

A smiling woman with her hair in a bun, wearing a blue top and a gold watch, leaning on a clothing rack in a store. The background shows more clothing racks and a bright, well-lit interior.

# Reimagining retail in the digital age

The retail industry is undergoing seismic shifts stoked by swift and unprecedented technology innovation.

This change presents both a challenge and an opportunity for retailers faced with adapting to a shopping landscape being upended by a \$2.3 trillion global ecommerce market, and the rise of savvy, ever-connected consumers with the world's biggest virtual mall at their fingertips.<sup>1</sup>

For retailers and brands navigating this new world, digital intelligence and innovation—be it an artificial intelligence powered chatbot that fields customer-service requests or a hyper-local store assortment informed by the Internet of Things—are critical to driving sales and margins in today's on-demand consumer economy.

Digital technology is the connective tissue adding ease, convenience, customization, and automation to every aspect of a retail organization—from its business processes, operations, and how employees work, to the customer experiences provided and the very products and services offered.

In this paper, we explore the opportunities birthed by digital transformation, and how Microsoft can help retailers reimagine their businesses and survive and thrive in today's competitive environment.

# The forces changing retail

Retailers are facing challenges coming from a myriad of directions. Disruptive shifts like the explosion of online and mobile shopping have thrust retailers, now competing in a global omnichannel marketplace, into a fierce battle for the ever-fragmenting wallet share—and mindshare—of consumers.

Meanwhile, an overstored U.S. retail sector built for a pre-Amazon era is in resizing mode, and the store's role in the shopping experience is changing, further driving the need for new business models that generate growth.

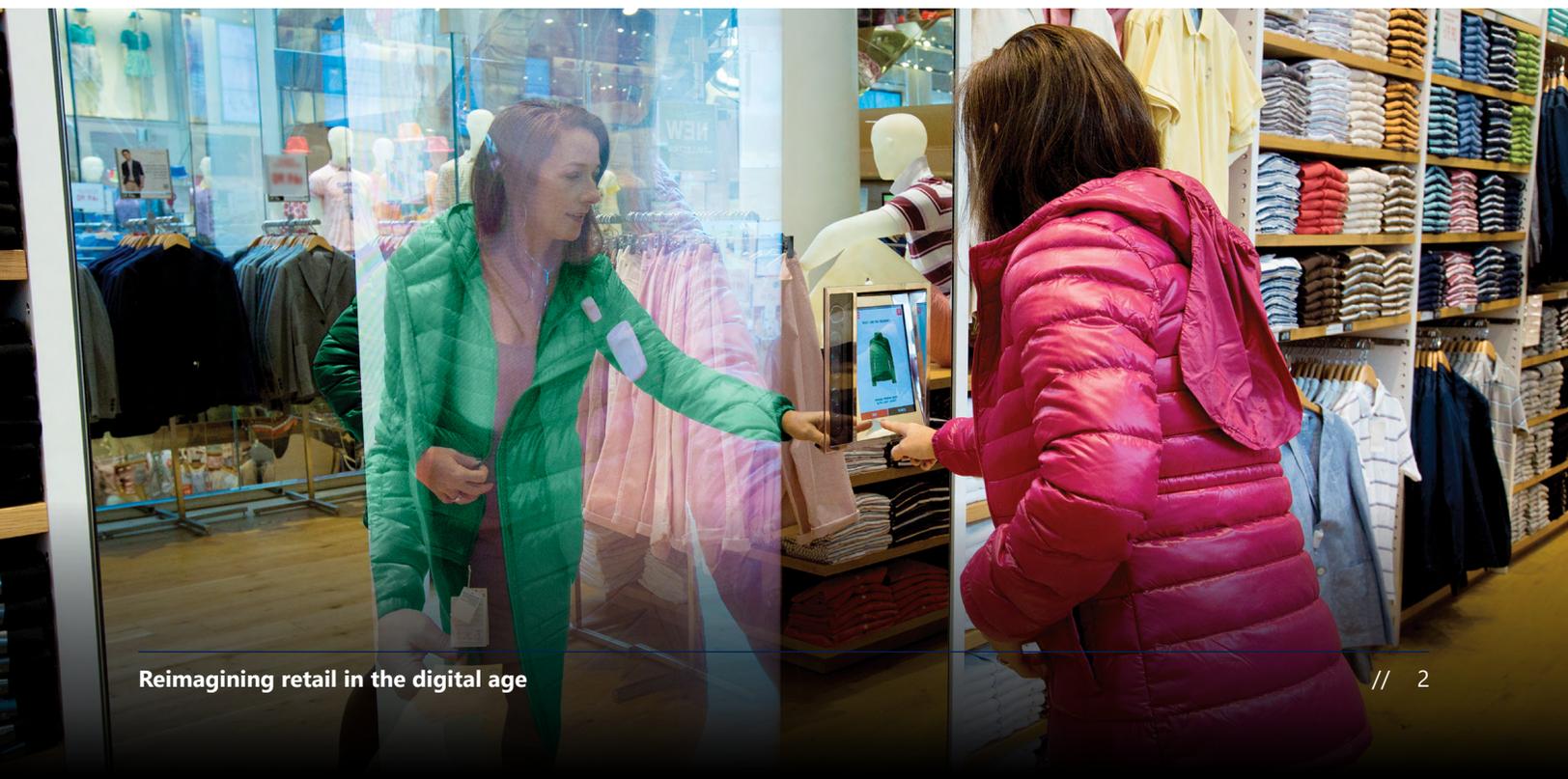
Evolving customer behavior and preferences are primary catalysts for change. For the new instant-gratification consumer, smartphones increasingly serve as the indispensable portal to their personal, social, workplace, and shopping lives, used to pay bills, book a hotel, share vacation photos on social networks, or buy a coffeemaker.

