deckcommerce

Why ERPs Alone Can’t Power Modern Order Management

Where ERPs fall short and how brands can pair ERP and OMS to deliver connected, customer-first order experiences.

Introduction

Order management has become central to modern retail. With the rapid rise of direct to consumer (DTC) commerce, shoppers now expect to buy through any channel and receive their orders in whatever way is most convenient.

To keep up, many retailers look to their enterprise resource planning (ERP) system to manage orders. Since the ERP already stores product, inventory, and financial data, using it for order management feels efficient and practical.

But can an ERP truly serve as an effective order management system?

This guide explores:

- A brief history of ERP in retail
- Why order management matters in modern commerce
- The problems when ERP acts as the OMS
- Understanding the roles: ERP vs OMS
- When to let an OMS take the lead

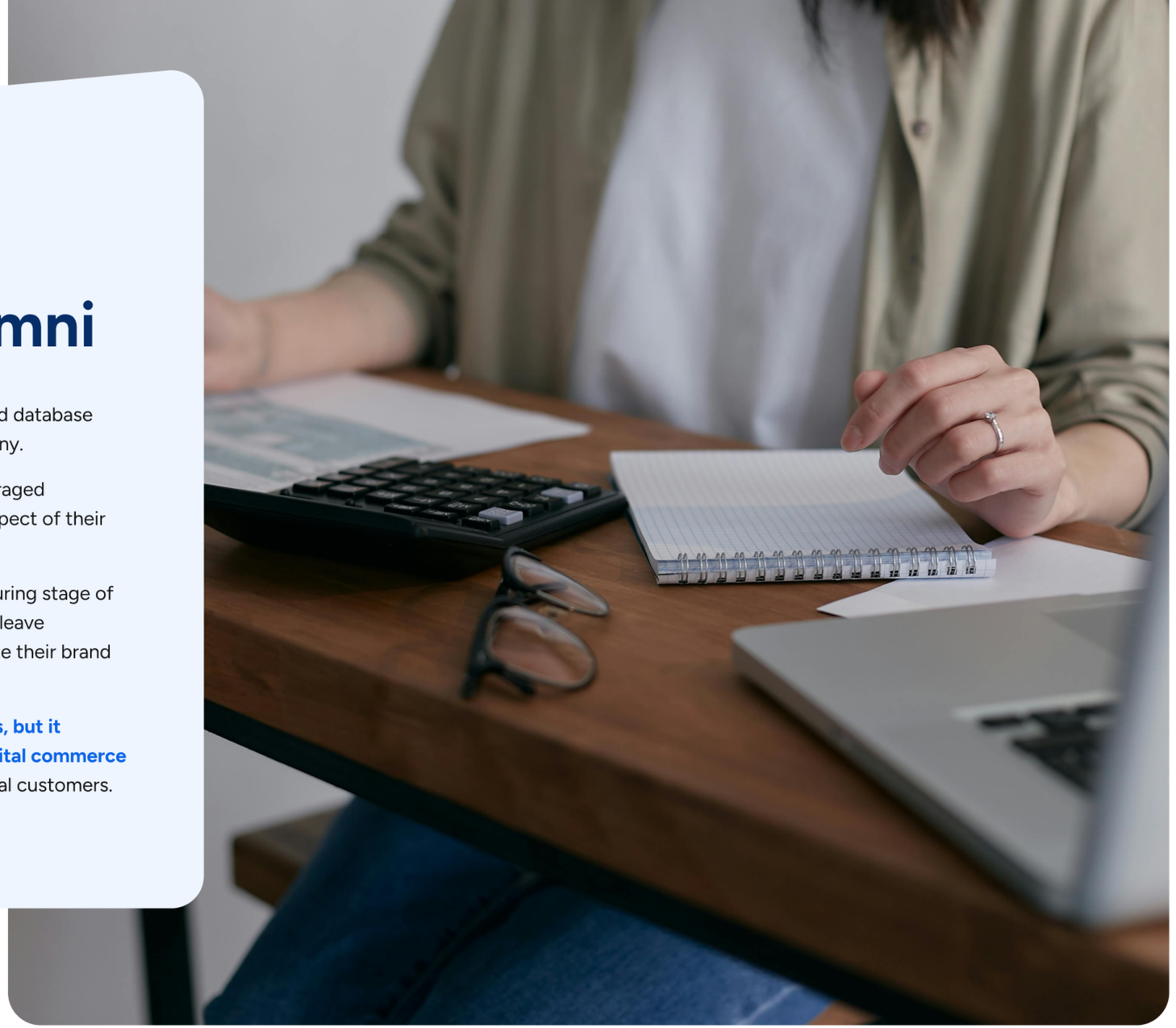
ERP Is Built for Operations, Not Omni

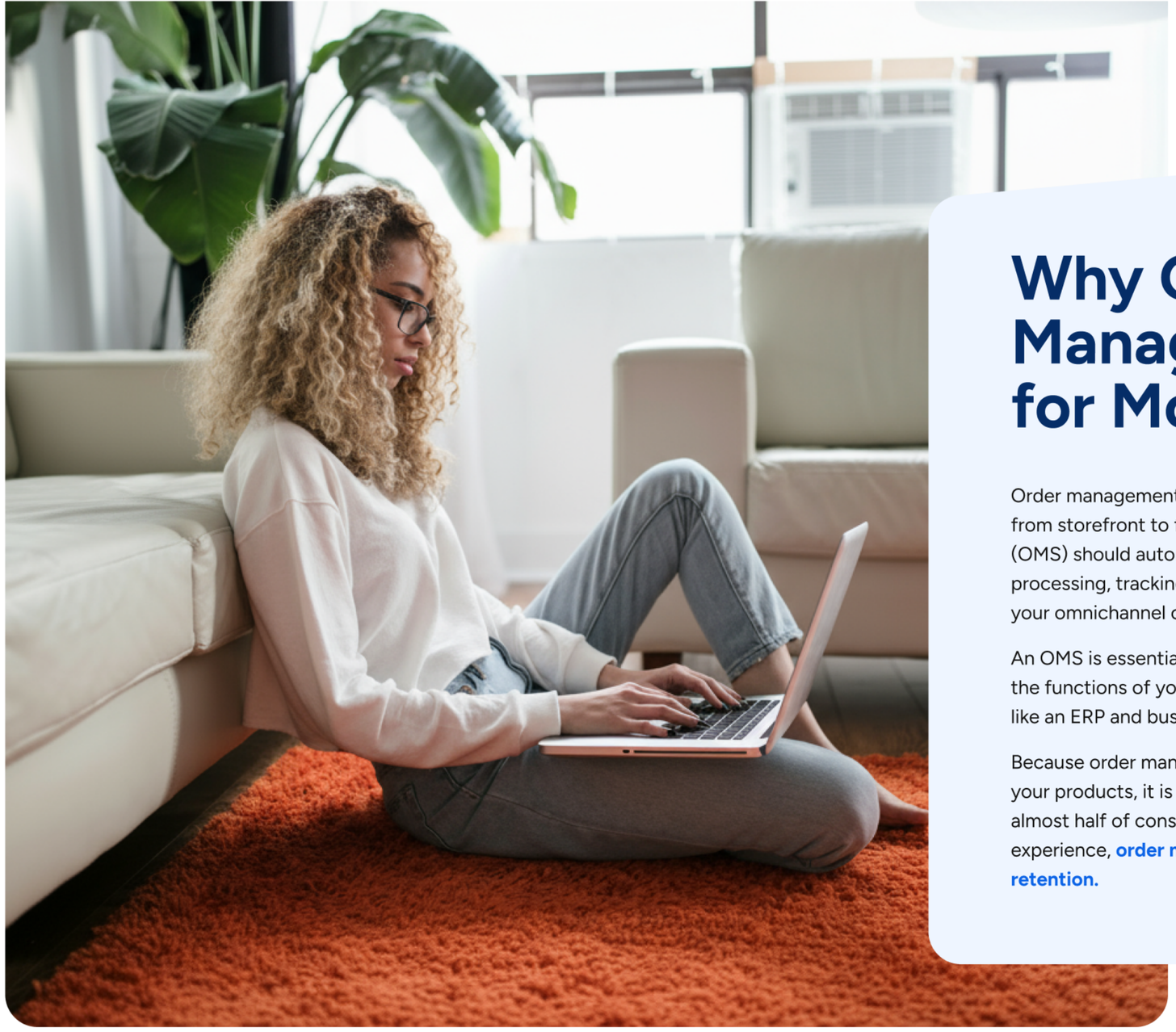
The spirit behind the ERP is to provide a centralized, integrated database and information across a wide variety of functions at a company.

