techblocks

The Agentic Retail Imperative

Why retailers need AI orchestration, AI-ready data, & an AI-native software factory

Retail has entered a new phase of transformation. Stores moved online, mobile transformed the pocket into a storefront, and omnichannel strategies stitched physical and digital touchpoints together. Today, however, the industry is facing a fundamentally different shift. While retailers have spent years investing in AI tools, pilots, and automation initiatives, the next wave of competitive advantage will not come from AI adoption alone. It will come from the ability to operationalize AI across the enterprise through AI-ready data foundations, AI orchestration, and an AI-native software factory that enables organizations to scale with confidence.

Insights gathered from **Total Retail TECH 2026** in Dallas, where TechBlocks met with industry leaders, retailers, technology innovators, and incubators, revealed a common challenge: modern customer experiences are evolving faster than the systems, data foundations, and operating models required to support them. Customer-first innovation is pushing retailers to think from the outside-in, as consumers increasingly rely on AI-assisted discovery, highly personalized recommendations, and emerging agentic commerce experiences. At the same time, retailers continue to struggle with fragmented data, disconnected technology platforms, and software delivery models that prevent innovation from scaling. While retailers increasingly expect agentic AI to support core enterprise operations and consumers continue shifting toward AI-led discovery, a deeper bottleneck has emerged.

INSIDE THIS REPORT YOU'LL DISCOVER:

- How agentic commerce is reshaping customer discovery and decision-making
- Why trust, community, and first-party data are becoming strategic assets
- The role of AI-ready product, customer, and inventory data in driving competitive advantage
- Why AI orchestration is emerging as the new enterprise architecture layer
- How an AI-native software factory enables faster innovation and measurable business outcomes
- What leading retailers are doing differently to turn AI investments into customer value at scale

The challenge is no longer AI adoption, but the ability to operationalize AI through connected data, orchestrated systems, and scalable software delivery at enterprise scale.

The friction today is no longer about imagination or budget; it is structural. Retailers are deploying advanced generative experiences and predictive intelligence on top of brittle legacy systems, fragmented data silos, and rigid engineering pipelines.

When front-end AI experiences move faster than back-end architectures can support, innovation stalls in “pilot purgatory,” preventing organizations from translating AI investments into measurable customer and business outcomes.

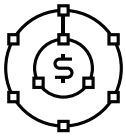
The defining challenge for retail leaders is no longer whether to adopt AI. It is whether the enterprise can continuously adapt, govern, and execute AI initiatives at the speed required to create measurable business outcomes.

This report explores how leading retailers are addressing these challenges by building AI-ready data foundations, creating agentic product, customer, and inventory intelligence, adopting AI orchestration frameworks, and operationalizing innovation through an AI-native software factory. It also examines how organizations are moving beyond proof-of-concepts and creating measurable business outcomes through enterprise-wide AI execution.

The findings from **Total Retail TECH 2026** consistently point to a common conclusion: competitive advantage in the next era of retail will be determined not by AI adoption alone, but by an organization’s ability to operationalize AI across data, technology, customer experiences, and operating models.



The future belongs to retailers that can continuously learn, adapt, orchestrate, and operationalize AI faster than the market changes around them. The following sections provide a roadmap for building that future.



