OliverWyman
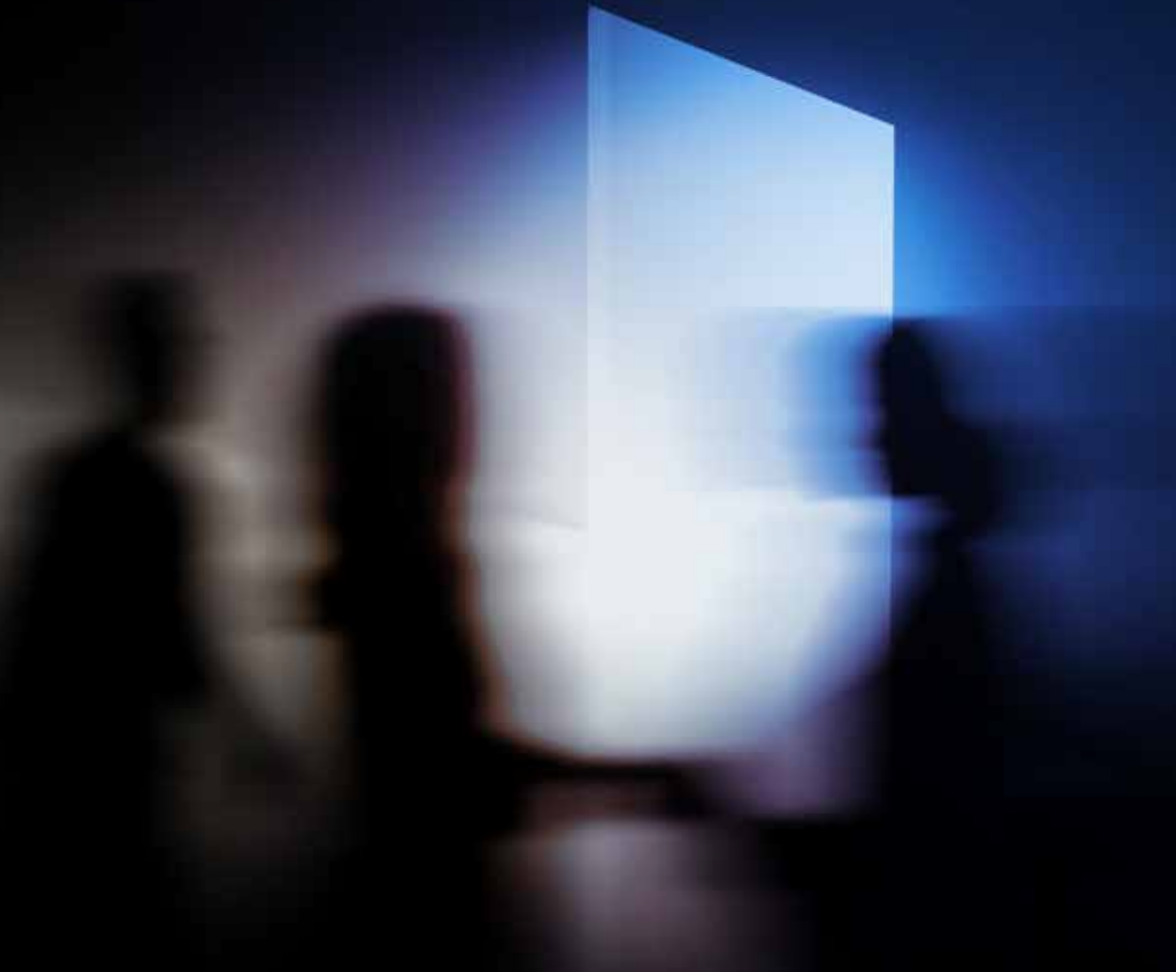
The Future Of Retail

GENERATIVE AI-POWERED RETAIL STORES

Jens Torchalla
Tanja Colanero
Corey Rochkin

CONTENTS

GENERATIVE AI-POWERED RETAIL STORES

In the dynamic world of retail, **generative artificial intelligence (generative AI)** is revolutionizing the game. But can it also revolutionize how retail stores operate? In this article, we explore how generative AI can serve as a catalyst for retailers to operate their stores leaner and more cost-efficiently, while providing store associates with enhanced knowledge and decision support. Furthermore, we believe that generative AI has the potential to fuel new growth for retailers, particularly by improving the customer shopping experience through hyper-personalized offers. This article delves into the impact of generative AI on store operations and the workforce, showcasing accessible and ready-to-implement use cases that can generate high impact in these early stages of technology adoption.

