

THE PHYSICAL, VIRTUAL FUTURE OF RETAIL

A Better In-Store Experience for Connected Consumers

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The rise of digital shopping has disrupted the retail industry, causing a fundamental shift in the way retailers conduct business and empower their employees at every level. It requires delivering a modern workplace designed to meet evolving employee expectations and the challenges of an increasingly complex digital landscape. In retail, a truly modern workplace equips employees with the tools and solutions to deliver a better experience to customers through collaboration, optimized operations, and more efficient business models. A successful digital transformation requires all workers to participate, from the board to the executive team all the way down to salespeople on the floor of a brick-and-mortar retail location.

Firstline Workers are the more than two billion people in roles that make them the first points of contact between a company and the world it serves. They are often the first to engage customers, the first to represent a company's brand, and the first to see products and services in action. In the retail industry, they're the employees who recommend products, answer questions, and ring up customers in the checkout line. Their intimate knowledge of consumer preferences, product trends, and daily operations offers real-time insight and could generate new ideas on store layout and product merchandising. These workers have huge but untapped potential to promote growth, spark innovation, and accelerate a retailer's success in the digital age.

Every retailer strives to deliver the best possible experience to their customers. To do this successfully in our faster, more competitive world, it should be one of the top priorities of every leader in the industry to empower their Firstline Workers to unleash this potential. When these employees are equipped with intuitive technology that taps into their abilities, their perspectives, insights, expertise, and ingenuity can help shape the business, ignite new ideas, and facilitate a superior customer experience.

At Microsoft, our mission is to empower every person and every organization on the planet to achieve more. Recognizing the unique potential of Firstline Workers in the retail industry, we aim to build tools to close long-standing technology gaps that separate employees from the data, resources, and expertise they need to do their best work—whether in the C-suite or on the Firstline. By streamlining the routine parts of their jobs and connecting them to each other and back to the organization more often, we can enable anyone in the organization to turn their ideas into action and respond to customers more quickly and effectively.

We've partnered with Harvard Business Review Analytic Services to examine the unique and critical role Firstline Workers play in retail's digital transformation. This is part of a broader series exploring the opportunity organizations across industries have to build a more intuitive, comprehensive, and empowering experience for Firstline Workers and provide new solutions that reshape how employees think, innovate, and take action for their customers and business.



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INTRODUCTION

Denise Taylor's son loves shoes. Despite the fact that Taylor is the chief information officer (CIO) of a global mall owner/operator, her son makes most of his purchases online. That's not to say he doesn't shop at the mall; he does. He wants to see, feel, and try on the latest styles. He just doesn't want to carry them with him while he goes to see a movie or work out at the gym. So he starts his shopping online, tries out the product in the store, then completes his purchase online—often while he's still in the store—and continues with his day.

Taylor's son is one of millions of consumers who are turning the retail industry on its head, and both retailers and mall owners are feeling the heat. More stores closed their doors in 2017 than in any prior year, according to Fung Global Retail & Technology.¹ The need to better control costs, operate more efficiently, and engage customers in new ways is driving retailers to transform the in-store experience. To survive, they know they need to optimize both in-store and online—figuring out what each channel is best for and engaging consumers across both. In the store, that means equipping store managers and associates with better technology and information.

“People choose online for convenience, speed, and price,” said the CIO of one of the world's largest retailers, headquartered in Asia. “They want the in-store experience to be pleasurable and entertaining.”

That said, “retail” is a diverse category, including online giants like Amazon, specialty and luxury brands like Coach and Louis Vuitton, big-box stores like Best Buy and Lowes, and even grocers and coffee shops like Starbucks and Dunkin' Donuts. While all are undergoing some form of digital transformation, different business models drive different approaches.

“If you're competing as a brand, you have to know what you stand for and amplify that,” said the CIO of a high-end handbag and shoe company. This affects store design, lighting, sound, and staffing—and requires creating a consumer experience that is personalized and engaging. In fact, brands that create personalized experiences using digital technologies and data are increasing their revenue by 6% to 10%—at least twice as fast as those that don't, according to research conducted by the Boston Consulting Group.²

HIGHLIGHTS

78%

OF RESPONDENTS STRONGLY AGREED WITH THE STATEMENT “TO BE SUCCESSFUL IN THE FUTURE, OUR ORGANIZATION MUST CONNECT AND EMPOWER ITS FIRSTLINE WORKERS WITH TECHNOLOGY AND INFORMATION.”

