



15th Annual Global Shopper Study

The World Has Changed— Have Retailers?

A Decisive Moment in Retail Transformation

From evolving consumer behaviors to technology, industry and global trends, a state of perpetual disruption influences shoppers' new expectations and drives innovation in the retail sector.





About the Study

Zebra Technologies commissioned a global research study among shoppers, decision-makers and retail associates to analyze the shopper experience, device and technology usage, delivery and fulfillment both in-store and online. The study included 4,200 respondents across 13 countries in North America, Latin America, Europe and Asia-Pacific. All data was collected and tabulated by Azure Knowledge Corporation.

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The Next Norm: Unified Commerce

As customers return to levels of pre-pandemic shopping in stores, retailers need to accommodate rising expectations for convenience, fulfillment, frictionless experiences, and price sensitivity.



Shoppers Embrace Blended Channel Experiences

Shoppers continue choosing online or in-store for the same reasons—availability, selection and price. They prefer retailers that offer easy returns (80%), allow them to get in and out of a store quickly (76%), and offer order delivery to home (75%). They are also taking advantage of alternative pickup and delivery options: 34% of shoppers have opted for buy online, pick up in store (BOPIS), or buy in store and ship to home, with about 90% saying they will likely continue to use these services.



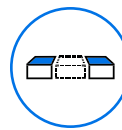
Associates Are Everything

Associates are the bridge between retailers and shoppers and play a pivotal role in ensuring shopper expectations are met. However, retailers are struggling to hire and retain workers in a competitive hiring market. Most associates (78%) and decision-makers (84%) believe technology is an asset in attracting, training and retaining extraordinary workers.



Investing in Innovation

Retailers are doubling down on tech investments to keep pace with consumers: 82% of decision-makers surveyed plan to increase tech investments over the next three years. They are also preparing to evolve brick-and-mortar store designs: 45% are planning to convert more cash register space to self-checkout, and 43% are converting space for contactless checkout.



Managing Market Forces

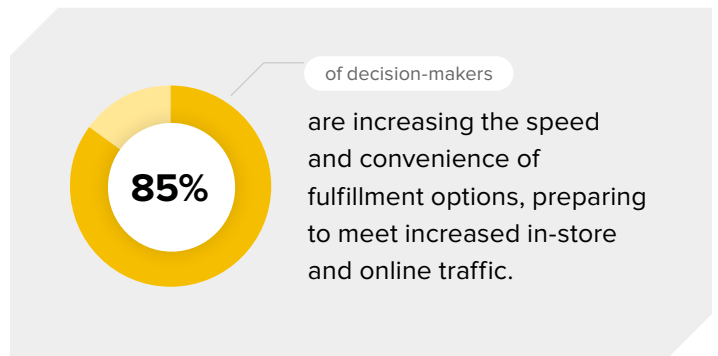
From supply-chain issues in the news and empty shelves in stores, consumers are keenly aware of the challenges many retailers face. Nevertheless, they are still frustrated by inventory issues, and 76% of global decision-makers are feeling the pressure to minimize out-of-stocks. And 82% agree they've increased their focus on supply-chain operations.



Shopper Behaviors Shift Into New Habits and Preferences

Old habits die hard, but post-pandemic, new habits have staying power. After several years of accelerated growth of e-commerce and newer technologies like contactless payment, shoppers now expect a seamless experience however they shop.

Retailers need to get ahead, or at least catch up. While they wrangle with labor shortages, supply chain challenges and the economy, retailers must also work to bridge ongoing disconnects with shoppers and associates.



Market Watch: Retail Transformation by the Numbers

Shoppers are back in stores with heightened expectations as retailers wrangle tight labor markets, supply chain shortages and inflation.



Shoppers' Perspectives

Over three-quarters of shoppers (76%) say they're visiting physical stores as they did before the pandemic, but 68% say they're concerned about reducing spending to make ends meet.