TWO KEY BENEFITS OF GENERATIVE AI IN STORE OPERATION

The adoption of generative AI in stores brings forth a twofold benefit: driving cost and productivity improvements, and fueling new growth. Together, these benefits create a virtuous cycle that propels businesses forward.

DRIVE COST AND PRODUCTIVITY IMPROVEMENTS

Imagine a store where 40% to 60% of human tasks are automated using AI. First-line managers (e.g., store managers, shift leaders) believe that 45% of their own jobs could be automated by generative AI, which aligns with various expert views. In contrast, entry-level blue-collar employees think only 36% of their jobs could be automated by AI. However, experts believe the potential for automation in these roles is much higher, in the range of 60% or more.[1]

Generative AI acts as a catalyst for efficiency and effectiveness in store operations in the following three areas.

- **Streamlining repetitive tasks of store associates.** Generative AI can automate recurring tasks, such as employee labor scheduling, predictive maintenance of store equipment, routine customer inquiries (for instance returns or exchanges), or onboarding of new colleagues, freeing up employees' time to focus on higher-value activities like customer interaction and sales opportunities.
- **Enabling better and faster decision-making** by augmenting (not replacing) human expertise with generative AI "copilots." For example, generative AI can support associates in answering more complex customer questions or supporting inventory management and production planning decisions.
- **Elevating the role of store management** by shifting focus from task execution to validation and action-taking. For example, generative AI can support store and department managers through automated reporting analysis, summary of insights, and action planning based on multiple daily store and department performance reports, alerting compliance issues, flagging waste reduction opportunities, or detecting fraud in stores.

---

1   Oliver Wyman Forum Generative AI report with 25,000 global respondents across 19 countries including US, Canada, Mexico, Brazil

Equipping store associates with generative AI allows associates to shift from task-oriented roles to more customer-facing roles, eventually driving higher sales and customer loyalty for the store

FUEL NEW GROWTH

Fueling new growth is driven mainly by three types of generative AI solutions.

- Solutions that support **store associates in better serving customers**, for example by using generative AI copilots to help answer basic or more complex customer questions (for instance, "Help me find a healthy cereal option for kids under $5.")
- **Reallocating time freed up by generative AI solutions**, for example time savings from automating repetitive tasks and supporting decision-making can be invested in activities highly valued by customers.
- **End-customer-directed** sales and profitability-driving generative AI solutions, for example:
  - Hyper-personalized customer outreach, such as promotions and product recommendations, leveraging data at scale for improved relevance
  - Offering unique services like meal inspiration and planning through AI copilots
  - Redirecting increased productivity toward innovation, particularly in merchandising and marketing functions

Solutions in the last category are primarily driven by leveraging generative AI in upstream functions, such as marketing and merchandising, and are less prevalent in the hands of store operators. However, as we take an end-to-end view of the impact of generative AI on omni-channel shopping, we did not want to miss mentioning these opportunities in this article.

Oliver Wyman's most recent research shows that consumers' interest in user-facing AI solutions is currently limited. This is particularly driven by concerns around data privacy issues (see exhibits 1 and 2). Personalized promotions, however, are an area of high interest and where generative AI can unlock material benefits. Despite limited interest, retailers should still find value in exploring generative AI solutions and building capabilities because, at some point, customers will be interested.

