

A photograph of two men in a retail store. The man on the right, with a beard and wearing an orange sweater over a plaid shirt, is holding a tablet and pointing at the screen. The man on the left, wearing a blue button-down shirt, is looking at the tablet. They are standing in front of shelves stocked with various bottles, likely in a pharmacy or health store. A chandelier is visible in the background.

Transforming retail for the digital age

*How to reinvent the customer
journey and rewrite the business
of retail*

Featuring insights by Tracy Issel, General Manager of the
Worldwide Retail Sector at Microsoft

Introduction

As digital transformation takes over the world, retailers everywhere need to change to survive, developing new capabilities that can drive competitiveness and growth. But what does this really involve and how do you succeed? In this paper, we discuss the opportunities for the retail industry to grow, adapt and evolve to address the changing needs of customers and capture new business potential, and how Microsoft can help accelerate digital transformation.

A rapidly changing landscape

Customer satisfaction and operational excellence have long been the outcomes that retailers seek to achieve. And while these priorities haven't changed, the means to attain them is changing significantly.

In today's digital world, disruptive technological innovations and other market forces—the empowered consumer, fierce global competition for share of wallet, merchandising and inventory changes, rapid shifts in workforce demographics and new modes of work—have catapulted the retail industry into a new era, where the standard of superior customer engagement and business performance has shifted.

With technological advancements like the Internet of Things (IoT), the cloud, and advanced analytics now being part of every discussion we have with our global retail customers, we look at what's really changed, and how organizations can best take advantage.



As General Manager of the Retail Sector, Tracy Issel leads Microsoft's sales, services, marketing, and strategy efforts for the Retail, Consumer Goods and Hospitality industries worldwide. She is responsible for aligning the sales, partner, and services organizations to deliver optimal value for customers and strong business results for partners who serve these industries.

Transforming your business

For the first time in decades, technology has outpaced the evolution of business processes. Increasing volumes of data, advancements in data analytics and intelligence, and the ubiquity of cloud computing have shifted both what customers expect as the result of being armed with information in a way not previously possible, as well as what companies can deliver to meet those expectations and reinvent the value they offer.

As retailers navigate these new consumer expectations, what worked in the past in terms of increasing margins and creating customer loyalty isn't going to mean success in the future. It's not enough to just digitize paper-based processes and stitch together solutions that cover the seams between the digital and physical. To stay relevant and compete in this evolving industry, retailers will need to re-imagine their customer experiences and business processes from the ground up.

We call this digital transformation—implementing technology in new ways as well as cultural changes that help improve customer engagement, empower employees, optimize operations and transform products, and ultimately drive growth and opportunities for the business.

To succeed, this includes rethinking how your organization operates and how it generates value, starting with the shopping journey and how you interact with your customers. It also means transforming your business processes with systems of intelligence that draw better insights out of data to inform more intelligent actions.

It's also important to remember it isn't simply about technology. Systems of intelligence represent the technology, process, and people that define an organization's competitiveness and ability to change the entire industry landscape. This involves giving employees the flexibility and tools they need to easily collaborate with colleagues, partners, and customers around the world.

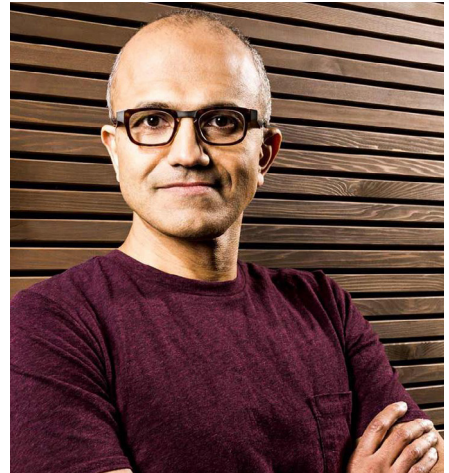
The promise of digital transformation

When information technology and operations technology converge, when products, processes and systems become connected, and when people are armed with data-driven intelligence, revolutionary things can happen. Retailers can take their business in directions never before possible.

