



AI in Consumer, Retail & Leisure Sector

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AI in Consumer, Retail & Leisure

Trends, opportunities and challenges



BI
2020



CONSUMER, RETAIL, AND LEISURE SECTOR – TRENDS, OPPORTUNITIES AND CHALLENGES (1/2)

AI is redefining retail by personalising interaction and automating demand driving growth and efficiency

Key Trends Reshaping CR&L	Prevalent Opportunities	Related Challenges
<p>Omnichannel becomes the default Omnichannel already accounts for ~60% of Singapore retail spend and is becoming the structural default as retailers integrate channels, experiences, and loyalty at scale</p>	<p>AI-driven omnichannel retail orchestration AI is enabling real-time orchestration of customer, inventory, pricing, and experience data, evolving toward shopping copilots and agentic journeys</p>	<p>Fragmented data and costly compliance AI adoption is limited by fragmented omnichannel data, PDPA-driven consent constraints, and high upfront costs that remain challenging for many C,R&L organisations</p>
<p>Value orientation reshapes retail demand Cost-of-living pressure and price sensitivity are shifting Singapore shoppers toward essentials, promotions, and private labels – reinforcing value-led purchasing</p>	<p>AI-optimised value and margins AI enables dynamic pricing, promotion effectiveness, and demand forecasting, progressing toward personalised value and basket-level profitability</p>	<p>Fair pricing and margin pressure Consumer trust risks and compressed margins limit pricing-led AI adoption and restrict investment capacity for C,R&L organisations</p>
<p>Frictionless, embedded digital payments Digital wallets and embedded finance have made cashless, low-friction checkout the default across Singapore retail</p>	<p>Intelligence and context-aware payments AI strengthens fraud detection and conversion today, evolving toward context-aware routing, personalised credit, and autonomous risk controls</p>	<p>Fraud velocity and regulatory scrutiny AI-driven fraud sophistication and tightening MAS oversight raise explainability, governance, and operational risk</p>
<p>Fulfilment becomes experience battleground Same-day delivery expectations and high last-mile costs are making fulfilment a decisive differentiator for customer experience and cost efficiency</p>	<p>AI-optimised and sustainable fulfilment AI improves routing, ETA accuracy and micro-fulfilment, with future potential in autonomous delivery, carbon-aware logistics and self-optimising supply chains</p>	<p>Thin economics and automation readiness Low unit margins, fragmented logistics data and regulatory and consumer readiness constraints intensify ROI scrutiny for advanced fulfilment automation</p>
<p>Shift towards accountability-based, voluntary AI governance Singapore emphasises voluntary, accountability-based AI governance over prescriptive regulation to balance trust and innovation</p>	<p>Design and implementation of AI governance frameworks Retailers can translate ethical principles into practice through AI governance frameworks, controls, and review mechanisms</p>	<p>Consumer concerns over algorithmic decision-making Opaque AI decisions in pricing, offers, or access risk consumer mistrust if fairness and explainability are not demonstrable</p>

PREVALENT AI THEMES IN CONSUMER, RETAIL, AND LEISURE SECTOR

Singapore retail is evolving into AI-led omnichannel models that shift from manual to AI-assisted operations

	Key themes in market	Future imperatives for players
 <p>AI personalization & recommendation engines</p>	<p>Recommendation engines are moving beyond big platforms into SME retail stacks, enabled by government-supported components like IMDA's Retail Recommendation Engine (RRE), which lowers barriers for retailers with limited data maturity</p> <ul style="list-style-type: none"> Skechers and We Are Social Singapore launched "Luna", an AI shopping assistant that blends conversational AI, personal styling, and in-store/Telegram interactions to deliver a seamless, experience-led retail journey 	<ul style="list-style-type: none"> Leverage plug-and-play AI components like IMDA RRE instead of building proprietary models Move from periodic promotions to real-time recommendations
 <p>Frictionless / cashier less retail</p>	<p>Convenience formats are using computer vision and AI for "just-walk-out" style experiences positioned as a practical response to labor constraints and the need for 24/7 operations in constrained footprints</p> <ul style="list-style-type: none"> 7-Eleven Singapore has launched a cashier-less, frictionless "Shop & Go" store where customers tap a card to enter, pick items, and walk out with payments automatically processed using AI cameras and sensor technology 	<ul style="list-style-type: none"> Shift staff roles from checkout to replenishment, hygiene, security, and customer assistance Frictionless stores should be data nodes in an omnichannel ecosystem, not isolated endpoints
 <p>AI-led omnichannel retail management</p>	<p>Retailers are adopting AI-enabled omnichannel retail management (OCRM) to unify POS, e-commerce, inventory, pricing and CRM in one data loop driven by IMDA's Retail Industry Digital Plan and Advanced Digital Solutions, which position OCRM as the core scalable backbone</p> <ul style="list-style-type: none"> IMDA, together with Enterprise Singapore, launched new integrated digital solution categories under the Advanced Digital Solutions (ADS) initiative to help retail SMEs deepen digital and AI adoption through Omnichannel Retail Management (OCRM) solutions (July 2024) 	<ul style="list-style-type: none"> Use AI for demand sensing, allocation, dynamic pricing, replenishment, and promotion optimization Centralize AI models and analytics, while allowing store- or region-level flexibility

