

How Outdated Retail Systems and Practices are Costing you Money

Discover how to lower your costs and increase your revenue by modernizing your retail operations

The Consumer and Business Impact of Outdated Systems

Retailers must deliver a strong omnichannel digital experience to engage customers, but outdated systems and legacy technology remain a significant barrier to achieving digital transformation goals. As a workaround, retail organizations rely on manual processes like spreadsheets and batch processing to connect data silos and disconnected systems. Not only are these workarounds time-consuming and inefficient, they also increase operational and labor costs and, more importantly, are extremely costly from a missed opportunities and a poor customer experience perspective.

According to one report, disconnected data costs businesses \$140 billion annually due to missed opportunities, stifled innovation, and a negative impact on the customer experience.¹

There are additional ripple effects of disconnected data and systems for retailers, including the inability to meet customer expectations for an end-to-end seamless omnichannel experience that includes fast and efficient fulfillment.

According to Retail Touchpoints, 88% of consumers are willing to pay for same-day (or faster) delivery services.² And nearly a quarter (24%) of shoppers said they would pay more to receive packages within a one-or two-hour window of their choosing.³ Delivery is a critical part of the online shopping experience. Not getting delivery right is a revenue killer. In one study, 73% of customers said they are unlikely to do business again with a site after a poor delivery experience.⁴

In contrast, when brands invest in modernizing their infrastructure, consumers are much more likely to continue to shop and spend on their site and in their stores. More than three out of five consumers feel retail technologies have improved their shopping experiences, with eight in ten saying they've had better online interactions thanks to retailers' technology investments.⁵

Modernizing your retail infrastructure is not only necessary to provide a better customer experience, but will also drive greater revenue to your business, positioning your business to take advantage of new opportunities and innovations.

73%

of consumers won't shop a brand again after a poor delivery experience

88%

of consumers will pay for same-day delivery

24%

of consumers will pay more to receive packages within 1-2 hours

The Challenge with Outdated Systems

The rapid increase in data across all industries has overwhelmed many organizations, and retail brands are no exception. Updated data capabilities, including real-time data insights and a 360-degree view of the customer, are no longer nice to have – they are table stakes.

Yet retailers strapped with legacy technologies often don't have real-time access to insights or a holistic view of the customer. Instead, they typically use batch processing for data integration. The problem with this approach is that batch processing leaves you with stale data – sometimes it's processed a day or week later than it was initially collected. The proliferation of third-party applications to help run retail operations has resulted in a myriad of disconnected systems, which further limits your ability to combine multiple data sources for a single view of the customer.

Real-time inventory and order management is another area where legacy systems and outdated processes can be costly. The cost of inaccurate forecasting is high. As many as 70% of online shoppers say that they would search for an item elsewhere if it was unavailable, rather than wait any length of time for it to come back.⁶ According to Retail Dive, the impact is that retailers have lost nearly \$1 trillion in sales because they don't have on hand what customers want to buy.⁷

Despite the high cost of inaccurate demand forecasting, most retailers have yet to conquer the issue. According to one survey, 73% of corporate retail professionals consider inaccurate forecasting “a constant issue” for their store.⁸

The High Cost of Outdated Systems

\$140 B

Disconnected data

\$1 Tr

Inaccurate demand forecasting

\$1.5 B

Slow delivery

The Challenge with Outdated Systems

One reason it's challenging to accurately predict inventory demand is that many retailers still rely on spreadsheets and manual calculations to track inventory. Even in retail organizations using software and other technologies, forecasting, inventory, and replenishment systems often operate in silos. Ecommerce, in-store systems, and the front-end and backroom systems inside a store may also be siloed. Even tools and resources that help close the data gap on the last few feet inside the store, including robots and hand-held mobile scanners, are siloed – making it next to impossible to get complete visibility across all your retail operations.

Improved fulfillment capabilities, such as offering same-day delivery and buy online pick up in-store (BOPIS) is another area where many retailers cannot fully compete due to legacy technology. But, here again, a quick and seamless omnichannel fulfillment experience has become an imperative – and not modernizing to meet these expectations is risky.

Batch processing, disconnected systems, and siloed data all play a role in limiting a retailer's fulfillment capabilities. Every time you can't fulfill the way a customer wants – you lose revenue. Half of shoppers say they've made a purchase decision based on the availability of flexible fulfillment options like BOPIS.⁹

How fast you can ship your product also plays a significant role in customers purchasing decisions. In one survey, nearly one-third (29%) of shoppers said they are more likely to place an order that arrives within a week – and only 7% said that shipping dates do not affect their purchasing decisions. Free two-day shipping, which many see as the norm of online retail now, was important to 79% of customers.¹⁰

