



Transformative Al

Maximising efficiency while minimising carbon

RETAIL

Introduction

In many ways, AI is currently rewriting the rules of retail. It's shaping an industry that's not just evolving but transforming at an unprecedented pace. As consumer expectations rise and environmental challenges grow, AI stands at the forefront, uniting commerce, driving sustainability, and reshaping how retailers operate. This report explores how AI can be the catalyst, enabling businesses to unlock unparalleled growth while advancing eco-conscious objectives.

Al isn't just about efficiency – it's about opportunity. It has the power to synchronise all retail channels, creating a unified commerce environment where each consumer interaction is informed, personalised, and seamless. More importantly, Al can help brands achieve the 'holy grail' of modern business: balancing profitability with genuine environmental responsibility.

This report provides a strategic roadmap for Al adoption, demonstrating how the right investments today can lead to sustainable growth and competitive advantage tomorrow. The research includes insights mined from extensive surveys which include over 250 retailers in the UK, US, France, Germany, and Canada, an audit of the top 200 global retailers, and consumer insights gathered from over 7,500 respondents across the same countries.

The work features three main sections:



Explores Al's integration across business functions and its impact on the retail landscape.

Section 2

Provides powerful survey insights and looks at impacts of AI, the sustainability-profit link and reducing carbon, efficiency versus consumer experiences, and barriers of adoption.

Section 3

Outlines strategic priorities for leveraging AI effectively, ensuring businesses maximise opportunities.

Through comprehensive analysis, this report aims to equip retail leaders with the knowledge and strategies they need to navigate a more Al-driven future, ensuring they not only meet the challenges ahead, but lead the transformation.

Section 1:

Al shaping the evolution of retail

1.1 Al within unified commerce and sustainability

Al is transforming retail, driving the industry towards unified commerce and sustainable practices. Unified commerce integrates all retail channels into a seamless platform, providing a consistent experience across consumer and retailer touchpoints. Al technologies cleanse, consolidate, and analyse data, generating actionable insights to optimise operations. As digital transformation progresses, generative Al and predictive analytics will help retailers anticipate needs at every stage of the customer journey.

Over the past three decades, retail has evolved significantly (Fig. 1), and Al is at the core of this transition.

Beyond personalised shopping experiences, AI empowers sustainable commerce. It enables data consolidation and real-time analysis for operational decisions that reduce carbon footprints – from inventory management to sustainable sourcing – supporting the journey to net zero.

Fig. 1 - Al is central to the next evolution of retail

Source: Retail Economics, SymphonyAl

1.2 Al in the customer journey

A useful framework to analyse the impact of AI is the customer journey (Fig. 2). This approach looks at touchpoints from both a consumer and retailer perspective. For example, at stage 1 of the customer journey:

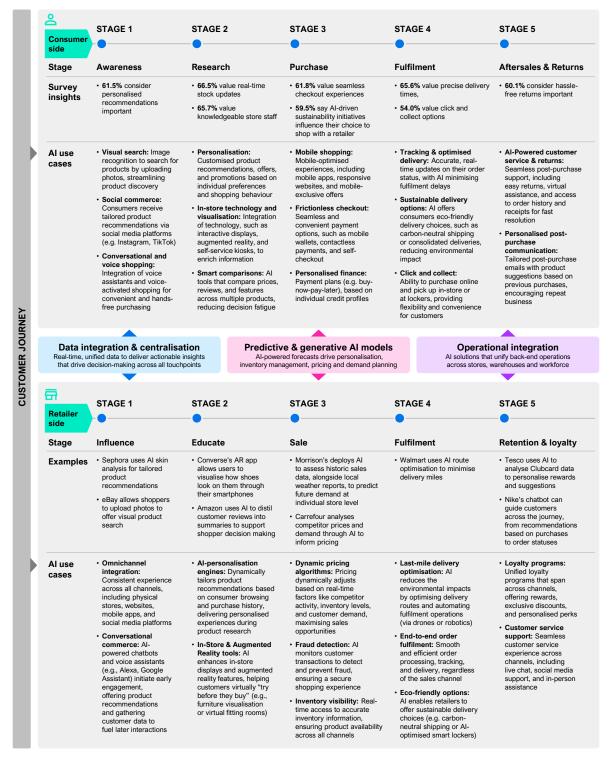
For consumers:

Al can anticipate their needs and offer hyper-personalised product suggestions, creating a cohesive experience across both digital and physical channels, making interactions seamless.

For retailers:

Al can use sophisticated algorithms to segment consumers to help serve effective content with harmonised messaging across platforms and devices to capture attention at critical moments in these early stages. Al effectively bridges silos across retail operations by capturing data at every touchpoint and applying real-time analytics. This unified approach allows retailers to optimise pricing, deliver fast and relevant messaging, and support sales growth – all while maintaining streamlined operations. Efficient Al-driven processes not only boost profitability but has many applications in the area of sustainability across the customer journey. Going forward, Al has the potential to widen the gap between retailers who embrace it, and those that don't.