41% of consumers are comfortable sharing their account's sales history to take advantage of AI offerings and services. They don't feel comfortable sharing other data, e.g., social media[2]

---

2   Oliver Wyman consumer research 2024, United States, N = 6859

UNLOCKING GENERATIVE AI VALUE IN STORES EMPOWERS STAFF AND BUILDS MOMENTUM

EMPOWER EVERYONE

Imagine equipping every store associate with a tool that amplifies their capabilities. That's the promise of generative AI. One big difference between traditional large language models (LLMs) and generative AI is that it is accessible for the masses, easy, and user-friendly. Implementing generative AI into stores does not require over-engineered change management but empowering thousands of frontline workers with intuitive generative AI use cases. We believe the big unlock comes from upskilling store employees to use generative AI for high-impact use cases while democratizing the usage of basic generative AI solutions across a broad set of associates. This democratizing approach to generative AI will allow stores to find many of the small — but cumulatively important — productivity unlocks. The result? A noticeable boost in efficiency and growth, achieved without the usual formalities.

92% of retail frontline (blue collar) workers believe that AI can benefit them in their current job

First-line managers (e.g., store managers, shift leaders) think that 46% of their own job could be automated by generative AI[3]

BUILD MOMENTUM

The harder part is integrating generative AI in complex, multi-step processes. While looking for the "big solution" is the ultimate goal for harvesting the transformative power of generative AI, a focused, intermediate effort builds critical experience and overcomes inertia. Oliver Wyman has developed and implemented multiple AI solutions at retail clients, all of them suitable for immediate implementation and scaling to build momentum.

---

3   Oliver Wyman Forum Generative AI report with 25,000 global respondents across 19 countries including US, Canada, Mexico, Brazil

GENERATIVE AI USE CASES FOR STORE ASSOCIATES

Generative AI is not just a tool but a partner for store associates, enhancing their ability to serve customers and manage tasks efficiently. Generative AI empowers store associates by providing:


DAILY ASSOCIATE TASKS
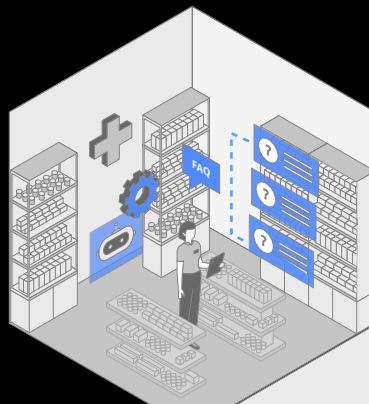
Knowledge assistant
Generative AI chatbot for store associates to ask questions about process standards, HR policies, training material, and more to reduce requests to HQ and help get answers faster (including benchmarking to competition)

Task management
Task management informed by generative AI and real-time computer vision tracking (for example, a picture of spoilage on the floor triggers a task list alert)
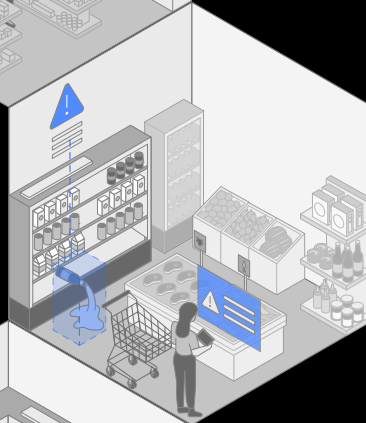
Predictive maintenance
Generative AI can generate recommendations for maintenance actions by analyzing data to detect anomalies instead of manual monitoring of equipment like coolers by employees
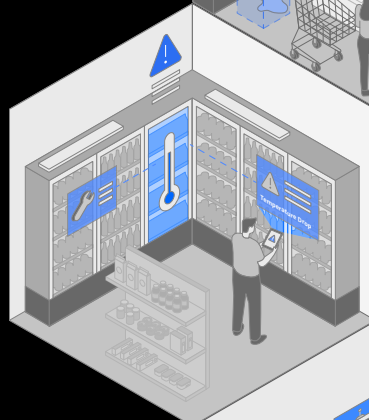
Customer support assistant
Generative AI chatbot to help associates respond to customer requests, such as best suitable products, availability, and location of products, etc.
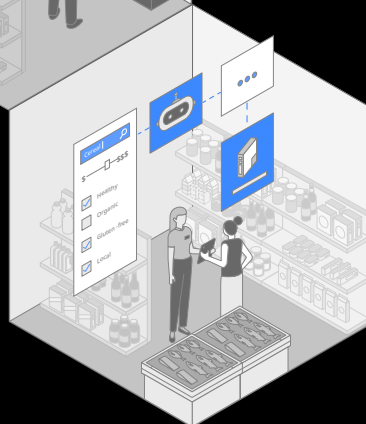
Deep Dive Use Case 1:

GENERATIVE AI CUSTOMER SUPPORT ASSISTANT FOR STORE ASSOCIATES

As retail stores become increasingly digitized, the role of store associates in customer engagement is a key differentiator from e-commerce. Often, store associates face challenges in responding to customer inquiries satisfactorily, whether due to a lack of knowledge, experience, or confidence.

HOW THE TECH WORKS

Data integration:
Generative AI integrates text and unstructured data sources describing product attributes, such as ingredients, origin, dietary markers (e.g., vegan, kosher, gluten-free), target groups (e.g., products for kids), product size, and current retail prices.

Planogram information:
Data base requires planogram data to inform where products are located in the store.

Response generation:
By providing a logic on how to categorize and combine these data points, generative AI can generate structured responses to complex customer questions.

IMPLEMENTATION

Most stores already equip their associates with mobile devices or headsets to access company data, making this solution easy to implement. This generative AI assistant can be deployed within six to eight weeks and offers tangible benefits for the business.

WHAT ARE THE BENEFITS?

Generative AI can provide significant support in responding to customer questions:

Simple inquiries:
Questions about product locations in a store with over 20,000 SKUs can be daunting. Generative AI can quickly provide accurate answers.

Complex inquiries:
Customers often seek advice on products with specific attributes, such as dietary restrictions or price points. Generative AI can handle these complex queries by analyzing various product attributes and offer the right advice.

This function can even evolve to tailored expert recommendations on how to use the product (e.g., recipes, cooking method, product pairings).

STORE MANAGEMENT

Localized customer feedback

Generative AI to analyze unstructured feedback based on customer reviews from multiple sources to provide insights into all areas of store ops and customer satisfaction (including benchmarking to competition)

Store analytics and reporting

Conversational search for store management to get rapid insights and suggested actions around store KPIs instead of analyzing long reports (for instance, "What were the highest-shrink products in dairy last week?")

Planogram compliance

Generative AI algorithms can analyze images or video footage of store shelves to identify deviations from intended planogram layouts and alert store associates or managers
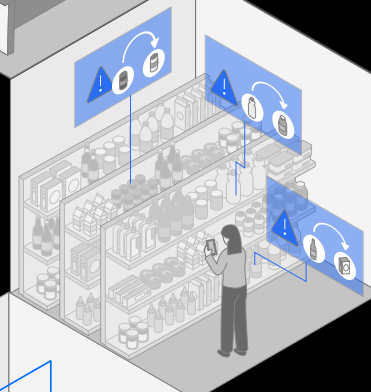
Labor scheduling and on-demand workforce services

Optimized labor scheduling, including an "Ask Generative AI" function for self-service for associates to look up schedules, swap shifts, etc.
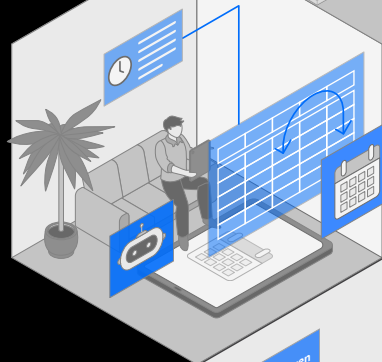
Store layout planning

