

ERP AND OMNI-CHANNEL ORDER MANAGEMENT IN TANDEM

A LOOK AHEAD



How an order management layer can prevent your “good old” ERP software from sinking your omni-channel aspirations.

For more than a decade, ERP systems sufficiently managed store, inventory and supply chain operations, pushing goods to stores in lockstep with relatively static and stable demand forecasts.

But consumer demand in today’s era of multi-channel retailing is anything but static and stable. The consumer’s expectation is to order anything, any time, from anywhere, and have it fulfilled at the place and time of their choice. Traditional ERP systems are not equipped to manage omni-channel orders that, by their nature, transcend online and offline channels.

To overcome ERP’s shortcomings with order capture, product availability, order orchestration, customer service and fulfillment, retail leaders have three choices:



Go straight, forging ahead using the legacy ERP system



Turn left, ripping out legacy ERP infrastructure and replacing it with an entirely new platform



Or turn right, meeting the new and ever-changing demands of multi-channel customers and commerce by introducing an order management layer to the ERP environment.

The following pages will describe what you need to do to unlock more functionality from ERP and get your system in tune with the tempo and rhythms of omni-channel commerce.

“Our ERP system lacked flexibility to support future growth. Manhattan’s innovative architecture will streamline our omni-channel operations and enable us to give prompt responses to customers’ inquiries on product availability and when and how orders can be fulfilled.” - Senior Logistics Director, Global Fashion Retailer and Distributor With More Than 2,000 Locations



Stay the Course? Not Advisable

The first option—forging ahead with the status quo—ignores the incredible opportunity presented by the multi-channel burgeon, disregards consumer desires, and puts the retailer at a disadvantage.

The strategic work that animates important business outcomes always spans multiple departments and many different data and process systems. The true way a company meets or exceeds its strategic goals stems from executing, monitoring and managing work to particular business outcomes. Today, this process is “hand-stitched” by people, email, spreadsheets, ERP software, sticky notes and endless meetings. Think about what it takes to bring a new product to market, on-board a new vendor or customer, or fulfill a customer order. Add in the number of departments and systems this type of work touches and what it takes to get it done profitably and on time. The way people actually get work done simply doesn’t map to the way traditional ERP has been set up.

Most ERP systems in use today were architected before “omni-channel” was even a term.¹ The business environment has changed many times since the original requirements were written at the start of the ERP implementation project. Enterprise silos sprung up that persist to this day. The brick-and-mortar retail store was managed with merchandising and replenishment software, whereas e-commerce was concerned with discrete orders and replenishing distribution centers (DCs). These are fundamentally different software constructs. That is why for years retailers would run different software for their retail operations and e-commerce operations.² For example, the idea of dynamically shifting inventory between channels is a foreign concept to ERP, other than an inventory transfer, which is meager

and insufficient to meet the requirements of modern omni-channel commerce.

The ERP “good enough” approach to extended functionality is not enough for much more challenging omni-channel requirements. The volatility of markets and consumer demand today require systems to support extreme agility in operations. **But ERP systems were never designed for agility.**³ Newer analytics and faster in-memory processing tools are helping to a degree, but the underlying applications aren’t very agile.

When Oracle Retail (Retek) and SAP Retail were being built (10-15 years ago), multi-channel consumer behavior wasn’t on the radar. You can innovate on the periphery (such as leveraging big data for merchandising, pricing, etc.) but drastic overhaul of the ERP core is massive and risky. Adding customizations to an existing ERP system has been shown to increase the amount of support required to maintain the system.⁴

SAP, in particular, can be difficult to change as a business evolves. According to Panorama Consulting, this is because, “[SAP] is tightly integrated and helps enforce standardized businesses processes across an enterprise, but it can also be more difficult to modify the software to adjust to evolving core processes and requirements.”⁵

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Rip-and-Replace? Not So Fast.

The second option, a complete rip-and-replace, is not only cost-prohibitive, it tosses the proverbial “baby out with the bathwater.” Few retailers are willing to risk the value established by their ERP software at the expense of new system implementation. This is because ERP systems have some important capabilities and assets such as:

- **Data**—massive amounts of transactional data about the company financials, customers, and information pertaining to transactions between trading partners.
- **Activities**—certain hard-coded activities that execute discrete bits of processes known as “business transaction events,” pre-packaged tasks that can be called upon to perform process steps such as, for example, “Pay the X Vendor” or “Check the Y Parts Inventory” or “Make a million copies of this widget in Hong Kong.”⁶

Retailers cannot afford to abandon this trove of back-office transactional data. Indeed, it is not the position of Manhattan Associates to suggest that this needs to be done. Advanced order management capabilities can be added to your existing ERP investment, and is the preferred route for many retailers that want to deliver more options for fulfillment and inventory access to their customers.

