

When AI Buys: How Shopping Agents Are Changing Commerce



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Our mission is to empower businesses by harnessing data and accelerating digital transformation. We take a collaborative approach, working closely with clients to scale their internal capabilities and achieve measurable success. At Marvik, we are committed to innovation and to aligning with our clients' goals to deliver real results.

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Executive Summary

AI shopping agents are quickly becoming the new front door to commerce. Platforms like Perplexity and ChatGPT are beginning to navigate websites, compare options, and even complete purchases, redefining how products are discovered and bought.

This marks the third wave of retail AI: predictive systems that forecast demand, generative AI that create new content, and now **autonomous agents that can complete entire shopping journeys with minimal human input.**

While adoption is still in its early stages, the trajectory is clear. Early tools are limited to small groups of users and face challenges around accuracy and speed, but **the pace of innovation suggests mainstream adoption is not far away.**

In this document we explore how retailers and marketplaces can adapt, compete, and thrive in the age of AI shopping agents, transforming the shopping experience into something faster, smarter, and more personalized.

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1. A New Battleground for Commerce

For nearly three decades, online shopping has been driven by search and browsing. Consumers typed keywords, scrolled through product lists, compared specifications, and made decisions manually. Even as digital retail evolved through mobile apps, personalized recommendations, and live shopping, the core experience remained the same: humans driving the journey.

AI shopping agents are breaking that model. Instead of people browsing, agents now browse on their behalf. With a single prompt, an agent can interpret intent, filter by attributes such as price, size, or sustainability score, and return relevant results in seconds. In some cases, the agent can complete the purchase without the consumer ever opening a retail website.



This shift represents the third wave of AI in commerce. The industry moved first through predictive AI, which used historical data to forecast demand and personalize timing. It then advanced to generative AI, which created content such as product copy, chat interfaces, and imagery. Now, in 2025, the industry is entering the era of agentic AI, where large language models (LLMs) are embedded into systems that not only reason but also act autonomously across digital platforms [\[1\]](#).

Adoption is already accelerating. Adobe Analytics reports that traffic from generative AI platforms to retail sites grew by more than **4,700% year over year by July 2025** [2]. Salesforce research shows that **39% of shoppers have already used AI for shopping tasks**, and **54% of Gen Z expect to rely on AI this year**. Importantly, **63% of Gen Z say they are comfortable letting agents complete purchases directly** [1]. This indicates a generational shift in trust that will shape the future of commerce.

Platforms are racing to capture this new entry point. **Perplexity's shopping assistant**, released in 2025, can browse websites and attempt transactions, though early trials showed failures when inventory data was outdated. **OpenAI and Google** are developing their own agentic systems for bookings and shopping, while **Amazon** is expected to expand its Rufus chatbot from product Q&A into full checkout functionality [3]. These experiments illustrate both the potential and the fragility of today's implementations.

For retailers, the implications are significant. Agents do not respond to lifestyle imagery or traditional advertising; they respond to structured data. Attributes such as durability, fit, or price are prioritized over brand storytelling [4]. As a result, **visibility will depend less on storefront design and more on the ability to deliver agent-readable catalogs, accessible through APIs and vector databases that LLMs can query in real time.**

The battleground for commerce is shifting. The first interaction is no longer between consumer and brand but between consumer and agent. To compete in this environment, retailers must design for two audiences at once: the human who benefits from the purchase, and the AI agent making decisions on their behalf.

2. Inside AI Shopping Agents: How They Work

AI shopping agents feel simple on the surface — you type a request, and they return results. But behind the scenes, they follow a multi-step process that combines reasoning, data access, and execution. Understanding this workflow is key to seeing both the potential and the current limits of the technology.

Step 1: Understanding intent

Agents begin by interpreting a shopper's request using large language models (LLMs). A query like *"Find sneakers under \$100 with good cushioning for running"* is broken down into attributes: product type (sneakers), budget (under \$100), and feature (cushioning for running).