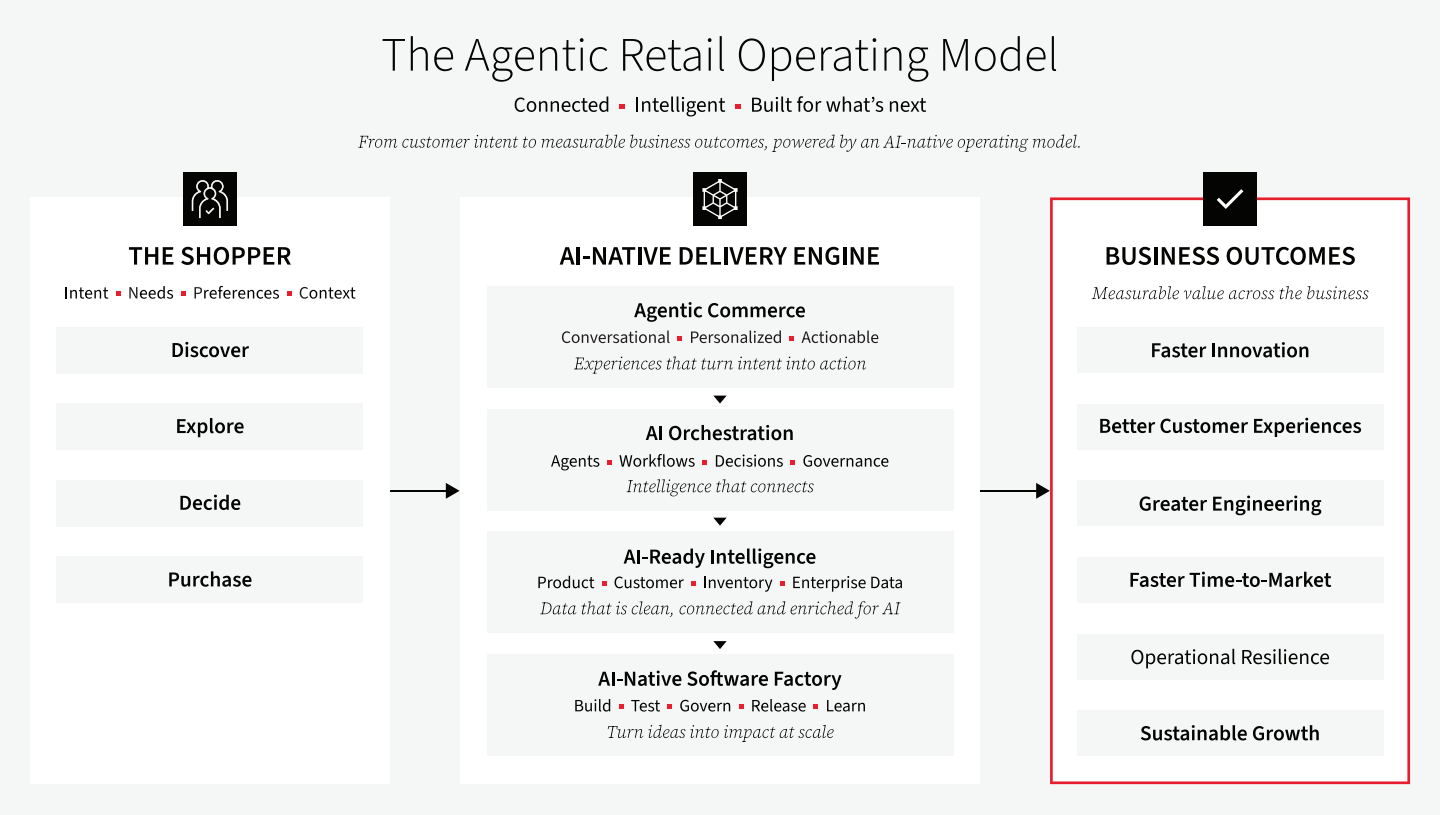
TotalRetail TECH

Key Insights from Total Retail TECH 2026

Strategic lessons shaping the future of retail

Insights gathered from **Total Retail TECH 2026** revealed a common theme across retailers, technology leaders, and innovators: AI is no longer an emerging capability. It is becoming a foundational operating layer for customer experience, commerce, and enterprise execution. The future of retail will be shaped by organizations that can operationalize AI through AI-ready data foundations, AI orchestration, and an AI-native software factory, while maintaining trusted customer relationships and delivering measurable business outcomes. The following strategic themes emerged consistently throughout the event:

STRATEGIC THEME	KEY INSIGHT	FEATURED PERSPECTIVES
Agentic Commerce & Customer Discovery	Customer discovery is evolving into AI-assisted decision support. Retailers must guide customers through increasingly personalized and intent-driven experiences that simplify complex decisions.	BONOBOS Ahold Delhaize
AI-Ready Data Foundations	Product, customer, and inventory data must become structured, machine-readable, and AI-ready. Retailers that build intelligent data foundations will gain a competitive advantage in agentic commerce.	atronous.ai SALLY BEAUTY
Trust, Community & First-Party Data	Trust is emerging as one of retail's most valuable assets. Retailers can differentiate by building communities, leveraging first-party data, and creating value beyond the transaction.	Hardware GAMECHANGER KEARNE
AI-Native Software Factory	Organizations are discovering that AI tools alone do not create business value. Success requires an AI-native software factory that powers modern operating models through governance, engineering intelligence, and outcome measurement, enabling organizations to transform AI investments into measurable business outcomes.	Michaels techblocks
AI Orchestration & Operating Models	AI creates value only when connected across systems, workflows, and business functions. Organizations are shifting from isolated AI tools toward orchestrated operating models powered by connected data, governance, and intelligent agents.	Michaels techblocks Catalyst Brands
Continuous Innovation & Adaptability	Retail transformation is no longer a project with a fixed end state. Winning organizations continuously adapt, simplify, learn, and evolve faster than customer expectations change.	Catalyst Brands LEADOLOGY



1

Agentic Commerce: How AI is Reshaping Customer Discovery & Decision-Making

For more than two decades, "customer discovery" in e-commerce was built around a simple principle: matching keywords to products. Whether shoppers searched within a retailer's website or arrived through a search engine, the journey followed a predictable path of query, filter, browse, compare and purchase.

Today, the model is rapidly evolving. Customers are increasingly engaging with AI-powered experiences that understand intent, context and preferences rather than relying solely on keywords. Instead of searching for products, shoppers can describe needs, goals, or desired outcomes and receive personalized recommendations, explanations and guidance. Discovery is becoming conversational, contextual and increasingly agent-driven. Platforms like Google's AI-led search modalities are processing billions of active interactions, moving away from static lists of blue links and exact-match product tags toward experiences where users can describe complex lifestyle needs in natural language rather than hunting for items. This evolution represents a significant shift in how retailers create value. In the agentic era, customer-first innovation is increasingly defined by a retailer's ability to understand, anticipate, and respond to customer intent.

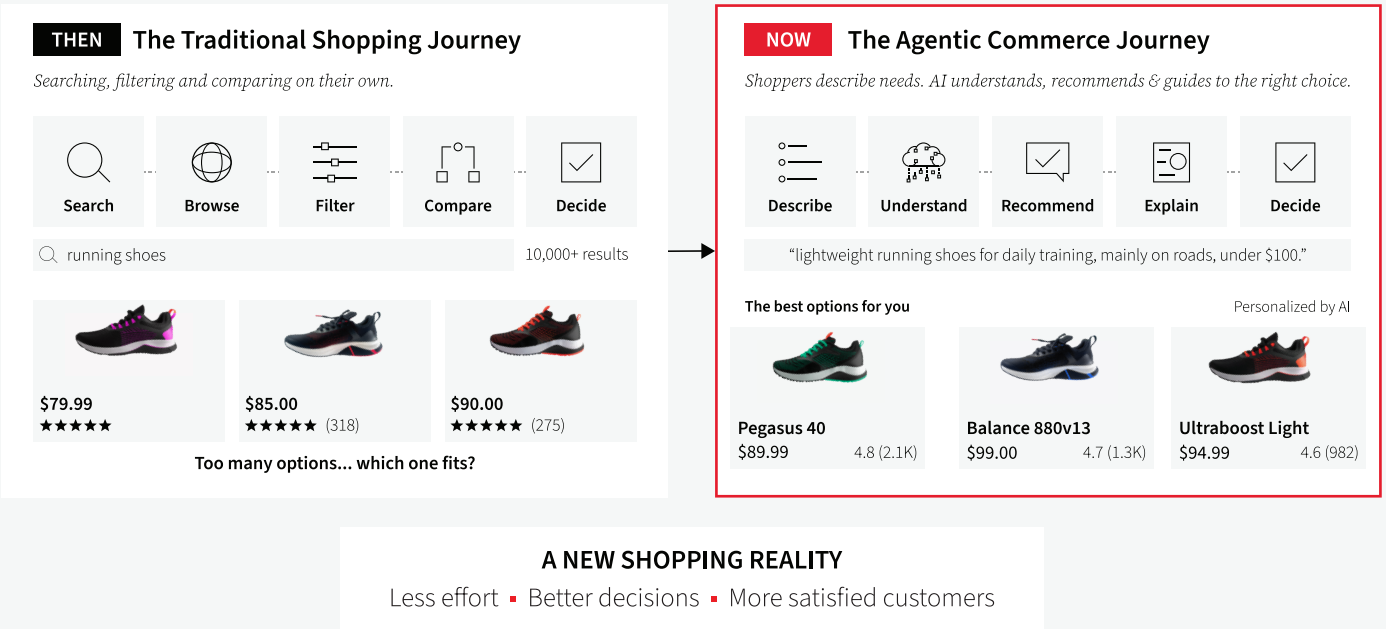
Success is no longer determined solely by advertising effectiveness, search optimization, or channel reach. It is shaped by the ability to build trusted, intelligent ecosystems that help customers achieve desired outcomes with greater speed, relevance, and confidence.

