ECONOMIST
IMPACT

A taste for AI

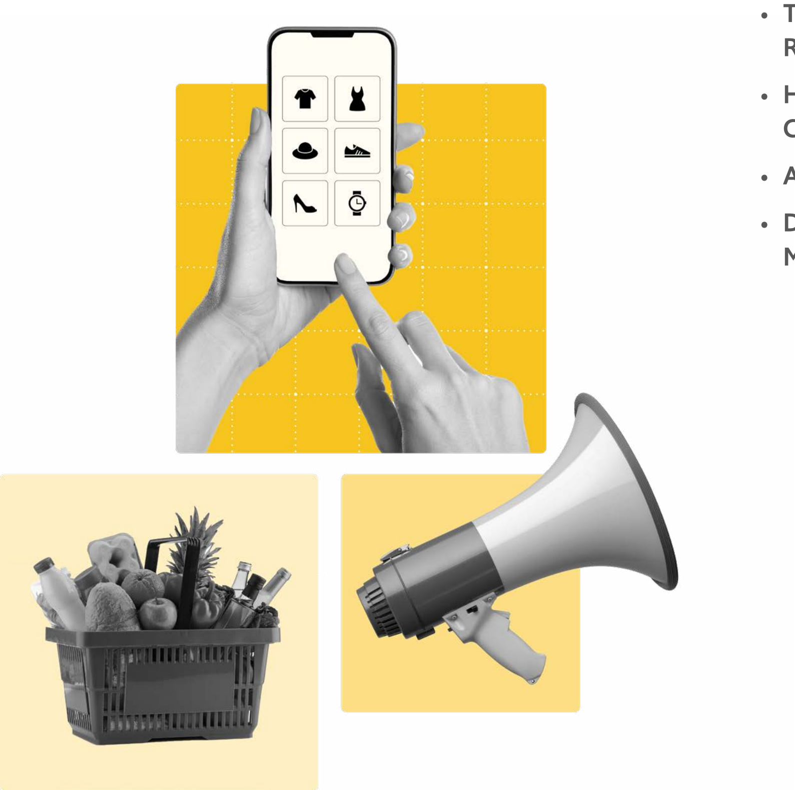
The outlook in retail and consumer goods

Sponsored by databricks

Introduction

Retail companies have been sophisticated users of AI for more than a decade, using machine learning (ML) to forecast demand, manage inventory and generate customer-specific recommendations. The natural language element of generative AI (GenAI), meanwhile, is paving the way for consumer facing features such as realistic digital shopping assistants and conversational search. As a result, retail companies are now paying more attention than ever to their data pipelines in order to rapidly develop and launch new features into production.

An Economist Impact survey, commissioned by Databricks, polled 715 technical executives and 385 data and artificial intelligence (AI) technologists with titles such as data scientists, data engineers and enterprise architects. The survey included 150 respondents representing the retail and consumer goods sector.



We found:

- **Retail is among those at the forefront of both GenAI and AI adoption.**
- **Traditional AI is powering supply chain monitoring and operations: 77% and 75% of retail respondents respectively said AI was having the most impact in these areas.**
- **GenAI, meanwhile, is being adopted or piloted across 70% of business functions at retail firms, surpassing the global average. It is expected to expand to nearly all business functions in the next three years, exceeding projections for all other industries.**

We'd like to thank the following executives for participating in interviews and sharing their insights:

- **Ting Cai,** chief AI and data officer, **Rakuten Group**
- **Helen Choi,** chief digital and information officer, **CJ Cheiljedang**
- **Andy Hill,** chief data officer, **Unilever**
- **Darrin Vohs,** global chief information officer, **Molson Coors**

A strategic imperative

Globally, retail is expected to be the second-largest spender on AI after banking over the next four years, according to market research firm IDC.[1] But companies are not just investing large sums, they are also increasingly bringing AI into boardrooms.

