Survey Report

# State of AI in Retail and CPG: 2025 Trends



CoolerX

Geomagical Labs

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Serve Robotics
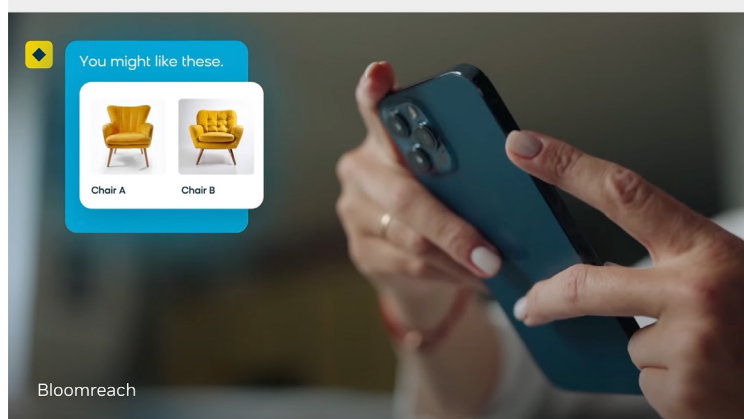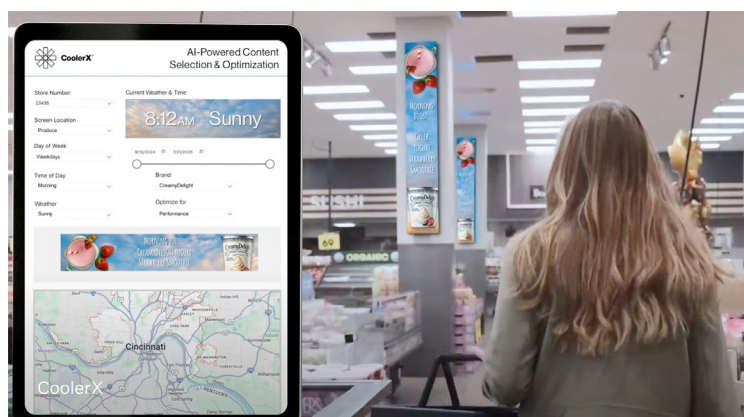
# AI in Retail: Strategic Insights for Industry Leaders

The retail and consumer packaged goods (CPG) industries are undergoing a profound transformation, powered by advancements in artificial intelligence. Building on last year's momentum, businesses are discovering AI's potential to unlock significant value, with opportunities to dramatically reduce costs and drive growth. From elevating the in-store experience to boosting employee productivity and streamlining operations, AI is becoming a cornerstone of core retail operations. For executives, embracing this technology is no longer optional—it's essential for navigating the complexities of a rapidly evolving marketplace and maintaining a competitive edge.

To gain deeper insights into the current state of AI in retail, a survey was conducted from September to November 2024, gathering hundreds of responses from professionals across the industry. The goal was to assess how the industry is adopting AI technologies, identify the opportunities and challenges faced by adopters, and quantify how AI is maturing into business operations.

**The survey discovered that:**

**9** out of **10** companies are using AI

**The adoption of AI** in the industry has become widespread, with nine out of ten companies saying they're actively using or assessing AI in their operations.

**Generative AI** has found a foothold in the industry, especially for creating marketing and advertising content and customer analytics.
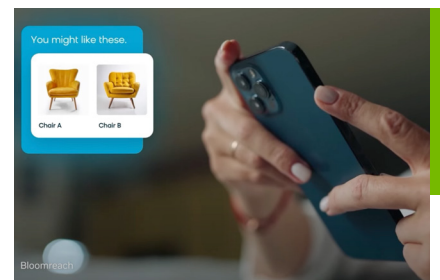


Bloomreach personalizes the ecommerce experience by unifying real-time customer and product data, helping businesses understand customer needs.

**51%** are using AI in their operations

**Over half of the respondents are using AI** for more than six use cases, which span nearly all aspects of operations, from content creation to demand forecasting to personalization.

**59%** reported increased challenges

**AI in the supply chain** is gaining prominence, but 59 percent of executives and supply chain professionals reported increased challenges over the past year. This has led to a focus on enhancing operational performance and meeting customer expectations.

This year's survey revealed that the retail industry (inclusive of CPG) has embraced AI, with usage and investment increasing across nearly all lines of business. Challenges persist, with companies still searching for AI experts and talent, as well as explainable AI tools. Overall investment remains modest, but 97 percent of survey participants project AI investment to grow in the next year as use cases mature and companies realize the impact AI is making on their business.

In this survey report, we take an in-depth look into how AI has been adopted by retail and CPG and explore how AI has impacted industry-specific challenges, such as supply chain management.

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# Part 1: AI Impact and Investment

Retailers and CPG companies are seeing significant benefits from AI. Companies are integrating AI into digital retail, the supply chain, physical store management and operations, and the back office to drive revenue and reduce costs.

## Key Insights of AI Adoption, Investment, and Impact

**9** out of **10**

**are adopting or assessing AI**
About nine out of every ten respondents said that they're either actively using AI in their operations or assessing AI projects via trials, pilots, and evaluations.

AI helped increase revenue more than **20%**

Four out of five respondents said that AI had increased annual revenue, and a quarter said that AI helped increase revenue by more than 20 percent.

AI helped reduce costs by **20%**

Ninety-four percent of respondents said that AI has helped reduce annual operational costs, and more than a quarter indicated that it reduced costs by more than 20 percent.

**97%** increased spending on AI

97 percent of respondents said that spending on AI would increase in the next fiscal year, with 52 percent planning on raising AI budgets by at least 10 percent.

## AI Continues to Drive Revenue and Reduce Costs

In 2024, **89 percent of respondents said that they're either assessing or actively using AI in their operations**, up from 82 percent in 2023. A little less than half—47 percent—of companies are in the assessment phase, up from 36 percent from the previous year, while 42 percent of companies said they're actively using AI in their operations.

Overall, **87 percent of respondents currently using AI said that it helped increase annual revenue**. A full quarter of respondents even said that AI had helped increase revenue by more than 20 percent.

### How Many Retailers Are Adopting AI?



- 11% Not using
- 47% Assessing
- 42% Actively using
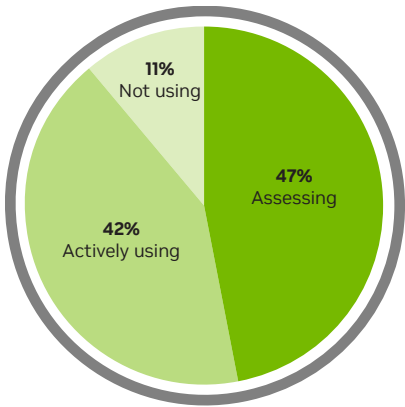
## AI Impact on Revenue and CostCost—2024
Respondent Results

### Increasing Annual Revenue

| 13% | 23% 10–20% | 18% 5–9% | 21% Less than 5% | 25% No impact |
|---|---|---|---|---|

More than 20%

### Decreasing Annual Operational Costs

| 6% | 31% 10–20% | 21% 5–9% | 14% Less than 5% | 28% No impact |
|---|---|---|---|---|

More than 20%

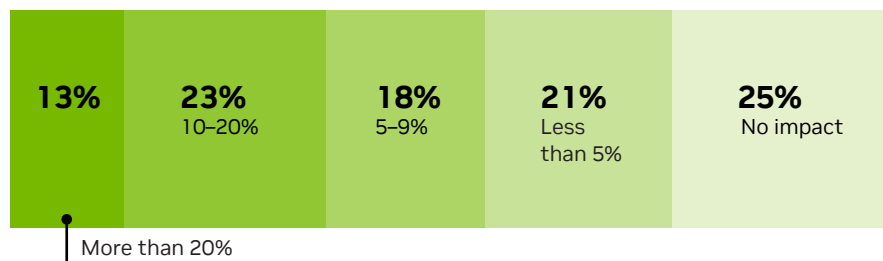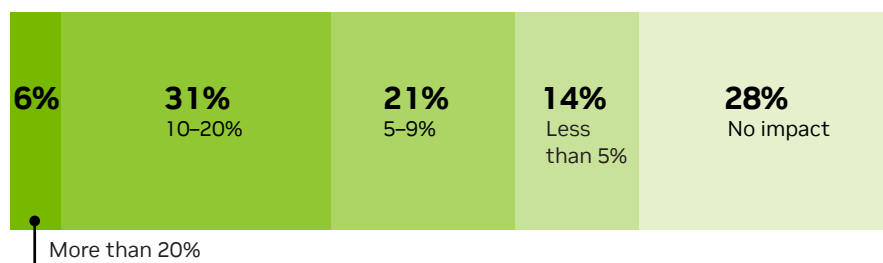While AI is driving revenue growth for retail, it's also helping to lower costs. A full 94 percent of companies said that AI helped decrease costs, with 28 percent saying that AI lowered costs by more than 20 percent.