Modern consumers increasingly expect shopping experiences that are personalized, intuitive, and frictionless. They want recommendations that reflect their preferences, guidance that simplifies decision-making, and interactions that reduce the effort required to discover, evaluate, and purchase products. To meet these expectations, retailers must think beyond individual transactions and consider the broader ecosystem that supports customer success. Customers, suppliers, partners, associates, and digital channels are becoming interconnected through AI-native operating models, where data integration, intelligence, and real-time decision-making work together to create seamless experiences. Within these ecosystems, every interaction becomes an opportunity to learn, personalize, and strengthen customer relationships.

This shift marks the emergence of agentic commerce, where AI agents assist consumers throughout the buying journey, helping them discover products, evaluate alternatives, understand trade-offs, and make confident decisions. As a result, retailers must rethink how products, content, customer data, and experiences are presented within AI-mediated environments. This creates a new imperative: building AI-ready data foundations capable of powering product, customer, and inventory intelligence at scale.

From Search Results to AI-Mediated Decisions

Shoppers no longer search alone. They describe, and AI helps them discover, compare and decide.



A NEW SHOPPING REALITY

Less effort ▪ Better decisions ▪ More satisfied customers

FROM PRODUCT DISCOVERY TO DECISION SUPPORT		
Traditional experience	→	Emerging experience
Search by keywords	→	Describe a need
Browse categories	→	Receive contextual recommendations
Apply filters	→	Explain preferences and constraints
Compare products	→	Understand trade-offs and alternatives
Make the decision alone	→	Receive intelligent guidance

For retail leaders, the challenge is not simply adopting new customer-facing AI experiences. The challenge is ensuring that the underlying digital architecture can support them.

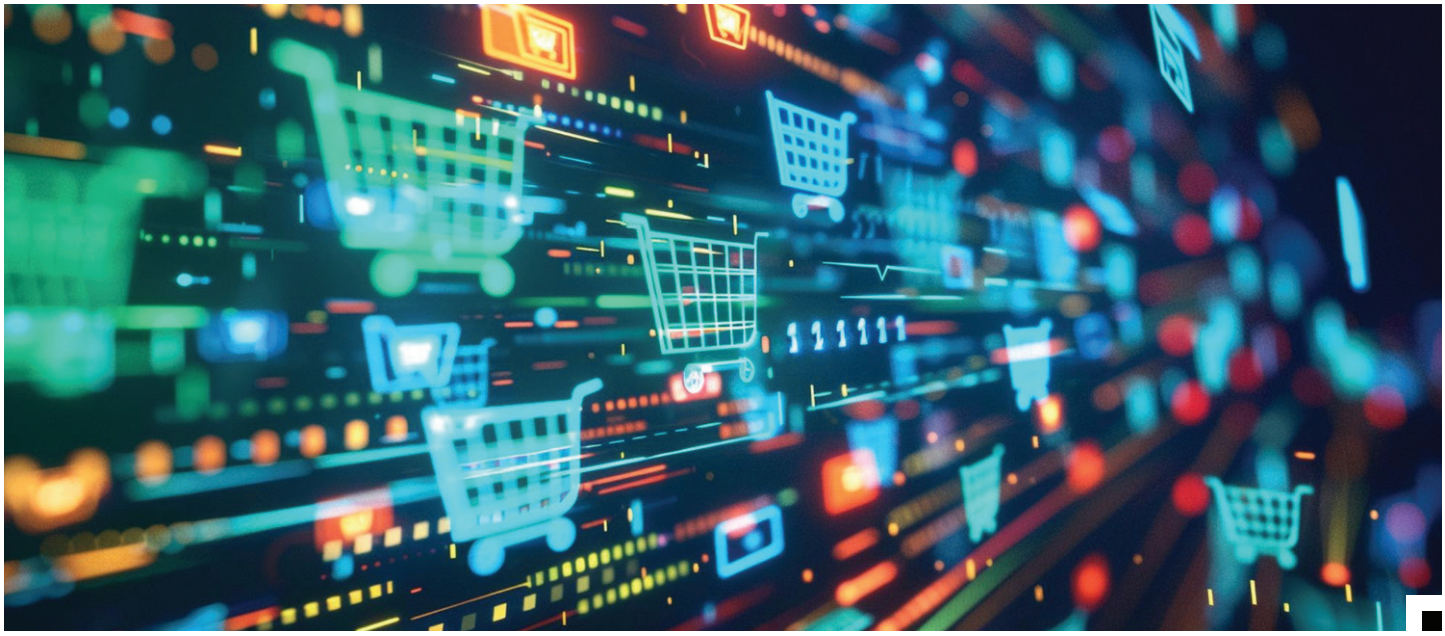
The Limitations of Keyword Matching: Traditional search engines were designed to find words rather than understand customer intent. As consumer interactions become more conversational, retailers must move beyond keyword relevance towards contextual understanding.

The Cognitive Burden on the Consumer: Customers have historically been responsible for gathering information, comparing alternatives, evaluating reviews, and making decisions independently. AI-assisted experiences reduce friction by transforming product discovery into guided decision-making.

The Rise of Autonomous Intermediaries: Consumers are increasingly relying on AI assistants and intelligent agents to evaluate options, compare products, and recommend purchases. In many cases, these experiences reduce direct interaction with traditional search and navigation models.

The result is a fundamental shift from product discovery to decision support. Competitive advantage will increasingly depend on a retailer's ability to provide AI systems with accurate, contextual, and trustworthy information that enables intelligent recommendations.

To succeed in an agentic commerce environment, retailers must move beyond digital shelves that simply display inventory. They must create intelligent experiences that explain relevance, fit, availability, and value. Achieving this requires a strong foundation of AI-ready data that can be understood and leveraged by both human shoppers and AI agents. This challenge exposes the next critical requirement for modern retail organizations: building data foundations capable of powering product intelligence, customer intelligence, and inventory intelligence at scale.