Indeed, technology advisory firm Gartner predicts that, “over time the current heavily customized ERP implementations will be rearchitected to focus on ‘systems of record’ functionalities—which should require little customization—while the differentiating processes and innovation activities will use alternative delivery models that are integrated with the ERP system of record capabilities.”⁷



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An Order Management Layer – The Right Direction

Enabling any-channel inventory agility through the integration of an order management platform atop ERP software allows retailers to choose the path already blazed by the consumer. It empowers retailers to meet shoppers' multi-channel expectations via a new level of order management agility not afforded by legacy ERP systems alone, and it promises significant efficiency benefits related to the management of retail information systems.

Along with agility, innovation must be quicker and specific to the new challenges retailers face every day. Companies like Manhattan Associates with its rapid innovation cycles are more attuned to today's requirements than large ERP companies. Big ERP players tend to be generalists with broad, monolithic solutions that are hard to pivot the way retail and supply chain executives need to respond to today's changing customer demands.

The demands on companies to provide a seamless, multi-channel shopping experience require a level of sophistication orchestrated by distributed order management (DOM) software across retail operations, supply chain planning and supply chain execution. These are capabilities that many ERP systems don't have.

The software layer known as order management is quickly becoming the enterprise hub for selling and fulfillment. It's a reality affirmed in The Forrester Wave™: Omnichannel Order Management, Q3 2014 report:

"Order management solutions have evolved to support a complex set of omnichannel order fulfillment scenarios including ship-from-store and store pickup. In addition, firms are increasingly relying on their order management systems to fill the role of the enterprise-wide system of record for order data. This means that not only is the order management system acting as an order capture hub for online web, tablet, and mobile orders, but also for all sales that originate via the contact center, point of service (POS), kiosk, or field sales force. By consolidating all order data from the across the enterprise in one centralized repository, eBusiness professionals, with some help from their customer intelligence colleagues, are now able to view a customer's complete order history and purchase behavior."⁸



1 Information Systems: The Case for Order Management

No two retailers operate the same ERP infrastructure, so the application of an order management platform that accommodates the dynamics of multi-channel demand—while ensuring inventory accuracy—requires an organization-specific approach.

ERP system age and duplication are two common ERP scenarios that pose challenges to multi-channel retailers.⁹

Age. The older the ERP system, the more likely that it was implicitly developed to handle store inventory allocation alone. Legacy ERP systems that are rooted in finance don't feature logic that allows them to allocate stock that doesn't physically exist within the "four walls" of the company. Nor are they designed to readily re-allocate stock to another channel when necessary.

Duplication. Whether the result of mergers and acquisitions or legacy, channel-specific system investments, many retailers operate multiple ERP systems. In these situations, each ERP platform is subject to the resource-intensive and error-prone processes of replication and synchronization to ensure holistic data integrity and consistency of systems.



If you resell products or work with a partner for distribution, it probably requires integration with multiple enterprise systems. It is for this reason that most traditional ERP solutions will struggle with complex product returns—a return that starts in one distribution system but ends up in a different ERP system.

Modern order management systems remove these burdens by centralizing business rules and data. This mitigates the risk of error while allowing the preservation of ERP investments.

The same logic applies in situations where retailers have deployed or acquired different Web tools for different Web channels or brands; the order management system serves as the central source of inventory data and consolidates the management of order flow among those varying systems. When correctly deployed, “DOM becomes an essential element in delivering ‘one version of the truth’ and a seamless experience to the customer.”¹⁰

The order management platform enables data accuracy and quality. That’s a benefit also enjoyed by the retail IT department, which can dedicate its resources to core ERP management instead of managing ERP modifications and customizations. This frees the business and operations teams to make progress with the agility and flexibility afforded by the order management platform.