Clearly, retailers and CPG companies are seeing the benefits of AI in their operations. It then comes as no surprise that nearly every single company in the survey—97 percent—is planning on increasing their AI investment in the next fiscal year.

In some cases, investment will increase substantially. For instance, 36 percent of respondents said that AI budgets would increase by 20 percent or more, while 16 percent said the budget would increase between 10 and 20 percent.

What's driving the adoption of AI in retail? And how are companies using it to boost operational efficiencies and reduce costs? Below, we break down the most popular use cases, starting with generative AI before moving on to overall usage of AI and a special breakout exploring supply chain use cases.
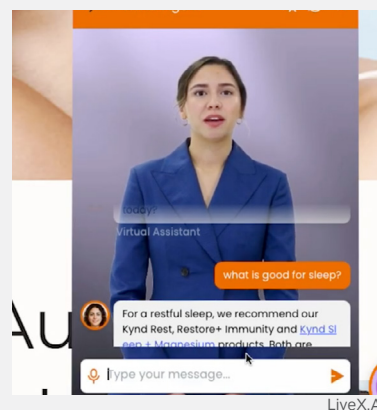


LiveX.AI

LiveX.AI redefines online customer experience with cutting-edge AI agents, delivering personalized engagement throughout the customer journey. Their human-like agents provide proactive support, shopping assistance, and product education, boosting sales, increasing upsells and renewals, and providing a VIP experience for every customer.

# 94%
of respondents say AI helped decrease costs.

# Part 2: Generative AI in Retail

Generative AI is transforming the retail and CPG industries. Generative AI is a subclass of AI that uses neural networks to identify the patterns and structures within existing data to generate new and original content. From shopping assistants for personalized product recommendations to marketing content creation to code generation, generative AI is enhancing customer experiences, increasing productivity, and optimizing operations.

## Key Insights on Generative AI in Retail

### Adoption of AI

**4** out of every **5** companies

are either using generative AI or piloting projects.

Nearly
**50%**

believe that generative AI is a strategic technology that will be a differentiator in the market. This is consistent with last year.

**50%** almost half of companies

plan to use generative AI through third-party software vendors.

### Top Generative AI Use Cases
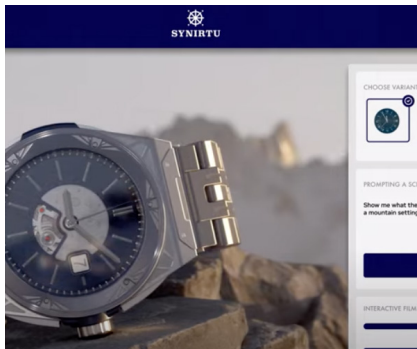

WPP

Predictive analytics is a top use case for generative AI, along with customer analysis and segmentation. Overall, the leading use for generative AI is to create content for marketing, advertising, and personalization.

### Generative AI Investments

**9** out of every **10**

companies plan to increase their investments in generative AI in the next fiscal year.
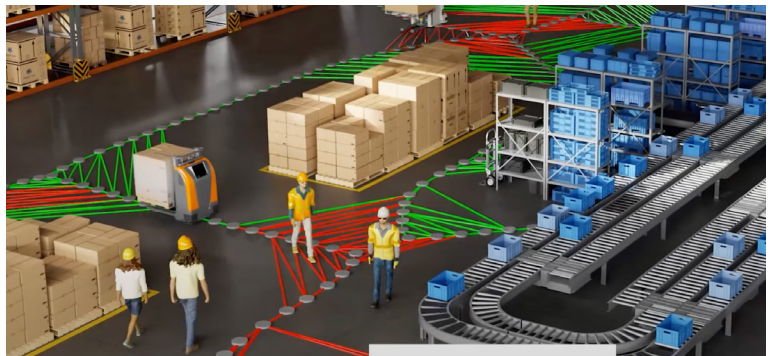

Industrial Digital Twins for Simulating Robot Fleets

### Generative AI Concerns

Data privacy and security are among the top concerns for retailers when using generative AI.

**57%**

of respondents have questions about the cost to implement generative AI.

## Retailers Get on Board With Generative AI

Very few retailers said they're not using generative AI or are in the process of testing it out. Eight-two percent are either using or assessing generative AI, with over half using generative AI in production. Only a handful of respondents at 11 percent said they're "waiting and watching."

### Gen AI Stage—2024

**2%**

| 51%<br>Using<br>generative AI | 32%<br>Assessing | 11% | 4% |

Looked at it, but decided not to use it

Waiting and watching

No current plans to use AI
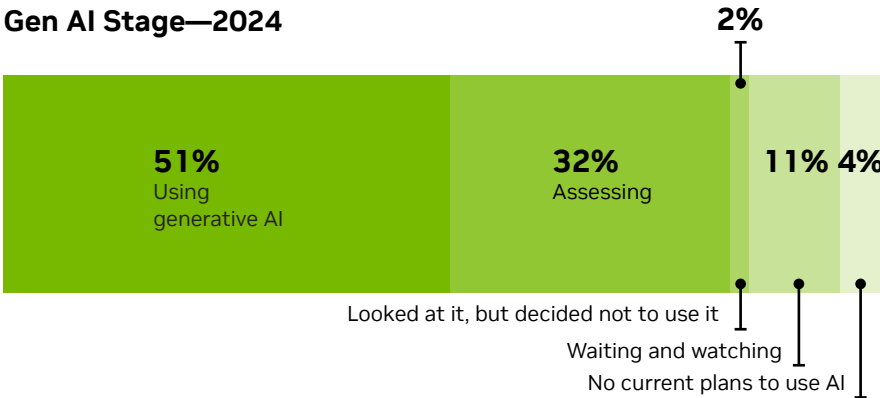
The sentiment behind using and deploying generative AI in retail and CPG remains positive. Half the respondents said that generative AI is a strategic tool and will be a differentiator for them in the market.

What's changed between 2023 and 2024 is how retailers plan to adopt generative AI. While, in 2023, only 24 percent said that they would use generative AI through third-party software vendors, in 2024, nearly half said that they'd be looking to purchase generative AI from software vendors. The increase speaks to a maturing market for generative AI solutions, with many more software vendors developing solutions that can be applied to specific industries, lines of business, and business operations.