With the ongoing expansion of ERPs, many retailers have leveraged functionality from their ERP system to manage at least one aspect of their sales and marketing processes.

However, because ERPs were built primarily for the manufacturing stage of the supply chain versus sales and order fulfillment, they often leave requirement gaps for retailers trying to streamline and optimize their brand experience.

In other words, **the ERP can do many things for your business, but it doesn't mean it's a good solution in today's omnichannel digital commerce landscape** where a bad customer experience can cost you loyal customers.





Why Order Management Is Critical for Modern Commerce

Order management is the facilitation of all retail order data and processes, from storefront to front door. Therefore, an order management system (OMS) should automate the receiving, routing, fulfilling, payment processing, tracking, customer notifications, and returning or exchanges of your omnichannel orders.

An OMS is essentially the “brain” behind your order processes: coordinating the functions of your customer-facing channels with your back-end systems like an ERP and business intelligence (BI) tools.

Because order management involves how customers purchase and receive your products, it is a key driver behind your brand experience. And given that almost half of consumers won’t buy from a brand again if they have a poor experience, **order management is vital to customer acquisition and retention.**

The Problems When ERP Acts as the OMS

While leveraging an ERP may be sufficient for some smaller or start-up brands, it doesn't come without challenges. Let's take a closer look:

It's Costly in the Long Run

ERPs are expensive to implement. And while an initial bundled price for order management may seem cost effective, often times retailers spend more money in the long-run customizing (and then customizing again) the system to meet their business needs.

Risk to the SOR for Financials

While ERPs can be customized, most companies don't make too many changes to their ERP system, as it is generally the source of record (SOR) for finance and accounting teams. Using your ERP as an OMS would require significant customization, and therefore can impact data integrity, compliance and regulations.

Complicated to Manage

When ERPs are used as an OMS, it involves a high level of customization which can lead to a complicated "Franken-system." Even something as simple as data formatting between systems becomes tricky and time-consuming to ensure that changing one thing doesn't break another.

Challenging to Add New Capabilities

Using an ERP as an OMS makes it hard to add or replace tools in your tech stack, like new payment gateways, loyalty programs, marketplaces, or fulfillment options. Each change costs time and money compared to an API-based OMS.

Difficult to Meet Customer Expectations

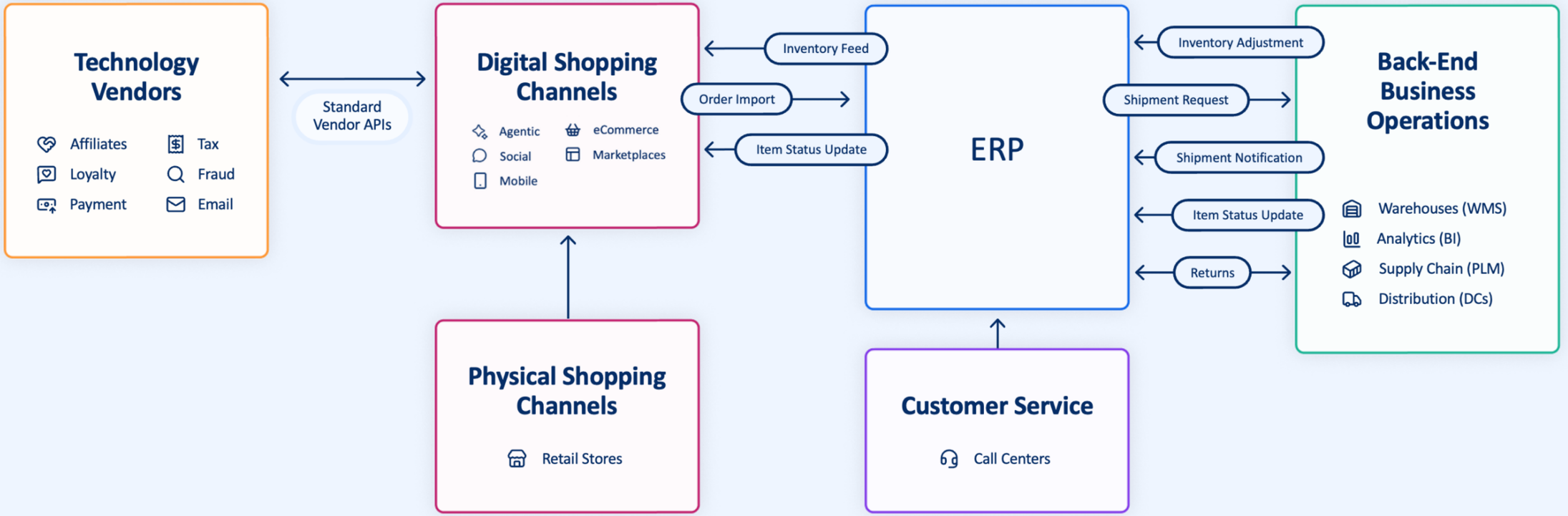
Brands that have multiple ways for customers to buy, receive, and return or exchange their orders increase their likelihood of acquiring and retaining customers. None of those omnichannel order management capabilities are native to an ERP; they have to be custom built.