Shoppers are frustrated by supply chain issues

66%

are concerned about items out-of-stock (+9 pp YoY)

76%

left a store without the item they wanted (49% because it was out of stock)

Inflation concerns have an impact on spending

79%

are concerned about price increases on essentials

72%

say inflation has caused them to delay purchases



Associates' Observations

67% of associates are increasingly concerned that shoppers are more connected to information than they are (+8 pp YoY).

Empowered by technology

78%

feel more valued by employers when provided with tech tools that help them work

Measuring their biggest frustrations¹

43%

cite out-of-stock complaints

42%

report little time to help customers (+10 pp YoY)



Decision-Makers' Actions

Acknowledging inventory management issues:

80%

report maintaining real-time visibility of out-of-stocks is a significant challenge

79%

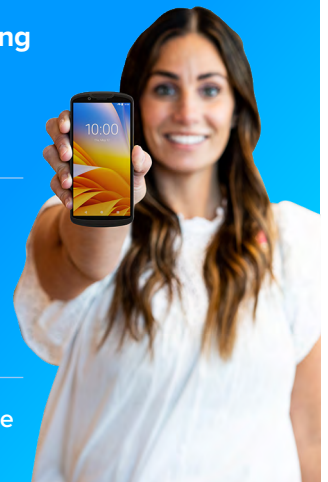
say they need better inventory management tools for availability

Top priorities when investing in retail technology

1 Increase automation

2 Improve inventory management (real-time visibility, out-of-stocks, cycle counts, shrink and fraud visibility)

3 Become more sustainable



1. Associates in customer service/in-store sales roles.

Through the Years: Key Events That Shaped the Retail World

The world is dramatically different today than when the shopper study began in 2007.



Technology Changes the Game

A new tech boom kicked off with the release of the first-generation iPhone.



The Internet Explodes

Internet users in China increased significantly, setting up to surpass the United States, Japan and South Korea within a year.²



E-commerce Sales Skyrocket

E-commerce sales in 2007 totaled **\$175 billion**,³ compared to an estimated **\$5 trillion** in 2022 and a projected **\$6 trillion** in 2024.⁴



Social Media Takes Off

Facebook and Twitter both went global, bringing millions of new users within the year.

2007

Only **37%** of shoppers satisfied with associates

2008

50% of shoppers unable to find an item; **34%** due to out-of-stock

2009

Over **50%** of consumers use mobile phones for in-store shopping

2010

55% of retailers agree shoppers are better connected to information than associates

2011

67% of shoppers say in-store experience is better with retailers using the latest technology

2012

61% of retailers report consumers are better informed than associates

2017

One-half of Millennial shoppers think they are better connected than associates

2016

Seven in 10 retailers to invest in Internet of Things (IoT)

2015

Over **50%** of in-store shoppers interested in location-based services

2014

Shopper satisfaction up **23%** since 2008

2013

Nearly **50%** of consumers believe they are more informed than store associates

2018

Two-thirds of retail store associates believe they can provide better customer service with technology

2019

75% of Millennials abandon in-store purchases, led by out-of-stocks

2020

COVID-19 accelerates technology spending for **six in 10** surveyed retailers

2021

Only **four in 10** shoppers completely trust retailers to fulfill orders as promised

2022

Self-serve drives improved satisfaction with associates for **seven in 10** shoppers

2. *The New York Times*, "China Surpasses U.S. in Number of Internet Users," July 26, 2008. <https://www.nytimes.com/2008/07/26/business/worldbusiness/26internet.html>
 3. *Digital Commerce 360*, "2007 Online retail sales hit \$175 billion, Forrester Research says," Jan 28, 2008. <https://www.digitalcommerce360.com/2008/01/28/2007-online-retail-sales-hit-175-billion-forrester-research-sa>
 4. *Shopify*, "Future of Ecommerce," 2022. <https://www.shopify.com/research/future-of-commerce/future-of-ecommerce>



Connecting With Shoppers

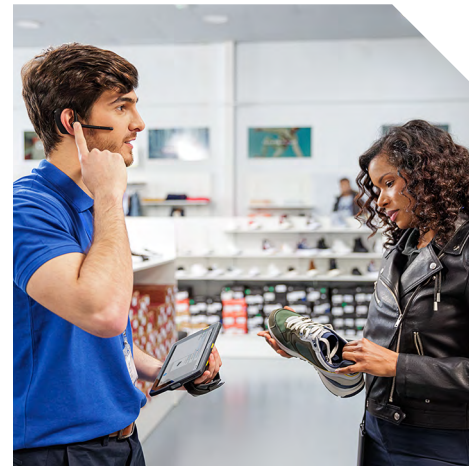
The modern store is playing a new role, and retailers are under pressure to keep up.