### How They View Generative AI    2023  2024

| | 2023 | 2024 |
|---|---|---|
| "The technology is strategic and will be a differentiator for us in the market." | 51% | 51% |
| "There is a top-down mandate to leverage the technology." | 25% | 30% |
| "We plan to use generative AI through software vendors that are creating solutions." | 24% | 49% |
| "We have blocked employee access to Gen AI tools like ChatGPT." | 10% | 11% |
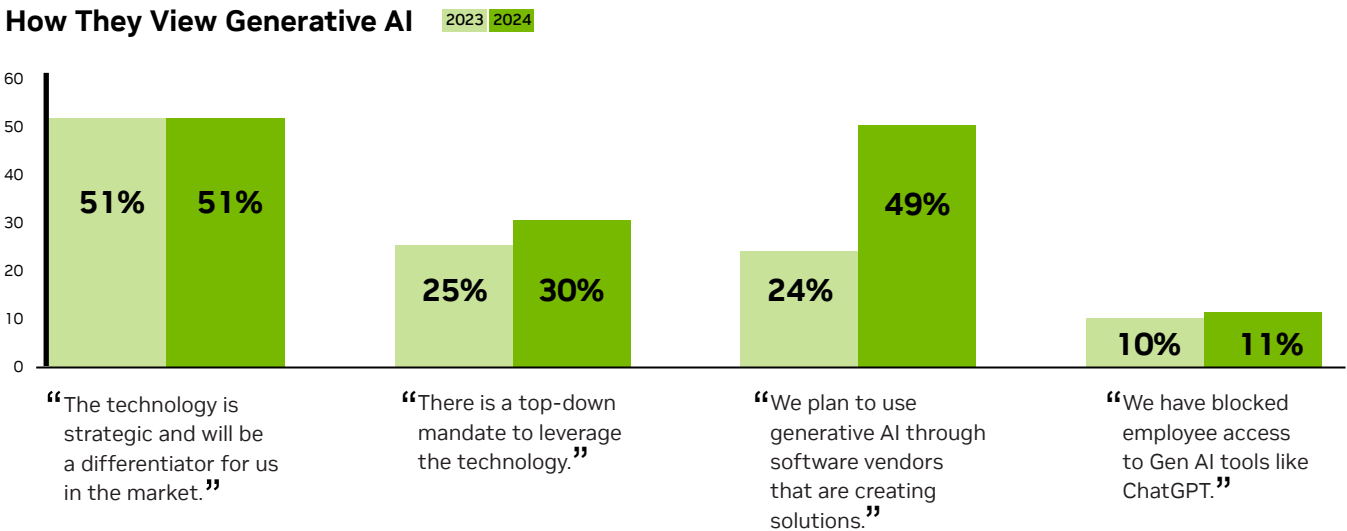
## Marketing, Analytics, and Advertising Drive Generative AI in Retail

In particular, generative AI has found rapid adoption where it's delivering immediate value. Of the top five use cases for generative AI in the industry, the top four involve marketing, advertising, content generation, and customer analytics.

Creation is the name of the game for generative AI in retail. The top use case for generative AI is marketing and content generation, with 60 percent of retailers saying they've implemented it to create multimodal assets, including text, images and videos.

# 60%

of retailers say they've implemented generative AI for marketing and content generation.

### Top 5 Gen AI Uses Cases—2024

| Use Case | Percent |
|---|---|
| Marketing and content generation (images, text, video, music, etc.) | 60% |
| Predictive analytics | 44% |
| Personalized marketing and advertising | 42% |
| Customer analysis and segmentation | 41% |
| Digital shopping assistant/ advisor copilot | 40% |
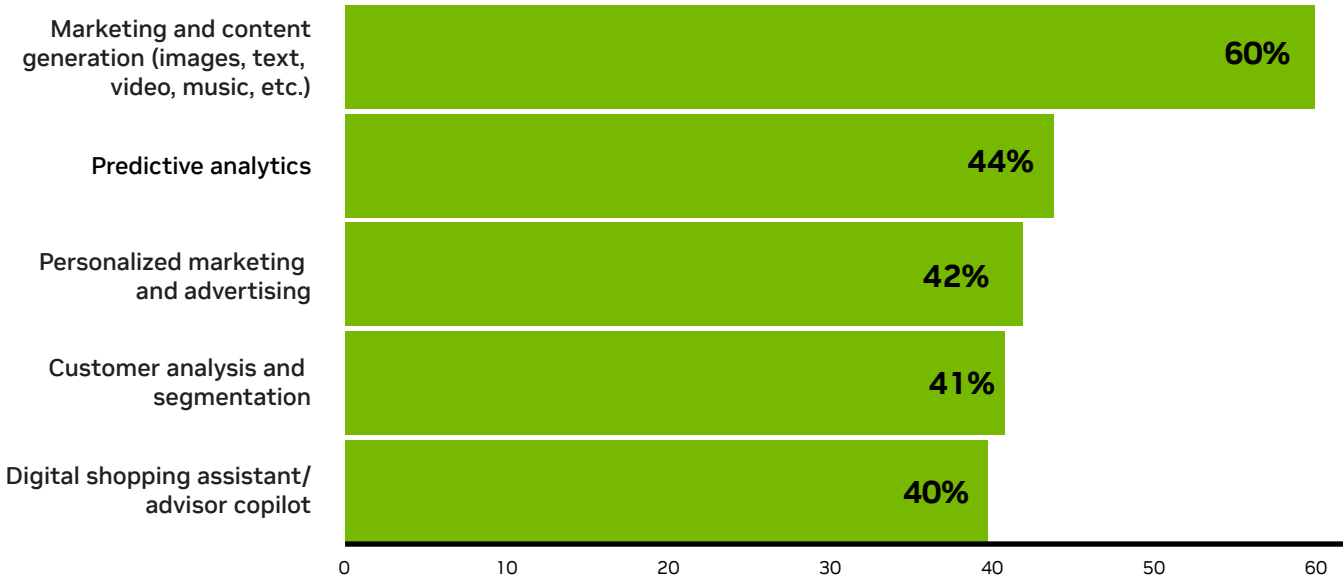
## Investment in Generative AI to Increase Next Year

The proliferation of generative AI use cases in retail and CPG make it no wonder that the industry is set to increase spending on it in the next fiscal year.

### Gen AI Spend Change Next Year—2024

| Segment | Percent |
|---|---|
| Increase <10% | 41% |
| Increase >10% | 52% |
| No change | 5% |
| Decrease | 2% |

Overall, 93 percent of respondents said their companies will increase their generative AI investment next year. More than half of companies at 51 percent said that spending on generative AI would increase by more than 10 percent next year. This includes 31 percent of companies who said generative AI investment would increase by more than 20 percent. Only 2 percent said that investment would decrease.

### Predictive Analytics

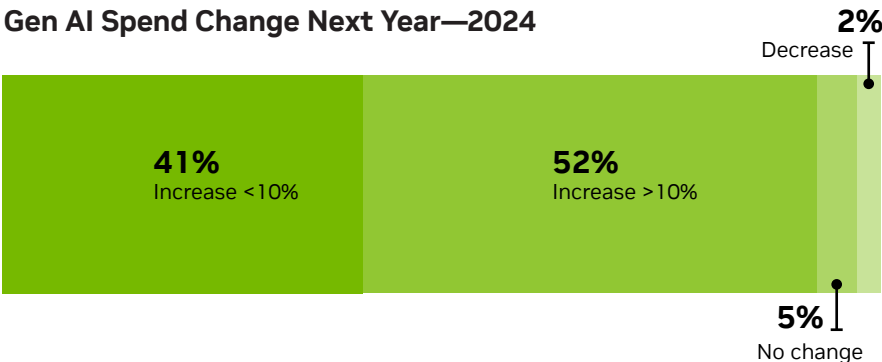**44%** say this is the second most popular use case

The second most popular use case for generative AI in retail is predictive analytics at 44 percent. Predictive analytics has been a staple in retail for the last decade, with generative AI helping to make it more useful in terms of understanding what customers want and what they will want next.

### Marketing and Advertising

**42%** say this is the third most popular use case

Retailers are also taking the next step with generative AI in the marketing journey, with 42 percent using it to create personalized marketing and advertising to better engage customers and help them find products relevant to their interests. This is the third most popular use case in the study for generative AI. At 40 percent, using generative AI to generate ads is the sixth most popular use case.

### Chatbots and Copilots

**40%** say this is the fifth most popular use case

The fifth most popular use case is digital shopping assistants or copilots at 40 percent. Chatbots, assistants, and copilots have been a popular method for using generative AI in its early years and, when combined with predictive analytics on the backend, plus a library of generative AI marketing, promotion, and product content, they're the perfect pairing for retailers' customer engagement efforts.
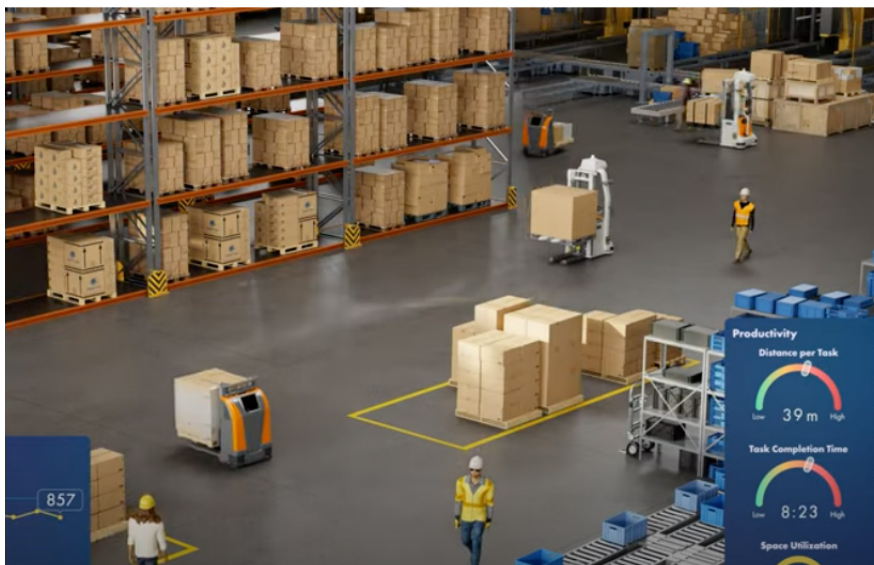

Industrial Digital Twins for Simulating Robot Fleets

KION Group, the Supply Chain Solutions Company, is working with Accenture to optimize supply chains to provide digital twins of warehouses that allow facility operators to design the most efficient and safe warehouse configurations without interrupting operations for testing. This includes optimizing the number of robots, workers, and automation equipment.