Step 2: Retrieving information

On their own, LLMs do not know which products are in stock. To bridge that gap, agents use retrieval-augmented generation (RAG) and vector databases to connect to live catalogs. This allows them to search based on meaning rather than just keywords, pulling products that match intent across retailers.

Step 3: Reasoning across options

Once the data is retrieved, the agent evaluates it. This can involve comparing prices, checking delivery times, or matching features against the user's history. Advanced orchestration frameworks even allow multiple agents to collaborate — for example, one agent filtering by features while another checks shipping options.



Step 4: Taking action

Finally, the agent can act. In early pilots, this means adding items to a cart or completing checkout, often through integrations or even scraping interfaces. While results can still be slow or unreliable, the goal is clear: agents that not only recommend but also transact.

Step 5: Guardrails and oversight

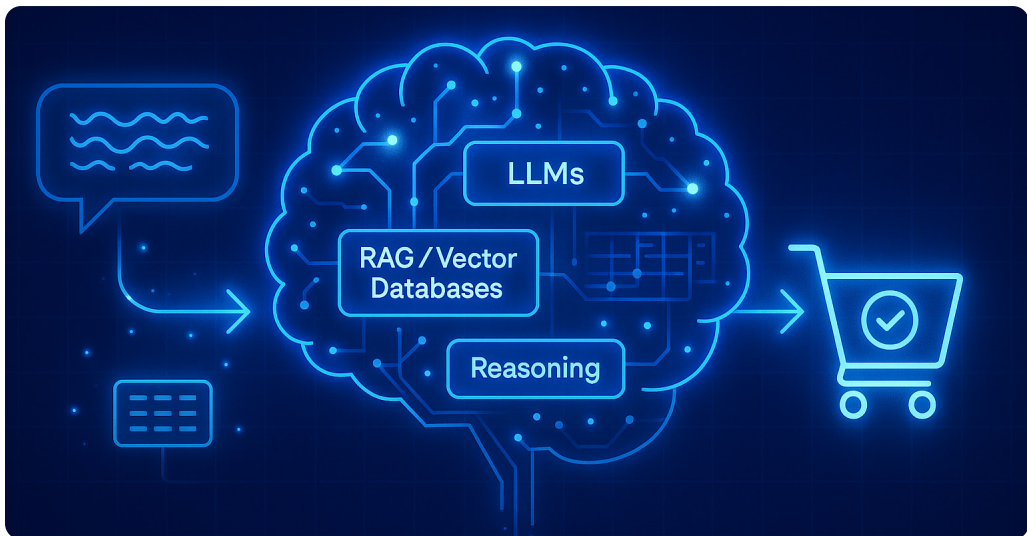
Because agents make decisions autonomously, monitoring systems are essential. Guardrails prevent errors such as purchasing the wrong product, while human oversight remains a backstop in early deployments.

3. The Great Disruption and Its Risks

AI shopping agents are not an incremental step in digital commerce. They represent a structural disruption that compresses shopping time, alters how discovery happens, and challenges the economics of retail media.

Shopping journeys are being condensed. On average, consumers spend more than **60 hours per year shopping online**. Agentic systems can reduce this dramatically, with pilots showing browsing time cut from about **62 minutes to under 5 minutes per journey** [1]. For consumers, this means convenience and efficiency. For retailers, it means fewer touchpoints for upselling, cross-selling, or brand storytelling.

Agent-to-agent negotiation is emerging. Research from Meta and DeepMind demonstrates that AI agents can already reason, cooperate, and negotiate at levels approaching human performance in strategic tasks [2]. Applied to retail, this could mean consumer-facing agents requesting products while retailer-side agents respond with availability, pricing, or even promotions — completing the transaction autonomously.



Retail media economics are under pressure. Retail media is one of the fastest-growing areas of digital advertising, projected to surpass **\$200B globally in 2025** [3]. **More than 70% of that spend still flows into bottom-funnel formats such as sponsored product ads** [3]. If agents, not humans, become the first layer of discovery, the effectiveness of these investments will decline. Visibility will shift toward structured data and ranking signals that agents use to decide, rather than traditional creative designed to persuade people.