58% of businesses who leverage their ERP for order management struggle with integrations and compatibility.

Read the full study

Architecture: When ERP Runs Order Management

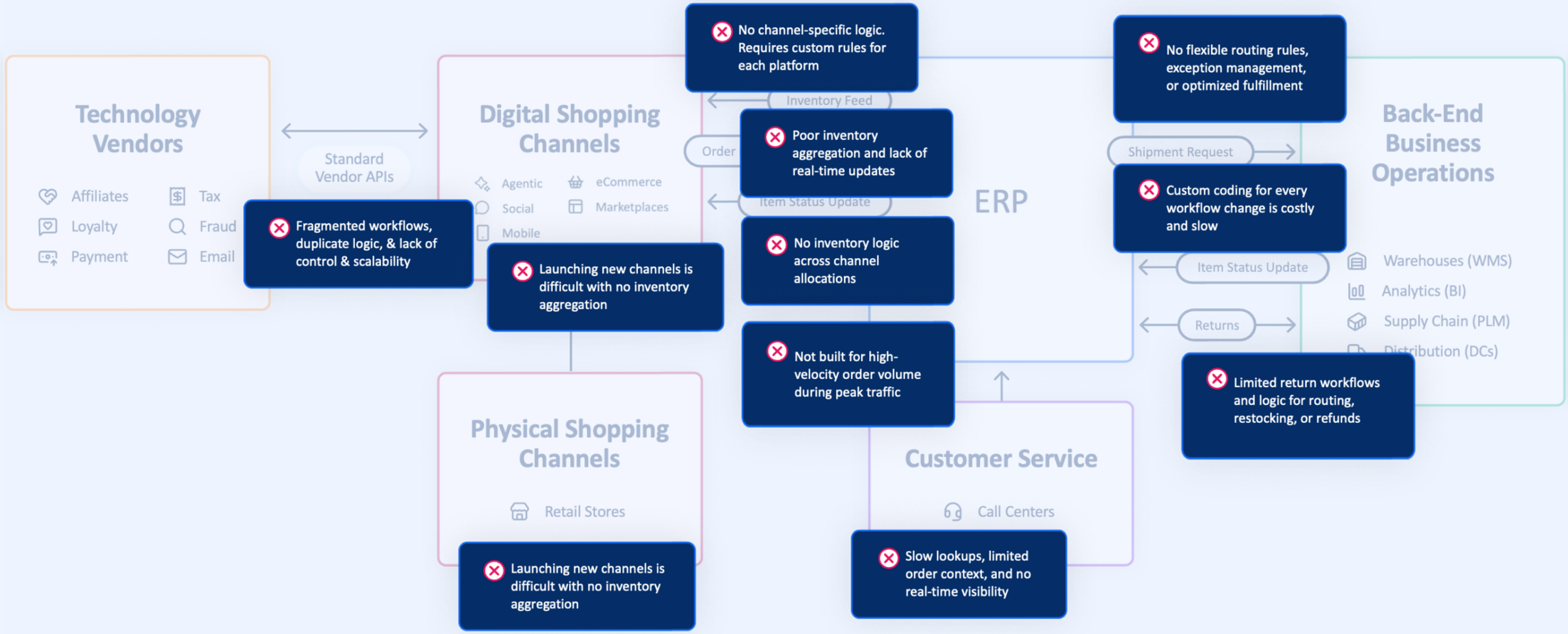
On paper, it can make sense to leverage your ERP for order management. The ERP already manages product, inventory, and financial data. It is deeply integrated with supply chain operations and serves as the system of record for the entire organization. Extending it to handle orders seems like a logical way to centralize processes, maintain control, and avoid the cost or complexity of adding new tech.