## Retail's Concerns for Generative AI

Retail is one of the industries most closely connected to its customers, gathering extensive data at multiple touchpoints throughout the customer journey—both in physical stores and on digital platforms. As such, it makes sense that retail's prima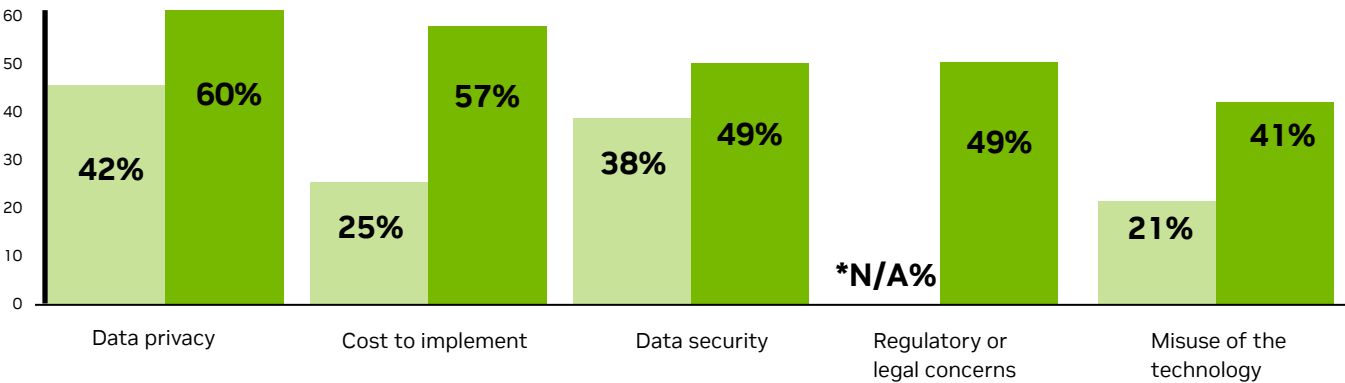ry concern around generative AI is data privacy, with 60 percent of survey respondents saying it was one of their top concerns.

In that same notion, at 49 percent, data security was third on the list of top concerns for generative AI. Generative AI models are well known to be data hungry, and companies want to make sure that data is safe, secure, and working for their company's interests. Related to security, 49 percent of respondents were also concerned about the regulatory and legal issues surrounding generative AI. This goes beyond data security to include copyright issues around the use of generative AI-created texts and images.

**Top 5 Gen AI Concerns** 2023 2024



| | Data privacy | Cost to implement | Data security | Regulatory or legal concerns | Misuse of the technology |
|---|---|---|---|---|---|
| 2023 | 42% | 25% | 38% | *N/A% | 21% |
| 2024 | 60% | 57% | 49% | 49% | 41% |

*Option not included in previous year's poll.

One concern retailers have about generative AI increased the most year to year—the cost of implementing it. In 2023, 25 percent of respondents considered it a concern, while 57 percent cited it as a concern in 2024. As companies move out of pilot projects and assessment periods, they're naturally concerned with how much generative AI will cost as they scale existing projects into production and expand it to new use cases.

Retailers aren't broadly concerned with generative AI as a source of job displacement. Only 16 percent cited it among their top three concerns this year. That's down from 21 percent in 2023 and comes as companies realize what generative AI can and cannot do and how it's best used to enable employees, streamline processes, and provide insights.

# Part 3: Overall Trends for AI in Retail

In this section, we explore the true breadth of how AI is helping to transform retail and CPG. Use cases for AI have proliferated across nearly every line of business, helping to improve decision-making, create operational efficiencies, and enhance employee productivity.

## Key Trends for 2025

### Retailers Expand Their AI Focus Across the Entire Business

Companies are seeing a return on investment (ROI) across the operational stack.

Companies are focused on AI investment across digital retail channels, back office operations, the supply chain, and physical stores.

Productivity and operational efficiency have been areas of improvement from AI.

### Overall Use Cases of AI in Retail

Use cases are spread across retail and CPG operations, with the majority of companies using AI in six or more projects.

In physical stores, the top use cases for AI are inventory management, analytics and insights, and adaptive advertising.

For digital retail, the top use cases for AI are content creation for marketing and advertising and hyperpersonalized recommendations.

In the back office, the top use cases for AI are customer and predictive analytics.

### Challenges of AI in Retail

The top challenges companies face in achieving their AI goals are spread across operations, including lack of AI talent, budget, and explainable AI tools.

The challenge that had the biggest year-to-year increase for retailers was lack of budget.

The challenge that had the biggest year-to-year decrease was having inadequate technology to accomplish goals, as well as enough compute performance to process data.

More than half of retailers said that AI governance is "very important" to their companies, while less than half of companies have created formal governance policies.

## AI Investments Are Spread Across the Retail Landscape

Omnichannel retail—including ecommerce, mobile, social channels, and physical stores—was the top focus of AI investment for retailers at 57 percent. Back office operations, such as marketing, human resources, and finance, were well represented, with 50 percent of respondents saying they've invested in AI for internal projects. About 45 percent also said they're investing in AI for the supply chain, including forecasting and distribution. Physical stores have also seen progress with AI, with 31 percent having invested in AI projects for brick-and-mortar locations.