Big-box retailers

FOCUS HEAVILY ON EFFICIENCY AND INVENTORY MANAGEMENT IN THEIR APPROACH TO DIGITALLY ENABLING THEIR FIRSTLINE WORKERS



WHILE CONSUMERS MAY PREFER TO ORDER EVERYDAY ITEMS ONLINE, SHIPPING LOW-COST ITEMS IS A MONEY LOSER.

“Retailers are figuring out what retail is for them,” said Christopher B. Curran, chief technology officer at PWC New Ventures. “For some, that means an expanded functional footprint, a more refined approach to selling, and offering service and support to create a reason to draw someone into the physical space.”

Tech retailers have established a concierge role to do a kind of intake with customers and send them to the most appropriate associate, given their need. That requires mobile technology and a connected back end. At the other end of the spectrum, consumers don’t go to Walmart for an “experience”; they go to get the things they need at the best possible price. Knowing that the products they want will be there and that shopping will be fast and easy is what counts.

Consequently, big-box retailers focus heavily on efficiency and inventory management in their approach to digitally enabling their firstline workers. **FIGURE 1** While consumers may

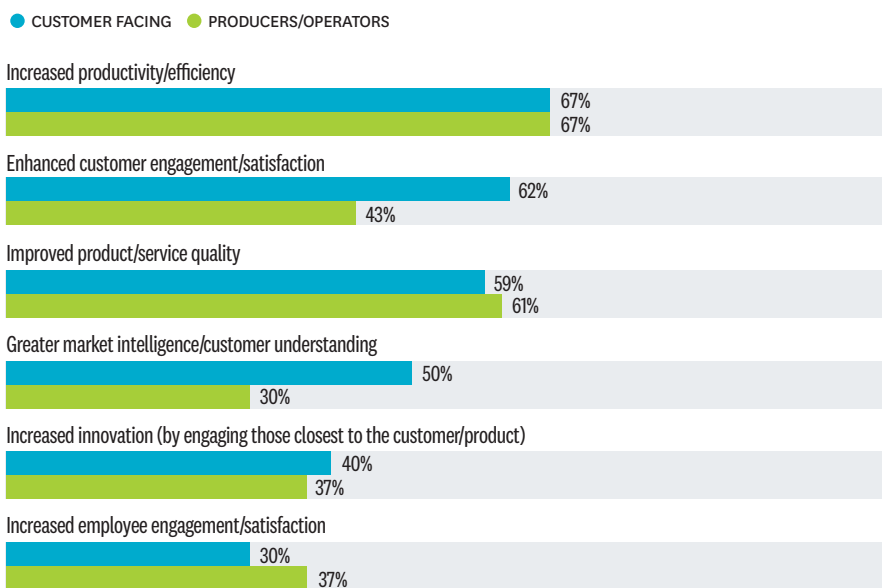
prefer to order everyday items online, shipping low-cost items is a money loser. Walmart has begun featuring higher prices for some items ordered online, with a lower price listed next to it for pickup in the store. While this improves in-store sales and raises profit margins online, it also creates new challenges for store managers. “Click and collect’ requires store associates to pick, pack, and check out the right product at the right time, packaged appropriately for the shopper,” said Daniel O’Connor, founder of RetailNet and a fellow at Harvard’s Advanced Leadership Initiative. “Today’s store managers must lead these new digital order-fulfillment teams in addition to their traditional retail team.” This has an impact on “store economics, customer service models, and performance metrics as well as the tools and information provided to their associates.” Greater connection through digital tools and access to customer, product, and inventory information enables these in-store workers to keep pace with the online world and deliver a superior customer experience.

Digital technologies and data present both opportunity and threat for retailers. In a recent survey about firstline workers conducted by Harvard Business Review Analytic Services, 78% of respondents strongly agreed with the statement “To be successful in the future, our organization must connect and empower its firstline workers with technology and information.” Respondents said the biggest barrier was the cost of rolling out new digital technologies to a broader employee base. This is not surprising in retail, given the low-margin nature of the industry. Smart retailers are figuring out the ROI of doing so at both the top and the bottom lines. They are increasing sales through greater customer insight, more accessible inventory, and more personalized, relevant customer experiences. At the same time, they are improving the bottom line by empowering firstline workers with technology and information to drive greater efficiency throughout their operations.

FIGURE 1

PRIMARY DRIVERS

What are the primary drivers for creating a more digitally connected and empowered firstline workforce?



SOURCE: HARVARD BUSINESS REVIEW ANALYTIC SERVICES SURVEY, JULY 2017

Customer Insight, Customer Service

As different as the various flavors of retail may be, they all share a common imperative: to better understand customers in order to cement their loyalty and get them to buy. Retailers have learned the value of customer insight from the ecommerce experience, where it's relatively easy to gather data and use it to get consumers to the "moment of truth," according to Ari Lightman, director of digital media and marketing at Carnegie Mellon University.