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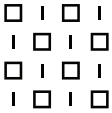
AI-Ready Data Foundations: The New Competitive Advantage

The most critical and overlooked blind spot in modern retail is not out-of-stock inventory; it is inaccessible intelligence. Retailers continue to invest heavily in customer-facing innovations and optimizing front-end user experiences, yet many still rely on fragmented product, customer, and inventory data that remains largely unusable by the AI systems driving modern commerce. Without AI-ready data foundations, retailers cannot fully capitalize on agentic commerce, personalized experiences, or enterprise-wide AI execution.

When an autonomous shopping agent, a conversational search experience, recommendation engine, or external marketplace algorithm evaluates information on behalf of a customer, it depends on accurate, structured, and machine-readable data. Traditional Product Information Management (PIM) systems, disconnected customer records, and siloed inventory platforms often fail to provide the semantic context required by AI-powered experiences.

When product, customer, or inventory data lacks structural precision, AI systems struggle to understand context, intent, availability, or relevance. Valuable products become difficult to discover, personalization becomes less effective, and automated decision-making loses accuracy. Retailers risk losing revenue opportunities not because their products lack competitiveness, but because their underlying data foundations restrict AI performance.

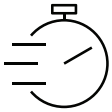
In an increasingly agentic retail environment, data is no longer a back-office asset. It has become the foundation for customer intelligence, product intelligence, and inventory intelligence. Organizations that can unify and operationalize these data assets are better positioned to create differentiated customer experiences, accelerate decision-making, and generate measurable business outcomes. The operational impact of fragmented data foundations extends well beyond discovery and search. Enterprise deployments consistently reveal several challenges:



Catalog and Data Friction: Major distributors and enterprise retailers managing catalogs ranging from **60,000** SKUs to upwards of **1 million** products face chronic onboarding bottlenecks when trying to launch on third-party digital channels.



The Cost of Manual Data Management: Relying on manual data entry for tens of thousands of complex product lines such as industrial equipment, specialized health care supplies, or multi-attribute fashion lines, creates hidden unit discrepancies and missing compliance attributes that cause AI search bots to pass over the product entirely.



Stalled Expansion: Without automated enrichment, expanding a product catalog across new regional or online marketplaces takes months of engineering overhead, directly delaying go-to-market strategies.

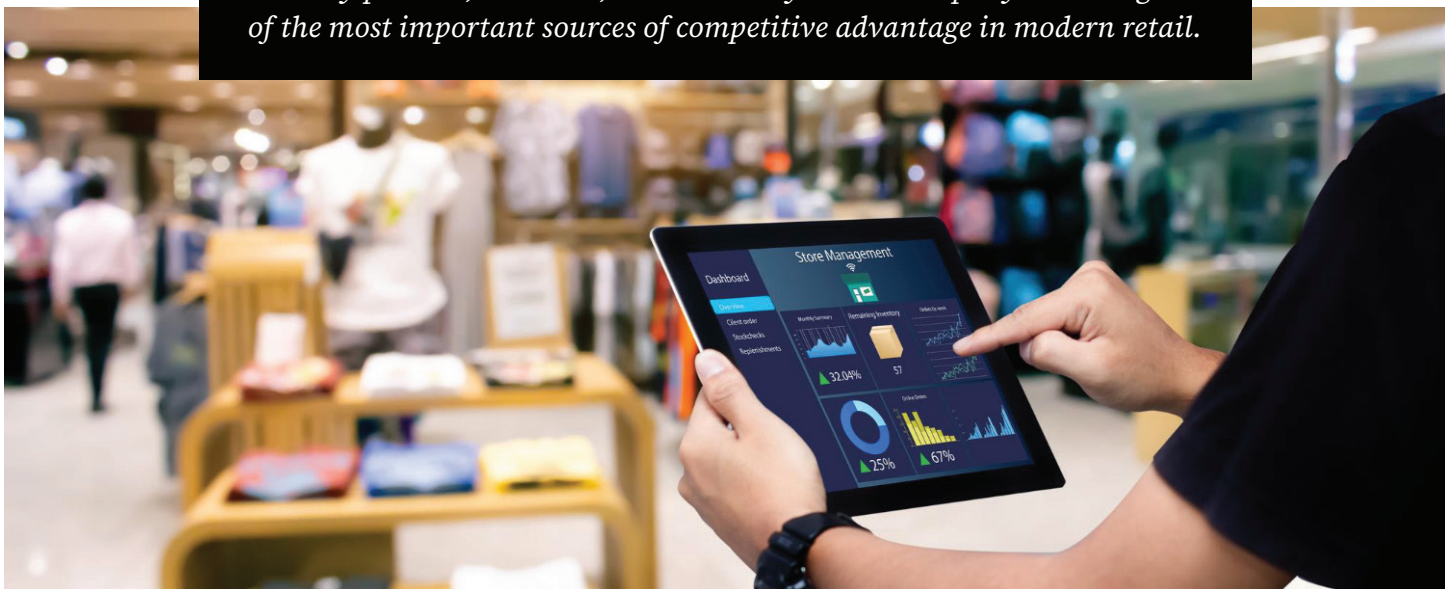
Leading retailers are addressing these challenges by transforming fragmented data assets into AI-ready intelligence layers capable of supporting customers, employees, partners, and AI agents across the enterprise.

LEGACY PIM & CATALOG ARCHITECTURE	THE AI-READY INTELLIGENCE FOUNDATION: "GOLDEN CATALOG"	BUSINESS IMPACT & OPERATIONAL VALUE
Human-Centric & **Unstructured:** Relies on subjective marketing copy, flat images, and basic categorical tagging.	**Machine-Readable** & **Semantic:** Structured semantic attributes, explicit compatibility mapping, and deep contextual specifications.	Eliminates "*silent data rejections*" by external AI search algorithms and marketplace discovery bots.
Siloed Manual Maintenance: Spreadsheets and vendor documents managed through slow, error-prone manual entry.	**Automated Multimodal Ingestion:** AI pipelines that parse raw supplier files, CAD schematics, and unstructured logs instantly.	Compresses product onboarding timelines from months down to days, enabling rapid multi-region expansion.
High Discrepancy Risk: Hidden unit mismatches, missing dimensions, and compliance gaps break automated flows.	**Deterministic Quality Engines:** Automated validation layers that proactively cleanse errors and map to strict taxonomies.	Drives verified commercial returns, such as enterprises capturing a **3%** recurring revenue lift and up to **50%** additional product sales through automated catalog enrichment.