Consequently shopper-buying triggers have changed. Spoonfed marketing and advertising messages hold infinitely less sway, as consumers turn to online customer reviews, the opinions of their peers on social networks, and influencers that include self-made YouTube stars for product recommendations.

Further challenging retailers, shoppers are spending more on experiences like restaurants and spa visits, than tangible things.

Meanwhile, they are channel agnostic, and expect a seamless, curated shopping journey that reflects their purchasing behavior and preferences, whether they're buying online, from a mobile device, in-store, or some combination of the three. As a result, "Consumers expect their experience to 'automagically' adapt whenever they engage physically, digitally and emotionally," according to an Accenture report.<sup>2</sup>

The new retail reality is that whatever the best experience the shopper has, regardless of where and how it was delivered, now sets the expectation for the industry—whether retailers are equipped to deliver it or not.



# Transforming your retail business: four key pillars of digital-transformation success

As retailers stare down these new expectations, they're finding that longtime business practices designed to boost margins and foster customer loyalty won't guarantee ongoing success. To stay relevant and compete in a rapidly evolving industry, retailers must reimagine their customer experiences and business processes from the ground up by implementing technology in new ways.

Microsoft is working with retailers to take advantage of today's innovations to unlock new opportunities to change and grow, built on four key pillars.

## Engage your customers to create personalized and seamless shopping experiences that influence buying behavior

Redefining customer engagement calls for predicting the wants and needs of shoppers, whether they're in store, at home, or on the go, and delivering convenient, personalized, contextually relevant messaging, merchandise, and shopping experiences, fueled by data-driven technology solutions, from beacons and sensors to cross-channel analytics. Delivering meaningful shopper engagement also calls for recognizing the multichannel shoppers across their "phygital" (digital and physical) touchpoints, and speaking consistently to an audience of one.

## Empower your employees to delight consumers with outstanding service at every point along the shopping journey

Empowering your employees with state-of-the-art technology that weaves inventory visibility and advanced data analytics throughout the retail supply chain is critical today, so that retailers can nimbly adjust their merchandising strategies to reflect customer preferences in real time, for example.