Microsoft believes that true digital transformation in retail will re-invent the customer journey, providing consumer-centric experiences that transcend consumers' perceptions of how shopping works. This new, personalized customer journey requires transformation at all levels of a retail organization—from how the customer experiences and interacts with the brand, to how it equips its employees with the information and tools they need to be most productive, to how it uses data and analytics to act on opportunities and evolve business practices.

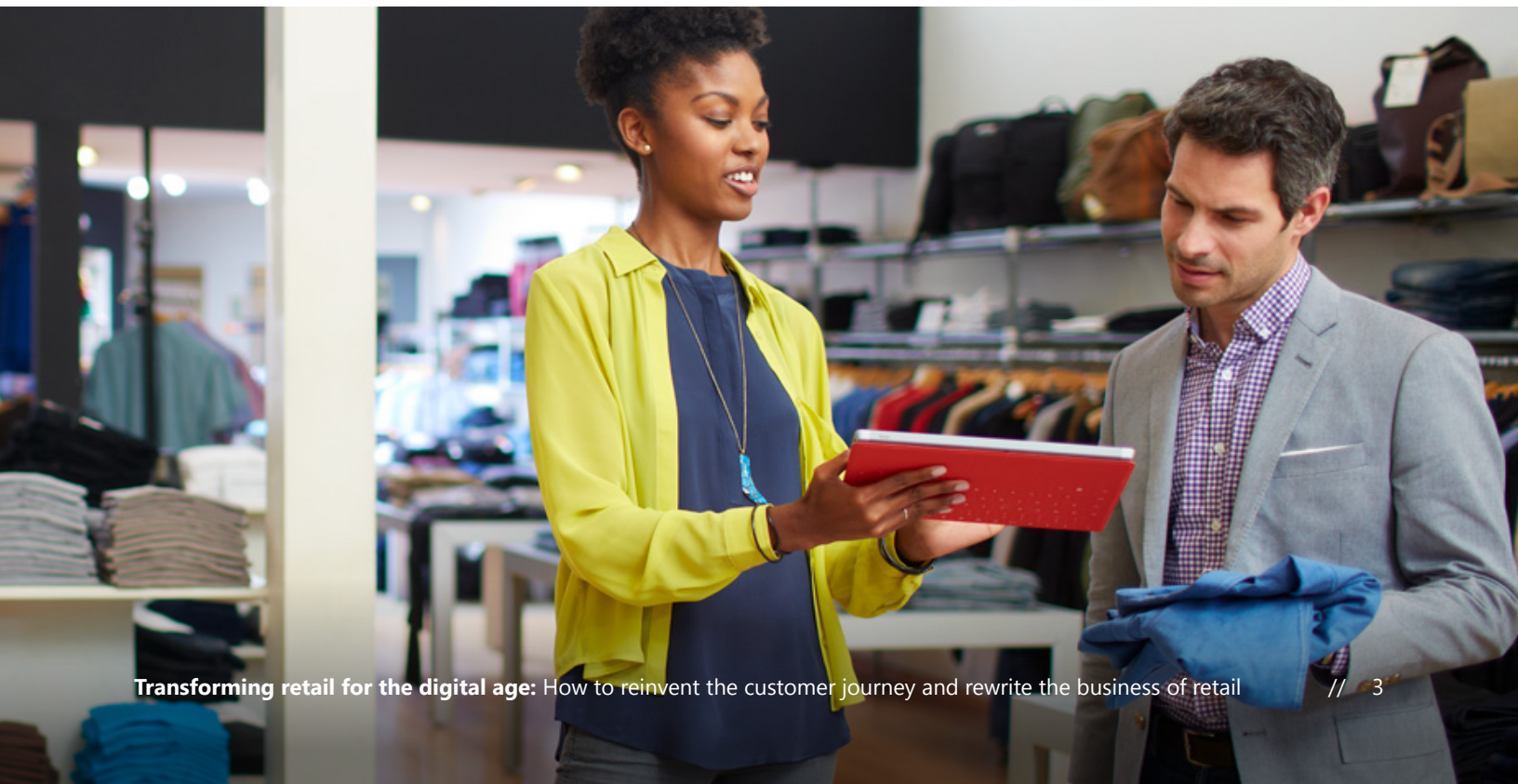
And the opportunities to translate this into higher margins and new revenue are significant. Organizations that take the steps to embrace digital transformation to evolve how they leverage data, analytics and the cloud generate an average of \$100 million more operating income each year than those who lag behind.¹