Most consumers increasingly blend e-commerce and in-store, with **seven in 10** saying they prefer shopping with online retailers who also have brick-and-mortar locations. More fulfillment options—from buy-online-pick-up-in-store (BOPIS) and click-and-collect to curbside pick-up or ship-to-home—mean more work for retailers with increased picking, staging, delivery and return solutions required to meet shopper habits and expectations.

While the reality of simultaneously operating separate fulfillment channels is complex for retailers, most consumers have a simple view: They see online and in-store as two sides of one retail experience and bring similar expectations to both.

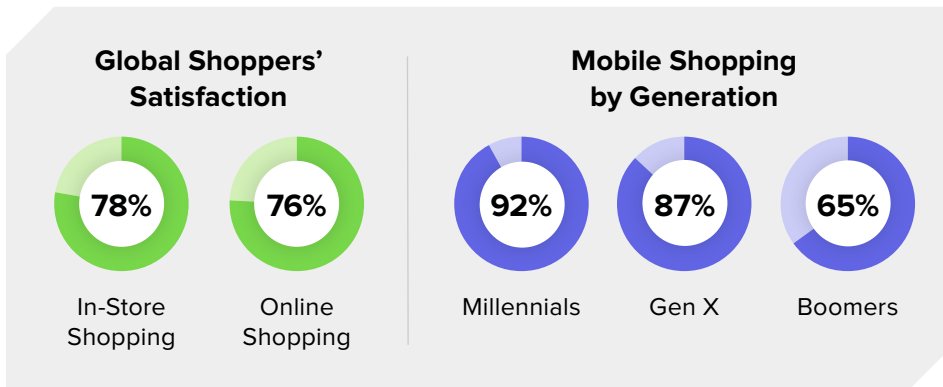
Over **three-quarters** of shoppers are satisfied with the shopping experience—both in-store and online. Satisfaction with online shopping trends down with age, with digital-native Millennials and Gen Xers both slightly more satisfied than the global average. Comfort with everyday consumer technology likely influences their experiences.

As further confirmation of a blended approach to shopping, mobile ordering continues to increase, with **82%** of all consumers surveyed having used it.



Top Five Changes Driving the Future of Store Operation, According to Decision-Makers

- 1 **Facilitating** mobile ordering
- 2 **Shifting** to online sales
- 3 **Buying/reserving** online and picking up in store
- 4 **Equipping** associates with mobile technology at scale
- 5 **Returning** online purchases in store



Understanding Unified Commerce

Decision-makers recognize that seamlessly blending online and in-store shopping experiences is critical to winning in retail now and sustaining success ahead. The most forward-thinking merchants are moving toward unified commerce. Unlike omnichannel, which appears connected to the consumer but is siloed on the backend infrastructure, unified commerce connects in-store and online systems with a single platform to seamlessly deliver the singular channel experience shoppers expect now.



Shoppers Will Pay for Faster, Flexible Fulfillment. Can Retailers Deliver?

89% are willing to pay for direct-to-home delivery (+13 pp since 2019)

73% are likely to make a minimum purchase amount in exchange for free delivery

69% are likely to pick up a purchase in exchange for a discount or cash



Manned Checkouts Are Checking Out

Retailers invest in more self-service technology as consumers increasingly use in-store solutions.



Anywhere Convenience

“Frictionless” checkout is the name of the game today as shopper interaction with retail technology continues to increase. Nearly **half** of shoppers used self-checkouts, about **one-third** picked up orders inside, and almost **four in 10** used cashless payment methods. Traditional registers staffed by associates saw some of the biggest declines (-20pp since 2019), as only **55%** of shoppers preferred this method of purchase. Many decision-makers see manned registers becoming less necessary.