Generative AI can analyze customer traffic patterns, product popularity, and sales data to generate optimized layouts and create visual simulations of their effectiveness
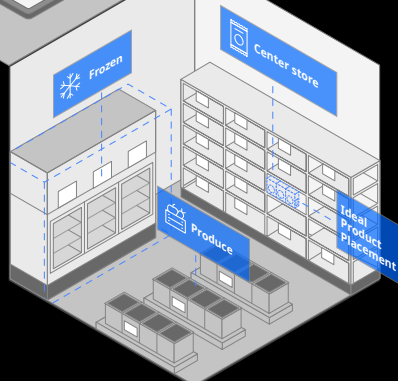
Deep Dive Use Case 2:

GENERATIVE AI KNOWLEDGE ASSISTANT FOR STORE ASSOCIATES

The Generative AI knowledge assistant is designed to enhance store operations by providing store associates with instant access to essential information.

Unlike the customer support assistant, this tool focuses on internal processes rather than customer interactions. It digitizes and structures a vast array of text-based information, much of which is still paper-based or only accessible via back-office computers, far from where it is needed on the shop floor.

HOW THE TECH WORKS

Data integration:
Generative AI consolidates and structures a large set of unstructured documents, including company guidelines, standard operating procedures, emails, memos on new commercial programs, product recalls, HR policies, etc.

Response generation:
By categorizing and combining these data points, generative AI generates structured responses tailored to the associate's role.

Chatbot interface:
Associates interact with the system via a Q&A chatbot function on a device or through voice commands.

Source file tracking:
Responses can include links to source files for deeper dives and transparency.

IMPLEMENTATION

The implementation of this use case can be supported by the same technical infrastructure required for the customer support assistant (typically done within six to eight weeks).

WHAT ARE THE BENEFITS?

1. Simplified, operational guidance
Reduces the need for associates to consult department or store managers or call the support office, thereby increasing efficiency across the entire company. Helps newer employees navigate their tasks more confidently.

2. Agile task management
Provides guidance on "what's next" on associates' task lists informed by generative AI processing images, videos, alerts, and labor schedules.

3. Consistency
Ensures higher execution consistency of store operations and therefore more reliable customer shopping experience.

INVENTORY MANAGEMENT

Out-of-stock management
Stores can use AI and augmented-reality applications to quickly and remotely gauge what needs restocking, reducing trips between the aisles and the backroom

Loss prevention
Generative AI can detect anomalies in sales and inventory data, analyzing video surveillance footage for suspicious behavior and predict potential theft and fraud
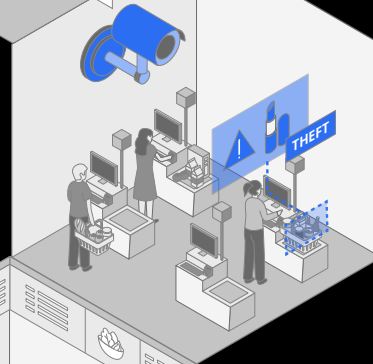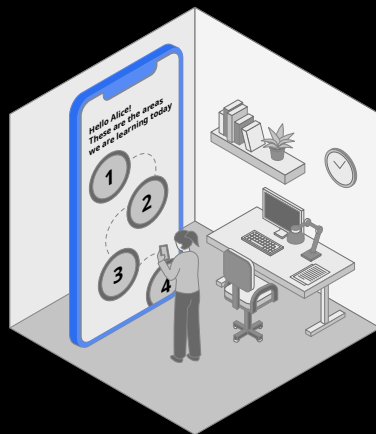
Waste reduction and menu creation
Generative AI can generate menus for in-store cafes or delis based on customer preferences, seasonal offerings, and items that are at risk of being wasted

ONBOARDING AND TRAINING

Virtual generative AI trainer for onboarding of new associates, offering adaptive and personalized learning for all employees leveraging policies, simulations, virtual reality, and assessments

In conclusion, the incorporation of generative AI into store operations unlocks significant potential for cost efficiency and sales growth. By strategically launching high-impact generative AI solutions and democratizing generative AI across the workforce, retailers can rapidly learn from and adopt this transformative technology. The journey with generative AI is just beginning, and for those willing to embrace it, impact on store productivity, customer service, and sales growth can be generated rapidly.