The vast majority (78%) of retail executives in our survey say AI now informs most of their organisation's strategic direction, particularly risk management, market expansion and partnerships.

Delivering such an AI-based corporate strategy requires a common set of change management principles, according to Andy Hill, chief data officer at Unilever, a multi-national consumer goods conglomerate. Guidance and direction "must come from the very top, and get senior sponsorship," he says.

Once executives make it clear that AI is being used to inform major business decisions such as acquisitions and product launches, budgets are often made available to build cutting-edge applications. Individual business units and functions are also more likely to adopt the technology. This is seen across the retail and consumer goods industry, where GenAI is already being used or piloted in 70% of business functions (the global average is 66%) and is expected to expand to 93% of functions in the next three years, surpassing expectations for all other industries.

Such endorsement from the top of a business is crucial in a sector characterised by conglomerate structures, cross-border businesses and multiple subsidiaries and brands. "The digital transformation team needs to be aligned with each business unit on business goals, timelines, resources and investment," says Helen Choi, chief digital and information officer at CJ Cheiljedang, South Korea's largest food company, which has a growing market share globally thanks to the K-culture wave.

---

[1] https://www.idc.com/getdoc.jsp?containerId=prUS52530724

Strong foundations

With speed and efficiency at the forefront of retailers' minds, the data foundation at retail and consumer goods organisations is more important than ever. Teams can't afford roadblocks when it comes to data access, sharing and delivery. At Molson Coors, a Fortune 500 Canadian-American drink and brewing company, AI excellence depends on a strong data core.

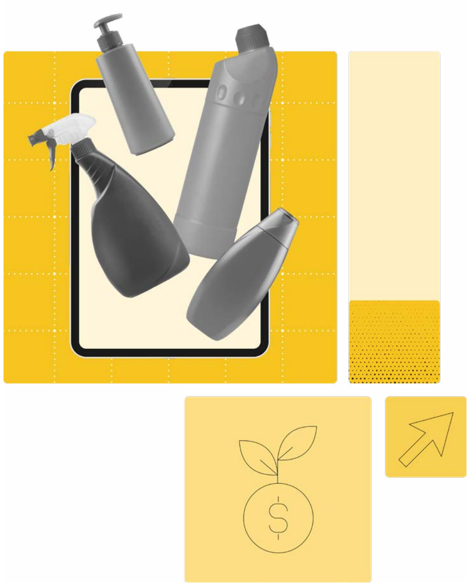
> **"We have to focus on the fundamentals of good data engineering and data management. [They] are still very important, probably more important than ever. My top advice is to figure out what the data foundation is and evangelise it."**
>
> Darrin Vohs, global chief information officer, Molson Coors

Many retailers struggle to develop this strong base because data has historically been scattered across many internal and external pipelines, brands, countries, and providers. According to Mr Hill at Unilever, streamlining data is essential. "The crucial point is that everybody is using the same data. There's only one version of truth, and that becomes a critical success factor."

Once an effective data infrastructure is in place, retail companies can implement AI solutions in near real-time, in a way that can have a real impact on the business. At Unilever, for example, upgrades to the company's data pipelines have allowed its ML-based demand and promotion forecasting solution to incorporate live sales data. This allows the company to automatically take actions, such as increasing orders from suppliers, as consumer buying patterns change.

By removing the traditional barriers between supply chains and increasing the visibility of data, Unilever's model creates a seamless ecosystem, joining one supply chain to the other. "It's an example of a really strong autonomous process where you can see the benefit of ML computing all these different data points coming in, whether it is customer demand, promotions, weather, competitor activity, we are running millions of models every day," says Mr Hill. "It's one of our jewels in the crown."

Unilever has also implemented a separate tool that leverages advanced analytics, AI and big data to rank and optimise the company's portfolio. Last year, this helped to reduce total stock keeping units (product inventory) by 25%, saving money and boosting gross margin, without adversely affecting sales.