Risks of inaction are growing. Experiments with Perplexity’s shopping agent illustrate the current fragility of implementations. Tests show purchases taking hours or failing due to outdated inventory, requiring human oversight to complete [4]. As adoption scales, retailers that are not prepared with real-time APIs and agent-readable catalogs risk disappearing from agent recommendations altogether.

The disruption is not hypothetical. **Platforms are already experimenting, traffic from AI platforms to retail sites is surging, and consumer trust in agents is rising.**

4. What AI Shopping Agents Really Mean for Retail

AI shopping agents are more than a convenience feature. They mark a structural change in commerce, shifting control of visibility and discovery from retailers to algorithms. Instead of consumers browsing storefronts, agents will increasingly decide which products are surfaced, compared, and purchased [\[1\]](#).

This redefines discovery. Branding and lifestyle imagery once shaped consumer choices, but agents prioritize structured attributes such as price, material, durability, or delivery speed [\[1\]](#). Retailers that invest in high-quality, machine-readable data will gain visibility, while those that rely on design and creative alone risk being overlooked.

The economics of retail media are also being rewritten. With global spend expected to surpass \$200B in 2025, competition will move from capturing human attention to ranking in agent-driven recommendations [\[2\]](#). Success will depend on data quality and algorithmic relevance, not just ad creative.

Trust becomes the final differentiator. As shoppers hand more decisions to agents, they will expect transparency into how recommendations are made. Retailers that can explain and validate why a product was chosen will stand out in an agent-driven world [\[1\]](#).

5. How Retailers Must Adapt

As shopping agents gain traction, the balance of power in digital commerce is shifting. **Platforms that embrace agentic systems early are gaining visibility** and control of consumer interactions, while retailers that remain dependent on legacy storefront models risk being reduced to backend fulfillment.

Early adopters are building advantage. Saks Fifth Avenue launched Salesforce's Agentforce in late 2024 to power a digital stylist that could interpret photos of outfits, recommend products in the right size, and even coordinate exchanges automatically. SharkNinja has deployed similar systems across customer support and sales, creating a digital workforce that operates around the clock [\[1\]](#). These implementations show how agents are already moving from reactive chatbots to proactive decision-makers embedded in retail workflows.

Operational systems are being redesigned. Carrefour uses agents to optimize supply chains and loyalty campaigns, while Walmart's Intelligent Retail Lab applies AI vision agents to monitor inventory and flag out-of-stock items in real time [\[2\]](#). These integrations ensure that consumer-facing agents access reliable data, reducing the risk of mismatched availability and failed transactions.



Amazon's position highlights the stakes. Amazon generated \$56B in ad revenue in 2024 and is expected to exceed \$69B in 2025, making retail media one of its fastest-growing businesses [3]. Yet if shopping agents bypass sponsored product placements and instead choose based on structured product attributes, a significant share of that revenue is at risk. Retailers that do not optimize for agent selection may find themselves invisible despite heavy ad spending.