Shoppers Take a Do-It-Yourself Approach

Once shoppers experience self-service technology, their affinity and likelihood to keep using these solutions grow. Retailers are reaping the benefits by shifting associates to higher-value tasks, namely assisting customers.

Shoppers Are Using Self-Service Solutions

91%

A personal shopping device provided by the store

91%

Mobile cashless payment

89%

Self-checkouts

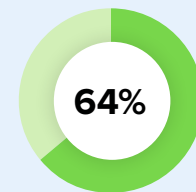
Self-checkout improves the customer experience and generates a solid return on investment for decision-makers. Retailers are expected to continue riding this wave, with a solid **45%** (+5 pp YoY) of decision-makers reporting they plan to convert cash register space to self-checkout.

Decision-Makers and Associates Agree Self-Checkout Is a Net Positive

	Improves customer experience	Agree investments are paying off	Frees associates to do higher-priority tasks and better serve shoppers
Associates	81%	82%	83%
Decision-makers	82%	85%	81%

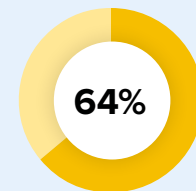


Convenience Counts



of shoppers prefer stores that offer contactless payment options

Highest among Millennials at 71%



of shoppers prefer being able to check out anywhere in the store

Highest in Latin America at 68%

Retail Associates Are Becoming Knowledge Workers

Associates are the key to shopper satisfaction, especially with the power of technology in their hands.



Technology can transform associates into empowered knowledge workers, redefining customer and employee experiences. About **80%** of associates agree stores that leverage technology and mobile devices attract and retain more workers. While **pay and benefits are the leading factors in workforce retention (55%)**, work-life balance and flexibility (**52%**) and opportunities for upskilling or career advancement (**45%**) are close behind.



Employers' Perspectives

Many retail decision-makers say they are struggling to meet the expectations of today's workforce. However, **eight in 10** say leveraging technology and mobile devices attracts and retains more store associates.

Retailers' labor-related challenges

- 77%** maintaining profit margins while meeting workforce expectations for salary and benefits
- 77%** upskilling or reskilling current store staff
- 76%** hiring and retaining qualified store staff



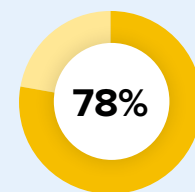
Associates' Perspectives

Associates understand the power of analytics and other enterprise solutions to allow for better management of work-life, as it can optimize scheduling and allow for more seamless task management.

Associates want more control and believe mobile devices can improve their autonomy

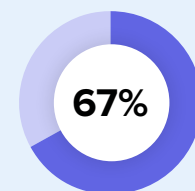
- 76%** prefer to manage their own schedule via mobile device or app
- 75%** prefer automatically prescribed tasks for managing their day

Balance of Technology



of decision-makers

and



of associates are concerned that shoppers have better access to information than store employees

Most agree that associates enabled with the latest technology help provide a better customer experience:



66%
Shoppers



79%
Associates



85%
Decision-makers



How Tech Enhances the Shopper Experience

Savvy shoppers likely recognize when retailers are laggards to tech adoption.