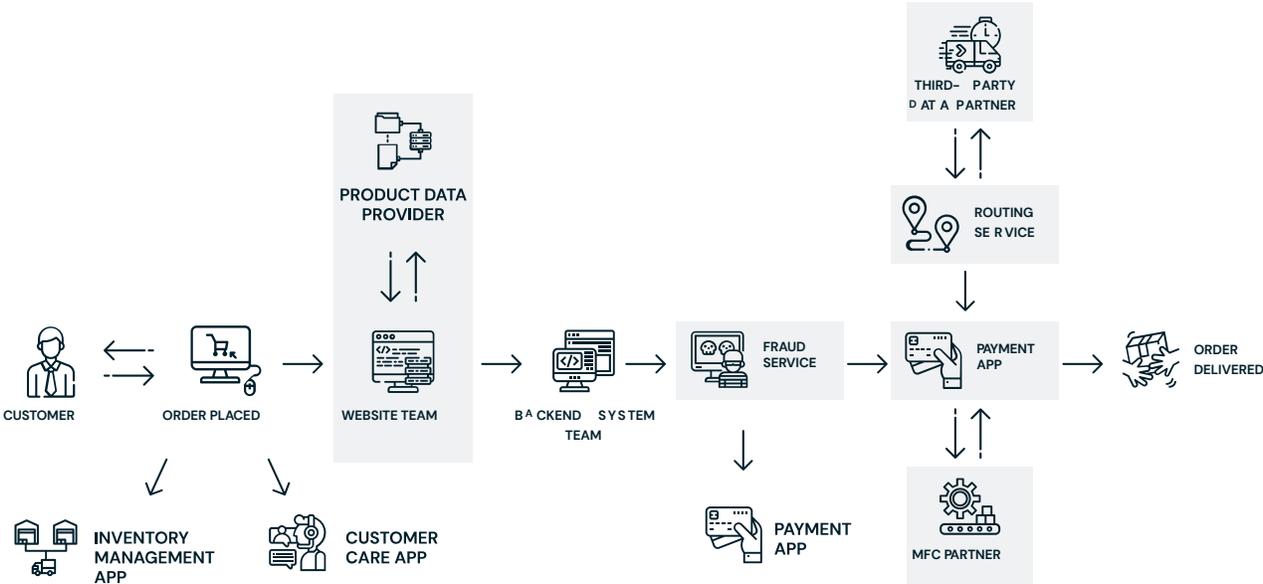
Fast delivery has become so critical to the retail experience that delivery issues were estimated to cost retailers \$1.5 billion in potential lost revenue from shoppers who won't return after a poor delivery experience.¹¹

Retailers who can't meet customers' expectations for fast and efficient fulfillment will lose the sale of the moment and lose the customer's long-term loyalty. It's a high price to pay for outdated systems and inefficient processes.

E-Commerce Order Fulfillment Human-Centric Process (Siloed Systems)

The architecture diagram below represents the current state of most retailers. Disparate applications, siloed data needing multiple human interventions, and batch processes make it challenging to provide personalization and an omnichannel experience to customers. These retailers tend to partner with third-party partners making these interactions reliant on the archaic systems' data-sharing capabilities which make the overall fulfillment process even more complex.

Although retailers are using numerous software solutions to manage it all, the overall process is inefficient and time consuming.

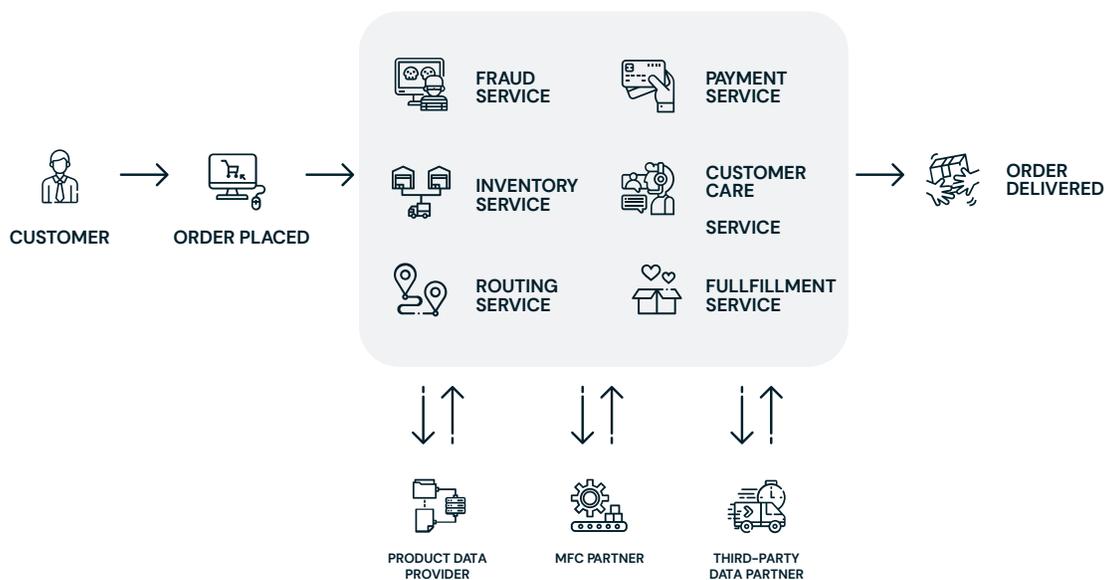


Human Centric Process (Siloed Systems)