So what role does Microsoft play in 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



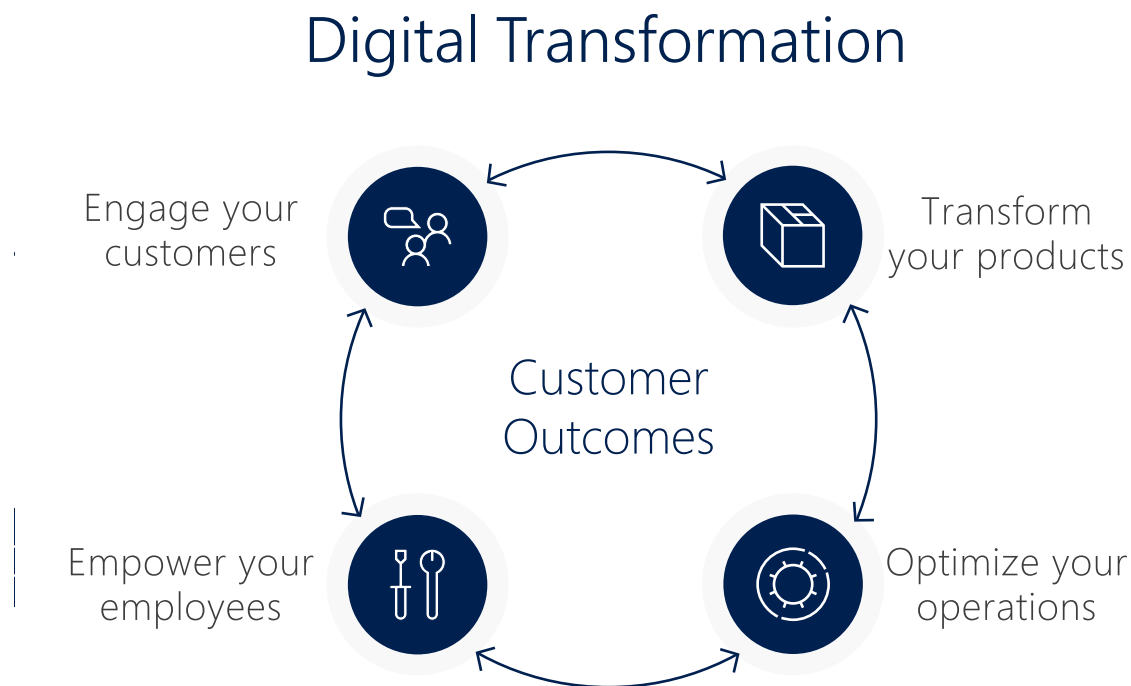
Capitalize on digital transformation opportunities with Microsoft

Microsoft's mission is to empower every person and every organization on the planet to achieve more. We build agile platforms and services so others can innovate, build their own technology, and create new solutions that make things happen. This platform approach has always been the cornerstone of Microsoft's strategy to deliver technology in ways that help our customers succeed with the help of our partners.

Digital transformation represents the application of Microsoft's three ambitions—create more personal computing, reinvent productivity and business processes, and build the intelligent cloud platform—for organizations around the world. Our ambitions guide both our product innovation and our unique approach to helping businesses along their transformation journey—ultimately changing the way they engage with customers, empower employees, optimize operations and transform their products to create better customer outcomes.