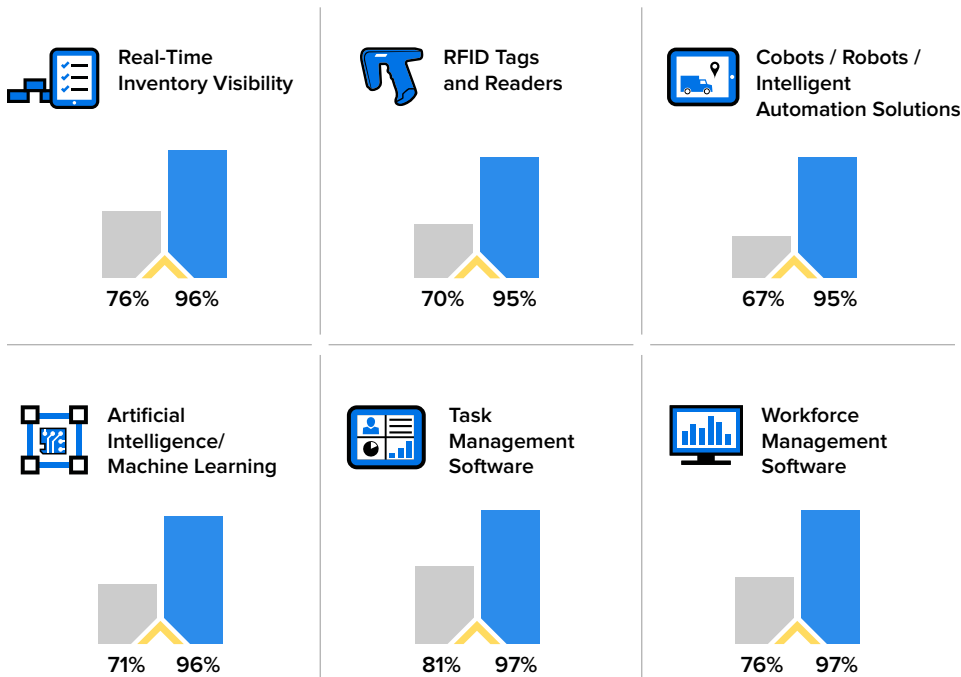
Tech is a must for any retail business seeking to align with how their current and future customers shop. Both shoppers (76%) and associates (84%) expect the retail environment to be just as technologically advanced as their everyday lives, and decision-makers know just how important technology can be for generating positive customer sentiment and increasing workforce retention.

The benefit of technology ripples throughout a retail organization, creating a more positive experience for shoppers and associates and helping to generate a positive ROI for decision-makers. For example, self-checkout and mobile checkout deliver the speed and convenience customers expect and give associates more time on the floor with customers. By the same token, **over eight in 10 associates say more inventory visibility would be beneficial**, helping speed up in-store fulfillment and ensure more shoppers leave the store with the items they wanted to purchase.

Device investments are brought to life with software solutions that apply automation, machine learning and artificial intelligence to functions like workforce and inventory management, bringing retailers into the next generation.

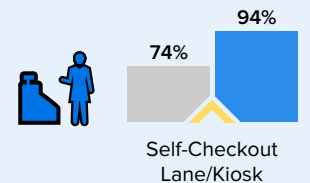
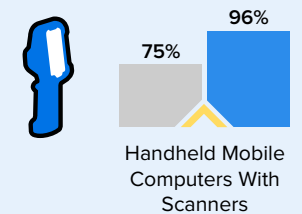
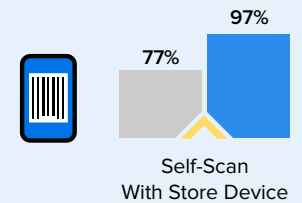
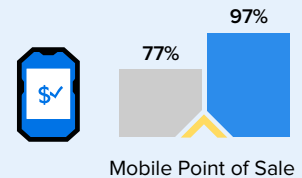
How Decision-Makers Are Prioritizing Technology Deployment

By 2023 By 2027



Decision-Makers' Device Deployment Plans

By 2023 By 2027



Supply Chain Challenges Persist

Supply chain shortfalls, panic buying, factory shutdowns, bottlenecks and more.

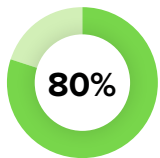
Many retailers have reported declining profits as they've slashed prices on inventory that was in high demand during the pandemic, then sat on shelves and in warehouses. **In fact, the length of time general and specialty retailers held stock before it turned into sales increased from 57.4 days in 2021 to 63.7 days in 2022.**⁵ Meanwhile, global disruptions have created issues at the manufacturing and distribution levels that have made it harder for retailers of all sizes to keep essentials on store shelves. As supply chain issues compound, retailers must protect profit margins while ensuring customers can buy everything they need.