To capture the full value of agentic commerce, leading retailers are moving beyond fragmented data repositories and building unified AI-ready intelligence foundations. By deploying multimodal AI pipelines to ingest unstructured supplier information, customer signals, and operational data, organizations can create trusted sources of product, customer, and inventory intelligence. Proven implementations at scale, such as refreshing over **100,000** SKUs quarterly for major industrial and specialty retail distributors, demonstrate that automated enrichment unlocks immediate marketplace visibility and drives tangible top-line growth.

This structural transformation turns data from an operational constraint into a strategic asset. Rather than serving as static repositories, AI-ready data foundations become dynamic intelligence platforms capable of powering personalized customer experiences, intelligent inventory decisions, retail media, AI-driven discovery, and enterprise-wide AI orchestration.

AI-ready product, customer, and inventory data are rapidly becoming one of the most important sources of competitive advantage in modern retail.



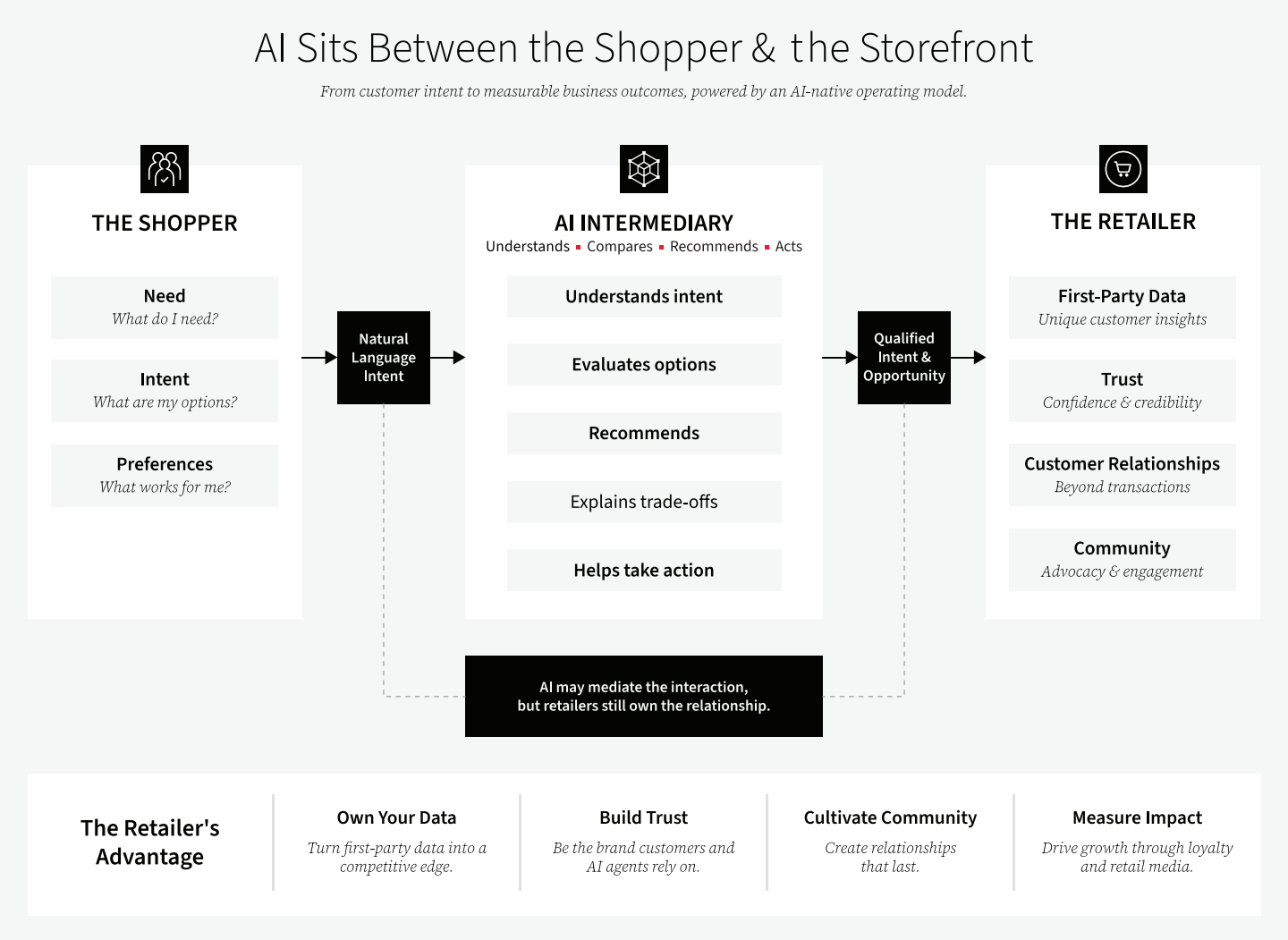
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Reclaiming Advantage: Trust, Community, First-Party Data, & the Retail Media Evolution

As AI assistants and agentic commerce experiences increasingly mediate customer decisions, retailers face a new challenge: maintaining differentiation when discovery, comparison, and purchasing are influenced by intelligent agents rather than direct brand interactions.

According to Bain & Company, agentic AI is disrupting the shopper journey as third-party agents increasingly disintermediate the top of the funnel, shifting influence away from traditional retailer-controlled experiences and forcing retailers to compete for both shoppers and AI agents. Bain & Company also found that consumers trust retailer-owned agents three times more than third-party agents to complete transactions, highlighting the growing strategic importance of trust and first-party relationships in the AI era.

In this environment, proprietary first-party data is emerging as one of retail's most valuable strategic assets. Customer preferences, purchase behaviors, loyalty engagement, product interactions, and community participation provide differentiated intelligence that AI platforms and marketplaces cannot easily replicate.



As consumers increasingly rely on AI assistants to identify products, compare alternatives, aggregate reviews, and even complete purchases, retailers risk losing direct engagement with customers. Organizations that rely solely on traditional transaction-based relationships may find themselves reduced to interchangeable, low-margin fulfillment providers.

At the same time, Retail Media Networks (RMNs) are reaching a strategic inflection point. While early growth was fueled by monetizing traffic and search placements, the next phase of growth will depend on leveraging first-party data, measurement capabilities, community engagement, and customer trust.