AI enables ROI gains but trust, cloud complexity remain key hurdles

Headwinds in AI adoption



Trust, privacy and governance

Stronger emphasis on AI governance and privacy engineering (policy-as-code, red-teaming, synthetic data, audit trails) to unlock personalization safely. Brands that operationalize “trust UX” (why this recommendation, what data used, easy controls) will outperform

53%

Consumers are very/extremely concerned about privacy globally⁽²⁾

33%

Consumers trust companies to use their personal information responsibly⁽²⁾



High implementation cost

Singapore retail operates on thin margins, high rent, and high labor costs, making AI investments risky without fast payback



Talent and skills gap in applied retail AI

Retail AI requires domain-specific skills such as demand forecasting, merchandising logic, customer behavior modeling

Tailwinds for AI adoption



GenAI-powered Personal Commerce

GenAI copilots embedded in apps, marketplaces, and brand sites that handle discovery, comparison, bundles, and post-purchase support—turning “browsing” into guided intent capture

38%

APAC consumers use AI to help them shop⁽¹⁾

59%

APAC consumers open to purchasing using AI in future⁽¹⁾



AI-driven dynamic pricing and promotion optimization

AI models optimize prices and promotions dynamically based on demand elasticity, inventory, consumer behavior, time of day, and location



AI-based loss prevention and shrinkage reduction

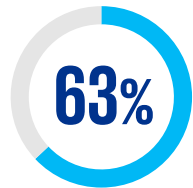
AI-based loss prevention is becoming critical in Singapore's retail sector as high store density, the rise of self-checkout, and unmanned formats increase shrinkage and fraud risks amid persistent labour constraints

Note: 1) A poll of 41,000 consumers across 28 markets including Singapore, Australia, Hong Kong, India, Japan, and Malaysia; 2) Global data collected from 23,730 consumers across 23 countries/regions

Sources: 'Adyen: Over a third of APAC consumers use AI to shop', Technode, [Link](#); 'AI in retail: Global lessons from strategy to storefront', KPMG, [Link](#); 'Sheng Siong to roll out facial recognition CCTV at all outlets to curb shop thefts', CNA, [Link](#); 'Shopee Marketing Solutions Wraps Up Its 5th Annual Summit', Shopee, [Link](#); 'Consumer preferences for privacy and personalization – 2025, Qualtrics, [Link](#)

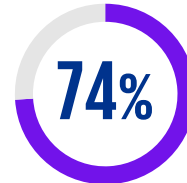
KPMG CONSUMER, RETAIL AND LEISURE SECTOR PUBLICATIONS – KEY FINDINGS

AI is now a core strategic priority in retail, with widespread adoption, rising investment, and clear ROI expectations shaping future competitiveness



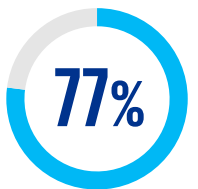
Retailers in the US state that AI has become the core of their business

Source: Intelligent Retail, [Link^{\(1\)}](#)

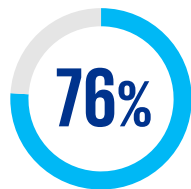


Organizations expected to scale AI use cases by 2026

Source: AI in retail, [Link^{\(2\)}](#)



Face pressure from shareholders to show immediate ROI on AI investment



Anticipate an ROI of more than 10 percent from AI in the next year

AI increasingly becoming a central pillar of future growth and competitiveness

AI spending to increase significantly over near-term

70%
Will increase the percentage of global budget spent on AI

1/3
Say AI spending will increase by more than 20 years

64%
of consumer and retail CEOs say AI is a top investment priority for their business