Trend catchers

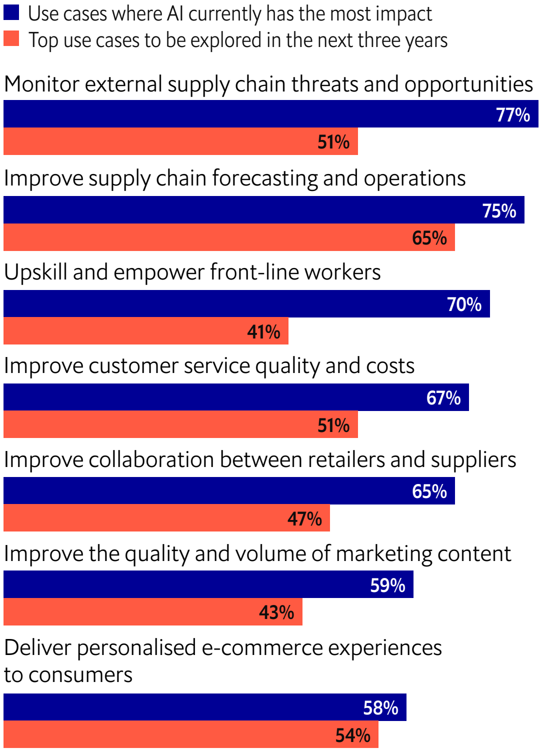
Just as retail and consumer goods companies led the adoption of traditional AI, they also appear set to pioneer ways to use GenAI. Supply chain monitoring and forecasting and operations were cited by 77% and 75% of retail respondents as the two areas where AI currently has the most impact on their business (see figure 1), but looking ahead to the next three years, retailers plan to make a significant push towards AI-powered personalised e-commerce experiences, which are likely to rely on the natural language elements of GenAI.

CJ Cheiljedang uses large language models (LLMs) for what it refers to as 'global trend catching services', providing visibility into the evolution of their customer base.

> **"We use the [LLM] model to collect, process and analyse data on 18 different topics, such as price, taste, texture, packaging, nutrition and delivery, which helps us visualise trends and get insight more quickly across all countries."**
>
> Helen Choi, chief digital and information officer, CJ Cheiljedang

This dramatically reduces the labour intensity of collecting, managing and analysing data and gives CJ Cheildedang much more insight into what their customers are looking for. Related technologies and techniques can also yield customer insight. For example, retrieval augmented generation—a technique that fine tunes outputs based on relevant external sources—can improve consumer engagement by predicting individual preferences based on past interactions with the company.[2]

Figure 1: Top use cases now and in the future



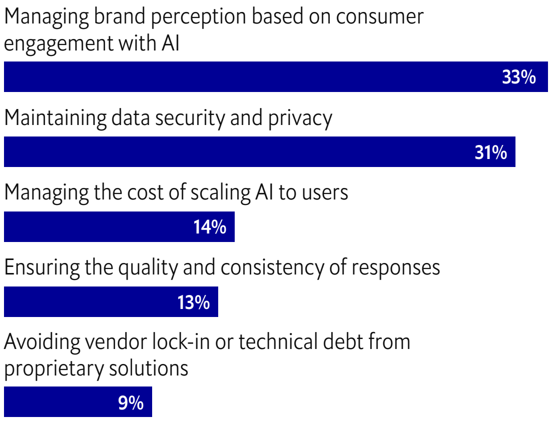
Source: Economist Impact

But brands must also tread carefully when incorporating AI into customer-facing interfaces. According to our survey, managing brand perception among consumers who engage with AI is the top concern when it comes to introducing AI to organisations in the sector (see figure 2). Instacart, for example, saw negative headlines in January 2024 when users mocked the AI generated images it had begun to use to illustrate recipes.[3] The company quietly dropped the experiment soon after.[4]

---

[2] https://www.mongodb.com/blog/post/enhancing-retail-retrieval-augmented-generation-rag
[3] https://www.businessinsider.com/instacart-ai-art-recipes-photos-2024-1
[4] https://www.businessinsider.com/instacart-deletes-ai-generated-food-images-2024-1

Figure 2: Top concern with introducing AI to the organisation



Source: Economist Impact

GenAI can also help bring costs down by streamlining the talent acquisition, review and onboarding process, improving employee management. In an industry that suffers from labour shortages and high turnover, workforce training and management is often one of the most significant areas of expenditure.