Solving the supply chain problem is far from simple, but the priority is on minimizing out-of-stocks. Among shoppers who left a store without the items they wanted, nearly half said it was because an item they were looking for was not in stock—a **26%** increase since 2019.⁶

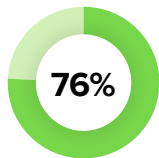


Shoppers Are Leaving Stores Empty-Handed

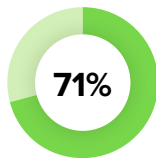
76% (+5 pp YoY) of shoppers are leaving stores without items they want.



Millennials

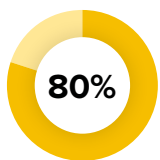


Gen X

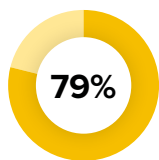


Boomers

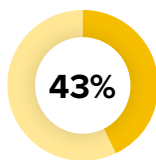
Retail Decision-Makers Are Feeling the Pressure



say maintaining real-time visibility of out-of-stocks is a significant challenge



say their company needs better inventory management tools for accuracy and availability



are investing in safety stock or overbuying to get ahead of out-of-stocks⁷



Decision-Makers Plan To Invest To Combat Supply Chain Issues

81%

IT staffing

75%

inventory visibility

75%

supply chain logistics

Many shoppers visit a retailer's website or mobile app before visiting the store to help them better plan their shopping trip and minimize disappointment once in store.

Nearly **50%** looked for competitive pricing, sales and coupons

34% checked inventory

32% placed an order for pickup inside the store

5. *Wall Street Journal*, "Retailers Face Pressure to Offer Discounts While Battling Inflation," September 23, 2022.

<https://www.wsj.com/articles/retailers-face-pressure-to-offer-discounts-while-battling-inflation-11663932601>

6. 2019 press release, shoppers left store without making purchase due to OOS.

<https://www.businesswire.com/news/home/20191114005024/en/Zebra-Study-75-Percent-of-Millennials-Abandon-In-Store-Purchases-Led-by-Out-of-Stocks>

7. Zebra Warehousing Vision Study, Dynamic Markets Demand Warehouse Agility, Zebra Technologies, 2022.

https://connect.zebra.com/warehousevs_2027_us_en

Disconnected Viewpoints

There is a notable gap between how retailers believe they are performing, and how shoppers really feel in key areas.

Convenience rules shopper satisfaction. And while shopper satisfaction is positive overall for online and in-store, retailers perceive their customers to be more satisfied than they actually are, especially when it comes to online returns by mail and in-store inventory and fulfillment.

Returns

If it's not easy to return, a customer may not buy an item regardless of channel. Retailers may believe they are delivering a higher level of service than shoppers believe they are getting. The silver lining? Shopper satisfaction with online returns is up year-over-year.

Mobility

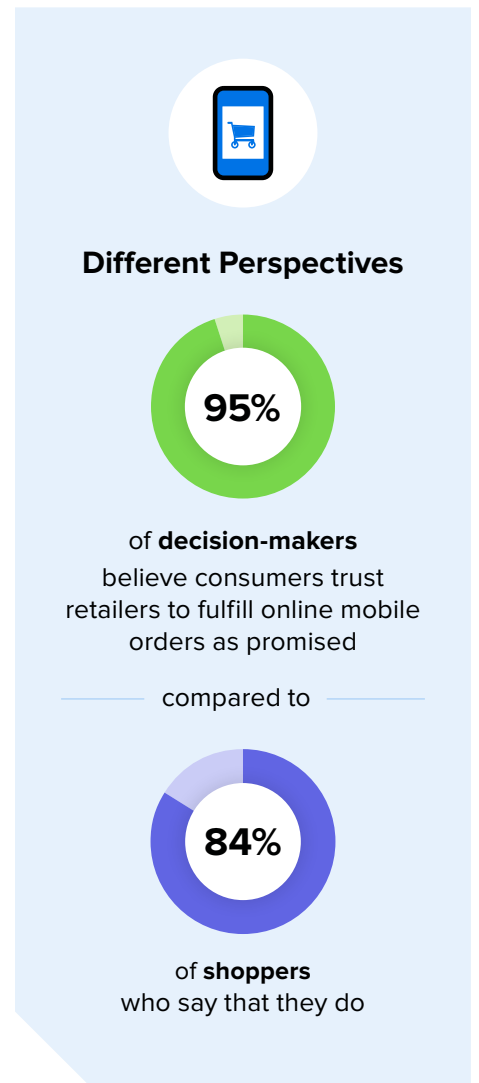
While shoppers expect store staff to be equipped with technology to help guide them quickly to the items they are looking for, they are less satisfied than decision-makers believe with the reality of attempting to locate specific items on shop floors.