In retail, Microsoft's mission and outcomes enable you to deliver personal, seamless and differentiated experiences by empowering people, enabling the best of online and offline, and capturing insights to drive growth. Our offerings are delivered on a common platform that can span both digital and physical environments, which means that retailers can benefit from seamless connectivity between solutions across all aspects of their business. And our global partner ecosystem provides customers with even more choice when it comes to the technology they use to run their businesses—all built on one platform for ease of integration.

In the next section, we'll look at the four ways Microsoft solutions and trusted cloud are helping reinvent the customer journey and accelerate transformation, as well as showcase leaders in retail that are seeing meaningful results.





Engage your customers

In today's digital world, it's all about putting customers first with technology that engages at a personal level. Until recently, personalized experiences and information were difficult to offer customers in physical environments. Targeted advertisements, offers and recommendations have proved successful for retailers online and via mobile devices, but bridging the gap to physical environments was difficult.

Today, sensors and screens, connectivity to devices, and the cloud and predictive data analytics are creating seamless experiences for people in physical stores as well. In today's customer journey, personalized experiences that span both digital and physical environments will be critical to meeting consumers' expectations, and the brands that can provide these experiences will set themselves apart among the competition. Retailers can use Microsoft solutions and technologies to create differentiation in the following ways.

Predict what customers want before they tell you.

With predictive analytics solutions that let you cost-effectively track demand and manage inventory levels (even from mobile devices) and locations, you can be sure that when customers visit your retail store, you have the right stock and your store associates can access accurate inventory information—for an optimum customer experience that lets them try before they buy. Tools like Azure Machine Learning, Microsoft Dynamics, Office, Power BI, SQL Server, and Microsoft Social Engagement make this possible.

Bridge the gap between in-store and digital experiences through a unified commerce strategy.

Today's digital native customers expect multiple ways to order, purchase, and receive merchandise and products—and you can meet these expectations with an end-to-end solution that integrates world-class, omnichannel experience management capabilities with operational commerce technologies, giving you real-time data insights for a deep understanding of customers' preferences, wants, and needs.

Deliver meaningful engagements across all touchpoints.

Take advantage of the shopper's smartphone as well as interactive in-store components (kiosks, digital signage) to enable customers to get extended information on products using capabilities such as NFC, beacons, and image recognition, and push relevant offers based on their interests and location in the store—all while gathering valuable information about consumer in-store shopping behavior.

Case Study:

Telstra

Telstra, Australia's largest telecommunications provider, wanted to create a store environment that would encourage a truly personal connection between people and technology.

With Windows 10 and the Universal Windows App Platform, Telstra and its Microsoft partner Engagis developed a solution around innovative "tap and take" cards, which use near field communications (NFC) to help customers build a personalized digital brochure by simply tapping the card on their selected product or service on digital kiosks in store. Telstra also uses Microsoft Power BI to analyze customer traffic and offer a better mix of products.

The new customer experience has led to an increase in sales, an upturn in visits to the stores, and an improvement in how customers rate the experience.

[Learn More](#)



Engage your customers

Drive your customer experience strategy by identifying various touchpoints of consumer path to purchase.

We help you capitalize on technology solutions like mobility, bots, virtual reality, cognitive intelligence, visual analytics, and unified commerce to provide an exceptional customer experience and personalization that deepens customer engagement and fosters loyalty and retention.

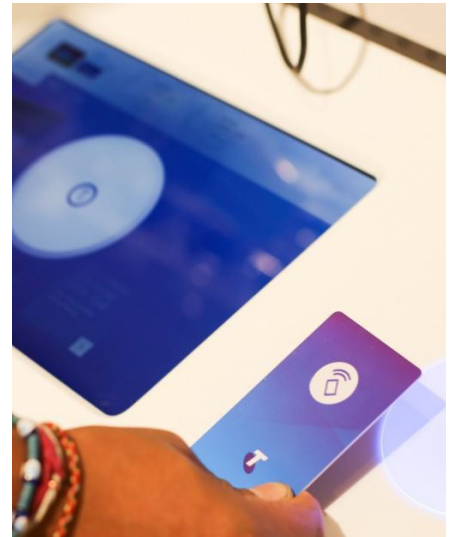
"Becoming more engaged with customers includes predicting what customers want before they know they want it, based on data intelligence, and offering it to customers in a way that's natural."

