommerce.com