Out-of-Stocks

As they're painfully aware, retailers must tackle inventory as it will help improve overall satisfaction with in-store shopping. While it's improved YoY, there's still a large perception gap between retailers and shoppers around out-of-stocks.



Perception Gaps	Shoppers	Associates	Decision-Makers
Reverse Logistics Decision-makers and associates overestimate shoppers' satisfaction with online purchase returns/exchanges by mail.	62% (+5 pp YoY)	70%	80% 29% higher than shoppers say
Mobile Devices In-store satisfaction with staff equipped with mobile devices to assist in finding items.	64% (+5 pp YoY)	78%	82% 28% higher than shoppers say
Out-of-Stock Orders in Stores Satisfaction with ordering out-of-stocks on the spot showed a significant disparity between what shoppers, associates and decision-makers think.	59% (+5 pp YoY)	74%	81% 37% higher than shoppers say



Saving a Sale

Shoppers are growing accustomed to alternative methods of getting out-of-stock items. As a first choice, shoppers want to buy an out-of-stock item while in the store and have it delivered. Associates, however, are most likely to send the customer to pick up the item at another store location, if possible.

Shoppers want more mobile ordering and more incentives from associates to complete their purchases while in-store. Associates' reported ability to fulfill these needs is less than ideal.

What's in Store: A Look Ahead

Providing an exceptional customer experience is the ultimate competitive advantage.

The future of retail will continue to see the shopper in the driver's seat, and retailers will have to remain nimble if they want to keep up with shifting preferences and priorities. Retailers must consider future disruption, prepare to reassess strategies, and take advantage of new opportunities.

Getting Ahead of Emerging Technologies

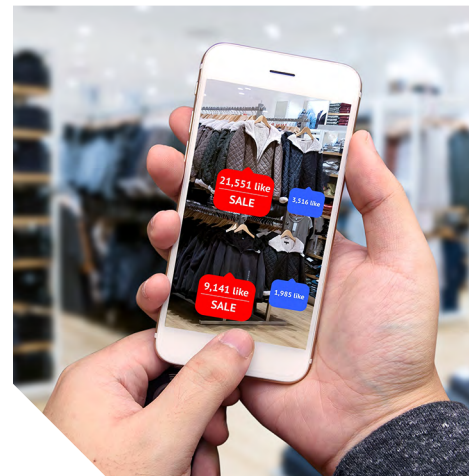
The pace of technology can be overwhelming. Topics like the metaverse seem to go from niche to mainstream in the blink of an eye, leaving retailers wondering what role they will play—and what emerging technologies are worth investing in as the future quickly unfolds.

Retail decision-makers estimate how important emerging technologies will be to their organization over the next five years:



The **metaverse** is a single virtual world that seamlessly bridges physical and digital realities like virtual reality (VR) and augmented reality (AR).

Forward-thinking organizations are already investing in metaverse-ready solutions like machine vision and artificial intelligence.



83%

Advanced order fulfillment/management



83%

Employee experience technologies



83%

Prescriptive analytics



82%

Demand planning



82%

Distributed order management



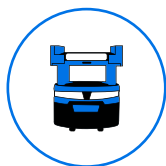
81%

Workforce management software



80%

Unified commerce ecosystem



78%

Robotic process automation



76%

Metaverse

Regional Findings

North America

Canada, United States

- **69%** of shoppers agree more retailers need mobile ordering.
- Nearly **nine in 10** decision-makers agree global disruptions have placed more focus on supply chain operations in North America—higher than any other region.
- Over **90%** of retail decision-makers say they are increasing the speed and convenience of fulfillment options for holiday orders.