Many retailers initially built RMNs to capture incremental advertising revenue, relying on basic search placements, sponsored products, and legacy ad-serving models. However, the next phase of growth will depend on leveraging first-party data, measurement capabilities, community engagement, and customer trust to create differentiated value for advertisers and consumers alike.

A growing number of retailers are adopting a “buy infrastructure, own strategy” model, exemplified by Ace Hardware's RedVest Media, which emphasizes ownership of customer relationships, first-party data, and measurement while leveraging external technology platforms where appropriate. They are attempting to compete with global digital giants using outdated ad-serving infrastructure that fails to satisfy today’s sophisticated brand advertisers (The Modern Growth Platform: Ace Hardware / RedVest Media, September 2026)

Agentic AI is transforming the retail customer journey, shifting influence from traditional brand interactions to AI-mediated decision-making. In response, leading retailers are reimagining their value propositions, leveraging trust and first-party data as strategic assets, modernizing retail media, and retaining control over critical commerce capabilities. In an increasingly agentic marketplace, trust, community, and proprietary intelligence are becoming durable sources of competitive advantage.

THE LEGACY RMN TRAP	THE MODERN GROWTH PLATFORM
Graded on a retail-media curve: Comparing performance only against other struggling retail ad networks.	**Competing with global media platforms:** Benchmarking against Google, Meta, Amazon, and Connected TV (CTV) ecosystems.
Over-reliance on commodity tech: Sticking to basic search bars, sponsored product rows, and copycat Amazon tactics.	**Buying Infrastructure, owning strategy:** Leveraging external ad technology while maintaining ownership of first-party data, merchant relationships and customer insights.
Short-term revenue impatience: Confusing total addressable market (TAM) with next year's revenue targets and burning vendor trust.	**Long-term growth orientation:** Balancing advertiser value, vendor growth, customer outcomes and category expansion.
Advertising as inventory: Treating media primarily as a source of incremental revenue.	**Measurement as the product:** Demonstrating attribution, incrementality, and business impact to strengthen advertiser confidence and long-term, YoY growth investment.

Source: RedVest Media, 2026 Source: RedVest Media, 2026



To resist commoditization and win in an AI-mediated market, retailers must leverage unique assets that generalized technology platforms and social media giants cannot replicate: trusted customer relationships, proprietary first-party data, community engagement, and differentiated customer experiences.



The Retailer Trust Advantage: As AI becomes increasingly involved in customer decision-making, trust is emerging as a key differentiator. Consumer research proves consumers are significantly more likely to trust retailer-owned AI experiences than third-party agents when completing transactions, reinforcing the strategic value of direct customer relationships.

Content and Community as the New Advantage: Winning brands are building engagement ecosystems that extend beyond traditional commerce. A notable example is DICK'S Sporting Goods' GameChanger platform, which combines youth sports scheduling, scorekeeping, live streaming, and team communications to create a highly engaged customer community. Industry reporting indicates the platform generated approximately **$100 million** in revenue in 2024 and was projected to reach **$150 million** in 2025, demonstrating how community-centric experiences can create meaningful business value beyond product transactions.

Redefining Retail Media: As demonstrated by leading retail media transformations, such as Ace Hardware scaling their RedVest Media past **500%** YoY growth, RMNs must shift from transactional ad spaces to comprehensive growth platforms. By treating measurement as the product and ensuring that media revenue, vendor growth, and category growth compound customer value, retailers can transform advertising into an irreplaceable strategic moat.

Agentic AI is transforming the retail customer journey, shifting influence from traditional brand interactions to AI-mediated decision-making. In response, leading retailers are reimagining their value propositions, leveraging trust and first-party data as strategic assets, modernizing retail media, and strengthening community engagement.



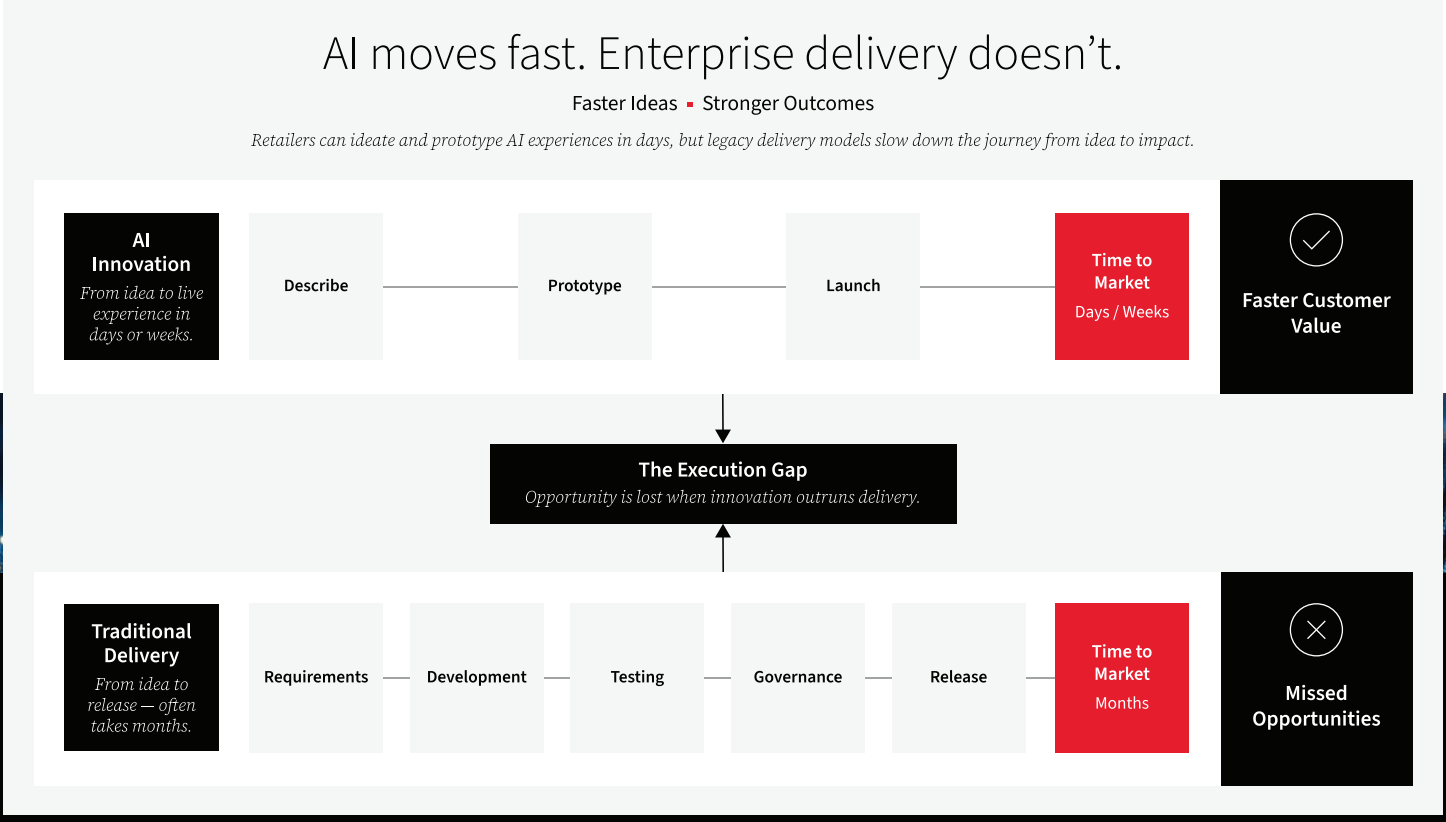
In an increasingly agentic marketplace, trusted relationships, proprietary intelligence, and customer ecosystems are becoming durable sources of competitive advantage that competitors cannot easily replicate.

