

18TH ANNUAL GLOBAL SHOPPER STUDY

Inside retail: The push for progress

Explore what's driving retail's next evolution—from innovative technologies and intelligent operations to personalized experiences and unified channels shaping the future of the industry.

ZEBRA



Redefining what's possible in **retail**

Retailers are making strategic moves to strengthen nearly every aspect of their operations. They are taking steps to elevate customer service, innovate to safeguard margins, and equip associates with the tools they need to thrive. This year's study captures perspectives from shoppers, associates, and decision-makers on how intelligent operations are transforming retail from the inside out.



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Personalizing shopper experiences

Shoppers expect every interaction to feel relevant and timely. To meet these expectations, retailers must connect data, channels, and insights to deliver offers and experiences that resonate in the moment.



PAGE 6

Empowering associates for retail's new era

Associates shape the heart of every shopper interaction. Empowering them means reducing friction and equipping teams with the tools and insights to deliver faster, smarter, and more connected service.



PAGE 9

Modernizing loss prevention strategies

Loss prevention is no longer just about protecting products. Addressing today's challenges calls for innovative strategies that safeguard margins while preserving the shopper experience.

PERSONALIZING SHOPPER EXPERIENCES

**The most valuable
currency in retail is
connection—and
personalization wins in a
price-pressured market.**



70%

of shoppers are delaying or postponing purchases due to tariff-related price increases

Economic pressures are changing purchase patterns—retailers must adapt faster to win the sale.

72%

of shoppers say they want to see more in-store personalized promotional ads

The personal touch wins hearts, carts, and sales as today's shoppers expect every offer to feel tailored.

What's at stake isn't just a sale—it's attention, trust, and the next visit.

Getting the right offer to the right shopper at the right time turns pressure into opportunity and makes every interaction count.

Personalization starts with strong foundations

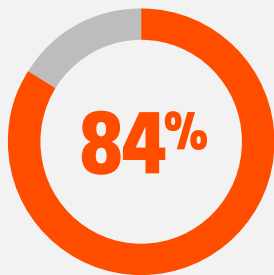
Shoppers expect experiences that feel personalized just for them. But when inventory, channels, and experiences are disconnected, even the best promotions fall short. That's the reality every retailer navigates, one where meeting expectations means knowing what's available, where it's needed, and when it's most likely to sell.

Inventory distortion from out-of-stocks and overstocks is costing retailers nearly \$1.7 trillion globally.¹ Fragmented systems only make matters worse. That's why retailers must double down on real-time inventory visibility, predictive forecasting, and synchronized operations. The advantage? Data that helps predict demand, reduce friction, and deliver on every promise. Retailers across all sectors are under intense pressure to improve operations or risk losing customers.

Unified commerce closes the gaps

Today's shopper doesn't think in channels, but disconnected systems still do. When inventory, fulfillment, and engagement aren't aligned, costly blind spots emerge. Unified commerce addresses these challenges by integrating inventory, channels, and shopper activity into a single, real-time view. With this foundation, retailers can deliver consistent, reliable, and conversion-driving experiences everywhere. Offers become well-crafted, actionable and accurate, meeting shoppers where they are with products that are truly available.

When inventory data is broken, so is the shopper experience



of retail decision-makers say they are under high pressure to synchronize real-time inventory across channels to better forecast demand and replenishment

By sector:

79%

Grocery Retailers

82%

Mass Merchandisers

86%

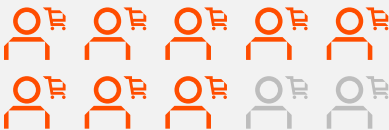
Drug Retailers

87%

Department Store Retailers



Unifying inventory, channels, and shopper activity is the foundation for delivering consistent experiences



NEARLY

8 out of 10

shoppers want a seamless connection between in-store and online experiences

83%

of retail decision-makers view a unified commerce ecosystem as an extremely/very important emerging technology over the next five years

¹IHL Group, *Fixing Inventory Distortion – Are We There Yet?* 2024.

Retail media momentum

43%

+6PP YOY

of decision-makers rank in-store digital ads and retail media networks as the **top driver of in-store profitability**

83%

of decision-makers rate retail media networks technology as **extremely/very important** over the next five years

54%

of decision-makers **plan to implement** retail media networks over the next five years

Personalization's future is predictive

Personalization is powering retail's next growth wave—and emerging technologies are accelerating the shift. Retail media networks (RMNs) and generative AI are transforming how retailers engage shoppers by using data and automation to deliver truly tailored experiences.