77%
Agree that a top constraint on AI growth is AI workforce readiness

75%
Believe that competition for AI talent is a top constraint

Note(s): 1. Key findings based on quantitative survey of 1,390 decision-makers across key global markets, including 183 respondents from the insurance sector; 2. Key findings of the survey based on responses from 1,350 CEOs between 05 Aug and 10 Sep 2025
Sources: 'Intelligence Retail', KPMG, [Link](#); 'AI in retail – Global lessons from strategy to storefront', KPMG, [Link](#); all accessed in Apr 2026



AI in Consumer, Retail & Leisure

Case Studies





AI CASE STUDIES BY SECTOR – AI IN CONSUMER, RETAIL, AND LEISURE SECTOR (1/3)

AI and GenAI enabled AS Watson to scale personalisation, forecasting, and accelerate enterprise decision-making

Background and context

AS Watson Group, one of the world’s largest international health and beauty retailers, embedded AI across customer engagement, operations, and the workforce – driving personalization, conversion, and productivity while positioning AI as a partner, not a replacement

Key benefits / takeaways



1 Revenue growth through hyper-personalisation

AI-driven recommendations, dynamic pricing, and personalized journeys lift basket size, conversion rates, and customer loyalty.

2 Human-centric productivity and adoption at scale

AI acts as a workplace partner, supported by structured training, Gen AI champions, and a “Grow as One” change model that accelerates enterprise-wide adoption.

3 Margin improvement and operational efficiency

Embedded AI across forecasting, replenishment, and logistics reduces overstock, markdowns, and delivery costs while improving speed-to-decision

4 Future-ready operating model with disciplined governance

Measured ROI, strong data foundations, and readiness for agentic AI enable sustainable, transformative impact rather than isolated pilots

Key learnings

- Design workflows with AI at the center, aligned with business goals
- Encourage cross-functional projects and sharing of ideas and develop a network of AI champion



Great leaders make AI human-centric. Retail wins when machines and minds collaborate. Start small by making AI accessible to everyone, not just a few specialists or one department. Begin with simple tools that help colleagues in their daily work — things that save time or make tasks easier”

— Dr Malina Ngai, Group CEO, AS Watson Group



AI CASE STUDIES BY SECTOR – AI IN CONSUMER, RETAIL, AND LEISURE SECTOR (2/3)

DFI focuses on governance-led, value-based AI adoption to deliver real business impact

Background and context

DFI Retail Group is taking a disciplined, value-led approach to AI, aligning initiatives to core business priorities customer experience, team enablement and operational efficiency while strengthening data governance, financial discipline and responsible adoption to deliver measurable impact

Key benefits / takeaways



1 Strategy-led, value-focused AI adoption

DFI Retail takes an intentional approach to AI, tightly aligning initiatives to core priorities – customer experience, team enablement, and operational efficiency – rather than pursuing fragmented experimentation

2 Human-centric productivity and adoption at scale

Strong financial discipline underpins AI investments, with “proof of value” governance and enterprise-wide data, privacy, and AI standards positioning data as a strategic asset.

3 People-first, responsible AI transformation

DFI prioritizes workforce upskilling, ethical customer use of data, and thoughtful role evolution, while preparing selectively for agentic AI to deliver next-wave impact in retail

Key learnings

- Validate AI initiatives through an AI governance forum focused on ‘proof of value’ – not just proof of concept
- Invest in data privacy, data governance, and AI governance boards to assure data reliability and trust



We’re trying to link AI initiatives to our core priorities – customer experience, team member enablement and operational efficiency. This means focusing on solutions that augment staff productivity, streamline communications, and automate routine tasks.”

— Stijn Casneuf, Director, Data and AI Automation, DFI Retail Group



AI CASE STUDIES BY SECTOR – AI IN CONSUMER, RETAIL, AND LEISURE SECTOR (2/3)

Dash helps UK retailers unlock profitable growth, reduce risk, improve capital allocation and remain competitive

Background and context

UK retailers face rising market volatility and uncertainty, yet remain constrained by data overload, intuition-led decisions, and increasingly risky store, pricing, and portfolio choices – resulting in weaker profitability and customer experience

Key benefits / takeaways



1 Pre-built, insight-ready platform

Dash combines KPMG's retail expertise, advanced analytics, and exclusive external data to deliver decision-ready insights, without long build times

2

AI-driven data enrichment & analytics

Retailers upload internal data, which Dash enriches with external datasets and analyses across performance, pricing, range, location, and portfolio

3

Faster, evidence-based decision-making

Pre-configured analytics enable retailers to assess performance, forecast outcomes, and test strategic decisions with confidence.

