



## There's a storm brewing in the Pacific.

Supply chain managers are concerned that shipments of a highly anticipated sneaker release could be delayed. Pre-orders are stacking up. The marketing team is about to launch a global promotional campaign. Merchandisers are on the line for aggressive sales goals. But no one knows exactly what a delay could mean for the business. Not even the CEO. Because no one has a full, real-time view of the data and the time required to analyze it.





# Data is the anchor in the storm Resetting retail requires insight

## Retailers have to continually and responsibly reset the business to thrive in a world that's changing fast.

From consumer behaviors and market trends to competitive dynamics and the economic outlook, today's reality is unlikely to be tomorrow's. This is the nature of post-pandemic retail. And it will be from now on.

While retailers are swimming in data that can help them make sense of this complex landscape, functional silos and a lack of strong data governance make it difficult to get enterprisewide data insights. So retailers are missing the big picture they need to be truly data-driven. To address the problem, retail leaders typically focus on migration to the cloud and data governance and management.

But this is only part of the solution. Getting the full value of data also means focusing on business outcomes and specific use cases and changing culture, processes and ways of working across the organization and with partners.

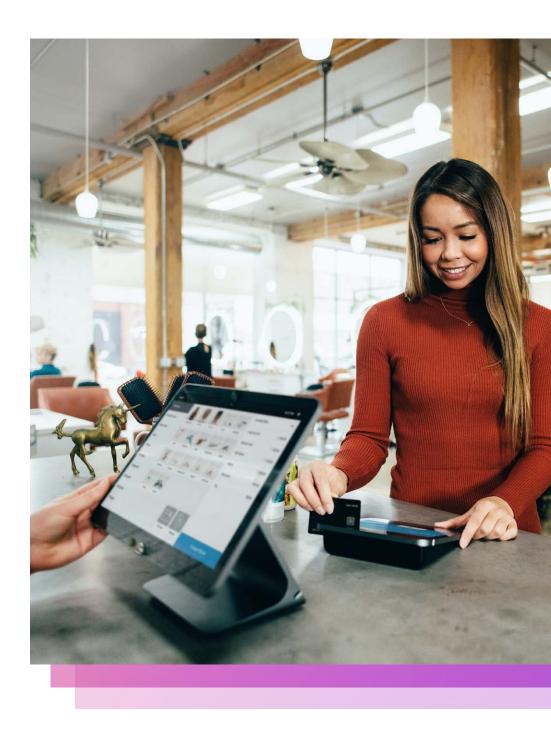
Only a handful of companies—fewer than 5% of the Global 1,000—have begun their data-driven reinvention.

# With a strategy in place, retailers are closer to unleashing data as a strategic asset to improve customer experience, innovation, operations and growth.

This is why data-driven reinvention starts at the top of the organization with a "go big or go home" strategy led by the CEO that combines technology investments and business-led change.

It's how retailers can connect business functions around a shared understanding of data to eliminate insight gaps. It's how they can empower their people to make data-driven decisions.

And it's how they can realize business outcomes. Case in point: One global powerhouse that handles 68 million transactions and 1,000 terabytes of data each day built a scalable, cloud-based data architecture that uses machine learning and artificial intelligence (AI). The intelligent platform processes and standardizes data from more than 39,000 stores around the world daily, providing an up-to-date view across operations and real-time customer insights to provide a more personalized experience. This global effort provided the foundation for identifying emerging customer needs, rapidly testing new ideas and increasing operational agility and resilience.





## **From** strategy to execution Holistic thinking, modularly applied

As critical as a data strategy is for retailers, it has to be backed by execution muscle to deliver the business outcomes that retailers need to compete. That's why we brought together the best of our retail experts, data scientists and technology ecosystem partners to develop a breakthrough tool that connects strategy to execution—not just within discrete functional areas but across the business. It provides holistic view of data and actionable insight that retailers crave. It also makes it possible to self-fund scaling these Al-powered solutions across the business.

ai.RETAIL is a data and AI solution built by multi-disciplinary retail professionals who understand the industry well. It helps retailers become data-driven faster by bringing strategy, AI and technology together. Drawing on our retail experience, proven algorithms and machine learning capabilities, we developed use cases specific to retail.

These proven use cases or "data products" jumpstart a retailer's data driven transformation across marketing, merchandising and supply chain, and can be highly customized and configured to meet their specific needs. It is relevant to every functional leader.

## A real-time view of data across the retail business

- + Customer segmentation
- + Price and promotion optimization
- + Real-time personalization
- + Assortment optimization
- + Supply chain control tower
- + Demand sensing and forecasting
- + Inventory optimization
- + Risk management

## Five steps for becoming a data-driven retailer

Data-driven retailers don't just have data. They continually unlock value from it to drive the business forward. ai.RETAIL helps retailers become data-driven through five key steps.







## Create a single version of the truth

Retailers have endless data across touchpoints and systems. But operating silos, lack of data ownership and inconsistent data management create blind spots that make it difficult to generate insights in line with the broader business strategy. Functional areas operate like islands. For example, marketing leaders don't know how actions in other areas of the business might jeopardize the promises they are making to customers.