Other operational areas could also benefit from GenAI. It can be used to write code, for example.[5] Meanwhile, software consultancy Miquido says fashion brands can reduce time to market for new designs by up to six months by using GenAI to predict consumer sentiment.[6]

Running with speed and intention

Integrating AI throughout the enterprise requires a long-term perspective.

> **“There is an expectation at the executive level around short-term performance and results. But it’s very hard to institutionalise AI and data analysis with employees. You cannot just measure over the short term, you need to think over a three-year timeline. This is because it is not just a matter of data or AI technology implementation. Achieving real business value, led by digital technology, involves a long journey of innovation across ways of working and organisational change management.”**

Helen Choi, chief digital and information officer, CJ Cheiljedang

---

[5] https://www.ey.com/en_gl/insights/consumer-products/how-genai-changes-the-way-cpg-and-retail-operate-and-consumers-too
[6] https://www.miquido.com/blog/generative-ai-in-fashion-industry/

Retail and consumer brands still need to filter out the noise to find the best technology.

> **“AI is moving at an incredible pace, but there is also a lot of hype out there too, and you need to be mindful. The big challenge is plotting the right path for the business between what is ready for experimentation, for prime time and what is future.”**
>
> Andy Hill, chief data officer, Unilever

Ms Choi at CJ Cheiljedang agrees: “Making an AI model and undertaking a technology trial is required, but utilising a model or data within a change management process is more important,” she says, adding that an AI project should align with the overall business objectives and organisational goals.

The lesson, says Mr Hill, is that AI is a “technical enabling capability used to drive the business forward. That means finding the best solution to help the company.” Investing in both people and culture, as Unilever has done through a programme that has trained almost 20,000 people in using GenAI, paves the way to maximise gains from the technology.[7]

---

[7] https://turbohire.co/resources/blog/revolutionising-hr-and-talent-acquisition-in-the-fmcg-industry-with-digital-transformation-and-ai/

While every effort has been taken to verify the accuracy of this information, Economist Impact cannot accept any responsibility or liability for reliance by any person on this report or any of the information, opinions or conclusions set out in this report. The findings and views expressed in the report do not necessarily reflect the views of the sponsor.

ECONOMIST IMPACT

LONDON
The Adelphi
1-11 John Adam Street
London WC2N 6HT
United Kingdom
Tel: (44) 20 7830 7000
Email: london@economist.com

NEW YORK
900 Third Avenue
16th Floor
New York, NY 10022
United States
Tel: (1.212) 554 0600
Fax: (1.212) 586 1181/2
Email: americas@economist.com

HONG KONG
1301
12 Taikoo Wan Road
Taikoo Shing
Hong Kong
Tel: (852) 2585 3888
Fax: (852) 2802 7638
Email: asia@economist.com

GENEVA
Rue de l'Athénée 32
1206 Geneva
Switzerland
Tel: (41) 22 566 2470
Fax: (41) 22 346 93 47
Email: geneva@economist.com

DUBAI
Office 1301a
Aurora Tower
Dubai Media City
Dubai
Tel: (971) 4 433 4202
Fax: (971) 4 438 0224
Email: dubai@economist.com

SINGAPORE
8 Cross Street
#23-01 Manulife Tower
Singapore
048424
Tel: (65) 6534 5177
Fax: (65) 6534 5077
Email: asia@economist.com

WASHINGTON DC
1920 L street NW Suite 500
Washington DC
20002
Email: americas@economist.com