






# Retail's AI Reckoning:

## What Every CIO Needs to Know Right Now

AI has moved from boardroom conversation to operational imperative in global retail. But for CIOs navigating the pressure to deploy faster, prove ROI, and keep the business secure, the path forward is anything but straightforward.

This report cuts through the noise.

GLOBAL RETAIL	CIO PERSPECTIVE	AI & AUTOMATION	CYBERSECURITY	COMMERCE DISCOVERY
				

### Editor's Note

## Why 2026 Is the Year Retail IT Leadership Gets Tested

The last two years produced a wave of AI announcements in retail — pilots, proofs of concept, press releases. In 2026, the wave breaks. What separates the retailers pulling ahead from those falling behind is no longer a question of whether they have started their AI journey. It is whether their technology leadership has built the architecture, the governance, and the commercial connective tissue to actually scale it.

For CIOs, the pressure is coming from multiple directions at once: boards demanding faster AI deployment, CFOs demanding proof of ROI, and security teams flagging that the same AI infrastructure introducing new capability is also expanding the attack surface. Meanwhile, the ground is shifting under the very concept of how consumers discover and buy — with AI search threatening to render years of SEO investment obsolete overnight.

This report draws on primary research from NVIDIA, IBM, Deloitte, Adobe, Salesforce, and McKinsey to give retail technology leaders a grounded, cited view of where the industry stands — and a clear set of priorities for what to do about it. We have deliberately focused on what is relevant to global retail, calling out regional variation where the data supports it.



“ 2026 is the year retail stops getting credit for having an AI strategy and starts getting judged on whether it's working.

*For most organisations, that is a much harder test than the one they've been preparing for.*

**RODNEY MCBRIEN**  
**CEO, RSG GLOBAL**

”

“ In retail, AI is no longer a technology question — it's a data question. The CIOs winning right now are the ones who realised that 18 months ago and spent the time cleaning up their product data, their customer data, and their integration layer. Everyone else is building on sand.

**BILL SANDRE**  
**CTO, RSG GLOBAL**

”

---

# Numbers that should be on every CIO's dashboard

All figures below are drawn from named primary research conducted in 2025–2026. Sources are listed in full at the end of this report.

<b>89%</b>	of global retail & CPG companies actively using or piloting AI right now - NVIDIA State of AI in Retail & CPG, 2026
<b>693%</b>	YoY growth in AI-driven traffic to US retail sites — 2025 holiday season - Adobe Analytics, Holiday Report 2025
<b>\$3.54M</b>	average cost of a retail sector data breach globally — up 18% year-on-year - IBM Cost of a Data Breach, 2025
<b>47%</b>	of retail & CPG companies deploying or assessing agentic AI — fastest growing category - NVIDIA State of AI in Retail & CPG, 2026



# Three Forces Reshaping Retail Technology

Urgency rating based on RSG analysis of cited research and rate of change

1.

## AI Has Crossed the Pilot Threshold — Now Comes the Hard Part

With 89% of retailers running AI in some form (NVIDIA, 2026), the question is no longer adoption — it's scale. Only 6% of organisations globally qualify as "AI high performers" generating 5%+ EBIT impact. The gap between deploying AI and deriving structural value from it is where most retail CIOs currently sit.

**URGENCY — HIGH**

AI ENTERPRISE SCALING

2.

## How Consumers Find Products Is Being Rewritten in Real Time

AI-driven traffic to US retail sites grew 693% year-on-year (Adobe, 2025). Globally, nearly three in five consumers have begun replacing traditional search with generative AI for product research (Capgemini). This is actively eroding the value of incumbent SEO and search infrastructure.

**URGENCY — CRITICAL**

COMMERCE DISCOVERY

3.

## The Attack Surface Is Growing as Fast as the AI Stack

The average retail breach cost \$3.54M in 2025 — up 18% (IBM). More critically, 97% of organisations hit by an AI-related security incident lacked proper AI access controls (IBM). Every AI deployment not matched by security architecture is a liability, not an asset.

**URGENCY — CRITICAL**

CYBERSECURITY RISK



## What the Research Actually Says

### AI Scaling: From Pilot to P&L

**86% increasing AI budgets - 6% achieving high impact**

NVIDIA's 2026 State of AI in Retail survey found 86% of retail organisations expect AI budgets to increase this year, with 40% planning increases of 10% or more. North American retailers are particularly aggressive, with 48% planning double-digit budget increases.

Yet scale remains elusive. The IBM Institute for Business Value — in a global survey of 1,500 retail and CPG executives across 15 countries — found 70–85% of AI initiatives fail to meet expected outcomes. Retailers plan to allocate an average of 3.32% of revenue to AI, equivalent to \$33M annually for a \$1B company.

- AI delivering ROI is AI connected to transactional systems, not running in parallel to them
- Organisations using AI for security cut breach lifecycle by 80 days and saved \$1.9M per incident on average (IBM, 2025)
- Customer experience and supply chain are the top two AI investment priorities globally (NVIDIA, 2026)

### Commerce Discovery: The SEO Disruption

**693% YoY AI traffic growth - 31% higher conversion**

Adobe's analysis of over one trillion visits to US retail sites shows AI-driven referral traffic grew 4,700% year-on-year in July 2025. During the 2025 holiday season, AI-referred shoppers converted 31% more often than non-AI traffic, and revenue per AI-driven visit grew 254% in the second half of 2025 alone.