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The AI-Native Software Factory: Accelerating Innovation at Scale

The next wave of retail transformation will not be won solely through AI-powered customer experiences. It will be won through an organization's ability to continuously build, deploy, govern, and scale innovation across the enterprise. Yet many retailers continue to face a persistent challenge: the gap between front-end ambition and back-end execution.

Executive leadership teams routinely approve innovative AI-powered experiences, conversational commerce capabilities, and predictive decision-support solutions. However, the software delivery lifecycle often remains constrained by siloed teams, manual processes, fragmented governance, and legacy development practices. As a result, the speed of innovation frequently lags behind the pace of market change. In fact, requirements bounce slowly across siloed departments; developers write code against moving targets, and manual QA teams are left endlessly validating rigid, predictable user journeys. When engineering velocity is crippled by brittle testing scripts and heavy manual dependencies, feature releases drag out for weeks or months. By the time an advanced AI capability finally clears pre-production review and hits the live site, consumer expectations have already shifted, rendering the deployment obsolete before it ever reaches the shopper.



To overcome these constraints, leading retailers are adopting an AI-native software factory to power their operating models and embed AI throughout the entire software development lifecycle. Rather than applying AI as a feature at the end of the process, these organizations are reimagining how software is planned, built, tested, governed, deployed, and measured. AI is increasingly used to accelerate requirements of gathering, code generation, engineering intelligence, testing, governance, deployment, and operational monitoring, enabling teams to reduce friction across the entire delivery continuum.



As highlighted by TechBlocks Founder & CEO, Prashant Kumar, during his keynote at Total Retail TECH 2026, many organizations have focused on accelerating individual tasks while leaving underlying operating models unchanged.

The result is that productivity gains often fail to translate into measurable business outcomes. True transformation requires more than AI tools. It requires an AI-native operating model built on six foundational capabilities: AI coding, engineering intelligence, enterprise knowledge, agent orchestration, governance and observability, and outcome measurement. Together, these capabilities create a software factory that continuously learns, adapts, and improves while maintaining accountability for business results. The result is a more adaptive, AI-native software factory capable of delivering innovation faster, with higher quality, stronger governance, and lower operational overhead. More importantly, it shifts the focus from AI adoption and pilot activity toward measurable outcomes that customers can actually experience.

THE BUILDING BLOCKS OF AN AI-NATIVE SOFTWARE FACTORY

Rather than treating artificial intelligence as a superficial feature added to the final product, leading digital engineering teams are fundamentally modernizing how software is conceived, tested, and shipped:

Requirements & Code Generation: Intelligent automation tools translate high-level business logic directly into structured technical specifications, while advanced LLMs assist developers in generating, reviewing, and refining core application code to minimize human syntax errors.

Autonomous Visual Testing: Replacing brittle, script-based testing frameworks (such as legacy Selenium or Playwright implementations) with autonomous multi-agent systems. These systems utilize specialized Action, Assertion, Extraction, and Persona agents that mimic real human shoppers navigating multi-region digital storefronts under dynamic conditions.

Upstream Governance Integration: Transforming compliance, security, and architectural checks from late-stage operational brakes into proactive, human-centric “people-in-the-loop” guardrails that accelerate secure deployments rather than delaying them.

AI-Powered Operational Intelligence: AI-driven monitoring, observability, and production telemetry provide continuous feedback loops that help engineering teams identify risks, optimize performance, and improve customer experiences in real time.

The AI-Native Software Factory

People ▪ Agents ▪ Real Outcomes

A new operating model to build, scale and continuously improve AI-powered retail experiences.

INPUTS

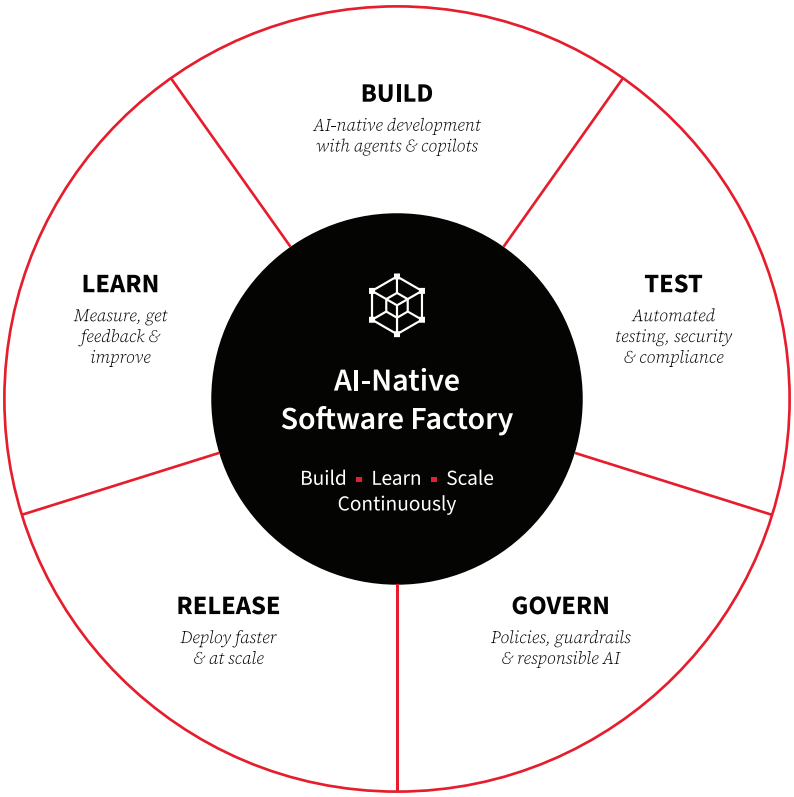
Turn real-world needs into build-ready opportunities.