Sample architecture with ERP running order management.

The Operational Friction Created

But when an ERP is pushed beyond its original purpose, it begins to strain under modern commerce demands. It wasn't built for real-time inventory updates, multi-channel fulfillment, or customer-initiated returns. What looks efficient in theory often results in slow processes, custom code, and a growing disconnect between what shoppers expect and what the system can deliver.



The Customer Experience Impact of That Operational Friction

These issues don't just create operational drag. They create poor shopper experiences. Customers encounter wrong availability messages, delayed shipments, and confusing status updates. Service teams cannot see what really happened with an order, and refunds take too long. Each delay chips away at trust and loyalty.

- Checkout issues and errors caused by poor platform integration.
- Items show as unavailable, even when they aren't.
- Inconsistent communications, charges, and order statuses.
- New channels take too long to launch.
- Checkout slows or crashes during sales.
- Deliveries are delayed, split, or shipped from the wrong location.
- Slow back-end changes delay new features shoppers care about.
- Returns are slow with delayed refunds or lost items.
- Customer service response time is slowed or incomplete.
- In-store availability shown online is wrong, eroding trust.

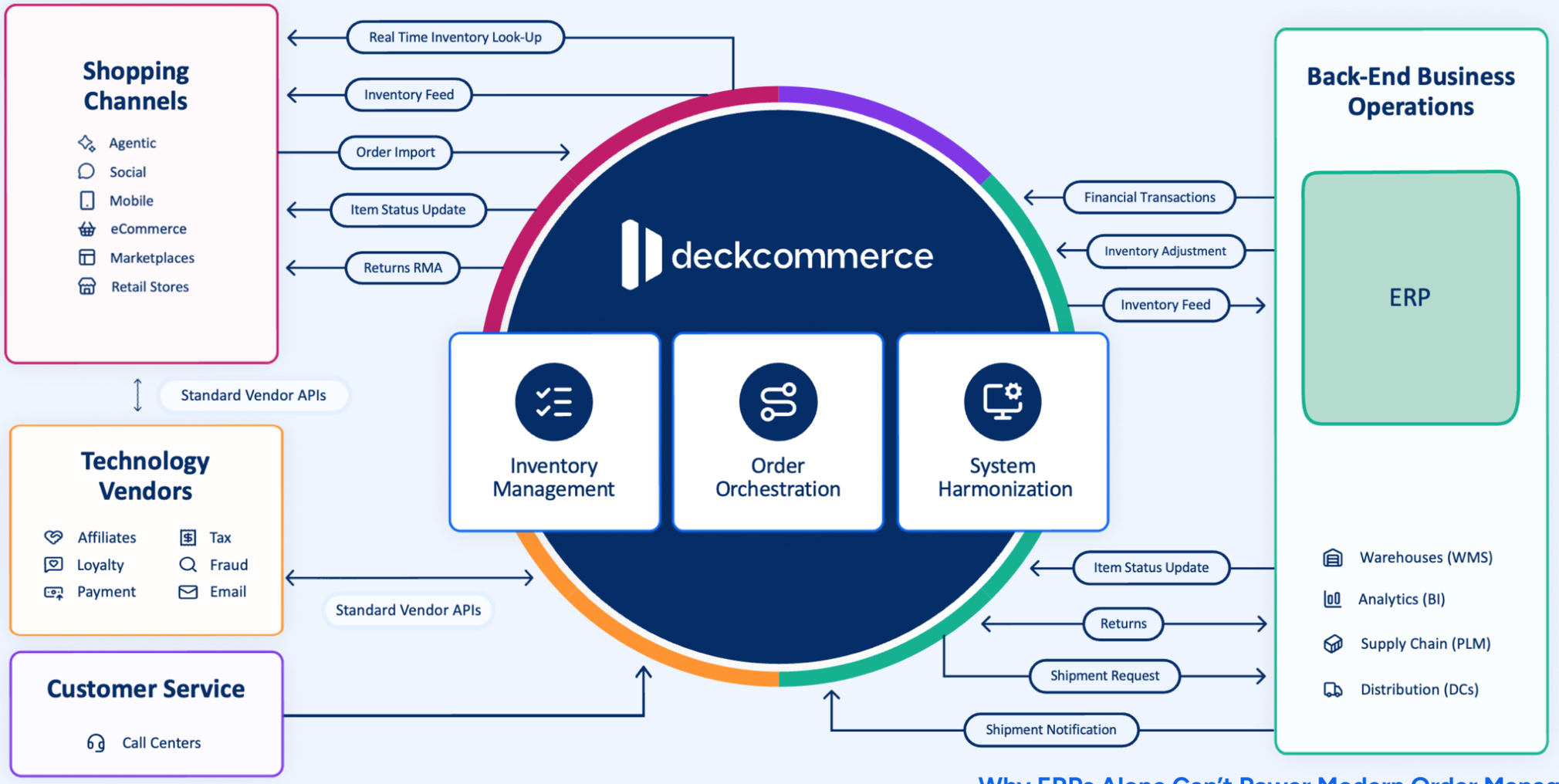
Understanding the Roles: ERP vs OMS

When the OMS handles orchestration and communicates with the ERP as the financial source of truth, brands get the best of both worlds: accuracy and agility. The ERP ensures financial control. The OMS ensures customer confidence.

ERP	Order Management System
Designed for Back-Office Functions	Designed for Order Processing & Servicing
Finance/Accounting	Inventory Management
Materials Sourcing	Order Aggregation
Demand Planning	Omnichannel Fulfillment
Manufacturing	Advanced Routing Logic & DOM
Product Lifecycle Management	Exception Management
Supply Chain Operations	Transaction Processing
Human Resources	Order Servicing
Wholesale Distribution	Return Management

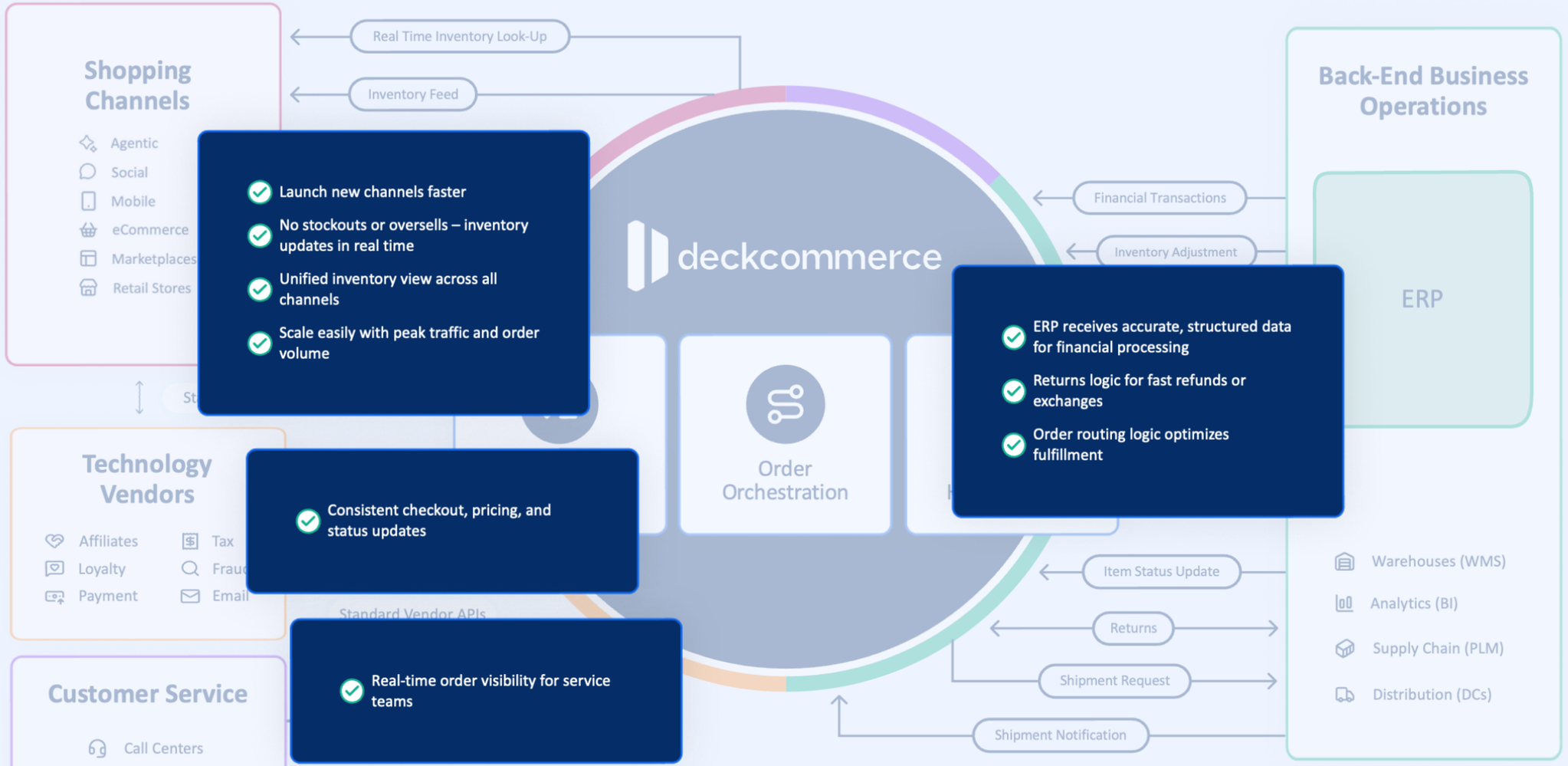
Architecture: Order Management as the Brains