In the modern, consumer-driven commerce environment, debating the merits of order management versus ERP is a false choice. **Achieving front-end business agility without sacrificing accounting and finance functionality is a product of ERP and order management systems working together.**

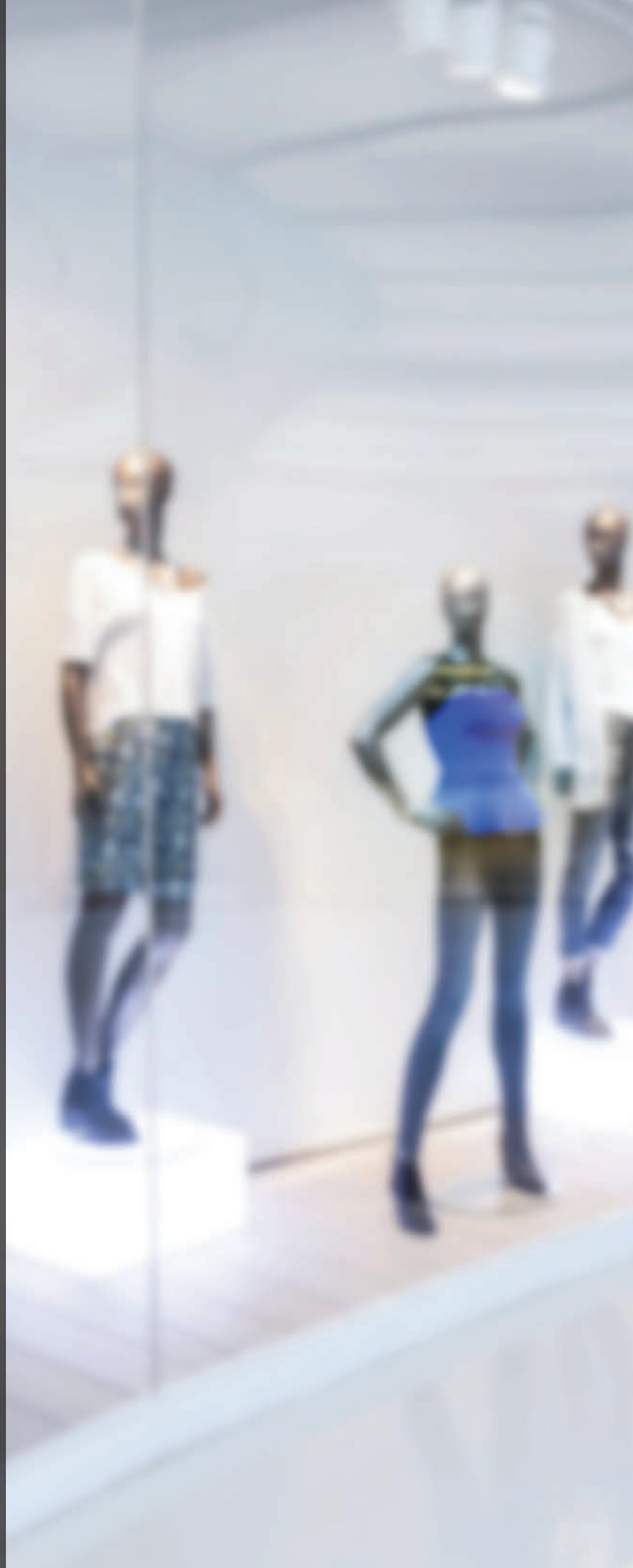
Order management is as equally important for organizations that sell directly to businesses, a market that Forrester calls B2B order management (B2B OM). According to Forrester, “[B2B OM products] complement your existing ERP platforms by directing orders between ERP instances, adding capabilities that many ERPs lack, and providing a consistent view of orders across all front-office systems.”¹¹

A common objection to adding an order management layer to ERP Systems is introducing redundancy. In fact, the opposite is true. An order management layer should be considered an ERP *enhancement* for the modern age.

CASE STUDY:

Linking ERP and Manhattan Enterprise Order Management Moves Fashion Forward

A global fashion leader uses Manhattan's Enterprise Order Management (EOM) solution to orchestrate omni-channel retail operations as the company continues to grow. EOM fetches segmented inventory information from the ERP system and surfaces availability information to customers browsing the company's website and associates in the store. When a customer order is created in EOM, through the website, call center, or in-store, the ERP system is notified so inventory can be reserved or allocated.



2 Business Rules Simplified By Order Management

ERP systems are designed to interface with a myriad of business systems, each with its own set of business rules. This web of disparate business rules can create pain for the retailer when consumer demand forces an agile response to market conditions. Order management removes this complication by providing a central business rules repository that makes it easier for the merchant to meet inventory allocation and fulfillment demands from multiple channels simultaneously.