Supply chain leaders are facing shifting demand and fulfillment dynamics, but meaningful customer data and insights are often a black box for them. Merchandisers are struggling to get the full data picture they need to uncover new business opportunities,

products and services at pace. And even CEOs lack a single source of truth across the business to confidently make data-driven decisions.

This is why becoming a data-driven retailer must be grounded in developing a fullyintegrated, real-time view of reliable internal and external data.

Think of it as creating a single version of the truth that's accessible to all functional leaders. After all, high-quality data is the foundation for generating business insights and using Al and machine learning to drive recommended actions.



**Use a retail data model.** Rely on a flexible, common data model purpose-built for retail to provide a shared framework for developing all business use cases. Consolidate data from all functions to provide a single source of the truth that removes data silos and enables data-driven decisions.

**Democratize data.** Provide business users from across the organization with tailored visualizations to generate deep descriptive insights that inform decisions across marketing, merchandising, supply chain and other retail areas.

Harness third-party data. Augment internal data sets with third-party data sources such as credit card and environmental, social and corporate governance (ESG) indicators for a more holistic view that looks beyond the core business.



Develop a 360-degree customer view. Bring together internal data (e.g., customer, transaction, product, location) with external data (e.g., competitor, social, economic, ESG) for a granular customer view with detailed customer sales and profitability deciles to inform decision making.

Analyze customer behaviors. Use AI to understand shoppers' tastes, wants and behaviors in real time. Identify key factors driving individual customer P&Ls and run "what-if" scenario simulations to improve future performance by attracting and retaining high-value customers.

Drive powerful personalization. Combine online and offline data with high-powered AI to tailor content, offers, search results and pricing to customers in real time, while aligning with supply chain teams to ensure required product availability, lead times and fulfilment options.

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# Customer Centricity (2)

### Put the customer at the center of the business

With a solid data foundation in place, retailers can reorient their focus to become truly customer centric regardless of channel. By moving away from predominantly store and product-based metrics to consider customer behavior and profitability, retailers can make more informed decisions to drive top-line growth and margin expansion.

With most of retailers' profit coming from a small number of customer groups, the key is to serve and acquire high-value customers while avoiding loss-making ones.

Customer-centric retailers do this across all business functions and channels because they have the right information to create effective omnichannel strategies. Marketers can direct advertising, product recommendations and promotions to the most loyal customer segments, not to fickle bargain hunters. Merchandisers can optimize assortments in real time by holding key products that their valuable customers desire, reducing shelf space and inventory for products that account for limited unique sales and can be easily substituted. Supply chain managers can move away from onesize-fits-all strategies to a segmented supply chain strategy that combines customer, product and channel requirements to tailor service levels and availability. All of these approaches can drive competitive advantage for retailers.



## Turn data into responsible actions

In many retail organizations, if it's not stuck in systems or spreadsheets, data is the purview of data scientists, not operators. It's an "ivory tower" dynamic where an academic view of data, rather than a practical one pervades. And the reality is that data insight is only as good as the actions it drives. While retailers have traditionally relied on historical data to drive insights, the pandemic revealed that the past cannot be the sole predictor of future customer behaviors. Historical data isn't obsolete—it just doesn't tell the full story. Instead, insights and recommended actions derived from data should be combined with an iterative, test-and-learn approach to continuously validate the overall strategy prior to scaling it.

resilience across operations. Retailers can innovate and know what customers want even before they know themselves.

To do this, retailers are increasingly embracing

an "explore vs. exploit" model. During

content and even business models to

the explore phase, retailers leverage their

customer insights and emerging trends to

rapidly test and refine new offers, products,

meet new and existing customer demand.

the opportunity by scaling the proposition

operations. This future focused, iterative

attractive results, retailers shift gears to exploit

across their customer base or wider business

approach creates a bias for action that drives

However, once a strategy demonstrates



Take priority actions fast. Generate predictive and prescriptive alerts so business users know what to focus on to improve performance. Take advantage of risk sensing and analysis to continuously anticipate, assess and mitigate against business risks across all retail functions.

Explore "what-if" scenarios. Define and run detailed scenario simulations to better understand the key performance drivers behind a particular issue or opportunity and identify the optimal course of action.

**Experiment to optimize.** Use a test-and-learn approach to prioritize, optimize and refine use cases—moving quickly through proof of concept, piloting and scale phases—with highly customizable accelerators and algorithms.

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Make it easy for people. Combine an "Uber-like" user interface with detailed dashboard reports to provide retail teams with a seamless, intuitive experience to identify key insights quickly and deepdive into the data to better understand the logic behind recommended actions.

Act on recommendations. Rely on proactive alerts and recommendations for priority actions, which removes the hassle of reconciling multiple reports and dashboards and makes it possible for people to focus on strategic execution.

Embed a data-driven culture. Shatter the "us" and "them" culture that's built up around data in retail. When everyone can access data, a single source of truth binds them together around a common understanding of the business—and their own role in reaching desired outcomes.