Empowering employees also means equipping in-store sales staff with customer-service enhancing mobile workforce tools that can locate an item for a shopper, for example, as well as automate, bring greater speed and precision to key retail tasks, from stocking shelves to setting up displays.

## Optimize your operations to build an agile retail organization

Retailers can now optimize their operations with technology platforms that transform reams of complex data signals—from shoppers' digital and physical footprints to external factors such as the weather, season, and time of day—into actionable insights that take product demand forecasting and customer targeting to new heights.

Optimizing business processes in a now-digital retail marketplace also means using a unified commerce platform that delivers friction-free, seamless customer experiences across buying channels, which is key to serving today's multichannel shoppers.

## Transform your products

Retailers must transform their products to meet shoppers' craving for personalized, timesaving services and experiences on demand: from offering one-of-a-kind, 3D-printed products to customizing a kitchen via mixed-reality technology. The idea is to excite, delight, and solve unmet needs via tech-enabled retail services and experiences.

For merchants, the potential return on investment from a digital makeover is significant. Retail companies that embrace digital transformation and mine their data intelligence can potentially realize an additional \$94 billion in revenue over companies that do not. Key opportunity areas include employee productivity (\$41 billion), operational improvement (\$29 billion), product innovation (\$15 billion), and customer-facing experiences (\$9 billion).

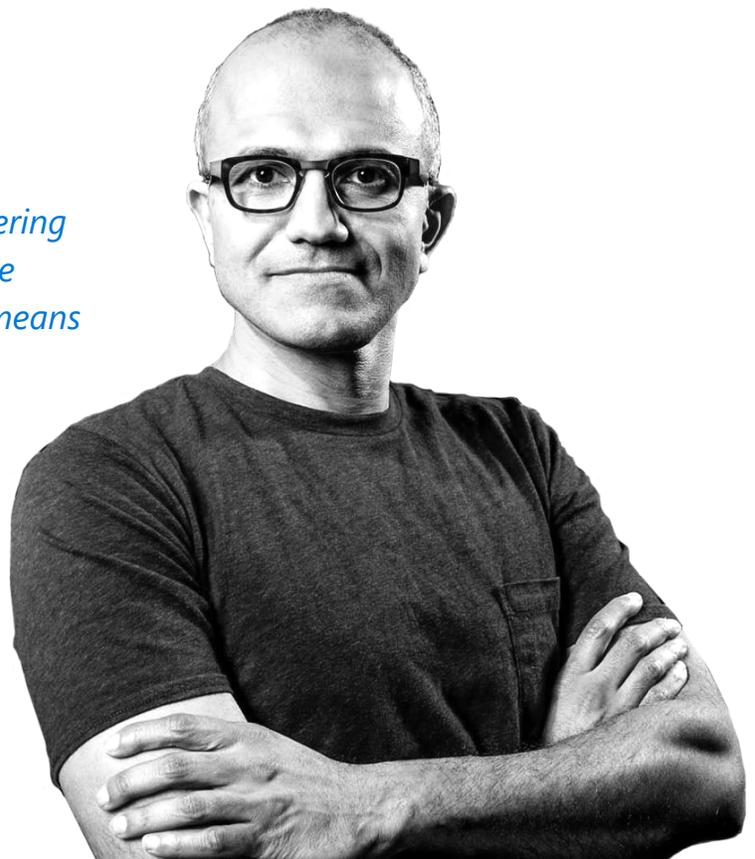
In the next section, we'll outline how these four Microsoft pillars are helping reimagine retail and accelerate transformation, and showcase industry leaders that are seeing meaningful results.

## Digital transformation



“ *Helping society move forward is deeply grounded in Microsoft’s mission of empowering every person and every organization on the planet to achieve more. For business that means a digital transformation.*”

**SATYA NADELLA**  
CEO, Microsoft



# Engage your customers

The digital shopping landscape has trained consumers to expect customized interactions, merchandise recommendations, and product offers based on their buying habits and purchasing patterns.