ERP systems can leverage seasonal, monthly and weekly historic data that feed multiple back-office functions and applications, particularly finance. Order management systems, on the other hand, are more recently developed for the business user to meet new business requirements. When order management supplements the historic ERP purview with valuable real-time data, stakeholders across the enterprise benefit by facilitating the real-time movement of goods and multi-channel sales that meet the modern customer's anytime, anywhere expectations.

Order management platforms enable a broad scope of business rules that respond to modern market demands, many of which are incomprehensible in the standalone ERP environment. Some examples include:

- Fulfillment optimization based on real-time and extended inventory data
- Allocation rules based on near real-time demand
- Order consolidation
- Average total cost optimization
- Real-time exception management (as opposed to batch exception management in ERP systems)
- Product substitutions, packaging and promotion rules
- Returns policies

3 Order Management: Made For Multi-Channel Inventory

While ERP systems can link supply chain and inventory allocation processes for back-office purposes, they're not built to accommodate complete inventory visibility—from the depths of the supply chain to shelf and order levels—required of today's multi-channel retailer.

In reality, the ERP system only gains inventory visibility when that inventory becomes physical stock via receipt at the store or warehouse. Goods in transit from suppliers or stored at supplier locations are out-of-bounds for the ERP. What's more, traditional ERP views stock in channel- and supplier-specific silos. That approach doesn't align with the expectations of the modern consumer.

An order management system expands the view of available inventory beyond the finance perspective (that inventory which can be physically accounted for), to the business management perspective (that inventory beyond the four walls which is available to sell).

By broadening inventory visibility to the supplier, third-party logistics (3PL) provider, and in-transit levels through order management, merchants can facilitate more sales through the expansion of product portfolios, brand offerings and sales channels.



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More Flexibility, More Benefits

That the order management system is fast becoming the nucleus of the multi-channel commerce experience is a product of its functionality, which enables a host of benefits including:

- Traceability of inbound flow of goods, as well as outbound order flow, including means of fulfillment, delivery number and delivery status
- Real-time visibility into order status
- The customer loyalty-building ability of accurate "available to promise" goods
- Enhanced visibility of goods in the supply chain, which reduces the risk associated with inadequate safety stock
- Simplified information systems management through easy integration and aversion of custom development



4 The Right Direction

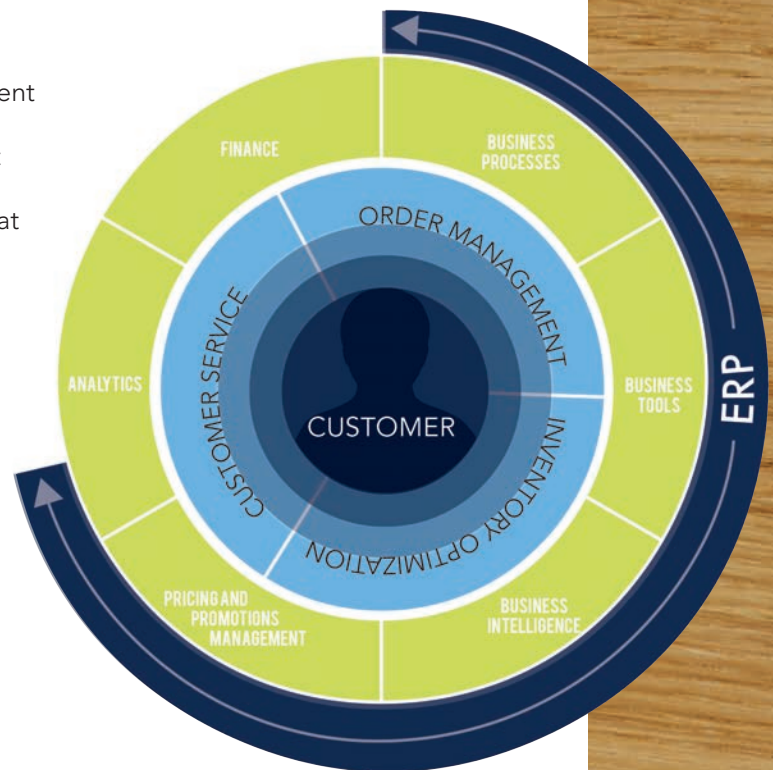
Using traditional ERP is like using a paper map or atlas for navigation: processes are hidden, difficult to manage and adopt; task ownership is unclear; and there are no instructions on what to do when something goes wrong.