Europe

France, Germany, Italy, United Kingdom

- Over **six in 10** associates agree managing returns of online orders is a significant challenge.
- Inflation has had the least impact on shoppers delaying purchases (**69%**) compared to those surveyed globally.
- Less than **30%** of associates rated health, wellness and lifestyle benefits as important factors in staying with their current employer—dramatically lower than in any other region.



Latin America

Brazil, Chile, Colombia, Mexico

- Only **68%** of retailers agree shoppers are spending less due to inflation, compared to **82%** who believe they are spending less globally.
- **Nine in 10** shoppers have used mobile ordering, leading globally, and 85% are satisfied with in-store shopping—the highest across all regions.
- **Eight in 10** shoppers prefer to shop with online retailers that also have a physical store, compared to **71%** overall.

Asia-Pacific

China, Japan, India, Australia, New Zealand

- This region had the highest percentage of retailers (**80%**) who agree upskilling current store staff is a significant challenge.
- Holiday shoppers expect over half (**54%**) of their holiday purchases to be in stores.
- Shoppers reported the lowest level of in-store satisfaction (**74%**) among all regions.

Key Takeaways

1 Meet Shopper Expectations

Regardless of where they make their final purchase, shoppers remain motivated to buy based on three essential priorities: **availability, selection and price**. They also crave convenience, driving up interaction with technology like mobile cashless payment, mobile ordering and self-checkout. To accommodate consumers, retailers must provide a seamless and memorable experience across all channels. For decision-makers, this means investing in a digital iteration and reconsidering the flexibility of store layouts to accommodate new technologies as they roll out.

2 Manage Supply Chain and Inventory

Global supply chains are getting more complex and increasingly sensitive to global disruptions, which have significant knock-on effects throughout the retail sector. Retailers are still under pressure to manage out-of-stocks and ensure shoppers can find—or easily order—the products they came to get. Out-of-stocks cause frustration for associates as well and have a potentially damaging impact on long-term shopper sentiment. Decision-makers are looking to optimize inventory processes for more real-time visibility, expecting to move toward deploying AI for demand planning and replenishment over the next year.

3 Drive Tech Experiences

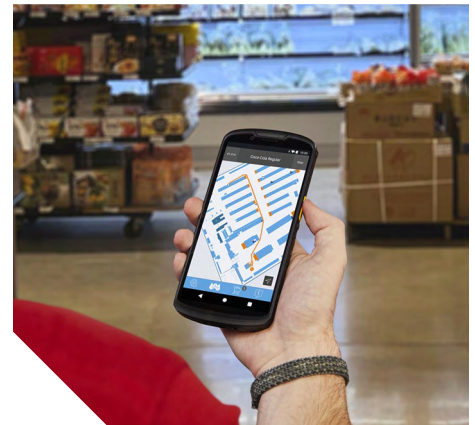
Most retail associates and decision-makers agree that stores that employ mobile devices and retail technology help attract and retain the in-store workforce. When retail associates are equipped with the right handheld device, software and applications, most agree it elevates the customer experience, improves daily tasks, and helps them manage schedules and collaborate with teammates.

4 Five-Year Outlook for Retail Technologies

Investment in the right technology is the key to retail agility and resilience for the modern store. More visibility and control over operations can help retailers overcome today's issues, as well as prepare for any future disruption that may be around the corner. While technology supports the shopper experience, it also provides a better experience for associates. Over the next five years, the emerging technologies most important to decision-makers are those that help them mend and prepare for disruptions, particularly related to labor and supply-chain issues.

About Zebra

Zebra (NASDAQ: ZBRA) empowers the front line of business in retail, manufacturing, transportation and logistics, healthcare, and other industries to achieve a performance edge. We deliver industry-tailored, end-to-end solutions that intelligently connect people, assets and data to help our customers make business-critical decisions.



Your Partner for the Future of Retail

To learn how Zebra can help your retail operation deliver seamless efficiency across capabilities, please visit www.zebra.com/retail



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