4

Value across six core retail levers

Dash drives measurable impact across performance monitoring, pricing effectiveness, range/portfolio optimisation, and competitive benchmarking

“

KPMG Dash showcases exceptional retail tech innovation, with a platform that delivers accuracy across functions and predicts store performance. Its broad functionality and quantified impact demonstrate strong real-world validation, offering retailers a transformative edge in location planning, portfolio optimisation, and revenue forecasting. This is a high-value, data-driven solution that empowers smarter, more confident decision-making”

— UK Business Tech Awards 2025 – Best AI-driven Business Intelligence Tool and Best Use of Data



AI in Consumer, Retail & Leisure

KPMG AI proposition and key differentiators

The KPMG Trusted AI Centre of Excellence

AI that deliver results, not just pilots.

Most organisations can launch AI pilots.
Very few manage to scale them.
The KPMG Trusted AI CoE exists to fix that.

What we do

We help organisations design, build, and scale AI that:

- Solves real business problems
- Is trusted by leaders, employees, and regulators
- Can be adopted and scaled across the organisation
- Enables intelligent governance, decision-making and operations

The result

AI that people trust, use, and rely on,
that leaders can see, measure, and defend.

[Register for a 45 mins demo](#)

Contact us



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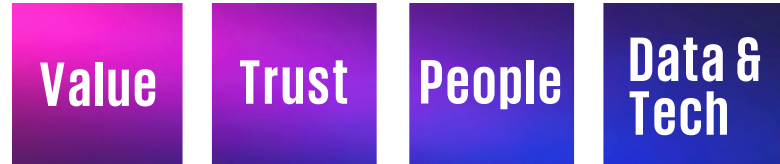
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What makes our AI CoE different

KPMG Four-Door Framework

A structured way to scale AI across the enterprise



VALUE

Turn AI activity into real business impact and ROI.

TRUST

Build AI that's trusted by everyone, from the start.

PEOPLE

Design AI around how people work, so adoption sticks.

DATA & TECH

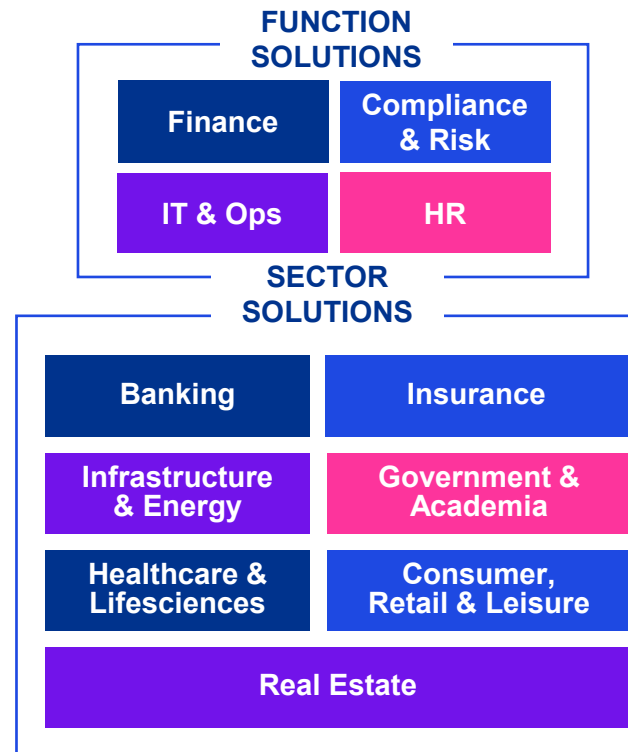
Enable AI to scale with the right technology foundation

Trusted ecosystem

KPMG brings together a powerful ecosystem of partners (leading technology companies, academia, industry organisations, and government agencies) to help turn AI ideas into tangible innovative solutions.