But legacy retailers have struggled to deliver these born in the web, technology driven personalized customer experiences and information in physical environments. Targeted advertisements and product offers have proven successful for retailers online and via mobile devices, but extending that success to brick-and-mortar stores has been elusive.

That's now changing. Digital tools such as beacons, the cloud, the Internet of Things, machine learning, mixed reality, and artificial intelligence technology are catalyzing personalized and seamless experiences for shoppers in physical stores, too.

It's what shoppers want, which is reflected in retail investments. Today, 40 percent of retailers say a personalized customer experience is their top priority, and 61 percent expect personalization technologies to generate a meaningful return on investment.<sup>3</sup>

## Anticipate shopper needs in the micro-moment

With Microsoft predictive analytics solutions, retailers can track product demand and manage inventory levels and store locations, including from mobile devices, while offering consumers a measure of curation and convenience that brings new value to the shopping journey.

A shopping scenario informed by Microsoft digital intelligence solutions might play out something like this: a consumer planning a vacation to Rome asks a retailer via a chatbot messaging app on her smartphone to recommend a few key fashion items for her trip.

The retailer would then harness the power of predictive analytics, using real-time data streams as well as social media platforms, such as the shopper's Pinterest board, to recommend styles she might like. Culling from this rich mix of data intelligence, the retailer would recommend personalized items, and then offer to reserve them for the shopper to try on at its nearest store.

The shopper then goes to the store, where a beacon sensor recognizes her presence, as the store has already prepared a fitting room where her reserved items await. The "smart" fitting room features a touch screen whereby the shopper can punch in requests for different sizes, colors, or other complementary items from the comfort of the dressing room, where store associates bring items to try on. The shopper then purchases the items directly from her smartphone.

A store associate receives a real-time notice of the purchase, as well as a message such as, "This item has a higher than expected demand. There are two left in stock. Order more now?"

Technology solutions and services like Microsoft Azure Machine Learning, Microsoft Dynamics 365, Office 365, Power BI, SQL Server, and Microsoft Social Engagement make this scenario possible today.

While bringing new value to the consumer's shopping trip, the journey is simultaneously tracked, which generates a goldmine of insights—like how many products make it from the fitting room to the checkout aisle—ones that retailers can draw on to enhance and customize further shopping experiences.

## Maximize personalized, relevant shopper interactions across retail touch points

The scenario illustrates how Microsoft digital solutions—such as the analytics that anticipated what items the consumer might like for her trip before she did and the beacons that directed her to an available fitting room once she was in the store—can deliver personalized and contextually relevant engagement across all touchpoints in the shopper journey.

The data-driven journey points to deepened customer engagement that fosters loyalty and shopper retention by capitalizing on mobility, immersive experiences, and unified commerce capabilities, as the consumer is recognized and served throughout her multichannel shopping trip.

# Engage your customers

That shopping journey is further personalized with relevant offers based on interests and location in the store, all the while the retailer gathers valuable information about the consumer's cross-channel shopping behavior.