Fig. 2 – Al impact across the customer journey



Source: Retail Economics and SymphonyAl

1.3 Retail Business Function Al Impact Model (RBFAIM)

In order to measure the impact of AI across retail businesses, we developed the Retail Business Function AI Impact Model (RBFAIM) (Fig. 3). The model features five critical business function pillars where AI-driven solutions contribute to an inclusive range of benefits.

The following five business function pillars are:

(1)

Merchandising and marketing

Al optimises assortment selection by analysing trends and real-time inventory to stock items aligned with customer demand. Al also drives targeted, personalised marketing campaigns and uses sentiment analysis to adapt strategies quickly, improving brand reputation and customer engagement.

2

Demand performance

Al-driven forecasting revolutionises demand prediction, using machine learning to anticipate consumer behaviour, optimise stock levels, and minimise overstocking or shortages. Real-time supply chain optimisation further ensures efficient logistics, adapting swiftly to customer needs across regions.

(3)

Workforce productivity

Al boosts productivity through automated workforce scheduling and task automation. Scheduling tools optimise staff deployment, while task automation frees employees for customer-focused activities, reducing labour costs and enhancing service quality.

4

Store and space

Al gathers in-store data to refine layouts and optimise shelf space. Store intelligence streamlines energy use, security, and maintenance. Al-driven space planning dynamically adapts store layouts based on traffic patterns, enhancing customer experience and reducing costs.

5

Sustainability and waste management

Al supports sustainable practices by forecasting demand accurately to prevent overproduction, managing inventory efficiently, and tracking carbon emissions. Al-driven supply chain optimisation aligns with sustainability goals, meeting the rising demand for green retail solutions.

Business function TIT. Workforce Sustainability & Merchandise and Demand Store & performance marketing productivity space waste **Business area** management Leveraging Al for Involves predicting Task automation Al-driven tools help data-driven consumer demand streamlines retailers make Al can contribute to decisions to improve trends from operations, informed decisions more sustainable product relevance, historical sales to allocating staff more and improve inretail practices, boost sales, and macroeconomic effectively and store experiences reducing excess enhance customer conditions reducing labour consumption, engagement costs energy and waste Re-investment & improvement Al-Driven Al for Demand Al for Workforce Macro Space Al-Driven **Example applications** Assortment Forecasting Scheduling Planning Sustainability Optimisation Automated Predictive Store Intelligence Analytics Al-Optimised Personalised Replenishment Employee & operations Shelf Planning Marketing Systems Performance Waste Supply Chain Campaigns Management Management Sentiment Optimisation Task Automation Sustainable Analysis for with AI Supply Chain Brand Optimisation Management **Cumulative benefits Improved** Commercial **Better operating Enhanced Better managed** consumer benefit efficiencies sustainability risk and reputation experiences

Fig. 3 – Retail Business Function Al Impact Model (RBFAIM)

Source: Retail Economics, SymphonyAl

Section 2:

Transformative AI – Both sides of the till

From extensive multi-regional surveys (see methodology), this section dives into how Al can empower retailers to boost operational efficiency while simultaneously enhancing customer satisfaction. By leveraging Al as a tool, brands can align sustainability goals with profitability, proving that environmental responsibility and business success are not mutually exclusive. This section brings together insights from both consumers and retailers, offering a unique perspective that captures the full picture – from 'both sides of the till'.

2.1 Current and future Al benefits

Current Al impact

Although Al is reshaping retail operations, its current impact is being felt unevenly across business functions – and markets (Fig. 4). Our research reveals that 'Merchandise and Marketing' is the area in which retailers are experiencing the most impact. Here, Al has enabled tailored experiences through personalisation with highly targeted marketing campaigns.

Conversely, 'Sustainability and Waste Management' is currently the area where AI is making the least impact, primarily because it requires comprehensive integration across complex supply chains. Achieving meaningful progress in sustainability often involves cross-organisational collaboration, long-term strategy, and significant investment to align AI with environmental goals.

Impact of Al across business functions: Cross market comparison

A Noticeable positive impact

Moderate Impact

Total Average

Business Function

Sustainability & Waste Mgt
Store & Space
Demand performance
Workforce Productivity
Merchandising & Marketing

Fig. 4 – Perceived impact of Al across business functions: cross market analysis

Source: Retail Economics, SymphonyAl

Variation of AI impact across markets

Perceptions of Al's impact vary significantly by country. While there are many moving parts impacting perceptions of Al across countries, the disparity is partially being shaped by different government and cultural attitudes towards Al, explored in the rank below. French retailers lead in recognising Al's positive organisational impact, whereas Canadian businesses show weaker perceptions, seeing only moderate benefits.