Exhibit 1: With new trends in technology and AI, what do you think about the following grocery store offerings?
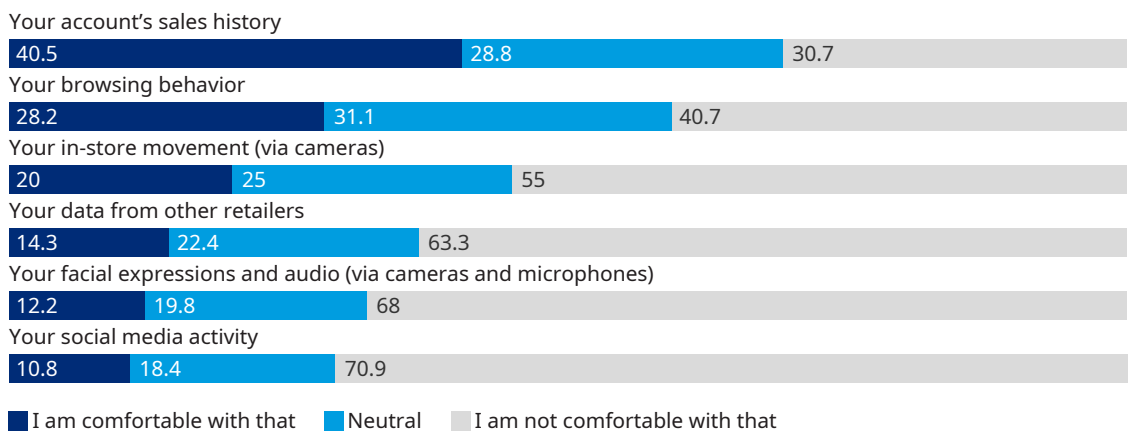
% respondents selected

Custom promotional offers just for you

| 57 | 28 | 16 |

Minimized exposure to non-relevant items during online shopping

| 29 | 40 | 31 |

Item recommendations for you based on similar shoppers' behavior

| 28 | 36 | 37 |

Just-walk-out transactions

| 26 | 36 | 38 |

Store associates using AI-supported devices and tools to assist customers

| 24 | 42 | 33 |

Custom marketing/screen communication in-store

| 17 | 37 | 46 |

Enhanced chatbots online for customer service and/or shopping help

| 17 | 33 | 50 |

■ I am interested ■ Neutral ▢ I am not interested

Source: Oliver Wyman consumer research 2024, United States, N=6859

Exhibit 2: New technology solutions often depend on data. What do you think about retailers having access to the following data?

% respondents selected

Your account's sales history

| 40.5 | 28.8 | 30.7 |

Your browsing behavior

| 28.2 | 31.1 | 40.7 |

Your in-store movement (via cameras)

| 20 | 25 | 55 |

Your data from other retailers

| 14.3 | 22.4 | 63.3 |

Your facial expressions and audio (via cameras and microphones)

| 12.2 | 19.8 | 68 |

Your social media activity

| 10.8 | 18.4 | 70.9 |

■ I am comfortable with that ■ Neutral ▢ I am not comfortable with that

Source: Oliver Wyman consumer research 2024, United States, N=6859

Oliver Wyman is a global leader in management consulting. With offices in more than 70 cities across 30 countries, Oliver Wyman combines deep industry knowledge with specialized expertise in strategy, operations, risk management, and organization transformation. The firm has 7,000 professionals around the world who work with clients to optimize their business, improve their operations and risk profile, and accelerate their organizational performance to seize the most attractive opportunities.

For more information, please contact the marketing department by phone at one of the following locations:

Americas	Europe	Asia Pacific	India, Middle East & Africa
+1 212 541 8100	+44 20 7333 8333	+65 6510 9700	+971 (0) 4 425 7000

AUTHORS

Jens Torchalla

Partner

jens.torchalla@oliverwyman.com

Tanja Colanero

Principal

tanja.colanero@oliverwyman.com

Corey Rochkin

Principal

corey.rochkin@oliverwyman.com