

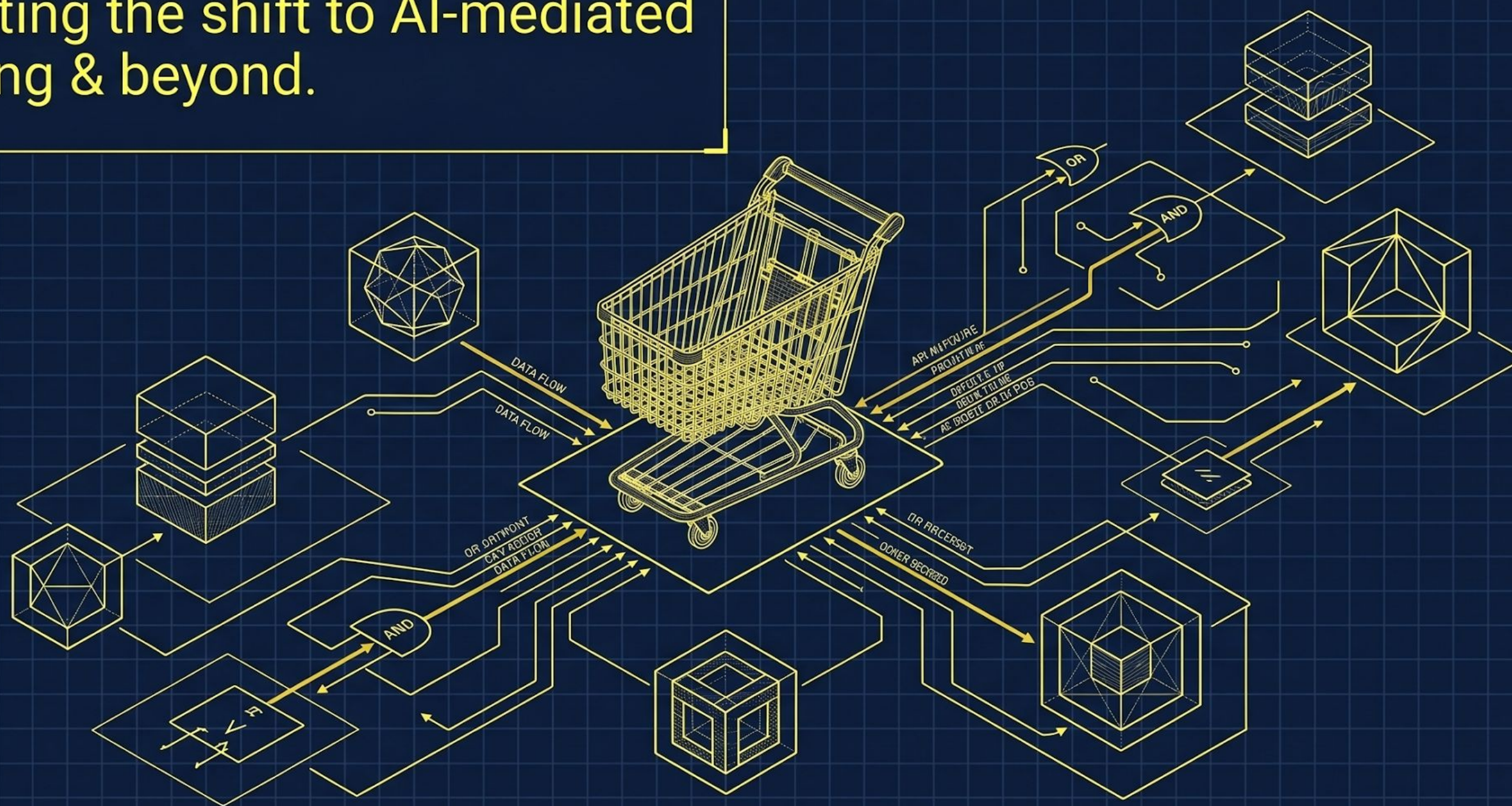


AGENTIC COMMERCE - BLUEPRINT -

Navigating the Shift to
Autonomous Shopping