Now they're trying "to understand the value of the physical retail presence and what consumers like to do when they come into the store," he said. That requires bringing more data analytics into the retail space, with the holy grail being to combine insight across both the physical and online worlds. "Retailers want to know who you are, what you're doing there, what you like and dislike" when you enter the store, Lightman said. "That lets them provide a more customized, crafted experience" for each and every customer. Store associates equipped with the right technology and connections can collect valuable insight and feed that back to the organization.

While many retailers are experimenting with beacons, apps, and sensors to identify customers via their own mobile devices, others still do it the old-fashioned way. At lululemon, a vertically integrated retailer that makes and sells technical athletic apparel, customers are identified by their phone number. That gives store associates access to customer's buying history online and off-line, along with their sizes and preferences.

Just having that insight isn't enough if a retailer can't use it to provide what a customer wants. That means extending inventory beyond an individual store and being able to get it to the customer quickly. Lululemon refers to this as the "back back room, or BBR" according to former interim CIO Dave Berry. BBR is an app that store associates access on their mobile device. "We'll do the order

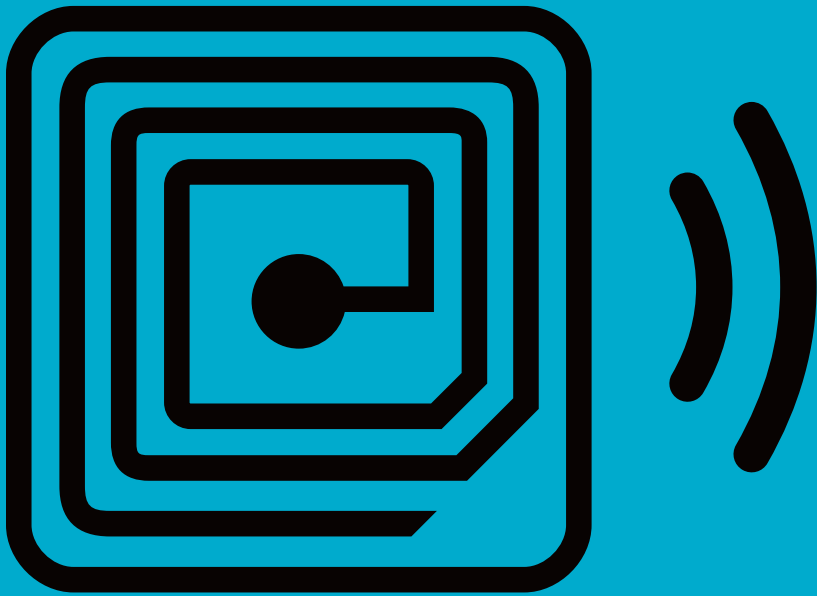
Omnichannel has taken on new meaning as retailers learn that there is no one typical customer journey.

right there for you," said Berry. "We'll ship it to the store, or we'll ship it to your home." Because every piece of clothing has an RFID tag that is tied into the universal inventory system, it's easy for associates to scan an item to see whether another store nearby has an item in a different size or color.

Omnichannel has taken on new meaning as retailers learn that there is no one typical customer journey. Consumers move back and forth across the physical and the virtual worlds—like Taylor's son, often starting with research online, moving into a physical space to experience the product, then making their purchase either in-store or online, sometimes picking up the product, sometimes having it delivered. Research suggests that retailers who enable this fluidity benefit, with omnichannel customers tending to be more loyal and to spend more per visit.³

A New Role for Mall Operators

When you think about dynamic, thriving businesses in the digital age, shopping malls are generally not the first group that springs to mind. Indeed, according to a 2017 research report from Credit Suisse, it seems likely that a quarter of all U.S. malls will close by 2022.⁴ Global mall operator Westfield intends to beat those odds by rethinking what the mall is, who its customers are, and how it serves them. It is creating new relationships with retailers and investing in a lot of technology to transform its very physical business for the digital age. Think of the mall as both a mega example of what many individual retailers are going through on a smaller scale (how to create compelling experiences that draw



**RFID TECHNOLOGY WAS TRIED AND REJECTED
BY RETAILERS OVER A DECADE AGO, BUT
RETAILERS ARE NOW TAKING A SECOND LOOK.**

customers to a physical location) and a critical enabler for those retailers to achieve that themselves.