## Optimize shopper interactions via social and digital channels

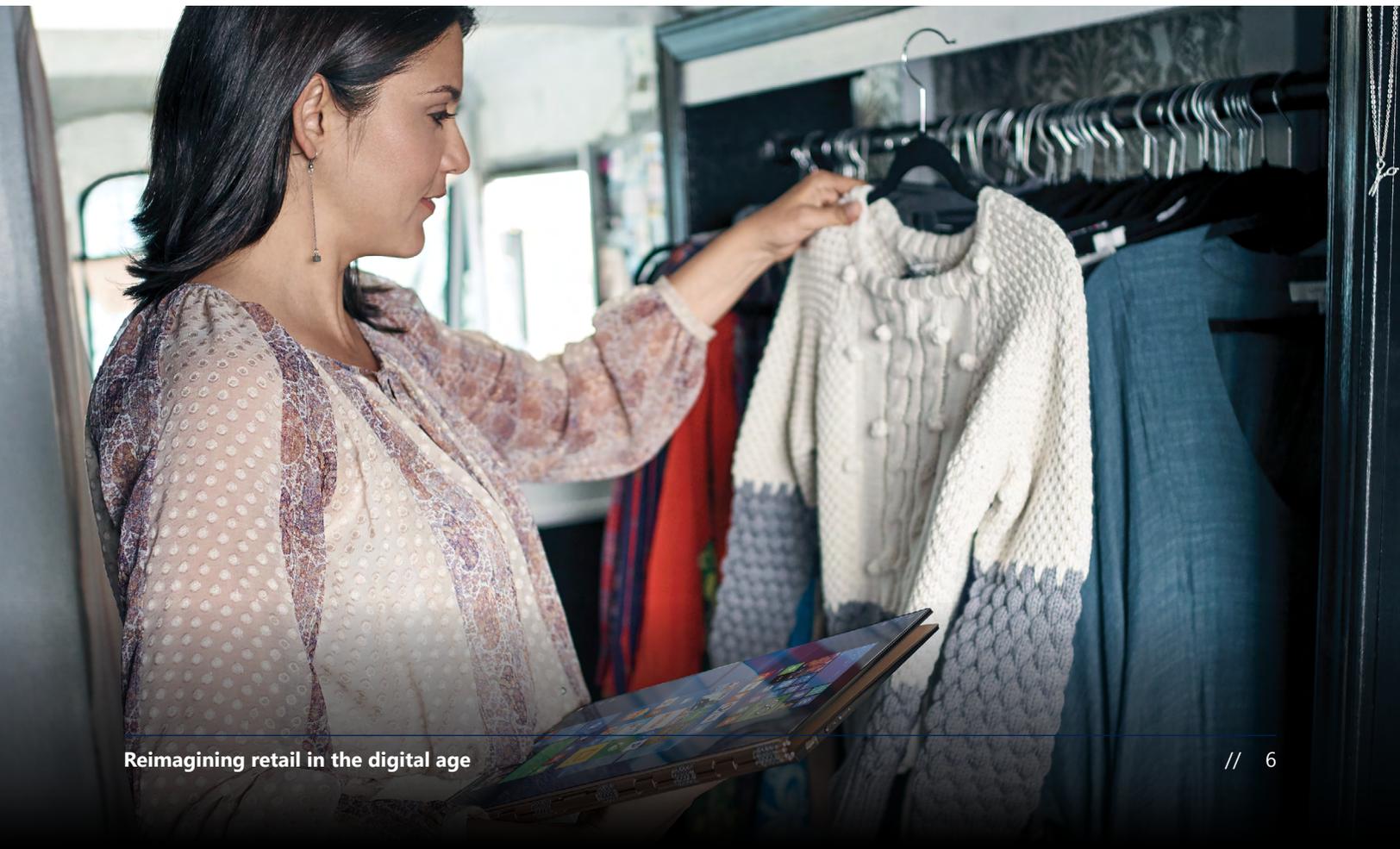
The scenario also reflects how savvy retailers are capitalizing on the growing influence of social and digital channels, from Pinterest scrapbooks to Amazon. Shoppers are tapping these platforms to research products and services, express their opinions, and search for deals. That presents big opportunities for retailers using technologies such as Microsoft Dynamics 365 to monitor customer sentiment, and the ongoing conversations bubbling on social networks and customer review sites, in turn allowing them to quickly respond to product and marketing trends.

## Tap AI to enhance, quicken customer service

Conversational commerce enabled by artificial intelligence, like chatbots, is redefining how consumers identify products and services that meet their needs pre-purchase, like finding those targeted items for Italy, and how they replenish goods, such as instructing their voice-assistant device to reorder laundry detergent.

It's also transforming how retailers serve shoppers. By connecting customers with chatbot technology, AI in the form of mobile or online virtual agents can improve customer service and support interactions, like handling a return and dealing with a shopper complaint.