Globally, Capgemini found nearly three in five consumers have begun replacing search engines with generative AI for shopping. Salesforce data showed AI agents influenced 20% of global retail sales — converting at nine times the rate of social media referrals.

- Structured product data, semantic richness, and API accessibility are now technical prerequisites for visibility
- Brands deploying proprietary AI agents grew sales 32% faster than those relying on third-party AI channels (Salesforce, 2025)
- This is a data architecture problem owned by the CIO, not a marketing problem owned by the CMO

## Cybersecurity: The Hidden Cost of Moving Fast

**\$3.54M avg breach cost - +58% ransomware attacks**

The IBM Cost of a Data Breach Report 2025 recorded an 18% year-on-year rise in average retail breach costs to \$3.54M globally. In the US, the average cross-sector breach cost rose to \$10.22M — the highest ever recorded. The Verizon 2025 DBIR recorded 419 confirmed retail data breaches, primarily driven by ransomware (present in 44% of all breaches).

Third-party breach involvement rose from 15% to 30% of all incidents — a doubling in a single year. Ransomware attacks against retailers jumped 58% in Q2 2025 vs. Q1 2025 alone.

- 97% of organisations hit by an AI security incident lacked proper AI access controls (IBM, 2025)
- Shadow AI — employees using unsanctioned tools with customer data — is a growing untracked risk vector
- UK retailers saw an 85% increase in attacks in the first four months of 2025 vs. prior year (Thales)

## The Consumer Technology Gap

**65% more purchase confidence - 37% brand abandonment risk**

Deloitte's 2026 Retail Industry Outlook — 330 executives at retailers with \$1B+ revenue — identifies AI as a top investment priority but notes consumer trust requires careful management. Adobe's 2026 AI and Digital Trends Consumer Report found 37% of consumers will stop interacting with a brand if they discover they are talking to AI when they expected a human.

The opportunity is real but conditional. Adobe's survey shows 65% of consumers using AI for shopping report greater purchase confidence and lower return rates. But 70% say it is very or moderately important that personalised offers feel human rather than automated.

- Consumer-facing AI without quality controls risks conversion loss and brand damage simultaneously
  - CIOs need to own the data quality layer that makes consumer AI experiences credible, not just the infrastructure
  - The technical and experience design challenge is more nuanced than simply deploying AI tools
-

# Four Priorities for Retail Technology Leaders

## 1.

### **Audit Your AI Architecture for Integration, Not Just Deployment**

The IBM and NVIDIA data converge on the same finding: AI that delivers ROI is AI connected to transactional systems, inventory data, and customer

records. The 70–85% failure rate for AI initiatives is largely an integration and data quality problem, not a technology problem. Before adding new AI

capability, audit what you have for integration depth.

**RSG CAN HELP → TECHNOLOGY ARCHITECTURE REVIEW**

## 2.

### **Treat Product Data as a Commercial Asset, Not a Catalogue Function**

Adobe's finding that AI-referred shoppers convert 31% better only applies to retailers whose products can be accurately interpreted by AI systems.

Structured data, semantic product descriptions, and API-accessible catalogues are the prerequisites. This is a CIO deliverable with direct revenue

consequences, and most retail technology stacks are not yet built for it.

**RSG CAN HELP → COMMERCE TECHNOLOGY ASSESSMENT**

## 3.

### **Build AI Governance Before You Build More AI**

The IBM finding that 97% of organisations hit by an AI security incident lacked proper access controls should give every retail CIO pause. Shadow AI is an untracked liability in most retail businesses. Governance frameworks, access controls, and AI-specific security architecture are not blockers to innovation — they are the conditions under which innovation can safely scale.

**RSG CAN HELP → AI GOVERNANCE & SECURITY FRAMEWORK**

## 4.

### Own the Answer Engine Strategy Before Someone Else Does

Brands deploying proprietary AI agents grew sales 32% faster than those relying on third-party AI channels (Salesforce). The infrastructure decisions — data architecture, API design, agent frameworks — belong in technology leadership's remit. Retail CIOs who wait for marketing to solve AI discovery are ceding a structural advantage that compounds over time.

**RSG CAN HELP → DIGITAL COMMERCE ROADMAP**

---

### Is your technology architecture ready for what retail AI actually demands?

RSG works with retail technology leaders globally to close the gap between AI ambition and operational reality. If any of the findings in this report raise questions about your current state, we would like to have that conversation.

**Contact RSG  
Global**

---

#### Research Sources & Methodology

- NVIDIA State of AI in Retail and CPG Survey Report, 2026 — global survey, · 3,200+ respondents
- IBM Cost of a Data Breach Report, 2025 — 600 organisations, March 2024–February 2025
- Verizon Data Breach Investigations Report (DBIR), 2025 — 22,052 incidents, 12,195 confirmed breaches globally
- Adobe Analytics — Holiday Shopping Report 2025 (1 trillion+ US retail site visits)
- Adobe 2026 AI and Digital Trends — Consumer Report (Oct–Nov 2025, multi-market survey)
- Salesforce — Shopping AI Trends 2025 & Holiday Season Commerce Cloud Data
- Deloitte 2026 Retail Industry Global Outlook — 330 executives, 86% at \$1B+ revenue retailers
- IBM Institute for Business Value — 1,500 global retail & CPG executives, 15 countries
- Capgemini Research Institute — Consumer AI Behaviour Survey, 2025
- Thales 2025 Data Threat Report — e-commerce and retail cybersecurity findings