Country rank based on perceived AI impact:

(1)

France

France's AI strategy, supported by €3 billion in investments since 2018, emphasises sector-specific applications and public-private partnerships to boost commercial AI adoption. This has positioned France as a European AI leader, with retailers, especially in luxury and experiential sectors, integrating AI into personalisation, customer experience, and sustainable practices. French retailers perceive the greatest AI benefits in enhancing customer experiences to meet preferences and boost satisfaction.

2

US

The US has a formal AI strategy dating back to 2016, updated in 2019 and 2023, focusing on maintaining global AI leadership through R&D, workforce development, and ethical frameworks. It emphasises innovation, responsible AI, and federal agency collaboration. However, AI development in the US is largely driven by private sector leaders, especially tech giants like Google, Amazon, and Microsoft, which apply AI extensively across sectors including retail.

3

UK

The UK is seen as a strong adopter of AI, driven in part by government initiatives like the UK National AI Strategy launched in 2021 and AI Action Plan in 2022. This approach aims to position the UK a global leader in AI by prioritising safe, ethical development and commercial applications. However, despite significant advancements in AI innovation, retail adoption remains led by individual company initiatives and is uneven, especially among traditional players. UK retailers in sectors such as grocery are exploring AI-driven efficiencies in inventory management and marketing, but adoption is often limited by legacy systems and budget constraints among smaller retailers. As a result, the perceived impact of AI in the UK scores moderately, as companies balance the benefits with the challenges of integrating AI.



Germany

Germany's approach to AI, backed by a €5 billion investment, prioritises ethical AI development, industry-specific applications, and regulatory alignment, including funding for AI research and industry partnerships. However, AI in the German retail sector has a comparatively conservative adoption rate, influenced by the country's emphasis on privacy, data protection.



Canada

Canada's 2017 Pan-Canadian Al Strategy has focused mainly on academic research, Al ethics, and talent development, with less emphasis on immediate commercial applications in sectors like retail. As a result, Canadian retailers have adopted a cautious approach to Al, prioritising costsaving efficiencies over transformative consumer experiences. With fewer large-scale retail players, the adoption of high-impact Al solutions has been slower, and perceived benefits are mainly seen in operational efficiencies.

The impact of AI is also being shaped by different industries, including:

Food

Grocery retailers feel the greatest impact of Al in 'Demand performance' and 'Merchandise & marketing'. This reflects a strategic focus on using AI for demand forecasting, stock management, and personalised promotions, where managing fresh produce and effective communication can reduce waste, boost sales and improve profitability.

2

Luxury

Retailers operating in the luxury market perceive the strongest impact of Al across 'Merchandise & marketing' and 'Store & space'. Al in this category is predominantly used to create personalised, high-touch and premium experiences.

Fuel

Fuel businesses perceive the highest impact for 'Sustainability & waste management' of all categories, prioritising AI to improve energy efficiency, reduce emissions, and minimise environmental impact.

While the current level of Al impact varies by country and industry, the types of benefits businesses expect remain remarkably consistent across markets. It shows retailers globally recognise similar value propositions from AI, despite differences in pace of adoption. As AIdriven transformation gains traction worldwide, a global convergence presents an opportunity for retailers to benchmark AI strategies against international best practices.

Future Al impact

As Al adoption matures, impacts are expected to be felt across all markets more evenly (Fig. 5, light blue bars). However, French retailers currently feels that Al is delivering the most benefits.

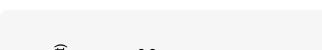
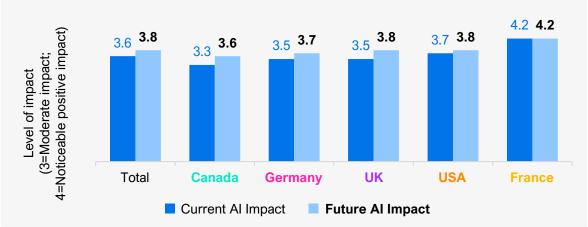


Fig. 5 – Impact of AI set to level up across countries



Furthermore, over the next two years, the influence of AI is set to accelerate significantly across all business functions. This growth signals a future where advanced technologies drive both business value and sustainability commitments. Regarding how companies expect AI impacts to change over the next couple of years, we measured perceived benefits across five key areas, ordered by level of impact being felt.

Workforce productivity

Accelerating impact of At Modern Chandise & marketing

Merchandise & marketing

Areas where businesses expect the impact of Al to increase over the next 2 years

Fig. 6 - Al impact expectations over the next 2 years

Source: Retail Economics and SymphonyAl

'Sustainability & waste management' will see the largest change, reflecting advancements in policy and investor pressure. 'Demand performance' and 'Store & space' will see the second-largest change, likely due to rapid Al advancements in personalisation and inventory efficiency. Lastly, 'Workforce productivity' and 'Merchandising & marketing' is expected to experience only moderate change.