Co-creation of solutions

with you, for you in your function and sector



Support from EDB

With grants for

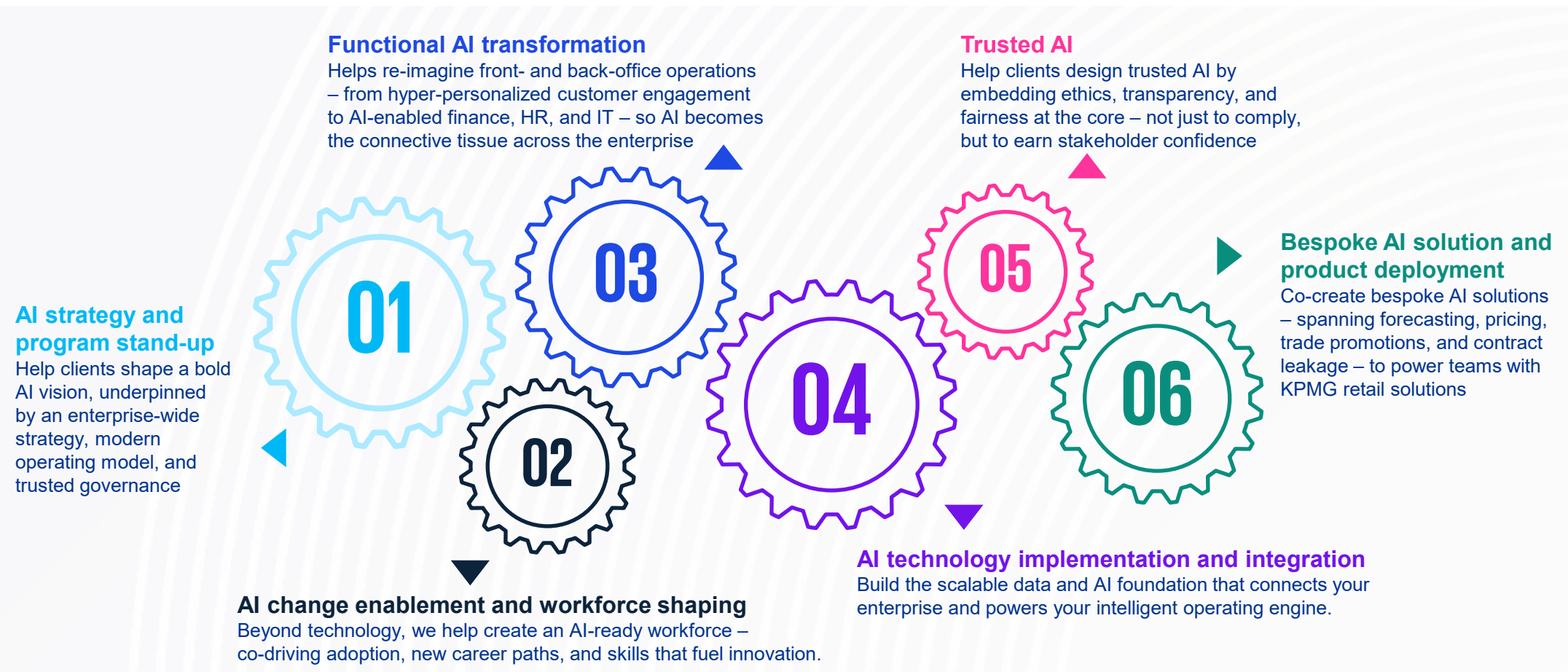
- Solution Design & Rapid Prototyping
- PoC/Pilot Build

Speed to market

- Faster time to market, going from idea to POC to scaled deployment
- Access to proven, reusable AI solutions and accelerators

HOW KPMG CAN HELP (1/2)

Driving enterprise-wide AI impact by combining strategy, technology, workforce, and trust


 Sources: 'AI in Retail – Global lessons from strategy to storefront', KPMG, [Link](#)

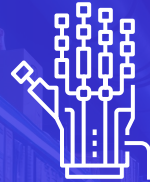
HOW KPMG CAN HELP (2/2)

KPMG can help clients across their AI journeys



Develop a transformational AI strategy

Define your AI goals, identify opportunities and risks, and create a tailored strategy and execution plan. Build a business case with clear metrics to secure investments and ensure measurable success by scaling AI for enterprise-wide impact and building lasting capabilities.



Ensure AI trust and compliance

Scaling AI introduces complexities and risks. KPMG Trusted AI teams can help ensure your AI solutions are ethical, secure and compliant. Our Trusted AI Framework, built on 10 ethical pillars, empowers organizations to boldly deploy AI responsibly, transparently and with confidence.



Empower your workforce with AI

KPMG AI-enabled Workforce solutions deliver personalized adoption and upskilling experiences, helping your team embrace generative AI and infuse it into everyday work.



Build a sustainable AI technology infrastructure

Leverage KPMG professionals' experience to integrate AI frameworks, platforms and accelerators, helping you ensure your technology infrastructure is ready to scale AI initiatives.



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