### AI Use Cases—2024 (Overall Categories)

| Category | Percentage |
|---|---|
| Digital retail | 57% |
| Back office | 50% |
| Supply chain | 45% |
| Physical stores | 31% |
| Other | 5% |
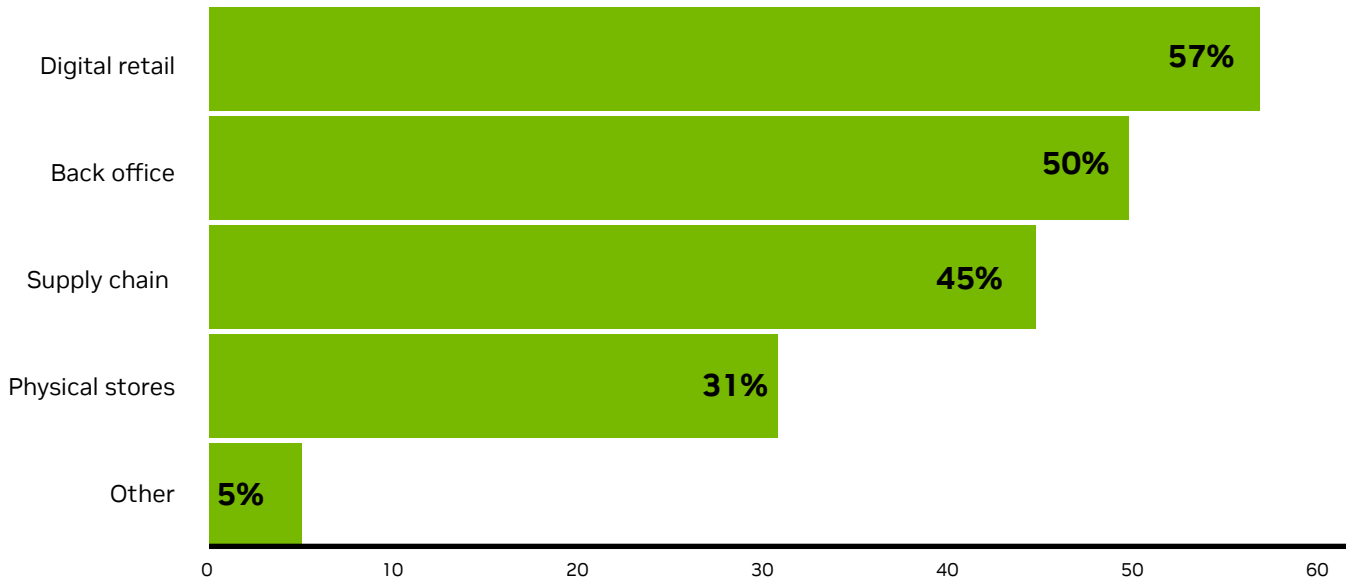
The spread of AI use cases across the entire retail stack shows how AI is uniquely applicable to how the industry operates. Relative to findings in our *State of AI in Financial Services* and *Telecommunications* survey reports, retail saw the highest number of use cases, indicating how well integrated AI has become in the industry. Overall, 51 percent of retailers said they use AI for more than six use cases.
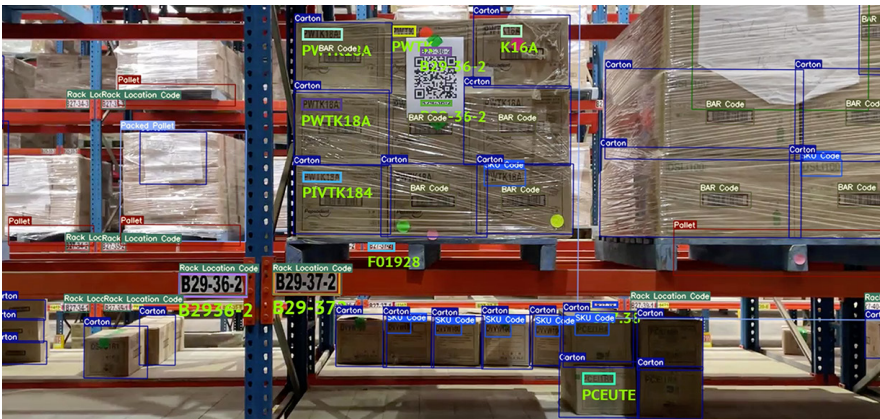


KoiReader, supply chain ISV using computer vision

KoiReader's technology helps read warehouse labels and barcodes in fast-moving environments where the labels can be in any size, at any angle, or even partially occluded or damaged.

Here's a breakdown of how AI is being integrated into physical stores, digital retail, and the back office. For how retailers and CPG manufacturers are integrating AI use cases in the supply chain, see our in-depth analysis in part 4 of this report.

## Digital Retail (Ecommerce, Mobile, Social, Etc.)

| Use Case | % |
|---|---|
| Marketing and advertising content creation (images, text, video, music, etc.) | 71% |
| Hyperpersonalized customer recommendations | 64% |
| Marketing and advertising placement and distribution (e.g., retail media network) | 50% |
| Multilingual chatbots for customer service | 49% |
| Product tagging and cataloging | 44% |
| Adaptive advertising, promotions, and pricing | 42% |
| Augmented reality experiences | 35% |
| Visual search | 31% |
| Brand avatar for automated customer service | 25% |
| Similar, complementary products | 24% |
| Cybersecurity | 21% |
| Other | 4% |

## Physical Stores

| Use Case | % |
|---|---|
| Stockout and inventory management | 72% |
| Store analytics and insights | 69% |
| Adaptive advertising, promotions, and pricing | 56% |
| Real-time shopper activity alerts (e.g., customer service) | 44% |
| Labor optimization | 42% |
| Loss prevention and asset protection | 36% |
| Product freshness and Production quality inspection | 36% |
| Autonomous checkout | 33% |
| Queue length / customer wait time | 31% |
| Organized retail crime and safety | 22% |
| Automated license plate recognition (ALPR) | 8% |
| Other | 6% |

**Back Office**



| Category | Percentage |
|---|---|
| Customer analysis and segmentation | 78% |
| Predictive analytics | 73% |
| Dynamic code and function generation | 42% |
| Synthetic data generation | 38% |
| Other | 5% |

## The Impact and Return on Investment of AI in Retail

What's been the practical benefit of all this investment in AI? Forty-three percent cited improved insights and decision-making. Essentially, AI has helped retailers understand their customers better with capabilities like customer segmentation and analysis, predictive analytics, insight into their supply chain and inventory levels, and more.

Beyond customer insights, AI is also transforming workforce efficiency. Employee productivity has been one of the biggest gains in the last year. Up from just 14 percent in 2023, 42 percent of respondents listed enhanced productivity as one of the biggest impacts of AI in 2024. For instance, using generative AI to help create marketing copy or advertising images is a clear example of how AI can help employees be more productive.
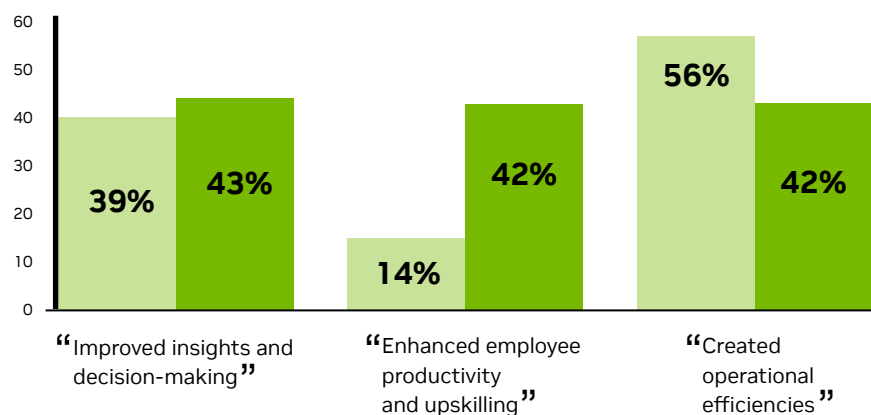
**43%**
improved insights and decision-making.

**42%**
enhanced productivity impacted by AI.

**AI Impact on Business Operations**  2023  2024



| Category | 2023 | 2024 |
|---|---|---|
| "Improved insights and decision-making" | 39% | 43% |
| "Enhanced employee productivity and upskilling" | 14% | 42% |
| "Created operational efficiencies" | 56% | 42% |

We've also seen the ROI of AI spread across retail and CPG operations. At 23 percent, marketing and advertising content generation was cited as the use case with the greatest ROI. Customer analysis and segmentation was next at 19 percent, followed by hyperpersonalized recommendations at 18 percent. The related use cases of demand forecasting and predictive analytics were both cited at 17 percent.