Technology Leaders vs. Laggards

Interestingly, differences arise in the perception of future Al impacts between businesses that consider themselves leaders in technology, versus those that feel they're lagging behind. Leaders (typically mid-to large-scale companies with digital-first strategies) experience broader Al benefits, reflecting their more advanced tech adoption, and are the most likely to expect sustainability benefits. They commonly operate in sectors like luxury, home goods, apparel, and electronics, and are slightly more prominent in France and the US.

Fig. 7 - Expected benefits of AI over the next two years



By contrast, 'laggards' (often smaller, traditional retailers focused on cost-efficiency) prioritise commercial benefits and operational efficiencies. They are skewed towards categories such as automotive, stationery and general merchandise. These businesses generally adopt Al in narrower scopes, focusing on more immediate returns like reducing labour costs through task automation, rather than long-term sustainability goals.

Categories such as fuel, grocery and home furnishings have a spread of businesses with varying technological proficiency, reflecting a broad range of business models.

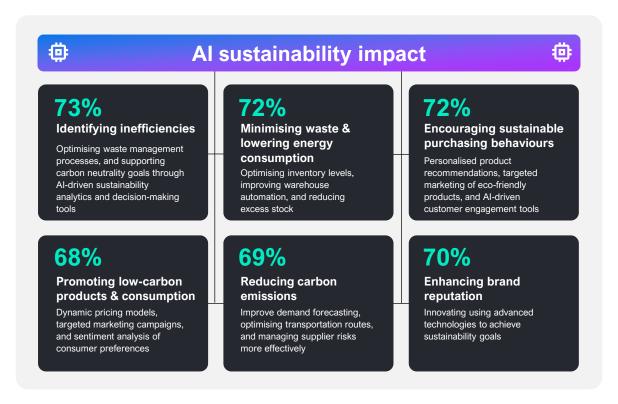
Mid-sized companies with a turnover of between \$100m and \$300m are particularly well-positioned as technology 'leaders' often have agility, compared to larger firms that may have legacy constraints, and smaller firms often struggle with resource limitations.

Overall, what's particularly striking is investing in Al-driven 'Sustainability & Waste Management' initiatives complement operational efficiencies, showing a dual role of Al in driving cost-benefits and environmental progress.

2.2 The Sustainability and Profitability Link

As retailers adapt to new market pressures, Al has emerged as a powerful tool for balancing sustainability goals with profitability objectives. Businesses are using Al to identify inefficiencies that support carbon neutrality by lowering energy use and promoting eco-friendly alternatives. Usage is expected to accelerate as sustainability becomes more pressing with regulatory and consumer demands. Our research demonstrates advances in Al tools are enabling retailers to achieve sustainability goals while optimising operations and improving margins.

Fig. 8 – Where AI is having a significant impact supporting sustainability



Source: Retail Economics, SymphonyAl

Lower carbon intensity hasn't come at the expense of profitability

Our analysis of the top 200 global retailers and consumer-facings brands (observing a five-year period to avoid any short-term volatility in financial results), found underlying trends between revenue, profit and emissions. Notably, revenues and profits have increased, while emissions have remained broadly flat, indicating a weakening relationship between financial performance and emissions.

Companies with retail operations have been able to reduce their carbon intensity (CO2e/revenue \$m) over that period, which effectively reduces the amount of CO2e embedded in every product sold.

When we consider the top 25 companies that have seen the fastest growth in profits over the past five years and compare that with the bottom 25 (Fig. 9) we find that: (1) the top 25 ('profit leaders') outperform on revenue growth, while carbon intensity has plummeted; (2) the bottom 25 ('profit laggards') have seen profit margins decline, revenue weaken, and carbon intensity rise.

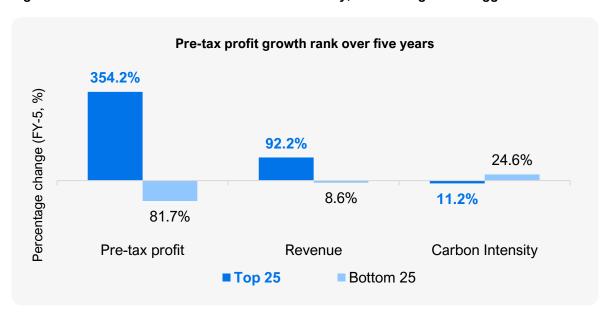


Fig. 9 - 'Profit-leaders' have reduced carbon intensity, contrasting 'Profit laggards'

Source: Retail Economics and SymphonyAl

When grouping companies by retail category (e.g. food, electricals), we see carbon intensity has improved across the board, while profit margins have generally improved also.