RMNs are emerging as vital growth engines. Using first-party data—from loyalty programs to browsing behavior—these networks deliver timely, relevant promotions across digital and physical channels. In stores, RMNs extend their reach through static and interactive displays, helping retailers influence shoppers right at the moment of decision. Adoption is growing, with nearly one in three shoppers engaging with interactive screens in the past six months—a 9-percentage-point increase from 2021 levels.

AI makes personalization truly personal

Generative AI is only beginning to show its full potential. The possibilities ahead include product descriptions updating in real time, offers adapting instantly, and recommendations that feel as personal as a one-to-one conversation. In store and online, AI-powered assistants and chatbots could help guide customers through tailored experiences, creating new ways to make shopping feel more relevant and seamless.

Together, RMNs and generative AI shift personalization from reactive to predictive. Retailers can anticipate intent, adapt faster, and deliver experiences that build trust, increase conversion, and create measurable impact.

The shift to predictive personalization is gaining speed

Decision-makers say generative AI will significantly impact key areas of their operations over the next three years

87%

Customer segmentation and targeted marketing

86%

Inventory management and demand forecasting

86%

Dynamic pricing

84%

Personalized recommendations





EMPOWERING ASSOCIATES FOR RETAIL'S NEW ERA

Retailers are raising the bar on associate enablement—from task completion to true customer connection.

90%

of associates believe using technology tools helps them complete tasks faster

More efficiency means more time for customers, where associates can make the biggest impact.

87%

of associates believe technology tools help them provide better service to customers

The right tools turn good service into great experiences.

When associates feel informed, supported, and trusted, they engage fully, make stronger connections and sell more.

Technology amplifies their impact, turning efficiency into service that customers notice and remember.

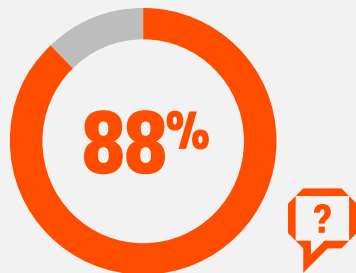
Empowered associates deliver better experiences

Associates shape every customer experience. From stocking shelves to managing returns and helping shoppers find what they need, their work defines the brand in action. But too often, they're weighed down by manual tasks, inefficient workflows, and systems that hold them back from focusing on shoppers.

Retailers are working to remove these barriers. Intelligent operations help simplify work, reduce friction, and give associates the tools they need to respond faster and serve smarter. The goal isn't just efficiency—it's connection. And the results are clear: according to Oxford Economics' study, retailers that meaningfully optimized workflows over the past two years have seen, on average, a 20% improvement in employee productivity.²

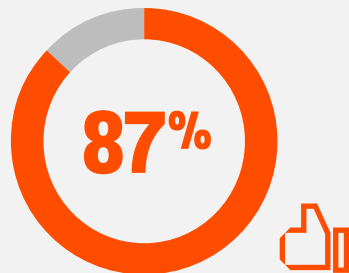
Yet many associates still face growing demands. Eight in ten say they feel stressed by the increasing complexity of their day-to-day work. When routine tasks become easier to manage, energy can shift to higher-impact activities. With fewer roadblocks, associates are quicker to help, better equipped to solve problems, and more present in every interaction. Small changes can make a big difference—on the floor, in the stockroom, and throughout the store.

Information delays frustrate associates and slow service



of associates say it's difficult to get timely help or information

The right tools reduce stress and improve satisfaction



of associates say the right technology tools make their job less stressful and more enjoyable

Biggest associate frustrations

Among those working in-store sales or customer service

46% Limited time to help customers because they are doing lower value tasks

42% Managing returns from online orders

39% Out-of-stock complaints

39% Physical inventory not aligned with virtual counts

37% Inability to easily communicate with associates/manager



²Oxford Economics and Zebra Technologies, *Elevating Retail Value: The Impact of Intelligent Operations*, 2025.

Bringing **AI technology** to frontline associates

Artificial intelligence will reshape how work gets done in retail—unlocking speed, accuracy, and real-time insights. From automating routine tasks to helping associates make smarter decisions, AI is fast becoming the foundation of intelligent operations.