In the past, Westfield had no direct relationship with the 400 million unique shoppers that visit its centers every year. Its relationship with the retailers who rented space from them was basically that of landlord to tenant. Today the mall is becoming a “connected smart center,” said CIO Taylor, enabling Westfield to offer not just floor space and infrastructure but also a “store as a service” that includes high-speed Wi-Fi, smart screens, and more. The fully connected network backbone and infrastructure at its Century City location in Los Angeles controls mall music, building management, “smart” parking, and digital media, Taylor said. To make the most of these investments, Westfield empowers its firstline workers with technology and tools that make them an integral part of the connected mall. Employees receive automated notifications for everything from security (a delivery driver left a garage door open) to guest services (only 20 parking spaces left in a particular parking garage) to facilities management (there’s a leak in the third-floor men’s room). They are easily able to answer shoppers’ questions, no matter what they might be. This increases their efficiency and enhances relationships with consumers and retailers alike.

All of Westfield’s relationships are changing. It is currently piloting a “shared consumer” program with retailers. Smart screens throughout the mall bring in revenue from brands that don’t even rent space there. And it’s connecting directly with shoppers through an app that lets them reserve parking, search for products, and purchase tickets for events. The ultimate goal is to create a seamless experience for consumers who often know what they want, or at least where they want to go, before they get to the mall, Taylor said.

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Efficiency and Inventory Control

Retailers are also using new—and some not-so-new—digital technologies to control costs and better manage inventory. Lululemon, Coach, and Inditex are all known for their use of RFID technology for inventory management. This technology was tried and rejected by retailers over a decade ago. But now that costs have gone down and the end-user technology to read the tags has gotten better, retailers are taking a second look.

At lululemon, RFID tags are put on each item at the factory. Previously, when a box full of product arrived at a store, an associate or store manager would have to open the box, hang the clothes item by item, and compare that to what was written on the manifest. “Today, they scan an RFID gun over the box before they even open it,” said Berry. “They know exactly what’s in the box,” and because the RFID system is tied into the inventory management system, “the inventory is updated instantly.”

Regular inventory counts are done the same way, saving hours of manual work. “Depending on the size of the store, they can do a complete inventory in one to two hours,” Berry said. Not only has this increased efficiency, but also “it’s reduced inventory shrinkage to less than 2%—so around 98% accuracy. You talk to any other store and they’re lucky if they’re getting 70 to 75%.”

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Big-box stores are focusing on improved, short-cycle, store-level information to improve efficiency and inventory management, according to RetailNet's O'Connor. Equipping associates with mobile devices to keep track of item-level, real-time inventory by store lets associates be "mobile in the store to pick, scan, and bag" online orders while informing the store-level inventory forecasting models. When these inventory systems are integrated with point of sale (POS) systems and retailers take advantage of forecasting tools enabled by artificial intelligence and machine learning, they both speed up the supply chain and have a better chance of avoiding out-of-stock items. And if something is out of stock in the store, "you have to be able to offer a digital substitute," O'Connor said—again, this requires a degree of systems integration that retailers didn't have to worry about in the past. Firstline employees are a critical link in this chain.

Walmart has started rolling out robots to aid associates in this quest for greater efficiency and better inventory control. The robots, which use cameras to scan shelves, "are 50% more productive than their human counterparts and can scan shelves significantly more accurately and three times faster," Jeremy King, chief technology officer for Walmart U.S. and e-commerce, told Reuters.⁵ The robots communicate what they find to employees, who then restock the shelves.

This kind of automation, done right, contributes to better service to customers by freeing store associates to spend more time with them. Some stores are reclaiming floor space by eliminating POS stations altogether, equipping associates with secure handheld devices to complete transactions.

Getting to the Future

Digital technologies and insight are powerful tools for store managers and associates alike. But retail CIOs caution that when it comes to the in-store experience, the technology has to be easy, intuitive, and enabling. "We need to empower our associates in-store," said the CIO of a chain of fitness stores. "The technology should be in the background, enabling associates to provide a better, more relevant experience to each consumer." In his case, that includes knowing not just which classes a customer has taken and what their performance has been, but also whether they prefer chilled or room-temperature water.

In-store tech has to be simple for another reason: With a high percentage of part-time and short-term employees, it can't require a lot of training. And to ensure the technology is relevant and useful, CIOs and their business partners need to spend time in the stores, watching associates work and even doing the jobs they will be enabling. At the fitness company, all senior leaders work in one of the stores on a regular basis, performing all aspects of the job—including wiping down equipment and disinfecting shoes.

The future of retail is uncertain, but one thing is clear. Technologies that enable consumers to easily move between the physical and virtual worlds—and increasingly to blend them—will be key. These are already here and being used by forward-thinking retailers today. For example, augmented reality lets a consumer see what a particular sofa will look like in their living room or what a pair of shoes will look like with a particular dress. Smart mirrors bring that capability into the fitting room

and suggest complementary products. Beacons and smart screens enable proximity marketing—detecting a shopper’s presence, knowing what they have looked at online, and suggesting it or another option that might be appealing.