## Top 5 Use Cases With the Highest ROI—2024
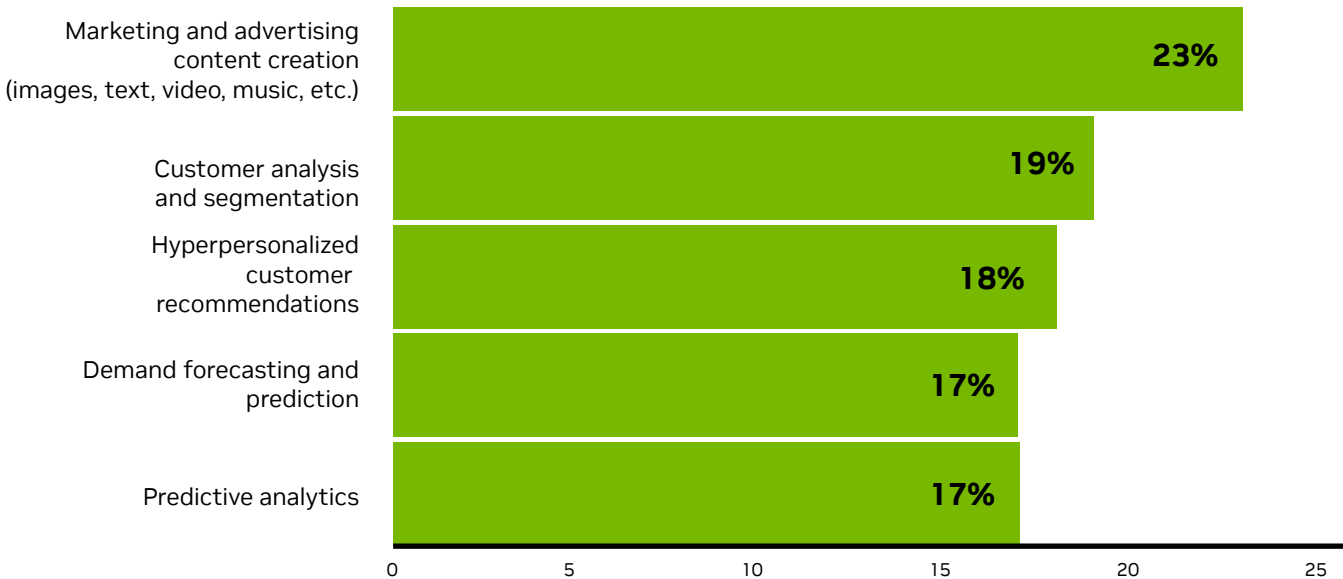


The results indicate a notable transformation, highlighting AI's function as a driver for deeper insights and improved operational efficiency. By helping retailers gain a better grasp of their customers and streamline their processes, AI is fundamentally changing how businesses function, resulting in substantial ROI. This transformation empowers employees to participate in more purposeful work while also promoting a culture of innovation and flexibility. As retailers adopt AI, they're not just integrating new technologies; they're rethinking their business models and redefining customer interactions, ultimately paving the way to a more resilient and dynamic future.

An independent study commissioned by a leading independent software vendor (ISV) revealed that retailers achieved a remarkable ROI of 374 percent over three years with an AI-powered loss prevention solution. On average, retail customers recouped $88,000 per store annually and achieved payback in less than six months.

## Challenges of AI for Retailers

Given the wide use of AI across retailers' value chains, it makes sense that no single challenge stood out among survey respondents. But some challenges in adopting and implementing AI are universal. In our other industry *State of AI* survey reports, the top two challenges companies say they face are typically recruiting and retaining AI experts and talent, such as data scientists and engineers, and knowing how to quantify ROI. These were also cited among the top three AI challenges that retailers face at 31 percent and 28 percent, respectively.

The top AI challenge for retailers in 2024 was the need for more explainable AI tools and research at 33 percent. This is a new answer option in the survey this year, and it speaks to the need for more software and solutions—specifically around generative AI and AI agents—that make it easier for companies to use AI and understand how the tools work.

### Top 5 AI Challenges    2023 2024
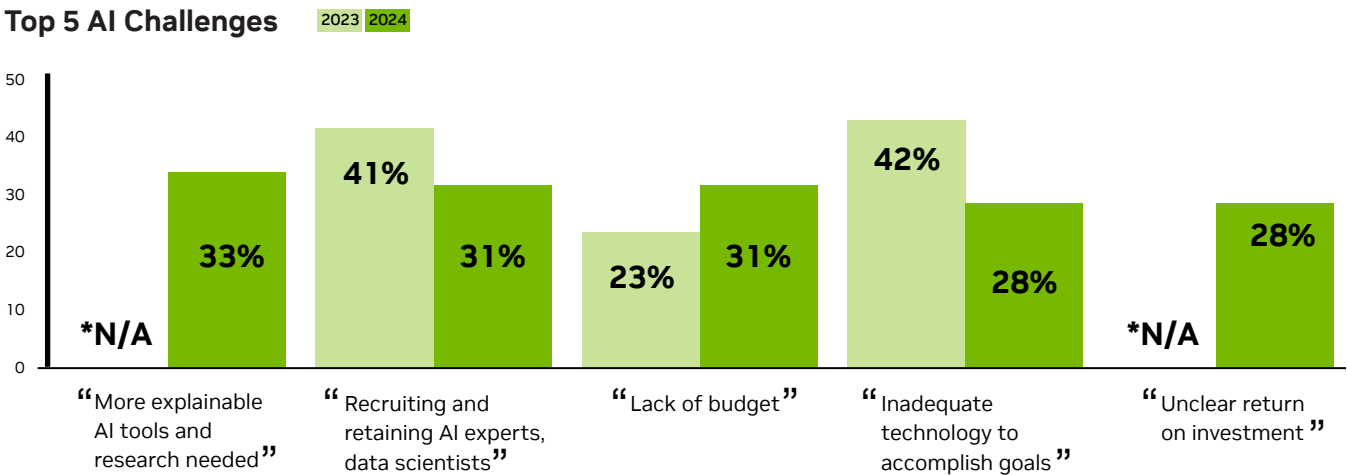


*Option not included in previous year's poll.

There were decreases year over year with other challenges. For instance, having inadequate technology to accomplish AI goals went from the top concern in 2023 at 42 percent down to 28 percent in 2024. Having enough compute performance for data processing and AI bottlenecks went from 22 percent last year to only 8 percent this year.

The flattening of responses around the top AI challenges speaks to the maturing of AI solutions as a whole. Whereas companies specifically were concerned with having the tools and people needed to get started (recruitment, inadequate technology, and lack of computing resources) and wondered how these tools would provide ROI in the last couple of years, they're now looking at more solutions from a holistic perspective, identifying challenges to specific lines of business and tools. Essentially, retailers feel like they have enough technology, but they want to better understand how that technology works.

Many of these challenges can be wholly or partially addressed through better AI governance. More than half of retailers at 52 percent said AI governance (in terms of identifying bias in AI models and solutions, as well as guardrails around how AI is used) is very important. And yet, a little less than half of respondents—46 percent—said they've created formal AI governance policies that align with industry standards and best practices. And 44 percent said they've developed a framework for ongoing assessment and improvement of AI governance practices. A bit more than a third at 36 percent said they've established an AI governance panel.

This highlights a significant opportunity for retailers to strengthen their approach to AI governance, ensuring they not only mitigate risks but also build trust and unlock the full potential of AI to drive innovation and value in their businesses.

**Top 3 AI Governance Initiatives—2024**

# 46%
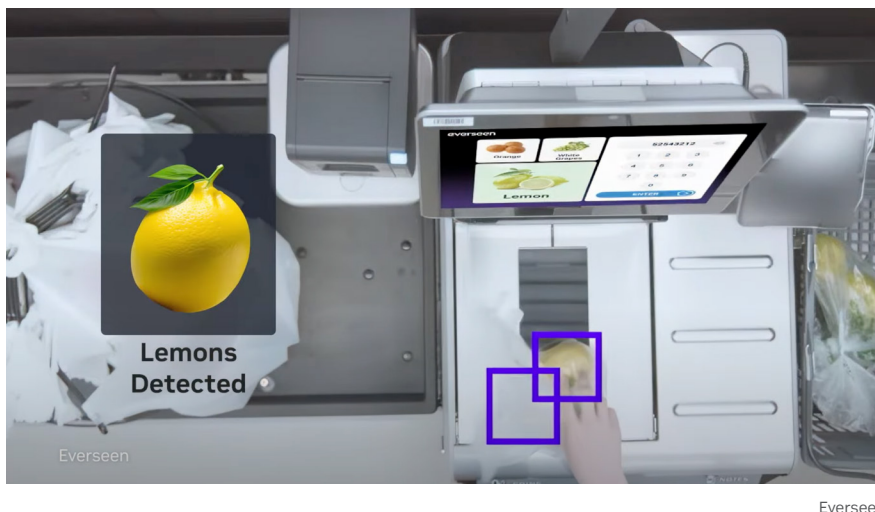created formal AI governance policies that align with industry standards and best practices.

# 44%
developed a framework for ongoing assessment and improvement of AI governance.

# 36%
established an AI governance panel.



Everseen

Everseen is a leader in vision AI, driving business value through loss prevention, inventory management, and improved customer experience.

# Part 4: AI in the Supply Chain

The supply chain has always been a challenge for retail and CPG companies, but it has become increasingly difficult to manage over the past five years due to the pandemic and other global events. Additionally, customer preferences have shifted, with many consumers now favoring omnichannel shopping experiences, reflecting a desire for convenience and safety.