It's everywhere—headlines, strategy decks, store conversations. The promise of AI is big. But in retail, its impact will be measured by something much simpler: how well it supports the people who show up every day. That's where it has the power to make a real difference.

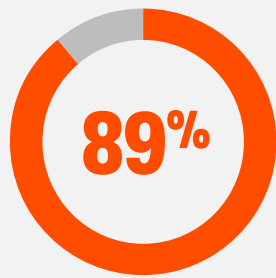
Empowering associates with the right tools

For associates, the shift is personal. AI-powered tools reduce repetitive tasks and eliminate guesswork. They help frontline teams respond faster, serve more effectively, and focus on what matters most: the customer.

AI adoption is accelerating. Research from Oxford Economics shows that retailers are already piloting and using AI across critical workflows. More than half (51%) of retailers are piloting AI for inventory optimization, along with 45% for cost optimization and 37% for demand forecasting.³

The potential is real. Nearly 9 in 10 associates say they feel more valued by their employer when they're given the right technology tools to do their jobs. When technology clears the way, people can do their best work—and create better experiences in the process.

Smarter automation reduces repetitive work and supports better decisions



of associates agree artificial intelligence will help them be more productive

By region:

84%

Asia Pacific

90%

Europe

95%

Latin America

89%

North America



Decision-makers rank the perceived benefits of on-device AI applications

56%

Automate administrative tasks to reduce operational costs

54%

Optimize inventory management

51%

Deepen customer engagement/advanced search capabilities

50%

Enhance employee training/virtual assistants for associates

³Oxford Economics and Zebra Technologies, *Elevating Retail Value: The Impact of Intelligent Operations*. 2025.



MODERNIZING LOSS PREVENTION STRATEGIES

Retailers need to rethink their security strategies—because **loss prevention is now **business-critical**.**

46%

of decision-makers report they saw an increase in their shrink rate in the past year

Persistent shrink rates remain one of retail's toughest challenges, demanding more innovative approaches.

70%

of shoppers say it's annoying when products they want are locked up or secured within a case

Shoppers expect protection to be invisible—not an obstacle to buying.

What's vanishing isn't just product—it's trust, confidence, and profit.

Retailers are stepping up with intelligent solutions to spot risks sooner, act faster, and preserve the experience shoppers expect.

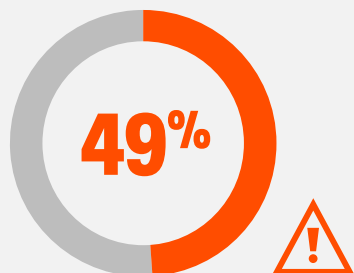
Balancing security and the shopper experience

Locked cases, long waits for assistance, and cumbersome security processes frustrate shoppers and may push them to purchase elsewhere. At the same time, the rising cost and complexity of traditional loss prevention methods drain resources while often failing to deliver stronger results.

Shrink continues to take a significant toll on retailers—far more than just a line on the balance sheet. As margins tighten, losses from theft, fraud, spoilage, and errors weigh more heavily on the bottom line. But modernizing loss prevention isn't easy. Nearly half of the decision-makers surveyed report a lack of necessary tools, and 43% cite costs as a significant barrier. When budgets are tight, the road to better protection becomes steeper—even as the risk continues to grow.

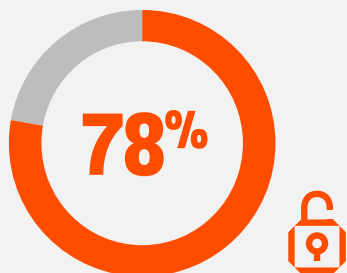
Retailers are looking for better ways to reduce risk—without slowing service or putting more strain on their teams. Because when security falls short, it doesn't just impact the bottom line. It creates stress for associates, frustration for shoppers, and challenges the store's ability to perform at its best.