# Data-Savvy Workforce

## Empower people with data confidence

The data challenge in retail is at its core human before it is technological. For a data and analytics initiative to scale successfully, it requires employees with different skills and priorities to adopt and trust AI to provide valuable insights and recommended actions. What's more, the starting point for any AI-initiative must always be a business opportunity or challenge, not a dense data set or new piece of shiny technology. The workforce will only embrace and adopt AI solutions if they are understood and trusted, deliver business outcomes—and are intuitive to use.

To unlock a data-driven workforce, retailers need to bring together retail experts, data scientists and technologists in a multi-disciplinary approach focused on solving priority business challenges or capturing new opportunities.

Too often, these teams work independently in siloed functions, losing the magic of inter-disciplinary problem solving. However, with retail experts identifying the business challenge, data scientists applying AI techniques to the right data sets, and technologists ensuring that the solution is scalable, retailers can put data to work in exciting new ways. It's about every part of the organization doing their part in harmony toward a common goal.



### Unlock data as a competitive asset

As nimble new entrants develop disruptive business models, forge creative partnerships and use innovative technology to win customers' hearts, minds and wallets, established retailers don't have to stand by and watch. They have an unique opportunity to leverage their own data to launch breakthrough businesses.

Retailers are increasingly using their valuable predictive and prescriptive customer insights to generate new revenue streams by selling granular insights to suppliers that want to optimize to their promotions, product development and category management.

More recently—following Amazon's lead—several retailers have established retail media businesses to create new, high-margin revenue streams. By leveraging their unique core data assets, retailers can create and scale media offerings that benefit brands, consumers and advertisers.

Beyond data monetization, retailers are using their deep data insights to identify emerging trends to explore new customer propositions and identify potential acquisitions.



Monetize data. Use comprehensive shopper behavior insights, product performance analysis, predictive recommendations and a data platform to help establish a media business that offers brands granular insights and targeted advertising campaigns.

**Spot trends first.** Rely on an AI engine to crawl hundreds of thousands of websites to track trends in lifestyle, materials, ingredients, health, luxury and more and plot them against customer segments, categories and brands for the insights to develop new propositions first.

Run data hackathons. Leverage shared access to enterprise-wide data to support a culture of experimentation and innovation. Run internal hackathons to rapidly ideate and prototype new data products and business ideas to be tested in market.

## Data fuels the insight-driven enterprise



#### **CASE STUDY**

Chief Merchant at a big-box retailer

## What assortments should I carry, where, how much and why to maximize margins and stock turn?

A big-box retailer wanted to localize assortment to brands that would better meet the needs of customers in a target area. An assessment of sales data analyzed incremental sales and identified the SKUs that were not performing. By removing non-incremental SKUs, the retailer saw a 7% increase in sales and a 28% increase in profit.



#### **CASE STUDY**

Chief Supply Chain Officer at a leading apparel retailer

## How do I flow, place and fulfill inventory to meet customer expectations profitably?

A leading apparel retailer wanted to reduce inventory while maintaining service. Safety stock calculations were a challenge. The retailer calculated at each node of the network without considering overall supply chain costs and was holding too much inventory. By conducting analytics-driven inventory optimization monthly, the retailer knows where to hold what inventory to meet customer demand. Carrying costs dropped by 8% while service levels jumped from 90% to 95%.



#### **CASE STUDY**

Chief Marketing Officer at a global fashion retailer

## Who should I target, and how can I engage them for profitable growth?

A global fashion retailer wanted to increase brand engagement, conversion and sales by tailoring every customer's journey to purchase. With a real-time, Al-powered solution, the retailer personalized millions of customer experiences across every channel. This drove a 29% increase in ecommerce average basket revenue—and a 25% uplift in conversion rates. With the Al algorithms re-trained twice daily to optimize performance, the retailer is positioned to realize even more value.



# Weathering the storm Unleashing the power of data

#### **Remember that Pacific storm?**

Consider how the retailer could address the threat with ai.RETAIL. Rather than remain in the dark, the supply chain team knows exactly what's happening. They receive an alert that 30% of their sneaker shipments are at a high risk of being delayed. This will cause a ripple effect of disappointed customers, lost sales and wasted marketing spend.

The supply chain team conducts a root cause analysis, which reveals the potentially delayed shipments are being sourced from Vietnam and destined for Los Angeles. The maximum potential delay is estimated at two weeks. "What-if" scenario simulations reveal that the best way to mitigate the impact is to reallocate some stock due to arrive in New York to Los Angeles—and that doing this won't hurt forecasted sales.

However, expedited transport fees will add unexpected costs, and the team needs executive approval to proceed. They share their assessment with the supply chain director. She reviews the assessment, recommended action and cost impact

and approves the plan. The retailer avoids the risk of delayed launch with zero impact on the customer experience and little disruption to the business. And through it all, functional leads know how the situation is being handled. No blind spots. No guess work.

That's how retail leaders can work together at the speed of change—delivering for customers and staying ahead of the competition. It's possible with ai.RETAIL.



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