SATYA NADELLA
CEO, Microsoft



Engage consumers and profit from optimized engagement through social and digital channels.

Customers are using social and digital channels to research products and services, express their opinions, and search for deals. For organizations with the technologies to monitor customer sentiment, quickly respond to complaints, and engage customers in marketing activities and ongoing conversations, this trend presents enormous opportunities.



"Windows 10 is a great platform for helping our people use small and large devices to be faster, more efficient and provide that seamless customer experience we're aiming for."

ANDREW SMITH
Director of Retail Operations,
Telstra





Empower your employees

Store floor employees are critical to improving the customer experience, but without mobile access to customer and product information, the value they can contribute is limited. Today, you can arm your employees with solutions that empower them to do their jobs better—mobile devices and role-optimized dashboards provide anywhere-access to product and customer information, and productivity solutions enable better collaboration and productivity so employees can spend less time on administrative tasks and more time on the floor serving customers.

Here are some of the ways Microsoft's familiar productivity, collaboration, and social solutions can help you engage and empower your people.

"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



Enable employees to make better and faster decisions.

Enhanced productivity and collaboration tools as well as business intelligence solutions provide retail employees with the right information in the right place to make quick and sound decisions. Microsoft delivers cost-effective self-service BI tools that any employee can use to view and manage data in a visual and intuitive manner, empowering new levels of decision-making in all levels of sales and operations.

Case Study:

Macy's

Macy's puts customers first. The retailer recognized a significant opportunity to empower its store leaders who engage both its selling-floor associates and customers. It transformed its stores by giving leaders Microsoft Surface devices to make them mobile and Office 365 to enable unprecedented collaboration and access to information, including the more than 30 applications, reports, and tools they use most often. They now spend more time on the sales floor, where they're better equipped to support sales associates, assist customers, and make adjustments on the fly. Macy's also uses Office 365 to connect its multi-unit managers more fluidly with their stores and increase their leadership impact.

This ability to identify opportunities to improve consistency and share best practices easily throughout the company helps Macy's provide the best possible shopping experience. The retailer's customer satisfaction scores are on the upswing, and Macy's believes its partnership with Microsoft to create and leverage best-in-class technology will allow it to make the customer experience more seamless across all channels.

[Learn More](#)



Empower your employees

Equip your teams with tools to handle daily activities.

Help your employees easily share knowledge and access the expertise and resources they need to create value for your customers. Employee portals that can be accessed on mobile devices provide news, product information, tasks, training, social, access to line-of-business applications, and much more. Solutions use a single user identity and to enable role-optimized experiences that ensure information is always provided in context, allowing employees to prioritize and to remain focused on serving customers and the business.

Share sales-floor and retail execution insights and foster cross-team collaboration in local assortments and inventory.

With Microsoft enterprise social capabilities, your in-store sales associates can closely collaborate with back-office workers like design teams, buyers, marketing teams, and the store manager while gaining a direct line to the customer, with visibility into how customers respond to products, how merchandising is working, and the effectiveness of in-store promotions.

Deliver ambient intelligence and pervasive computing power into the hands of a global workforce, on the devices they use, in the places they work and travel.

Break down silos across organizations and geographies, empowering people and supporting processes that lead to sustainable competitive advantage. Microsoft's advanced analytics bring the power of machine learning to retail challenges, enabling predictive, optimized, and personalized insights that lead to growth and profitability. You can also deliver visual reports on any device—online or offline—at one-fifth the cost of other self-service solutions.



"We've transformed our stores through technology by giving our leaders all the communication, information and data they need at their fingertips, without tethering them to a desk."