Figure 10 plots pre-tax profit margins (y-axis) against carbon intensity (x-axis), comparing the latest financial year (blue bubbles) versus five years ago (yellow bubbles). It shows that reducing carbon intensity does not need to come at the expense of profitability. Notable differences by category include:



Food

Experienced the largest reduction in carbon intensity, while profit margins have increased (e.g. a leading UK grocer uses AI for real-time inventory adjustments to optimise freshness, availability and minimise surplus waste).



Electricals

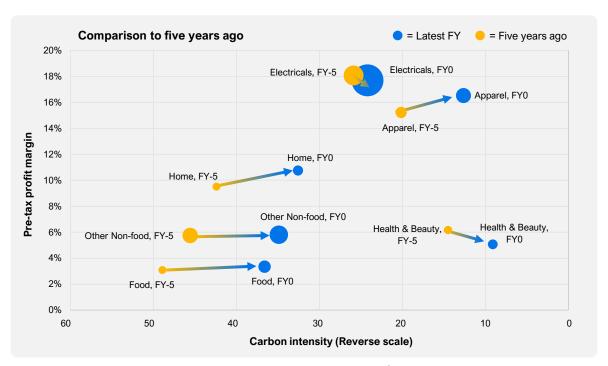
Shows limited changes in profitability or carbon intensity. This has been impacted by semi-conductor shortages as demand for components rises, relying on the Far East, Korea and China to maintain production, where there's limited infrastructure for clean energy and a reliance of coal or natural.



Health & Beauty

Encountered structural challenges due to intense competition from direct-toconsumer brands, putting pressure on traditional retail profitability (e.g. a leading cosmetics brand has strengthened its digital presence and uses Al in marketing and production processes to partially offset margin pressures).

Fig. 10 – Reduction in carbon intensity hasn't come at the expense of profitability among leading retailers



Al's dual role in financial performance and environmental impact

While AI is often leveraged for operational gains, it can have a dualistic effect in reducing carbon intensity. It comes as AI investment has multipliers that ripple through business areas, benefiting operations and sustainability goals (Fig. 11).

Targeted marketing of sustainable products Sustainability benefits Promotes eco-conscious choices and reduces carbon footprint of marketing campaigns (less physical advertising) Al-driven personalisation **Operational benefits** Enhances customer engagement, leading to increased sales and customer loyalty Al-powered Identify Merchandise and Marketing demand operational forecasting inefficiencies Minimise Optimise waste overstocking Sustainability management. and leading to cost Demand understocking, Management savings by performance improving inventory reducing unnecessary Direct impact on turnover rates waste production 俥 reducing carbon and reducing emissions operational Reducing waste Smarter waste and Accurate recycling systems. Transformation predictions lowers more sustainable with Al the environmental supply chains, and Al-driven circular impact of overproduction and economy solutions Store & transportation Workforce productivity emissions Al-optimised layouts Task automation & store management tools Al-driven scheduling enhance workforce productivity, reducing Enhance customer experiences, driving up sales and reducing space inefficiencies, while labour costs and improving reducing operating costs employee satisfaction Operational **Energy-efficient** energy savings store designs
Al-driven energy management systems Optimised in-store and warehouse activities, lowering emissions from reduce carbon intensity from lighting, excessive labour activity heating, and cooling operations

Fig. 11 - Al's dual impact across operations and sustainability

Source: Retail Economics, SymphonyAl

These efficiencies lead to positive externalities that benefit sustainability, through less waste, better targeting of products, and smarter energy use. As Al advances, we expect benefits and synergies to strengthen, solidifying Al's position as a cornerstone of responsible retail practices.

2.3 Balancing Al-driven sustainability strategy with consumer experiences

Al is becoming essential for retailers balancing operational efficiency with enhanced consumer experiences. Leading brands recognise that optimising current performance means anticipating future expectations, including personalisation, sustainability, and circular economy trends.

However, our research shows that on average across markets, sustainability initiatives in general are not currently viewed as key priorities in comparison to operational factors, either by retailers or consumers (indicated by green dots in Fig. 12 being lower priority). Initiatives like eco-friendly packaging are deprioritised versus more immediate concerns, despite rising external pressures for greener practices.