Consumer culture is ripe for conversational commerce, as shoppers have an increasingly lower threshold for longtime retail pain points, such as waiting on hold to resolve a customer service issue. In turn, as 60 percent of all shopper purchases are first influenced by visits to a digital channel, retailers are investing in it.<sup>4</sup>



# Engage your customers

## CASE STUDY

## Macy's

With annual sales of nearly \$26 billion, Macy's delivers fashion and affordable luxury to millions of customers shopping at its approximately 670 locations and online store. Recognizing that shoppers are increasingly turning to online and mobile channels to browse and purchase merchandise, Macy's is embracing digital transformation to provide personalized and optimized experiences that cater to all the ways their customers want to shop.

The retailer enhanced its website with a virtual agent based on the Microsoft Dynamics 365 AI solution for customer service. By connecting to Macy's internal system APIs to access information about merchandise and orders, the virtual agent provides customers with real-time responses to common inquiries and proactively solves customer issues or transfers them to a live agent to continue the conversation.

With the virtual agent already answering more than one quarter of customer queries, Macy's plans to expand it to additional shopping channels.

[Learn more](#)



*"Becoming more engaged with customers includes predicting what customers want before they know they want it, based on data intelligence, and offering it to customers in a way that's natural."*

**Satya Nadella**  
CEO, Microsoft



*"We can see, in real time, what our customers are asking and how our answers are performing, and we can make adjustments on the fly to give our customers a better experience."*

**ROBERT MICHAELS**

Director of Information Technology,  
Macy's



# Empower your employees

## Customer experience drives shopper loyalty—or doesn't

Traditional customer-service models that served retailers in the analog-only era of bricks no longer cut it in a “phygital”-shopping universe that straddles both bricks and clicks.

Retailers are paying a higher price for missteps serving consumers less tolerant of in-store hassles, like a store associate unable to locate an item that's supposed to be in stock. This pain point alone costs merchants \$68.1 billion every year, tarnishes customer service and good will, while hurting worker productivity.<sup>5</sup>

To defend market share and customer loyalty, retailers are scrambling to shift from functioning merely as transactional sellers of goods, to service providers that ease and enrich the path to purchase and complement digital channels.

To that end, retailers are investing in transforming sales associates into brand ambassadors and product experts with more sophisticated training programs, and empowering their front-line workers with assisted-selling technologies that redefine convenience and customization.

Today's shoppers who research products online are more purposeful spenders once they get to the store. They know what they want, and they want it fast and painlessly, and if they need help, they want informed, tech-equipped staff to offer on the spot solutions. Indeed, 68 percent of global shoppers cite the ability to check another store or online stock quickly for merchandise as key to a satisfying in-store experience.<sup>6</sup>

Forward-thinking retailers are tapping Microsoft to help their employees elevate customer service with the latest technology tools, such as mobile workforce devices that grant access to real-time product, customer, inventory, and order details, so that workers are at least as informed as the customers they serve. These assisted-selling solutions empower sales associates to identify inventory options from any location across an enterprise to meet customer demand.

They also enable employees to share information from any device, unifying digital, in-store, and back office operations. In-store sales associates with a direct line to the customer can now interact with headquarters workers like buyer, marketing, and design teams, gaining newfound visibility into how customers respond to products, how merchandising is working, and the effectiveness of in-store promotions. The result is more nimble collaboration that ultimately benefits the shopper.

Digital collaboration tools also replace manual paper and email processes to increase worker productivity, automating common tasks such as stocking shelves, prepping displays, and locating products.

# Empower your employees

## CASE STUDY

## Lowe's

With a purpose of “helping people love where they live,” Lowe’s is the second-largest home improvement company in the world, with 2,200 stores located throughout the United States, Mexico, and Canada. To help realize its purpose, the retailer wanted to empower its 260,000 employees with cloud-based productivity tools to more effectively tackle their jobs, collaborate between the corporate office and stores, and ensure personalized customer connections.