The Agentic Commerce Playbook

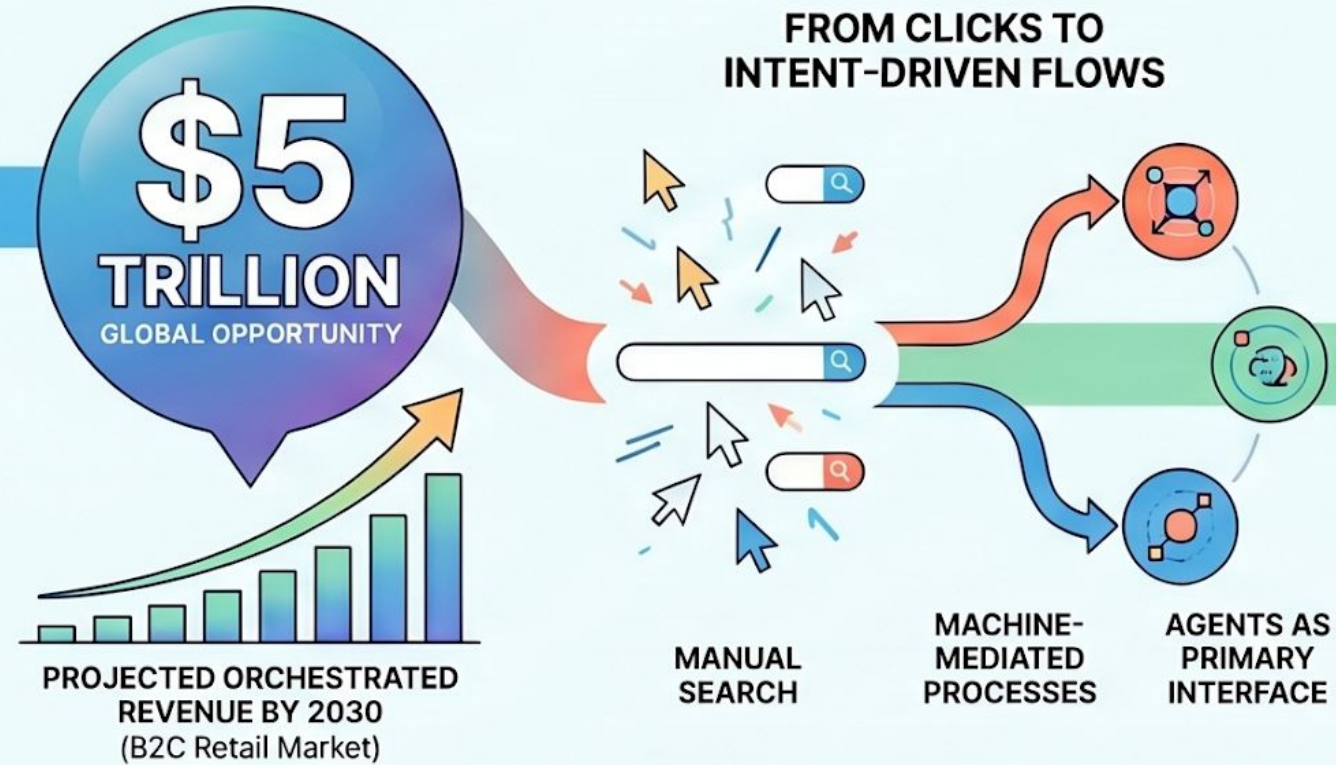
Navigating the shift to AI-mediated shopping & beyond.