Limited visibility leaves retailers one step behind on loss prevention



of decision-makers cite difficulty in detecting theft, fraud, and system errors in real-time

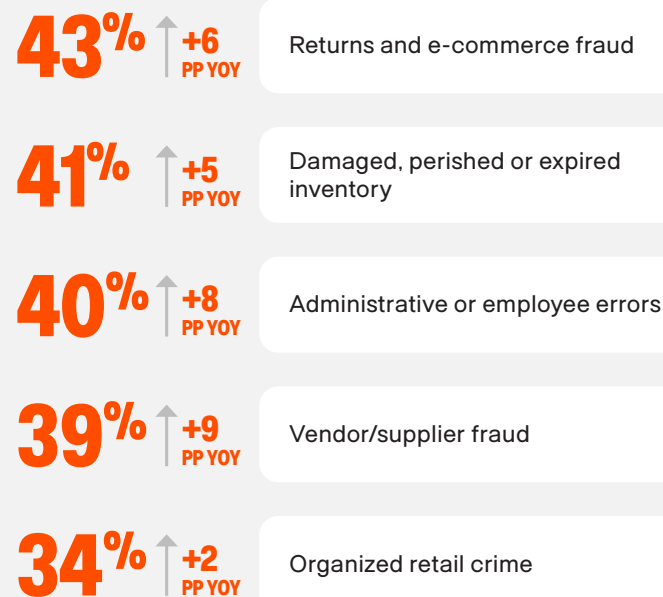
Losses hit more than the ledger—they affect the associate experience



of associates say they are concerned their store lacks technology to spot safety threats or criminal activities



Decision-makers identify leading causes of shrink



Tackling shrink, theft, and fraud with **intelligence**

Technology is moving to the center of loss prevention, giving retailers new tools to predict, prevent, and respond in real time. By strengthening visibility and speeding up detection, these innovations are helping retailers stay ahead of threats while keeping the shopping experience intact.

Momentum is building; a majority of decision-makers plan to adopt RFID, computer vision, and AI within the next five years. These technologies bring visibility, real-time detection, and predictive insights that strengthen frontline support and stop problems before they escalate. For many retailers, these tools represent the next stage of loss prevention.

The impact of technology-led prevention

These technologies aren't just upgrades—they're critical tools for building more responsive, resilient strategies. With real-time visibility into what's happening on the shelf, at the register, and across the store, retailers can prevent more losses before they happen. The benefits go beyond shrink—associates feel more supported, shoppers face fewer roadblocks, and leaders have greater control in a fast-moving environment.

What's clear is that there's no single fix. Retailers are building layered, flexible strategies designed to adapt to evolving threats—while also making stores safer and more convenient for shoppers.

Confidence climbs in game changing loss prevention technologies

More decision-makers see technology as the key to real-time visibility and enhanced loss detection

50%

+14 PP YOY

Electronic article surveillance

46%

+4 PP YOY

AI-driven prescriptive analytics

43%

+7 PP YOY

RFID tags and readers

37%

+5 PP YOY

Computer vision

Retailers are counting on advanced technologies to spot threats sooner and stop losses faster

Percentage of decision-makers planning to implement loss prevention technologies over the next five years

57%

Computer vision

54%

RFID tags and readers

51%

Generative AI



SUMMARY

Retail's next chapter starts now

Transformation is already underway—from the backroom to the checkout. Retailers are digitizing operations, empowering associates, and reshaping the customer journey. Just a few years ago, this pace of change would have seemed unthinkable. Yet the path forward is uneven. Shopper expectations continue to rise. At the same time, economic pressure, labor shortages, and operational complexity make it harder to deliver consistently.

This isn't just a story of challenge—it's a call to adapt. The study shows clear progress. It also reveals how far there is still to go. Retailers that lead from here will be those who treat intelligent operations not as an aspiration, but as the foundation for everyday decisions. They will modernize the journey to meet shopper expectations. And they will invest in their people—because the associate experience and the customer experience are inseparable.

About the study

Zebra commissioned a global research study among adult shoppers (age 18+), decision-makers, and associates to analyze the trends and technologies transforming the retail sector. Administered online by MAVRIX, formerly Azure Knowledge Corporation, this year's study includes over 4,200 respondents across topics of shopper experience, device and technology usage, delivery and fulfillment in store and online.



To view the 18th Annual Global Shopper Study series, visit zebra.com/shopperstudy

About Zebra Technologies

Zebra (NASDAQ: ZBRA) provides the foundation for intelligent operations with an award-winning portfolio of connected frontline, asset visibility, and automation solutions. Organizations globally across retail, manufacturing, transportation, logistics, healthcare, and other industries rely on us to deliver outcomes today while driving innovation for what's next. Together with our partners, we create new ways of working that improve productivity and empower organizations to be **better every day**.

To learn how Zebra equips retailers to stay ahead—enhancing the shopper journey, elevating store performance, and driving profitability in every channel, visit zebra.com/retail



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