By deploying Microsoft Office 365 services company-wide, the retailer gave its employees anytime access to productivity and collaboration tools, such as file sharing and instant messaging, from any device. Lowe’s also expanded its employees’ email inboxes so they can receive photos from customers asking for home project guidance.

Now with everyone accessing a unified platform and the online version of Office apps, employees can find information faster, work together more easily, and develop more attentive customer relationships to help bring their home project vision to life.

[Learn more](#)



*“It’s serendipity at work when you discover someone who has the solution to a problem that stumps you. You don’t need to rely on serendipity to get that result. All that knowledge and insight exists inside your infrastructure—in your email, your documents, your line of business applications—it’s just waiting to be found using organizational analytics, and provide insight to what is going on.”*

**Satya Nadella**  
CEO, Microsoft



*“We’ve empowered employees to find and share the information that they need, which has definitely increased teamwork and productivity. ...With all of our tools in the cloud, we can shift some of our resources elsewhere to deliver even better customer experiences.”*

**JUSTIN LITHERLAND**  
Vice President of IT Stores,  
Lowe’s



# Optimize operations

From a tech-transformation standpoint, computing power is digitizing nearly all retail functions from the warehouse to the store floor, providing merchants with ten times the insights on its customers and business processes in one-tenth the time.

Optimizing operations is about enabling retailers to shift from merely reacting to events to responding in real time or even preemptively.

Microsoft is working with retailers to optimize their operations to channel the power of data-driven insights to make smarter, more agile decisions, from merchandising to inventory management, and create hyper-local, relevant product assortments in stores.

That ability is critical today, as the shopping landscape calls for retailers to step up their speed to market to keep pace with an accelerated product trend cycle fueled by the “democratization of information.” Indeed, in a world of “information abundance, customers can [turn to] a wide variety of influences when making buying decisions.”<sup>8</sup>

At the same time, retailers must be equipped to conduct omnichannel fulfillment, amid the growing popularity of buy online, pick up in store, for example.

## Create hyper local inventory assortments

Improve loyalty and share of wallet with a hyper-local inventory mix that offers the right product at the right price at the right time. Using Microsoft digital solutions, retailers can better manage product allocation across channels with data-driven understanding of what will sell, when, where, and at what price. And by placing inventory according to local demand, retailers can reduce the need for large, centralized warehouse management facilities.

## Redefine merchandising with data-driven insights and faster speed to market

Consumers expect the latest product or fashion now. Rapid product lifecycles require retailers and brands to connect with consumers constantly and incorporate feedback into the design process for speed to market. Product development and delivery must be streamlined to be quick and nimble across borders.

With Microsoft solutions, retailers can reduce time to market for new products and services using actionable insights provided by market trend analysis and customer feedback, and woo more shoppers via personalized offers. Digital technology enables retailers to develop a more cost-effective, collaborative supply chain via end-to-end visibility and increased communication with consumer products partners, for example.

At the same time, Microsoft real-time predictive analytics improve inventory transparency to better anticipate customer and channel demand.

## Streamline your business processes and deliver a unified commerce platform

Customers expect to be known and recognized as an individual interacting with a retailer or brand, online or in-store.

Microsoft is helping merchants create smart, streamlined supply chains informed by intelligent insights that optimize fulfillment and enable real-time inventory visibility for a centralized and cohesive view of their entire operations.

Working with Microsoft, retailers can achieve seamless collaboration across their entire enterprise—from product planning and supply-chain operations to merchandising and marketing. The result is a seamless, connected customer experience across channels and touch points through a common data model, pre-integrated business services, cognitive intelligence, bots, AI, and powerful analytics capabilities like machine learning.

That upgrade is table stakes today amid the rapid growth of click and collect.

# Optimize your operations

## CASE STUDY

### JJ Food Service Limited

JJ Food Service is the largest independent food distributor in the UK, providing 60,000 customers with everything needed to run a food-service business. With customers ranging from restaurants and grocers to schools, the distributor looked to technological solutions to improve operational efficiencies and make it as easy as possible for their busy customers and suppliers to work with them.