In contrast, rules and workflow-based distributed order management software is like using a GPS app: one can visualize processes; control and automate; collect metrics; improve process agility; and facilitate process optimization. **All these cross-systems capabilities of the Order Management software layer can improve fulfillment process visibility, reduce process execution time, increase efficiency, and drive continual process improvement (CPI).**

By and large, retailers implementing order management systems are doing so to enhance and supplement—not to displace—their legacy ERP investments. They're finding that

the order management investment not only enables them to meet rapidly changing consumer demand, it creates quantifiable business efficiencies, particularly around inventory management, logistics and fulfillment.

The need for a retail order management software layer has always been one of ERP's shortcomings: it doesn't meet the entire challenge of multi-channel operations. As multi-channel consumer demand ramps up, progressive retailers will follow suit.



Self-Assessment: Are Your Systems Up to the Task?

Think about the scenarios below and whether your ERP system is up to the task:

The ordered item is not available in the e-commerce DC, so should I ship it from an in-store inventory? But do I get it from a store that is closer or do I get it from a store that has already marked the item down? Which is better for margins?

How do I know the store has inventory for sure? If my ERP system says there are two units left, do I trust it?

Are there enough people in the store to fulfill the order and at what times?

The order goes to the store, but the associate cannot find the order and/or item. What now?

5 About Manhattan Associates

We believe that for brands to be truly competitive, the entire enterprise must contribute to winning and keeping the customer's business. Making this happen means being flexible enough to respond efficiently and become drivers of revenue and relationships. And yet, to remain viable, organizations must carefully protect profitability.

Our **Omni-Channel Central** solutions function as the operating system of commerce, enabling all points of selling and service to have a common view of both customers and inventory, while also providing the fine-grained controls needed to quickly adapt to changing selling conditions. **Omni-Channel Local** solutions build on the foundation of Omni-Channel Central solutions to enable store associates to deliver high-touch selling and service experiences, while seamlessly serving as an extension of your fulfillment network.



See how Order Management Drives Order Accuracy for David's Bridal



Our Commitment to ERP Users

Adding order management and all of the benefits it brings can breathe new life into the ERP system you rely on today.

We recognize that many retailers around the world depend on ERP systems that they have invested significant time and resources into installing and customizing. The good news is that it isn't necessary to replace your ERP in order to reap the benefits of omni-channel commerce.

At Manhattan, we are committed to leveraging existing ERP installations and extending retailer commerce capabilities through order management.

Contact us today to learn more about how you can take the ERP system you have today and bring it into the omni-channel era with the agility that you need to win in the marketplace.

"The legacy system could not pinpoint the exact location of stock and inaccurate data left us exposed in terms of the quality of customer service we were able to deliver. The [Manhattan] system met our needs in terms of functionality and ability to be integrated with our legacy systems,"
CFO, Leading Food Distributor



¹Rashid, Mohammad et al. (2002). The Evolution of ERP Systems: A Historical Perspective.

²Is Your Store Associate Ready for a Makeover? Webinar. Manhattan Associates. (2015). <http://www.manh.com/resources/events/webinars/2015/09/24/your-store-associate-ready-makeover>

³Schrage, Michael. (2004). The Struggle to Define Agility. *CIO*.

⁴Koch, S., & Mitteregger, K. (2016). Linking customization of ERP systems to support effort: an empirical study. *Enterprise Information Systems*.

⁵Clash of the Titans 2014: An Independent Comparison of SAP, Oracle and Microsoft Dynamics. (2013) Panorama Consulting.

⁶BTE – Business Transaction Events “Demystified”. SAP Community Network blog post. Jan. 23, 2014.

⁷Gartner Says by 2016, the Impact of Cloud and Emergence of Postmodern ERP Will Relegate Highly Customized ERP Systems to “Legacy” Status. (2014) Gartner press release. Jan. 29, 2014.

⁸The Forrester Wave: Omnichannel Order Management, Q3 2014. (July 29, 2014). Forrester Research, Inc.

⁹Retail Enterprise Resource Planning. DMSRetail. Retrieved Dec. 29, 2015.

¹⁰RIS 2016 Store Systems Study. (2016) RIS News.

¹¹B2B Order Management Bridges the Gap Between B2B eCommerce and ERP. (2015) Forrester Research. March 27, 2015.