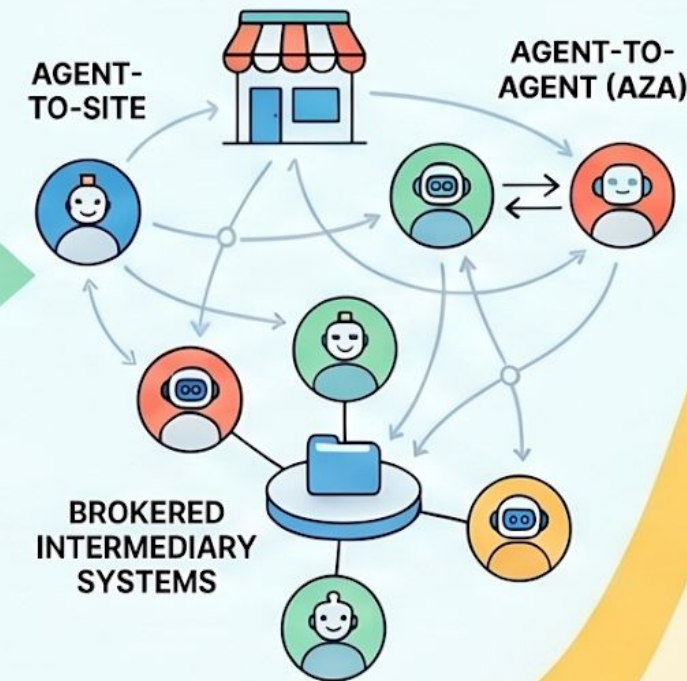
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The Dawn of Agentic Commerce: Navigating the \$5 Trillion Shift