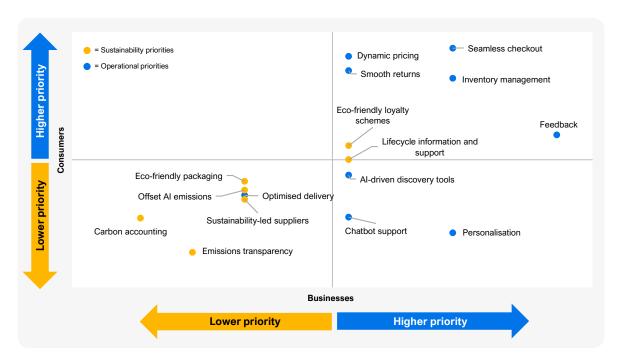


Fig. 12 - Matrix of Al-driven priorities

Source: Retail Economics and SymphonyAl

Key insights

Priority factor	What consumers demand	Implications for retailers
Seamless checkout	The most valued feature among consumers, with 61.8% prioritising a fast, frictionless checkout process.	Implementing Al-driven checkout systems, such as automated checkouts, personalised payment options, and fraud detection.
Personalisation	Tailored recommendations are crucial for 61.5% of shoppers, highlighting the importance of relevance in product discovery.	Providing personalised product recommendations and rewards to for customers, driven by Al to ensure relevance and scalability.
Dynamic pricing and promotions	Fair and transparent pricing strategies and promotions resonate with 61.5% of consumers, who expect dynamic adjustments based on demand and promotions.	Al-driven dynamic pricing models to respond to market demand, competition, and consumer behaviour to optimise sales.
Efficient returns	A smooth returns process is essential for 60.1% of consumers, highlighting a role for Al to streamline what is often a painful part of online shopping.	Al-powered returns and exchange management systems to provide a hassle-free post-purchase experience for shoppers.
Stock availability	Ensuring that products are consistently available is a priority for 59.7% of consumers, while 66.5% value real-time stock visibility.	Underscores the role of AI in inventory management and demand forecasting to avoid stockouts and improve customer satisfaction.
Carbon accounting	More than two in five (45.1% of) shoppers want retailers to consider the carbon footprint associated with their Al technologies.	Retailers must consider the carbon associated with AI when making decisions about its implementation and track its carbon footprint. As AI scales, so must energy-efficient solutions that power it to maximise sustainability benefits.
Feedback	Over half (53.0%) of shoppers want their feedback to be used by retailers to improve products, services, and experiences.	Retailers must listen to consumers at scale, using Al to analyse customer feedback and sentiment to improve products and services.
Offset AI emissions	Wanting retailers to offset or reduce the carbon emissions from the energy consumption of their Al technology matters to 47.6% of consumers.	Involves strategies that offset or reduce carbon emissions from Al deployments (e.g. the energy used to run large data centres).

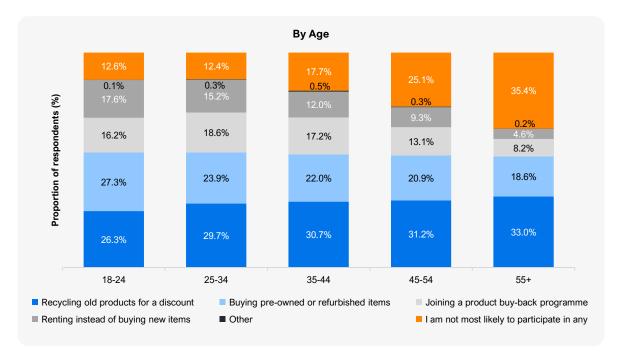
Circular economy

Efficiency and personalisation lead AI priorities, but interest in the circular economy is surging, particularly among younger consumers seeking pre-loved products and product access over ownership. Nearly 90% of consumers under 35 engage in the circular economy, compared to less than two-thirds of over-55s.

Younger consumers favour pre-owned items and buy-back schemes, prompting retailers like H&M and Zara to pilot resale and recycling initiatives, driving brand loyalty and ecoconsciousness. In contrast, older consumers prioritise recycling programmes, highlighting the need for tailored Al-driven sustainability strategies across age groups.

Fig. 13 – Younger consumers are most engaged in the circular economy

Qu: If a retailer uses AI to promote a circular economy (e.g., resale, recycling programmes), what would you be most likely to participate in, if any?



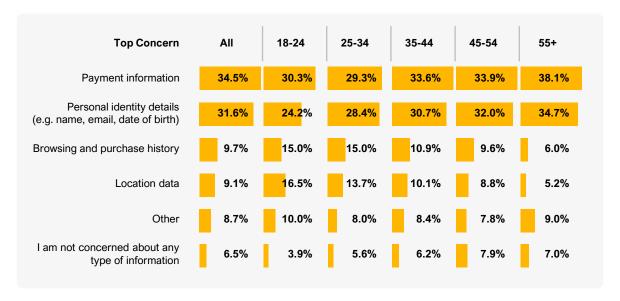
Source: Retail Economics, SymphonyAl

2.4 Consumer concerns

Understanding and addressing consumer concerns about data usage has become a critical component of building trust and brand loyalty. While AI promises enhanced personalisation and efficiency, it also raises valid concerns around privacy and data security. For consumers, the question isn't just about what AI can do, but how safely and ethically it manages their personal information.