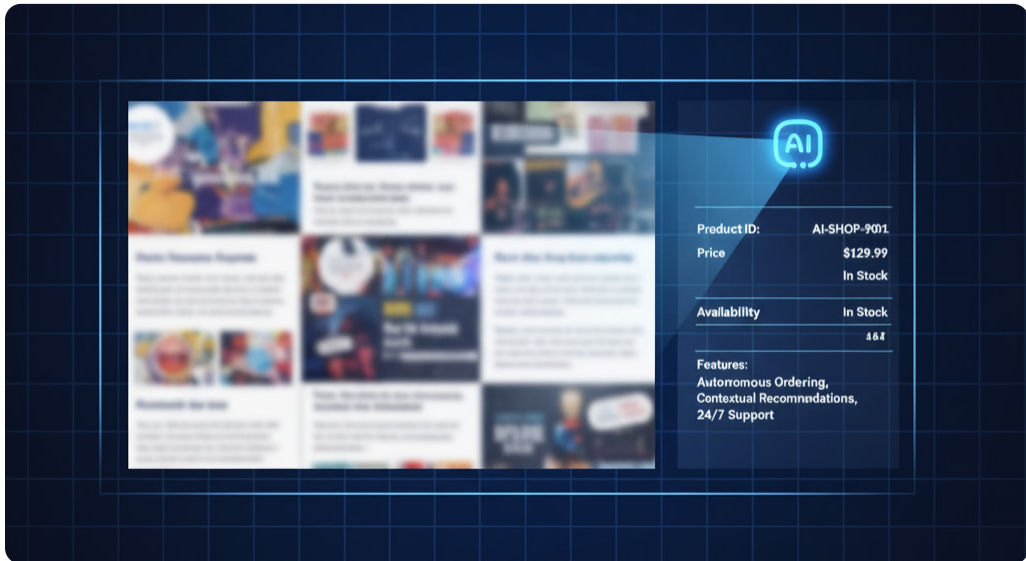
Technical readiness is the new differentiator. Successful retailers are not only adjusting marketing strategies, they are re-architecting data and infrastructure for agent interaction. This involves:

- **Large language models (LLMs)** that understand natural language prompts and product attributes.
- **Retrieval-augmented generation (RAG) and vector databases** that enable agents to query catalogs and surface the most relevant results.
- **APIs and structured product data** that allow agents to access inventory, pricing, and shipping information in real time.
- **Guardrails and monitoring systems** to ensure safety, accuracy, and compliance.

These technologies form the foundation of agent-readiness. Retailers that start implementing them today can secure visibility in agent-driven ecosystems, capture new pathways to customers, and differentiate on reliability and trust. Platforms are moving quickly, and the companies that adapt early will not only stay relevant but also unlock new opportunities to shape how shopping agents discover, evaluate, and recommend products.

6. Why Execution Matters

Retailers are investing in agentic AI, but many efforts remain stuck at the pilot stage. In 2025, the execution gap is emerging as one of the biggest barriers to realizing the potential of shopping agents.



Pilots rarely scale. Research from MIT Sloan shows that 95% of generative AI pilots never reach production [\[1\]](#). In retail, many proofs of concept demonstrate chatbot-style interactions but lack the data pipelines, APIs, or governance required for large-scale deployment. The result is innovation that looks promising in demos but fails under the pressure of real-world complexity.

Trust and quality remain decisive. Salesforce’s 2025 survey of consumer goods executives found that “quality of outcomes” is the top concern when evaluating shopping agents [\[2\]](#). Reliability is not optional. If agents recommend out-of-stock products, misinterpret attributes, or complete faulty transactions, consumer confidence can erode quickly. Perplexity’s early shopping agent trials revealed this fragility: purchases sometimes took hours to process or failed outright due to outdated inventory data, requiring human oversight [\[3\]](#).

Legacy systems limit readiness. Many retailers still rely on platforms optimized for human browsing, not machine-to-machine interaction. Without standardized catalogs, enriched attributes, and APIs that expose live pricing and inventory, agents default to scraping, a brittle process that often leads to mismatched availability and delayed checkouts [\[3\]](#).

The pace of adoption leaves little time to wait. Adobe Analytics reports that by July 2025, traffic to retail websites from generative AI platforms had grown **4,700% year over year** [\[4\]](#). What was experimental six months ago is rapidly becoming mainstream behavior. Retailers that hesitate risk losing visibility just as consumers shift en masse to agent-first pathways.