When an OMS serves as the operational hub, it orchestrates data and activity across the entire commerce stack. The ERP remains the system of record for financial accuracy, while the OMS delivers the agility and visibility needed to scale and adapt to new customer expectations.



The CX Improvement with Dedicated Order Management

When systems work together in real time, shoppers feel the difference. A dedicated OMS ensures accurate availability, faster delivery, and consistent communication at every step, turning operations into a competitive advantage.



When to Let an OMS Take the Lead

Both OMS and ERP are powerful tools that play distinct roles in streamlining and optimizing retail operations. But just like retail, technology isn't one-size-fits-all.

By understanding their unique strengths and applications, brands can make informed decisions on when to leverage an OMS over an ERP, and vice versa.

Here are five common use cases where an OMS shines compared to an ERP to help brands create seamless shopping experiences.

"**Order management systems complement your existing ERP platforms** by directing orders between ERP instances, adding capabilities that many ERPs lack, and providing a consistent view of orders across all front-office systems,"

Duncan Jones, Principal Analyst at Forrester

Direct-to-Consumer Orders

When you're shipping units and not pallets, it's best to lean on your order management system. Direct-to-consumer orders need to ship fast to meet consumer expectations and legacy systems like ERPs just can't keep up.

Flexibility and Agility

Brands need to be able to pivot in real time, whether that's adding a sales channel, implementing ship-from-store, or navigating an external crisis. Plus, an OMS built with plug-and-play architecture will give brands the ability to easily swap or add new technology vendors (like tax, fraud, loyalty, etc.) when they need it.

Complex Fulfillment Networks

ERPs work great when they deal with 4-6 distribution centers, but if a brand also has multiple retail locations they ship orders from, it's best to lean on an OMS. An OMS can route orders to the best fulfillment location, including stores.

Omnichannel Capabilities

An OMS excels in the omnichannel arena. Brands can offer convenient omnichannel fulfillment options like Buy Online Pick Up in Store (BOPIS), Curbside Pickup, and Buy Online Return in Store (BORIS) which are known to increase average order value and improve customer loyalty.

Advanced Order Complexities

Brands offering kits, bundles, preorders, backorders, grace periods, or any other complexity outside of a standard order should use an order management system to ensure a seamless customer experience.

Conclusion: Extend, Don’t Replace

ERPs remain the backbone of retail operations. They handle the accounting, planning, and compliance that every brand needs. But they were never designed to deliver modern shopper experiences.

A dedicated order management system extends the ERP’s value. It connects digital channels, fulfillment partners, and service teams in real time. It transforms the ERP from a static system of record into part of a living commerce ecosystem.

The ERP keeps your business grounded. The OMS keeps it moving. Together, they give you both operational control and customer confidence.

Ready to take the next step?

Modern brands know that an ERP alone cannot deliver the order experience shoppers expect. Deck Commerce helps retailers pair ERP stability with OMS agility to achieve connected, accurate, and scalable order management.

If you’re ready to bridge the gap between financial control and customer experience, our team can help you design the right architecture for your business.

Connect with our team