Fig. 14 - Top data concerns by age

Qu: What type of information are you most concerned about when it comes to Al data reflecting your preferences?



Source: Retail Economics, SymphonyAl

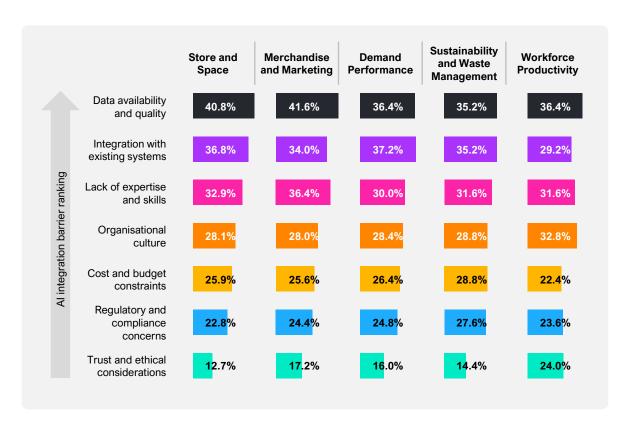
Figure 14 insights

- 'Payment information' and 'Personal identity details' are top concerns across all age groups. Here, retailers should prioritise cybersecurity to reassure shoppers to build trust.
- Data concerns vary by age and country. In the UK, **34.4%** of consumers are most concerned about identity data, influenced by frequent online shopping and loyalty programs, while **27.6%** worry about payment information.
- In the US, **30.7%** are concerned about payment data. Among over-55s, **38.1%** worry about payment security, reflecting financial fraud concerns.
- Younger consumers who are more digitally engaged are nearly three times more likely to be concerned about location data and browsing history, highlighting privacy awareness. Retailers can address this using transparent data practices and customisable data-sharing settings to build trust

2.5 Barriers of Al adoption

Realising Al's advantages means overcoming certain barriers which often vary by business function. We analysed retailer concerns about adopting Al (Fig. 15) and found that on average, data availability and quality, integrating Al with legacy systems, and lacking in-house Al expertise were top barriers.

Fig. 15 – The breadth of barriers to Al integration vary by business function



Source: Retail Economics, SymphonyAl

Figure 15 insights

1 Data quality and availability

Data underpins AI success and high-quality data ensures accurate insights. This is the top barrier across retail functions except for 'Demand performance' where system integration ranks higher. Collating data from siloed sources, getting it in the right format, cleansed and prepared, is a fundamental step. Investing in data collection and management systems is essential here.

2 Integrating with existing systems

Integration with legacy systems presents significant challenges, particularly in 'Demand performance' and 'Store & space'. Integrating AI into inventory management, POS, and operational workflows is costly and time-consuming, compounded by older systems' inflexibility. Investing in APIs and middleware can help different systems communicate and support seamless data flows.

Addressing skills and expertise shortages

All expertise is in high demand, and the retail industry struggles to fill roles requiring both All and retail knowledge. Retailers must invest in upskilling programs or partner with All consultants to close this skills gap.

Overcoming cultural resistance

Al adoption involves cultural transformation. Cultural resistance is especially significant in 'Workforce productivity', ranking just behind data availability. With fears that automation threatens job security, helping to overcome resistance means educating, promoting Al as an enhancement tool, and employee involvement in appropriate decision making.

5 Regulatory concerns with scale

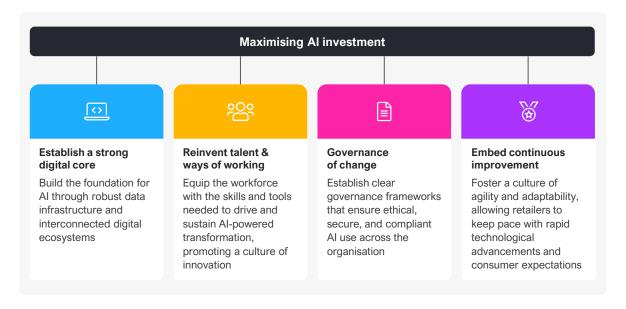
Retailers advanced in AI are twice as likely to see regulatory and compliance issues as a barrier compared to laggards. Trust and ethical considerations are cited three times more by Leaders, who include consumer data ethics and AI transparency in their strategies. Laggards focus more narrowly on immediate efficiencies, prioritising cost reduction over long-term ethics and governance.

Section 3:

Strategic priorities for leveraging Al investment

As Al advances, companies must act strategically to harness its transformative benefits. By proactively integrating Al across the value chain, retailers can boost efficiency, engagement, and sustainability. Realising this value requires a well-structured roadmap and identifying strategic priorities that reimagines operations for an Al-integrated future. The following four imperatives form a framework for maximising Al returns, enabling retail brands to navigate challenges and lead in an evolving marketplace (Fig. 16).