The New Commerce Paradigm



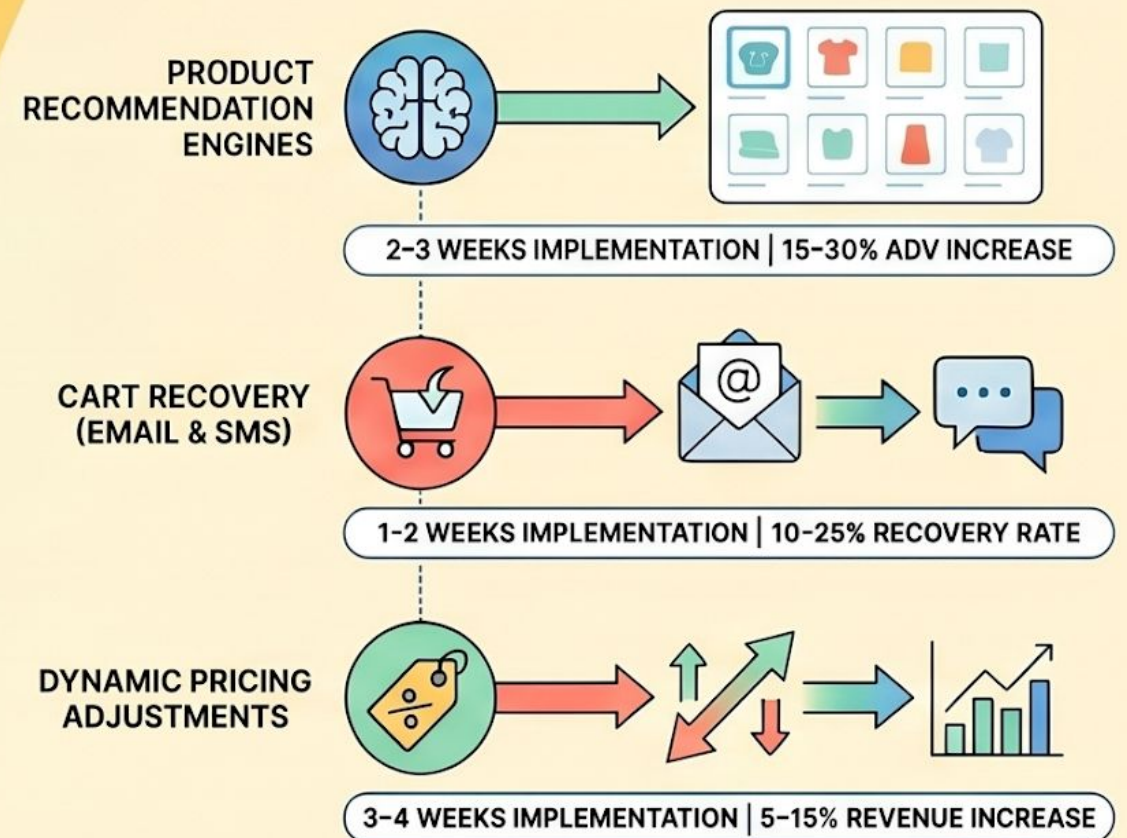
THE THREE INTERACTION MODELS



Strategic Implementation & Workflows



HIGH-IMPACT SHOPIFY WORKFLOWS

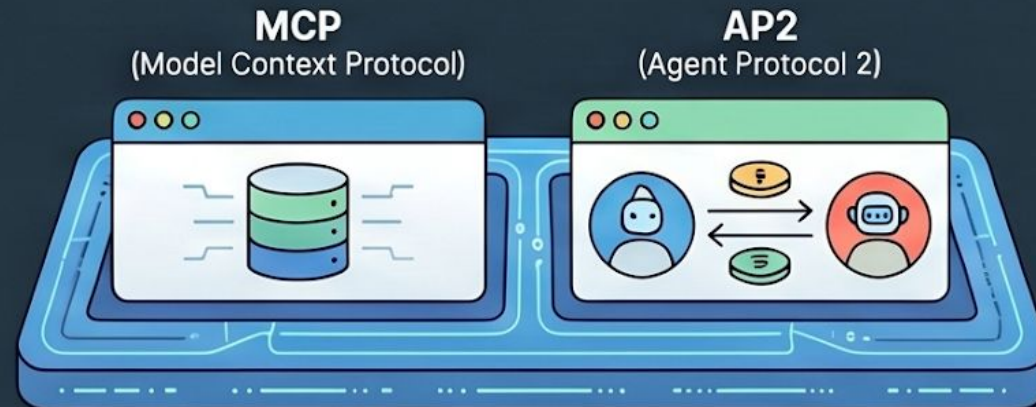


THE "TRISM" STACK FOR SAFETY



ESSENTIAL GOVERNANCE FOR AUTONOMOUS FINANCIAL DECISIONS

PROTOCOL-LEVEL INFRASTRUCTURE



STANDARDS TO SECURELY SHARE INTENT & EXECUTE PAYMENTS

The Commerce Schematic

Human vs. Agent-Mediated Commerce

Traditional Commerce		Agentic Commerce	
Actor:	Human browsing a website manually	AI Agent acting as a proxy	
Discovery:	SEO, keyword search, and display ads	AEO (Answer Engine Optimization) and semantic intent matching	
Interface:	Visual, graphical storefronts	API and Protocol layers parsing structured data	
Loyalty:	Emotional brand affinity	Algorithmic preference and agent-held context	

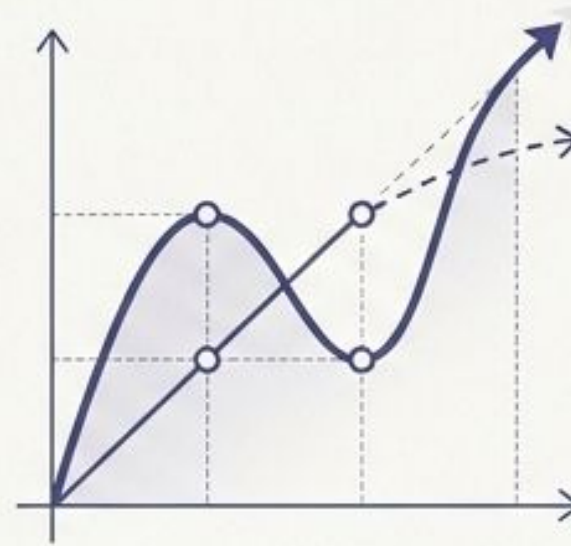
The Transition from Prediction to Autonomous Execution