SUE MCMAHON

Group Vice President of Retail Communication,
Macy's





Optimize your operations

From a digital transformation standpoint, computing power is digitizing nearly everything around us and is giving retailers ten times the insights on its customers and business processes in one-tenth of the time. Optimizing operations, in today's world, is about enabling retailers to shift from merely reacting to events, to responding in real time or even preemptively.

Through an aggregate understanding of shopping and market insights combined with external data, retailers are now empowered to drive optimized outcomes and evolve their business practices to meet customer expectations. Microsoft's intelligent platform enables you to achieve data-driven business innovation in the following ways.

Evolve your forecasting and react faster.

Improve loyalty and share of wallet through hyper-local assortments and inventory. Using Microsoft digital solutions, you can better manage product allocation across channels with data-driven understanding of what will sell, when, where and to whom. You can also enable forward-thinking, agile pricing and promotion with the analytical capability to predict optimum pricing and to make changes quickly when needed.

Harness the power of your data.

Become an insight-driven organization to differentiate from the competition by learning from the valuable data you already have—every device, sensor, upload, tweet, purchase, shipment, and keystroke. Shift from reactive to proactive to help build, monitor, and improve your brand through advanced visibility into what your customers are saying and the ability to offer innovative customer experiences. Improve operations by acting on your insights and evolving business practices to keep pace with rapid change. With the power of advanced analytics, Azure services, and machine learning, you can improve the speed and quality of predictions, deliver better forecasts, and make faster and more informed decisions to keep pace with consumer expectations.

Streamline your business processes and deliver a unified commerce platform.

Working with Microsoft you can achieve seamless customer experiences across channels and touchpoints by leveraging a common data model, pre-integrated business services, cognitive intelligence, bots, artificial intelligence, and powerful analytics capabilities such as machine learning. By taking advantage of these capabilities on a common cloud platform, you can meet and exceed your customers' expectations whenever and wherever you interact with them in a seamless and optimized fashion.

Case Study:

MARS Drinks

MARS DRINKS is passionate about creating great-tasting moments at work, believing that sharing a drink helps people connect and collaborate.

To improve operational efficiency for its partners in the field, MARS built an Azure IoT Suite-based solution that uses predictive analytics and collects real-time data to reduce the frequency of downtime and out-of-stock products.

By moving to Azure, MARS DRINKS has gained a platform to achieve unprecedented workflow efficiencies including route optimizations for service operators; drive business insights throughout its entire value chain, from vending machines and other equipment to distributors, customers, and workplace consumers; and support global expansion across all its markets.

[Learn More](#)



Optimize your operations

Modernize for a responsive supply chain.

With Microsoft solutions, you can reduce time to market for new products and services using actionable insights provided by market trend analysis and customer feedback. You can also develop a more cost-effective, collaborative supply chain through end-to-end visibility and increased partner and supply chain collaboration. Our technologies also enable you to optimize inventory management using real-time predictive analytics to improve inventory transparency and anticipate customer and channel demand.

"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



Protect store and employee data and devices against modern security threats.

The Microsoft platform offers enterprise-grade security and manageability to protect your assets from breaches and theft. Windows offers easy device management across your devices, with continuous protection, security, and compliance. Based entirely in the cloud, mobile devices are managed remotely. This provides a fast and simple implementation and allows you to outsource the management of devices to a Microsoft partner located virtually anywhere. Protect data at rest and in motion. SQL Server is the most secure database for six years running in the NIST vulnerabilities database.



"The analytics platform based on Azure helps us to deliver a better service to our customers. We achieve this by using the information the platform provides to identify the optimum time to stock and service MARS DRINKS machines. We give this information to our operators as simple, actionable data that can be acted upon straightaway."

JAMIE HEAD
Chief Information Officer,
MARS DRINKS

MARS
drinks



Transform your products

In order to succeed in a competitive environment, retailers and brands must continually deliver new products and services, improve processes, and find new ways to deliver value to customers.