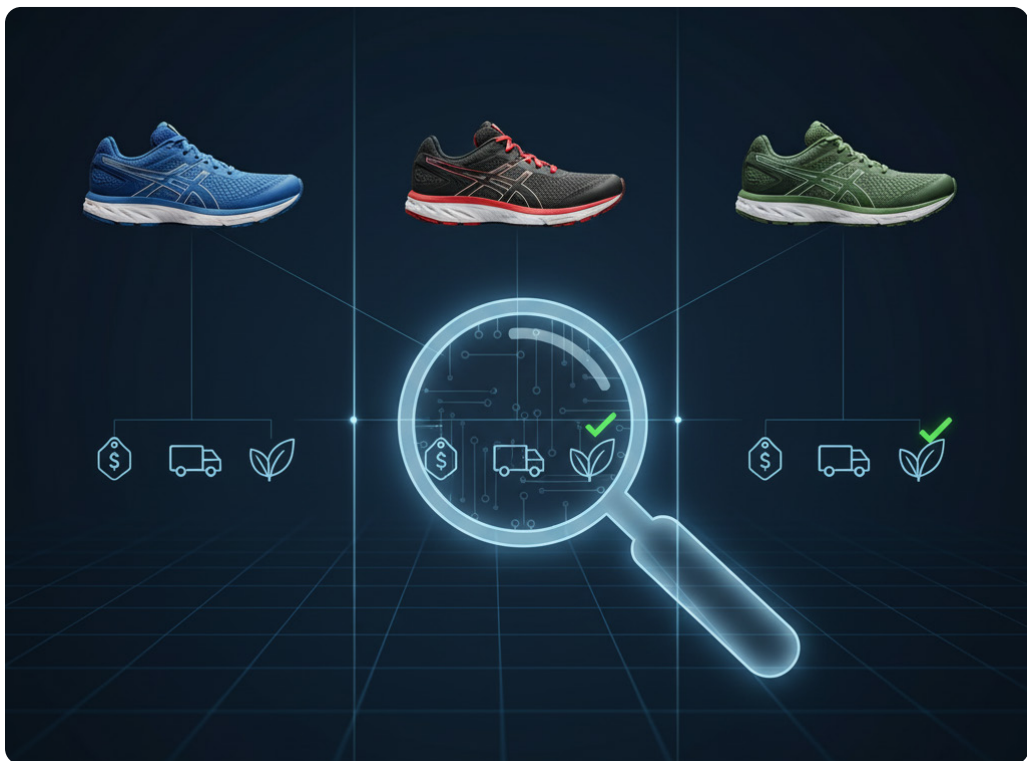
The lesson is clear. Innovation cannot stop at prototypes. Success in the agent era will be defined by execution: building resilient, transparent, production-grade systems that can operate reliably at scale.

7. Designing the Agent-Ready Roadmap

Moving from pilots to production requires a structured approach. In 2025, leading retailers are converging on a set of practices that make their systems agent-ready. **Three phases stand out as the emerging maturity model.**

1. Catalog Quality

The foundation is high-quality product data. Agents rely on structured attributes such as size, material, durability, or sustainability. Retailers need to enrich their catalogs, standardize taxonomies across SKUs and channels, and ensure metadata is consistent and machine-readable [\[1\]](#).



2. Agent interfaces

Structured data must be accessible. This means exposing APIs for live inventory and pricing, implementing retrieval-augmented generation (RAG) pipelines, and using vector databases for semantic queries. Standards such as the **Model Context Protocol (MCP)** are also emerging, enabling agents to connect reliably to external data and tools across platforms [\[2\]](#).

3. Governance and trust

Scaling requires oversight. Real-time monitoring, bias controls, and transparency in recommendations are essential for adoption. Salesforce research shows that “quality of outcomes” is the top concern among consumer goods executives deploying agents [\[3\]](#). Building governance from the start ensures that consumers and employees trust the results.

8. Conclusion: Built for the Now, Ready for What's Next

AI shopping agents are opening a new chapter in commerce. They are transforming how products are discovered, compared, and purchased, creating opportunities for retailers to reach customers with greater speed, precision, and relevance. What once required long browsing journeys can now happen in minutes, guided by intelligent agents that understand intent and act on it.

This is where Marvik comes in. With over **200 AI projects delivered into production** and partnerships with **NVIDIA** and **Oracle**, we help retailers and marketplaces translate emerging technologies into real impact. From structuring product data to deploying multi-agent systems, we guide companies beyond pilots and into production-ready solutions that scale.

Curious about how shopping agents could fit into your AI journey? [Reach out to us](#) and let's explore it together.

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