Fig. 16 - Fundamentals of maximising Al investment



Source: Retail Economics, SymphonyAl

1

Establish a strong digital core

Effective AI adoption starts with high-quality, well-governed data. Without structured and accessible data, AI cannot deliver insights for personalisation, demand forecasting, or supply chain optimisation. A strong digital core consolidates data across channels, creating interoperable systems for seamless data flows and accurate, real-time insights. This involves investments in scalable data lakes, cloud storage, and APIs to integrate AI into legacy systems without complete overhauls. By strengthening this foundation, retailers can future-proof technology investments and enhance responsiveness to market demands.

2

Reinvent talent and ways of working

Al adoption demands more than just technical tools – it requires a skilled workforce capable of effectively implementing and scaling solutions. There is a significant talent gap in areas such as machine learning, data science, and Al ethics. Closing this gap calls for targeted upskilling, strategic hiring, and a culture of continuous learning. Cross-functional Al literacy programmes and collaboration between data scientists, business analysts, and retail managers can help translate Al insights into actionable business outcomes.



Governance of change

As Al applications expand, robust governance is needed to address data privacy, ethics, and regulatory compliance. Consumers are increasingly concerned about data collection, storage, and usage, especially with more personalised and predictive shopping experiences. Governance frameworks should incorporate compliance standards, ethical guidelines, and transparent reporting. Establishing oversight roles, such as a Chief Al Officer or ethics committee, can help uphold responsible practices. Responsible Al use mitigates risk and builds consumer trust – a crucial asset in a data-driven economy.



Embed continuous improvement

Al demands ongoing iteration and optimisation. As capabilities evolve and consumer expectations shift, retailers must adopt agile methodologies to continuously improve Al models, processes, and customer strategies. Regularly assessing Al effectiveness, incorporating feedback, and keeping up with innovations ensures Al investments deliver long-term value. Embedding a mindset of continuous improvement helps retailers stay ahead of competitors and respond to new challenges with resilience.

Conclusion

Al is reshaping the retail industry, offering unprecedented opportunities to optimise operations, elevate customer experiences, and champion sustainable practices. To fully harness its transformative power, retailers must tackle challenges head-on – addressing data quality, system integration, skills gaps, and cultural barriers to adoption. Those who embrace a proactive, strategic approach will be well-positioned to turn these challenges into opportunities, gaining a decisive competitive advantage.

By building a robust digital core, reinventing talent and ways of working, ensuring ethical governance, and embedding continuous improvement, retailers can lay the foundation for success in an Al-integrated future. To maximise investment, retail brands need to implement Al with intention, vision, and a focus on creating lasting value for both customers and the business.

Al's potential to improve efficiency, customer engagement, and sustainability is not just a promise – it is a critical evolution in retail's journey. Retailers must consider unlocking Al's full potential, not only to lead in the current marketplace, but to support wider goals like sustainability. Embracing Al today means driving innovation, achieving operational excellence, and building a truly sustainable and customercentric business that thrives in a rapidly changing world.

Methodology

(1)

Business surveys

of over 250 retailers across the UK, US, France, Germany, and Canada, to understand current Al practices, priorities and challenges.

2

Consumer surveys

of over 7,500 respondents in the same regions, offering a consumer perspective on Al-driven retail experiences and priorities.

(3)

Audits of the top 200 global retailers and consumer brands,

evaluating five-year trends in carbon emissions, profitability, and revenue to assess the broader impact of AI on financial and environmental performance.

About SymphonyAl

SymphonyAl is a leading enterprise Al SaaS company for digital transformation across the most critical and resilient growth verticals, including retail, consumer packaged goods, financial services, manufacturing, media, and IT/enterprise service management. SymphonyAl verticals have many leading enterprises as clients. Since its founding in 2017, SymphonyAl has grown rapidly to 3,000 talented leaders, data scientists, and other professionals.

A 2024 Microsoft Partner of the Year for Business Transformation – Al Innovation, SymphonyAl is a SAlGroup company, backed by a \$1 billion commitment from successful entrepreneur and philanthropist Dr. Romesh Wadhwani.

Learn more at www.symphonyai.com

About Retail Economics

Retail Economics is an independent economics research consultancy focused on the consumer and retail industry. We analyse the complex retail economic landscape and draw out actionable insight for our clients. Leveraging our own proprietary retail data and applying rigorous economic analysis, we transform information into points of action.

Our service provides unbiased research and analysis on the key economic and social drivers behind the retail sector, helping to inform critical business decisions, giving you a competitive edge through deeper insights.

Learn more at www.retaileconomics.co.uk

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