As retailers make the shift to thinking and operating like a digital business, here are some of the ways Microsoft's solutions and technologies can help you foster a culture of innovation by making it easier for people to connect, share information, and work together across organizational and geographical boundaries.

Deliver engaging in-store experiences with interactive and intelligent technology.

By combining in-store technologies that give customers rich information—like augmented reality, digital signs, kiosks, touchscreens, and beacons—with the personal experiences of trying out products and engaging with informed sales associates, you can give your customers what they want, now. Endless aisle and custom order solutions allow retailers to extend their inventory range, and assisted selling solutions allow sales associates to identify inventory and design options from any location across the enterprise to meet customer demand.

Innovate products for competitive advantage.

With pop-up stores and smaller outlets that act as auxiliaries to online shops catching on as alternatives to traditional brick-and-mortar stores, mixed reality with Microsoft HoloLens could shape the future of the small format showroom and made-to-order merchandise.

Create new service-based revenue streams.

For example, as people spend more time in messaging apps, bots will become the predominant way of interacting with your customers, conversationally, and in context. To enable these capabilities, the Microsoft Bot Framework allows developers to create intelligent bots. The capabilities enabled by the combination of data, machine learning, cognitive services, and the Bot Framework provide exciting ways to enhance customer engagement and the shopping experience.

Case Study:

Lowe's

Home improvement retailer Lowe's has a long history of helping people reinvent spaces from the ground up. An incredibly visual undertaking, Lowe's teamed up with Microsoft to help reinvent visualization and design in a whole new way, using mixed reality and cognitive AI.

Now, customers can use Lowe's HoloLens kitchen design tool, which can analyze their Pinterest boards to define their personal style and provide recommendations based on the look and feel they want to create. Then, with HoloLens, customers will be able to see a full-sized holographic kitchen in front of them that they can customize, from changing cabinet styles to manipulating the size of an island before making a final decision.

On the back end, the Microsoft Cortana Intelligence Suite helps deliver analysis of those Pinterest boards, as well as real-time feedback for Lowe's to make more tailored recommendations to their customers as trends and preferences evolve.

[Learn More](#)



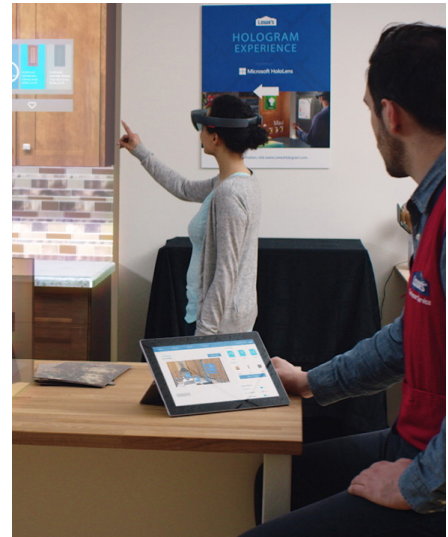
Transform your products

Connect systems of intelligence.

Our technology platform was designed to help you modernize your infrastructure and explore cloud platform cost efficiency. With Microsoft's offerings, you can deploy new services and experiences on a global scale by using a scalable and modular infrastructure. With a global, comprehensive platform, you can reduce service implementation and operating costs. You can also speed deployment and lower the cost of new consumer services by enabling advanced device connectivity and management infrastructure. Our advanced cloud analytics help you reduce the time and expense of analyzing large amounts of customer data, and you can reduce product costs with better and faster analysis of product performance and usage.

"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



"Customers are looking for help visualizing and this is far better than they ever thought they could get. We definitely see a future in this."

KYLE NEL
Executive Director,
Lowe's Innovation Labs



Why Microsoft

Microsoft has a track record of helping retailers realize the business value of digital transformation. We do this by first learning about your organization with a curious mind; understanding your industry, business strategies and needs; and bringing unique insights that help unlock new opportunities at the intersection of business performance improvement, differentiated experiences, and technology integration.