Stage 1



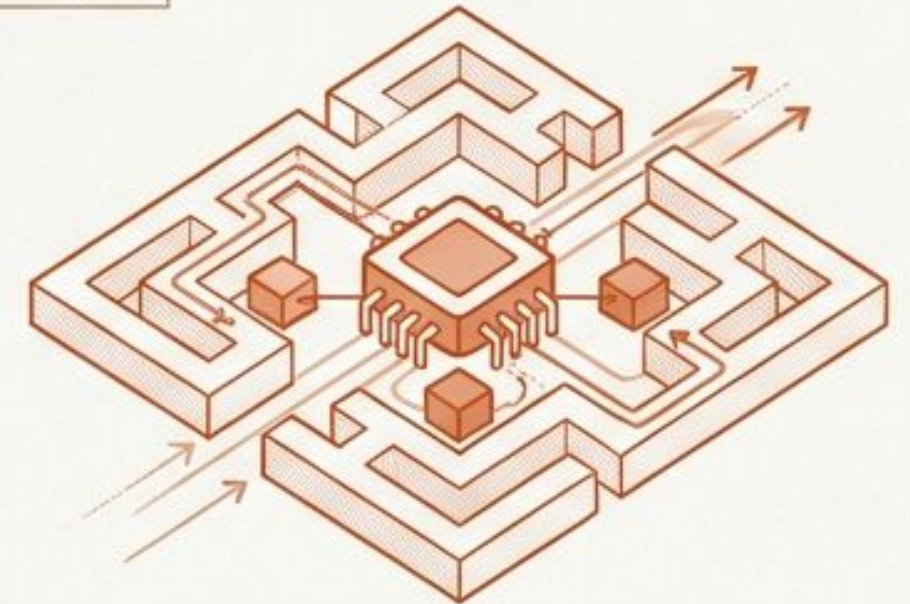
Passive Search

Stage 2



Predictive AI

Stage 3



Autonomous Agents

The Definition

Agentic Commerce is the shift from AI as a passive prediction tool to an active, autonomous proxy that anticipates needs, negotiates, and executes multi-step transactions on behalf of the consumer.

The Reality

AI is evolving from answering "What should I buy?" to executing "Buy the best option for me."

The Stakes

By 2030, the global economic opportunity for agentic commerce is projected to reach \$1T to \$5T.

Engineering commercial outcomes through three core optimization pillars



Clarification Quality – Asking precise, timely questions to refine user intent and eliminate friction without requiring complex prompt engineering.



Product Presentation Timing – Dynamically surfacing products perfectly aligned with the moment of highest consumer buying intent.



Sales-Closing Rate – The ultimate benchmark: optimizing the complete path from product discovery to finalized purchase.

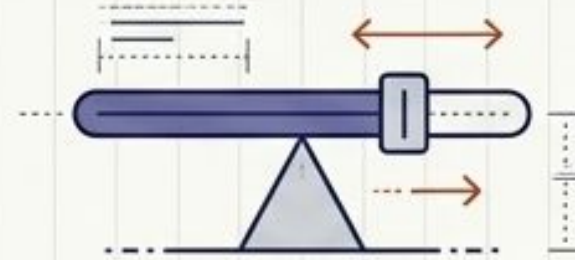
High-ROI Workflows: CX & Sales



Behavioral Recommendations

Deep learning algorithms analyze browsing history to surface highly relevant products.

Impact: 15-30% AOV lift



Dynamic Pricing

Real-time competitor tracking and inventory-aware adjustments. Maintains defined minimum profit margins while optimizing conversion based on demand.



AI Customer Support

24/7 ticket triaging and automated resolution for tracking, variants, and basic FAQs, shifting support from a cost center to a sales layer.

High-ROI Workflows: Operations & Retention



Demand Forecasting

Predictive analytics factor in seasonal trends, marketing impact, and historical data.

Impact: Reduces stockouts by 30-40%.



Autonomous Cart Recovery

Multi-channel, time-optimized recovery sequences (Email -> SMS) tailored to the specific cart value and customer segment.