Customer Insights
Voice of customer, behavior and feedback

Business Priorities
Strategic goals and use cases

Enterprise Data
Product, inventory, customer and more

Ideas & Innovation
From teams, partners and AI agents



A Continuous Cycle of Innovation

OUTCOMES

Faster Time-to-Market
Take ideas to customers in weeks, not months

Better Customer Experiences
More relevant, personalized & consistent

Greater Engineering Capacity
Teams focus on high-value work

Operational Resilience
Secure, compliant & scalable

Business Growth
Turn innovation into measurable revenue & loyalty

The Difference	Speed	Scale	Control	Impact
	From months to weeks	Across teams and markets	Built-in governance	Real business outcomes

QUANTIFYING THE ENGINEERING IMPACT

The operational gains generated by an AI-native software factory extend beyond engineering efficiency. Leading organizations are translating development velocity into measurable business outcomes, including faster innovation cycles, improved customer experiences, higher release quality, and increased organizational capacity. Rather than optimizing isolated tasks, the AI-native software factory modernizes the entire software delivery lifecycle. By combining engineering intelligence, agent orchestration, governance, and outcome measurement into a unified operating model, organizations can reduce delivery friction, accelerate decision-making, and create a more responsive innovation engine. Key outcomes commonly observed across AI-native software delivery initiatives include:

Accelerated Time-to-Market: Reducing the time required to move from concept to production, enabling organizations to respond more quickly to changing customer expectations and market opportunities.

Improved Software Quality: Identifying defects earlier in the development lifecycle while strengthening testing, governance, and release confidence.

Increased Engineering Capacity: Automating repetitive activities across planning, development, testing, and deployment, allowing teams to focus on higher-value innovation initiatives.

Greater Business Agility: Improving the ability to continuously release, learn, optimize, and adapt without disrupting ongoing operations.

As organizations mature their AI-native software factory capabilities, success is increasingly measured by customer value delivered, operational resilience, speed-to-market, and business outcomes rather than the number of AI tools deployed or pilots launched.



CUSTOMER SPOTLIGHT: RETAIL REENGINEERED: BUILDING AN AI-NATIVE OPERATING SYSTEM

Many enterprises have adopted AI tools yet struggle to translate productivity gains into measurable business outcomes. AiDE was designed to address this challenge by combining AI-native delivery, engineering intelligence, agent orchestration, governance, and outcome measurement into a single accountable operating model.
Learn how TechBlocks helped build a unified, AI-native software factory for retail. Read the Case Study →

REDEFINING SUCCESS METRICS

Ultimately, progressive retail engineering groups are shifting their internal scorecards away from vanity metrics, such as the raw volume of experimental AI pilots launched, and anchoring them to hard, verifiable engineering fundamentals. Organizations are increasingly measuring success based on customer value delivered, speed-to-market, operational resilience, engineering productivity, and business impact rather than the number of AI pilots launched. The most successful retailers are no longer treating AI as a technology initiative. They are treating it as a capability embedded throughout the software factory itself. By combining AI-ready data, intelligent orchestration, and AI-native software delivery, organizations can move beyond experimentation and create repeatable systems for innovation at scale.

CONCLUSION: FROM AI ADOPTION TO AI OPERATIONALIZATION

Retail has entered a fundamentally new era of transformation. For decades, technology investments were guided by the belief that a major platform upgrade, digital transformation initiative or modernization program could future-proof the enterprise for years to come. From e-commerce to mobile commerce and omnichannel retail, each wave promised a destination. Those assumptions no longer hold. The rise of agentic commerce, AI-powered discovery, and intelligent decision-making has fundamentally changed the pace of business. Customer expectations, technology capabilities, and competitive dynamics are evolving simultaneously, creating an environment where adaptability is no longer optional. The retailers best positioned for success are not necessarily those investing in the most AI tools or launching the greatest number of pilots. They are the organizations building the foundations required to operationalize AI across the enterprise.

Leading retailers share three common characteristics:

1. They invest in AI-ready data foundations that power product, customer, and inventory intelligence.
2. They establish AI orchestration capabilities that connect systems, workflows, decision-making, and governance across the enterprise.
3. They build AI-native software factories that accelerate innovation while delivering measurable business outcomes at scale.

Together, these capabilities enable organizations to move beyond experimentation and create repeatable, scalable systems for growth, innovation, and customer value.



The future belongs to retailers that can continuously learn, adapt, & operationalize AI faster than the market changes around them.

In an increasingly agentic world, a sustainable competitive advantage will not be defined by AI adoption alone. It will be defined by an organization's ability to translate AI investments into trusted customer experiences, operational excellence, and measurable business outcomes. True industry leadership demands a structural pivot toward perpetual adaptability. By fusing machine-readable data foundations, high-trust retail media platforms, and AI-native software delivery into a cohesive operating model, visionary enterprises are dismantling the operational silos that once paralyzed growth. The next era of retail dominance will not belong to companies with the heaviest legacy footprints or the longest lists of isolated proof-of-concepts. It will belong exclusively to those built to learn, respond, and iterate faster than the market changes around them, turning systemic agility into an enduring competitive advantage while the core system is running.

techblocks

From insight *to* impact.

The future of retail isn't defined by AI adoption alone,

but by the ability to turn ideas into real outcomes, faster, smarter, and at scale.

THE TECHBLOCKS RETAIL TEAM



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ABOUT TECHBLOCKS

TechBlocks is an end-to-end AI-native software engineering and consulting partner helping enterprises build, modernize, and scale digital platforms, data foundations, and AI-native operating models. We combine deep industry expertise with an outcome-focused approach to turn bold ideas into real business impact.

AI-Native Engineering | Data Foundations | Intelligent Commerce | AI-Native Software Factory

Total Retail TECH

TECHBLOCKS AT TOTAL RETAIL TECH 2026

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