As with all industries, data and analytics are at the heart of retail success. “Our crown jewels have always been our physical assets,” said Westfield’s Taylor. “It’s very different having it be consumer data. That requires a shift in skill sets and responsibilities” for everyone from risk managers to developers. Taylor sees it as “a transformational shift for everyone in the industry.” This has required getting more people involved. “Previously, it was just our developers and leasing folks who met with the retailers. Today, the CMO [chief marketing officer] and CIO are also at the table. The conversation is very different. We’re really trying to highlight that we understand our ability to share data, to be a trusted partner, to be respectful of boundaries” when it comes to consumer data. She said it is a work in progress, but she’s been surprised at how quickly the conversations have shifted “from landlord/tenant to how can we create this experience and make sure we’re capturing and delivering what consumers want.”

Similar conversations are taking place across retailers and brands as they equip their firstline employees with new tools and technologies. Firstline workers need access to:

- Customers’ history and preferences in order to deliver a superior customer experience
- Inventory levels and in-store stock to improve supply chain and back-house operations
- Corporate systems and resources to provide a digital alternative to an item that isn’t available in the store

And by being connected to the organization, firstline workers can share insights about customer preferences and operations that will further strengthen the business. In this way, retailers are creating a modern workplace in which firstline workers are more valuable than ever. As a consequence, retailers will be better equipped to compete in the future.



**AS WITH ALL INDUSTRIES,
DATA AND ANALYTICS
ARE AT THE HEART OF
RETAIL SUCCESS.**

ENDNOTES

- 1 “Weekly Store Openings and Closures Tracker #29: Target to Open 32 Stores in 2017 and 35 in 2018; Nordstrom Suspends Privatization Talks.” Fung Global Retail & Technology, www.fungglobalretailtech.com/news/weekly-store-openings-closures-tracker-29.
- 2 Mark Abraham, et al. “Profiting from Personalization.” 8 May 2017, <https://www.bcg.com/publications/2017/retail-marketing-sales-profiting-personalization.aspx>.
- 3 Emma Sopadjeva, Utpal M. Dholaki, and Beth Benjamin. “A Study of 46,000 Shoppers Shows That Omnichannel Retailing Works.” *Harvard Business Review*, 3 Jan. 2017, <http://hbr.org/2017/01/a-study-of-46000-shoppers-shows-that-omnichannel-retailing-works>.
- 4 Bart Higgins. “What to Do With Dead Malls.” *The Wall Street Journal*, Dow Jones & Company, 25 Oct. 2017, www.wsj.com/articles/what-to-do-with-dead-malls-1508936402.
- 5 Nandita Bose. “Wal-Mart’s New Robots Scan Shelves to Restock Items Faster.” Reuters, 26 Oct. 2017, www.reuters.com/article/us-usa-walmart-robots/wal-marts-new-robots-scan-shelves-to-restock-items-faster-idUSKBN1CV1N4.

METHODOLOGY AND PARTICIPANT PROFILE

A total of 383 respondents drawn from the *Harvard Business Review* audience of readers (magazine/newsletter readers, customers, HBR.org users) completed the survey.

SIZE OF ORGANIZATION

ALL RESPONDENTS' ORGANIZATIONS HAD 250 EMPLOYEES OR MORE.

30%	39%	31%
250-999 EMPLOYEES	1,000-9,999 EMPLOYEES	10,000 OR MORE EMPLOYEES

SENIORITY

18%	25%	40%
C-LEVEL OR EXECUTIVE MANAGERS	VICE PRESIDENT OR DIRECTOR	MANAGERS, SUPERVISORS, SENIOR MANAGERS, OR DEPARTMENT HEADS

KEY INDUSTRY SECTORS

15%	12%	9%	8%	8%	6%	5%	5%	5%
FINANCIAL SERVICES	MANUFACTURING	TECHNOLOGY	EDUCATION	GOVERNMENT/ NOT FOR PROFIT	TELECOMM	ENERGY/ UTILITIES	HEALTH CARE	OTHER

JOB FUNCTION

18%	10%	7%	7%	6%	6%	5%
GENERAL/ EXECUTIVE MANAGEMENT	SALES/BUSINESS DEVELOPMENT/ CUSTOMER SERVICE	MARKETING/ COMMUNICATIONS	STRATEGIC PLANNING	FINANCE/RISK	HR/TRAINING	OTHER



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