Companies are feeling the pressure, with 59 percent of surveyed respondents reporting that their supply chain challenges have increased in the last year. In this section, we surveyed executives and supply chain professionals to take a specific look at how AI is being used to manage the supply chain, increase efficiency, and reduce costs.

## Key Insights on AI in the Supply Chain

### Improving Supply Chain Operations With AII

Companies are looking to increase operational efficiency and throughput of the supply chain with AI, while addressing rising costs.

Many retailers are looking to AI to meet customer expectations, while supporting an increase in digital commerce.

### AI Investment in the Supply Chain

**82%**

of executives and supply chain professionals said they would increase spending on AI for the supply chain in the next fiscal year.

The most prominent investment of AI for supply chain management is in-demand forecasting and prediction.

Physical AI and robotics will help CPG companies manage logistics for the supply chain.

### The Impact of AI on Supply Chain Operations

AI has helped improve supply chain operations by reducing operational costs, automating repetitive tasks, and enhancing decision-making through data analysis.

**5%**

The reduction in supply chain costs cited by half of executives.

## How Retailers Are Using AI to Improve Supply Chain Operations

At 58 percent of responses, the top challenge that retailers and CPG manufacturers are addressing with AI is improving operational efficiency and throughput. AI excels at analyzing factors to optimize operations, such as predicting inventory demand and shipping times to ensure popular products are available when needed. And with reducing costs also cited as a top challenge at 45 percent, AI is well suited to analyzing the supply chain and finding where inefficiencies are costing companies money.

Two related challenges that retail and CPG companies are addressing with AI are meeting customer expectations at 42 percent and supporting the increase in digital commerce at 34 percent. These findings are largely due to the acceleration of consumer online shopping, which has led to heightened expectations for convenience and efficiency. Consequently, customers are less forgiving of stockouts or long delivery times, as they have many alternatives available.

### Top 3 Supply Chain Issues Addressed With AI

**58%**
addressed operational efficiency and throughput issues using AI.

**45%**
addressed rising costs using AI.

**42%**
addressed issues meeting customer expectations using AI.

## Investment in AI for the Supply Chain to Increase Next Year

As previously noted, the retail and CPG industries are almost universally expecting to increase investment in AI in the next fiscal year. Investing in AI for supply chain operations is no exception. Overall, 82 percent of respondents in this section of the survey, which was constrained to executives and supply chain professionals, said that they would increase their AI investment for the supply chain. No companies said that investments would decrease, and 18 percent said investments would remain the same.

Some companies are looking to substantially increase their investment in AI for the supply chain, with a full quarter saying that investment would increase by more than 20 percent. Another 14 percent said investment would increase between 10 and 20 percent.

**2025 Supply Chain AI Investment**
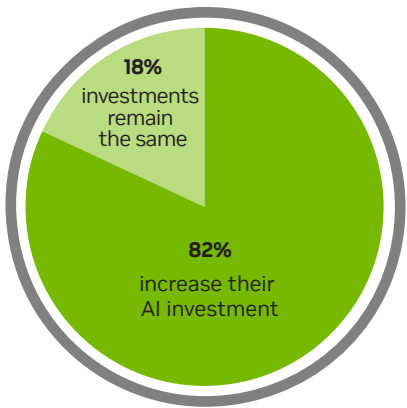


18% investments remain the same

82% increase their AI investment

The retail and CPG industries are almost universally expecting to increase investment in AI in the next fiscal year. Investing in AI for supply chain operations is no exception.

## How Much Will Your AI Investment for the Supply Chain Change in the Next Fiscal Year?

| **20%** Increase <5% | **25%** Increase >20% | **18%** No change |
|---|---|---|

What will that investment look like? By far, the strongest answer was in demand forecasting and prediction at 82 percent. After demand forecasting, a variety of answers saw similar levels of interest, including digital copilot advisors for warehouse employees at 35 percent, automating the creation of periodic reports at 33 percent, and logistics simulation and optimization at 27 percent.

A significant portion of companies will also be looking toward robotics and physical AI to support supply chain operations, especially among CPG companies. For instance, 29 percent said they were looking to invest in pick-and-place robotics solutions, where robotic arms (like gantry or delta robots) automate the process of picking up products and inspecting them or placing them in packages. About a quarter of companies at 24 percent said they would look to invest in smart forklifts or automated mobile robots (AMRs), while another 24 percent said they're investing in using sensors and AI for data capture and intelligence at the loading dock.
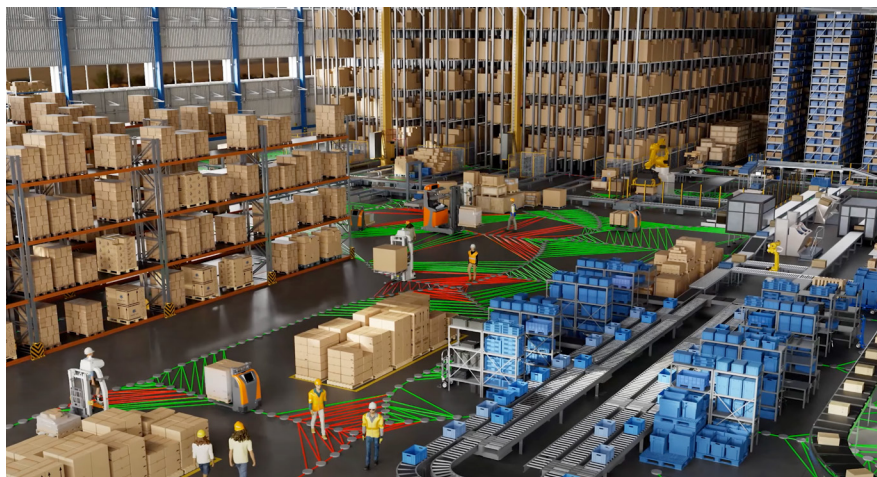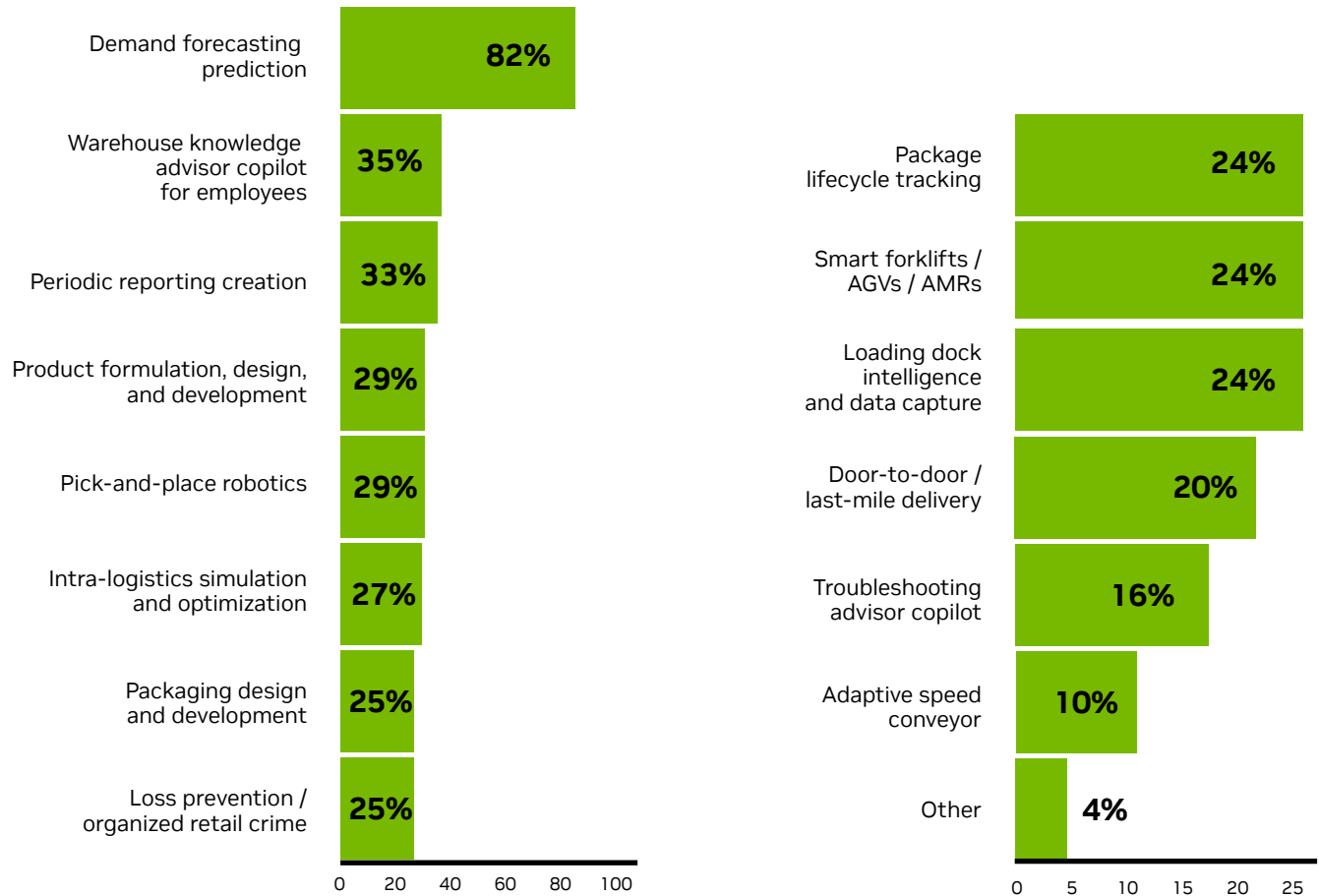