Combining years of customer ordering history stored in Microsoft Dynamics AX with information about local event schedules, Microsoft Azure Machine Learning builds preference profiles for each customer to anticipate orders. The solution can also use aggregate data from across the market, enabling JJ Foods to offer personalized recommendations to suit customers' changing menus and needs.

Recognizing that their customer is rarely behind the desk, the distributor offers a mobile app that lets them take advantage of anytime, anywhere ordering. Another mobile app provides order information to delivery drivers, and monitors temperature-controlled conditions so that the products arrive fresh.

[Learn more](#)



*"It's not enough to know what's happening now in your business—you have to anticipate what will happen, then be prepared to capitalize on that insight."*

**Satya Nadella**  
CEO, Microsoft



*"You have to keep asking yourself what is possible, what we can do next. With Azure Machine Learning, the wow factor is huge. Customers are amazed that we can predict so accurately what they need."*

**MUSHTAQUE AHMED**  
Chief Information Officer,  
JJ Food Service



# Transform your products

To meet customer expectations and build loyalty in today's digital age, retailers must provide an experience that is customized and differentiated, tapping innovation to go beyond the transactional to the inspirational. That's no easy task, but it's a critical one, and could mean the difference between surviving and thriving, or being left behind.

The good news is that advancements and speed in technology innovation are making this new paradigm of enhanced shopping experiences attainable.

As new consumer demands and behavior call for retailers to offer "revolving discovery...aligning the shopping experience with customer lifestyles and aspirations," retailers are mining digital tools to add a new dimension of product exploration, education, and community, even entertainment, to physical stores.<sup>8</sup>

Microsoft is working with retailers to do just that, blending the physical and digital, the offline and the online. Maybe one day that means a multi-sensory experience in a store that combines cooking demonstrations with digital ingredient lists. Or maybe it's the speed and convenience of a ready-made, grab-and-go item with mobile checkout. Or perhaps it's a virtual experience where shoppers can go beyond the physical inventory, sampling countless lipsticks via augmented reality mirrors for the perfect shade, without ever having to apply and reapply. All these experiences can co-exist, and retailers can bring them to fruition via a digital transformation.



# Transform your products

## CASE STUDY

### ASOS

How does ASOS, an online fashion retailer marketing to tech-savvy consumers in their twenties, achieve more than 25 percent revenue growth year after year, win multiple awards, and expand worldwide?

While the easy answer is to offer great products and services, that's only part of the story. This leading digital fashion destination transformed its e-commerce platform from a monolithic, on-premises system to a microservices platform running in the cloud on Microsoft Azure.

Used by more than 13 million young, tech-savvy customers worldwide, the new platform handled more than double the volume of Black Friday orders over the previous year. This high scalability and fast performance translated to more sales and an uplift in average basket-value. The rapidly growing UK-based company has also accelerated development of innovative mobile apps and plans to offer enhanced social media interactions to quickly target new markets and stay on top of consumer and technology trends.

[Learn more](#)



*"All companies everywhere are becoming data companies—from farming to finance, from New York to New Delhi—businesses are using data to connect everything from cars to cows."*

**Satya Nadella**  
CEO, Microsoft



*"We can react to changes in our global customer base. For example, if we expand our marketing spend in the US, we can simultaneously beef up services to support those new consumers. We can introduce new features and ramp up deployment wherever our customers are in the world."*

**BOB STRUDWICK**  
Chief Technology Officer,  
ASOS



## Get started today

Through a series of mission-driven engagements, Microsoft can help you extend and develop solutions that will transform your business today. Use our knowledge and expertise in a business outcome workshop, deeper solution session, private preview or customer focus group—or develop a proof-of-concept or pilot to drive the right implementations and solutions that meet your specific business needs.

No matter how you start, you can count on Microsoft to provide the solutions and resources to help you reimagine your business and accelerate digital transformation to thrive in today's competitive environment. For more information, visit our [Retail Industry Solutions webpage](#).

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