E-Commerce Order Fulfillment Software-Centric Process (Event Streaming)

The world is moving towards a more software-centric process that eliminates the unnecessary data handoff overheads, dependencies on other applications and teams, duplicate database hits, and manual interventions. Real-time data sharing also helps in deriving faster insights about the customer, order, and the product, which supports the pressing business priorities of providing a personalized experience to the end users. Such an architecture is commonly referred to as “Event Streaming Infrastructure.”

In this method, applications talk to each other with minimal external interruption, improving the time to complete any process - such as order fulfillment.



Software Centric Process (Event Streaming)

CASE STUDY

One customer Egen recently worked with to modernize their e-commerce platform saw an immediate improvement in turnaround times, which reduced from ~12 hours to mere seconds. Consequently, same-day and next-day deliveries became possible, enabling them to compete with fulfillment leaders like Amazon. Additionally, modernization also resulted in a lower cost of ownership due to reduced investment, provided a predictable cost-per-transaction, and offered omnichannel support through the integration of web, cloud, and mobile technologies.

Four Point Solution that Works for Retailers

1 Build a cloud-native foundation for on-demand scalability

Modern cloud-native services are the foundation of a highly scalable and resilient e-commerce platform. Transitioning to the cloud is not only a low upfront investment but will allow your organization to accelerate time to market and maintain on-demand scalability. Finally, the open-source and cloud-agnostic frameworks of a cloud-native infrastructure creates a level playing field for both startups and enterprises – making it easier to modernize no matter where you are in your digital transformation journey.

2 Centralize your data for real-time insights

Retail organizations need to bring together data from across a multitude of partners in supply chains, systems, and processes. These data sources may vary in formats, privacy standards, and customer preferences, further complicating ingesting and analyzing the data. With a data hub, you can create a harmonized data layer that accepts diverse sets of data into the platform, applies business rules, and takes necessary actions on the data before making it available for internal processing or external data sharing. Additionally, event-driven data pipelines can process inbound data whenever it comes in, allowing for real-time access to data and insights.

3 Use APIs to deliver an end-to-end experience

APIs are a cornerstone of integrating various technologies and applications. An open, dynamic, and secure API strategy that is based on a microservices architecture will enable your organization to integrate with internal and external partners across a broad range of functions and technologies. This will allow you, for example, to accept orders from trusted external partners and integrate with multiple third-party delivery services for last-mile delivery. Additionally, you can connect notification services to send out customer alerts on order fulfillment stages and use real-time location updates for delivery and pickup status, delays, and return processing.

4 Harness the power of AI and machine learning

Accessing intelligent real-time recommendation analytics that can help you uncover hard-to-spot trends, predict customer buying patterns, and more accurately forecast inventory demand, requires the use of powerful AI and machine learning (ML) algorithms and models. By combining historical data trends, seasonality, and cyclicity with predictions on weather, economy, and government regulations, you can more accurately predict customer purchasing behaviors, inventory demand, and even churn probability – and you can do it in minutes rather than days or weeks. Beyond these applications, you can further use AI and ML models to predict customer lifecycle value, provide real-time product recommendations, and even engage in dynamic pricing.



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¹ "The High Cost of Disconnected Data," SnapLogic, 2018.

² "88 Percent of Consumers Will Pay For Same Day Delivery," Retail Touchpoints, accessed Dec. 21, 2020.

³ "Global Consumer Insights Survey," Pwc, 2019.

⁴ George Anderson, "Survey says consumers want online orders shipped fast and free," Retail Wire, Nov. 1, 2019.

⁵ "3 Things to Know About Retail Tech Investments," National Retail Federation, July 25, 2019.

⁶ Derek O'Carroll, "Five ways the cloud is changing your supply chain management," Supply Chain, Nov. 16, 2019.

⁷ Daphane Howard, "Out-of-stocks could be costing retailers \$1T," Retail Dive, June 22, 2018.

⁸ Matt Leonard, "A majority of retailers struggle with inventory forecasting," Retail Dive, April 9, 2019.

⁹ Bryan Wassel, "50% of Shoppers Have Made a Purchase Decision Based On BOPIS Availability," Retail Touchpoints, Feb. 20, 2019.

¹⁰ George Anderson, "Survey says consumers want online orders shipped fast and free," Retail Wire, Nov. 1, 2019.

¹¹ Deena M. Amato-McCoy, "Study: Delivery Issues Could Cost Retailers More Than \$1.5 Billion in Lost Revenue," Chain Store Age, Nov. 21, 2017.