Digital Twin Warehouse

A digital twin is a large-scale, physically accurate simulation of an asset, process, or environment with multiple autonomous systems that's synchronized with real-world data streams.

Retailers are improving the next generation of their stores with digital twins, simulation, and advanced tools that remove friction for customers and associates.

## 2024 Supply Chain Investment

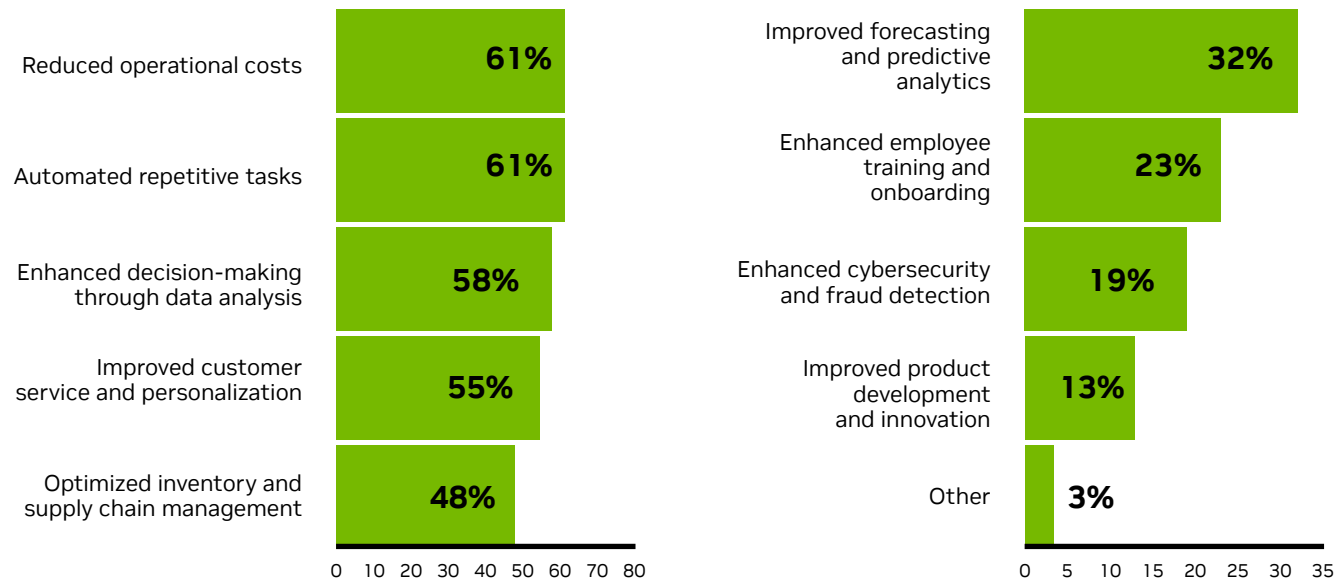| Category | Percentage |
|---|---|
| Demand forecasting prediction | 82% |
| Warehouse knowledge advisor copilot for employees | 35% |
| Periodic reporting creation | 33% |
| Product formulation, design, and development | 29% |
| Pick-and-place robotics | 29% |
| Intra-logistics simulation and optimization | 27% |
| Packaging design and development | 25% |
| Loss prevention / organized retail crime | 25% |
| Package lifecycle tracking | 24% |
| Smart forklifts / AGVs / AMRs | 24% |
| Loading dock intelligence and data capture | 24% |
| Door-to-door / last-mile delivery | 20% |
| Troubleshooting advisor copilot | 16% |
| Adaptive speed conveyor | 10% |
| Other | 4% |

## Impact of AI on Supply Chain Operations

The result of investing in AI for supply chain operations has been improvement across the board, according to survey respondents. For instance, at 61 percent, automating repetitive tasks was seen as a common improvement.

Data analysis has led to enhanced decision-making, according to 58 percent of respondents. Customer service has been enhanced by more than half of companies at 55 percent, and inventory and supply chain management has seen improved optimization according to 48 percent.

## How Has AI Improved Supply Chain Operations?

**Reduced operational costs** — **61%**
**Automated repetitive tasks** — **61%**
**Enhanced decision-making through data analysis** — **58%**
**Improved customer service and personalization** — **55%**
**Optimized inventory and supply chain management** — **48%**

0 10 20 30 40 50 60 70 80

**Improved forecasting and predictive analytics** — **32%**
**Enhanced employee training and onboarding** — **23%**
**Enhanced cybersecurity and fraud detection** — **19%**
**Improved product development and innovation** — **13%**
**Other** — **3%**

0 5 10 15 20 25 30 35

Four-fifths of companies have said that AI has ultimately helped reduce operational costs of the supply chain. A combined 25 percent said costs have been reduced by at least 10 percent.

### AI Impact on Reducing Operational Cost

| 20% | 31% | 24% | 9% | 16% |
|---|---|---|---|---|
| No impact | Less than 5% | 5–10% | 10–20% | More than 20% |
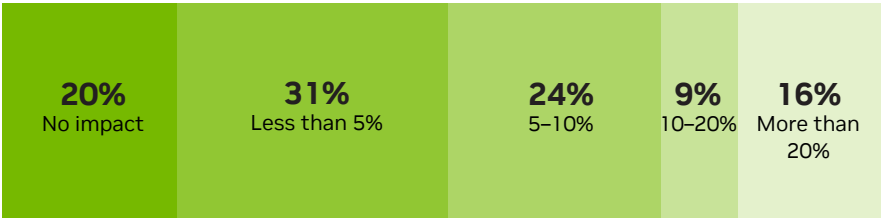
**4** out of **5**

of companies have said AI has ultimately helped reduce operational costs of the supply chain.

**25%**

said costs have been reduced by at least 10 percent.

## Part 5: Looking Forward

The results of this year's retail and CPG survey are clear. Companies have expanded their evaluations of various AI pilots and projects, and certain AI use cases have matured in production. These have had a net positive impact, for both customers and companies, to the point that nearly all companies are planning on increasing their AI budgets in the next year.

Generative AI is starting to find its footing across diverse business applications, with ample room for growth. We're witnessing a profound realization among retailers: AI has the potential to transform every facet of their operations. Companies are moving beyond cautious experimentation and integrating AI solutions into their daily practices. Initially focused on applications like content generation, customer experiences, and supply chain efficiency, AI is now extending its reach into new areas. As robotics technology matures, physical AI will emerge as a new frontier for retail and CPG.

Looking ahead, the next wave of innovation—agentic AI—promises to further revolutionize the industry. With autonomous AI agents that require minimal human guidance, the potential for enhanced business value and creativity is boundless. As organizations embrace this transformative technology, they enhance their operational capabilities and pave the way for a future where innovation drives success. The journey ahead isn't just about adopting technology—it's about reimagining what's possible for our businesses and beyond.

## Ready to Get Started?

To learn more about how leading retailers are using AI and generative AI, visit nvidia.com/retail