Microsoft's holistic platform and advanced technologies, open and flexible approach, enterprise-grade solutions, and partner ecosystem help you build on your existing technology investments and deliver results quickly and cost-effectively. Working with Microsoft brings a distinct set of business advantages that no other provider offers:

A trusted, flexible, and open cloud platform.

Today, the Microsoft cloud infrastructure supports more than one billion customers in more than 140 countries. With this unique experience and scale, Microsoft cloud services can achieve higher levels of security, privacy and compliance than most customers can on their own. Azure has received more compliance certifications than any other cloud provider, including major global, national, regional and industry standards and regulations. Microsoft's extensive global datacenter footprint covers more regions than any other provider, to better meet data sovereignty requirements. Azure is the only platform that supports a fully hybrid architecture, giving retailers complete flexibility and control of data and applications delivered between public and private clouds. The Microsoft cloud works with any operating system, database, middleware, and application framework, enabling you to use the tools and platforms of your choice.

Comprehensive, enterprise-ready solutions.

Microsoft solutions span the full spectrum of business needs from data access, high performance computing, advanced analytics, visualization and business process automation. Windows 10 offers unprecedented universal application capability across devices, including innovative devices like Surface, Surface Hub and HoloLens. Individual and enterprise productivity is increased by ensuring that the right information is provided to the right people at the right time for actionable insights and decisions. This is accomplished through a holistic suite of collaboration, knowledge management, work process, mobility, business insights, and advanced analytics capabilities.

Industry-specific retail solutions.

To ensure you get the most value out of Microsoft technology and accelerate digital transformation, we also provide best practices, end-to-end solution design, and delivery services for common retail industry scenarios including Advanced Planning; Employee Productivity & Collaboration; Inventory Optimization; Modern Point of Sale & Service; New Product Introduction; Personalization; Predictive Maintenance; Retail Execution; Retail Management System; and Multichannel Content Management.

Advanced technologies designed for ease of use.

By building technologies such as Power BI, Cortana Analytics and Azure IoT Suite for users with wide-ranging skills, Microsoft helps enterprises apply advanced technologies to business challenges once deemed too costly or complex to solve. For example, Microsoft's IoT capabilities enable retailers to ingest and combine data from any source—from proprietary, structured data like a loyalty program, to unstructured data like customer reviews or social media posts, to in-store monitoring of customer behavior, to external factors like weather; apply machine learning models and data visualization; and integrate those results into collaboration and work process solutions. This drives informed actions, as individuals take advantage of tailored, actionable insights to make better business decisions and deliver better business outcomes.

Commitment to retail standards.

At Microsoft, we believe there is a critical set of work our industry must undertake in order to make sure we deliver the right set of platforms and services to realize today's digital transformation opportunities. That's why Microsoft has been a longtime supporter of standardization organizations like the Association of Retail Technology Standards (ARTS) which will play a critical role in driving the technology interoperability needed for today's systems of intelligence.

Largest ecosystem of industry-leading partners.

Microsoft has a broad ecosystem of prominent systems integrators and independent software vendors. This ecosystem takes advantage of existing technology investments and offers the flexibility to select the best solutions for each business. Our partners design and deploy innovative, industry-focused solutions built on a Microsoft foundation, so you get best-in-class technology coupled with deep industry expertise.

No other technology provider offers a comparable end-to-end portfolio as well as an open and flexible approach. Together, it's this unique perspective that helps Microsoft drive digital transformation across all aspects of your retail organization and change the way you engage with customers, empower employees, optimize your operations, and transform products and services.

Get started today

Through a series of mission-driven engagements, Microsoft Services 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 reinvent the customer journey and drive digital transformation in all areas of your business. For more information, visit our [Retail Industry Solutions webpage](#).



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¹Keystone Strategy interviews Oct 2015 – Mar 2016. Based on interviews with 340+ leading enterprises comparing data platform maturity with business performance, controlling for company size and industry. Incremental operating income of \$100M is based on median company revenue of \$3.4B.