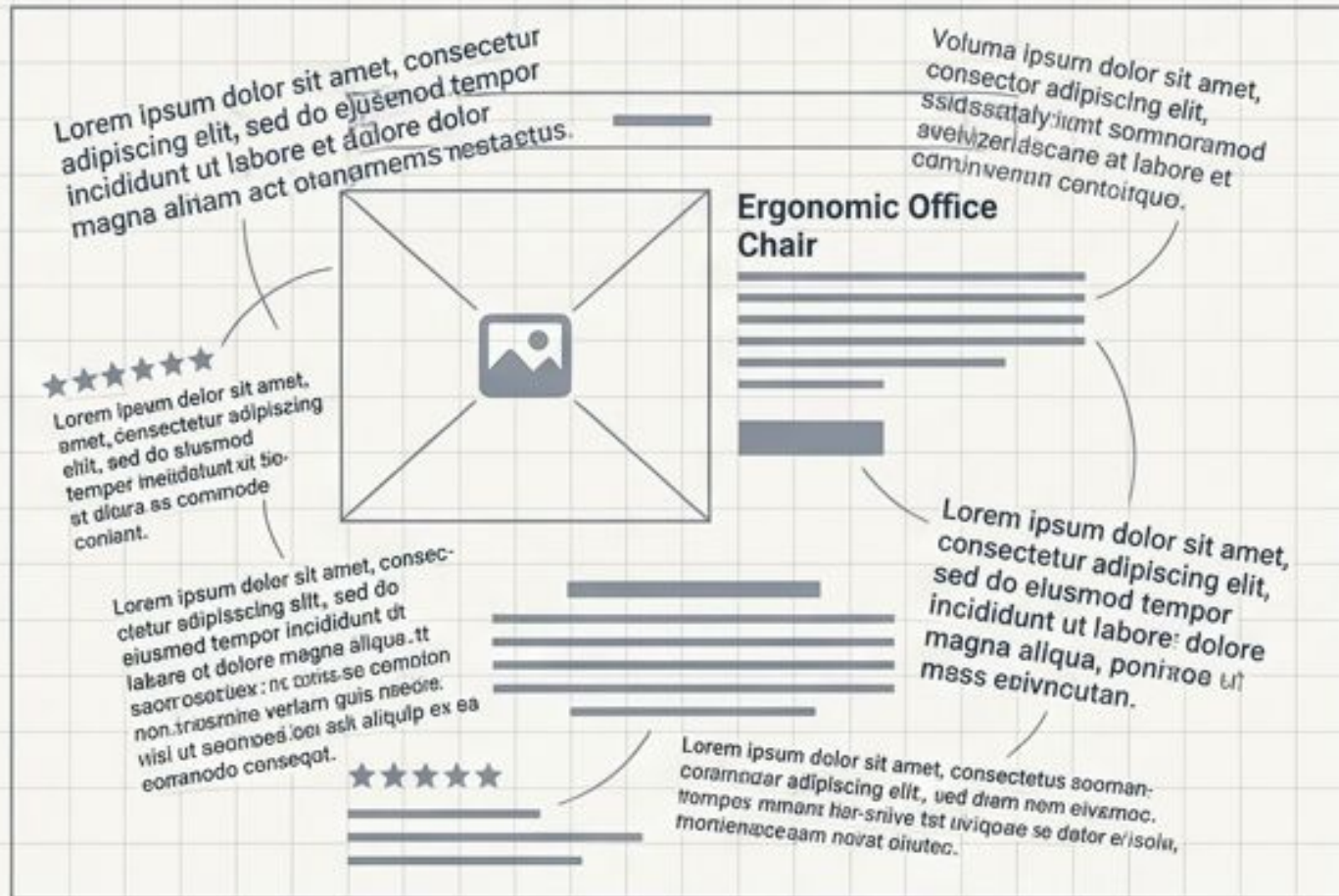


Churn Prediction

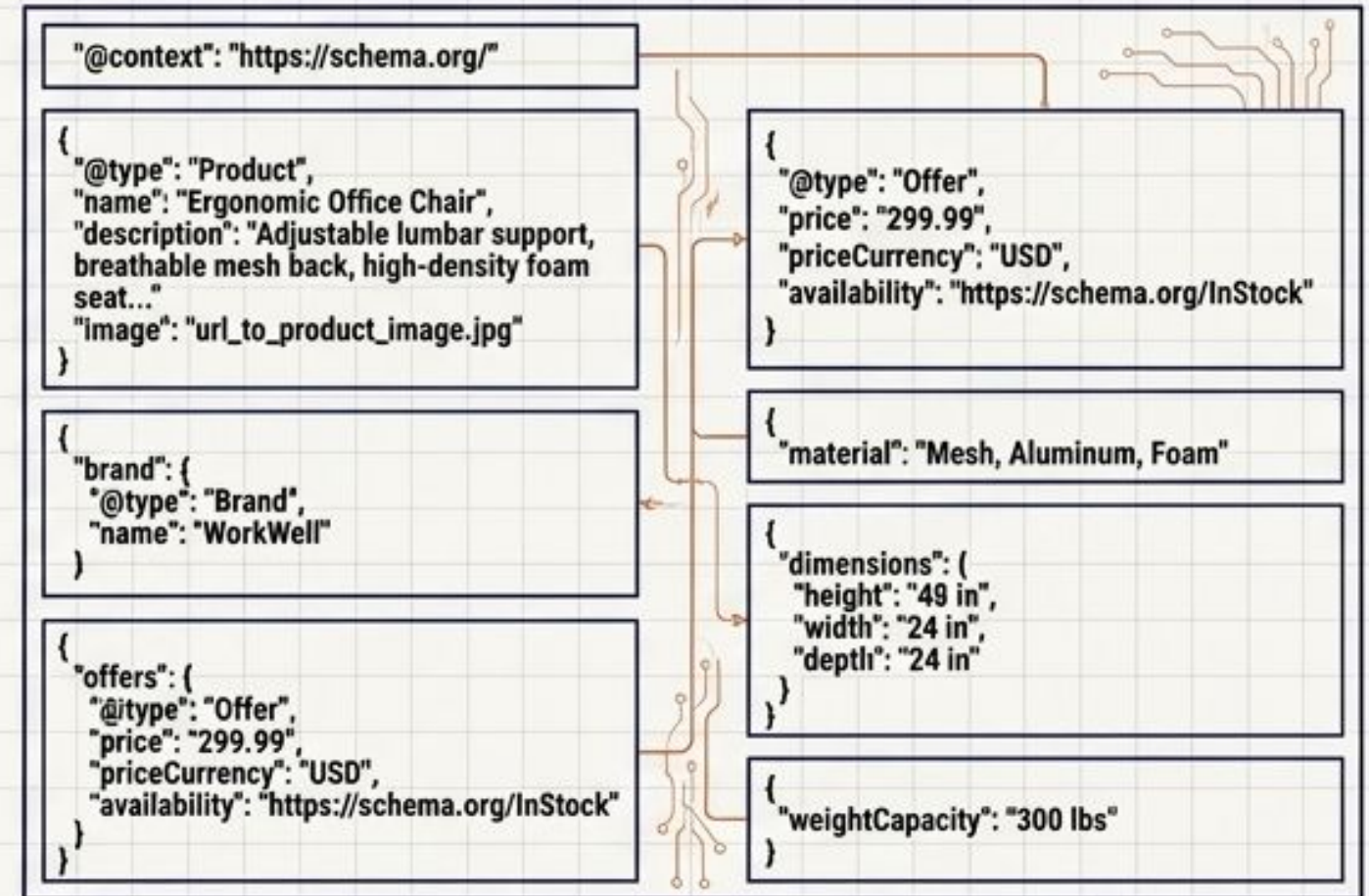
Proactive system alerts that identify disengaging customers and trigger automated, personalized retention incentives before they leave forever.




Making Your Catalog Machine-Readable (AEO)

UNSTRUCTURED DATA (HUMAN VIEW)

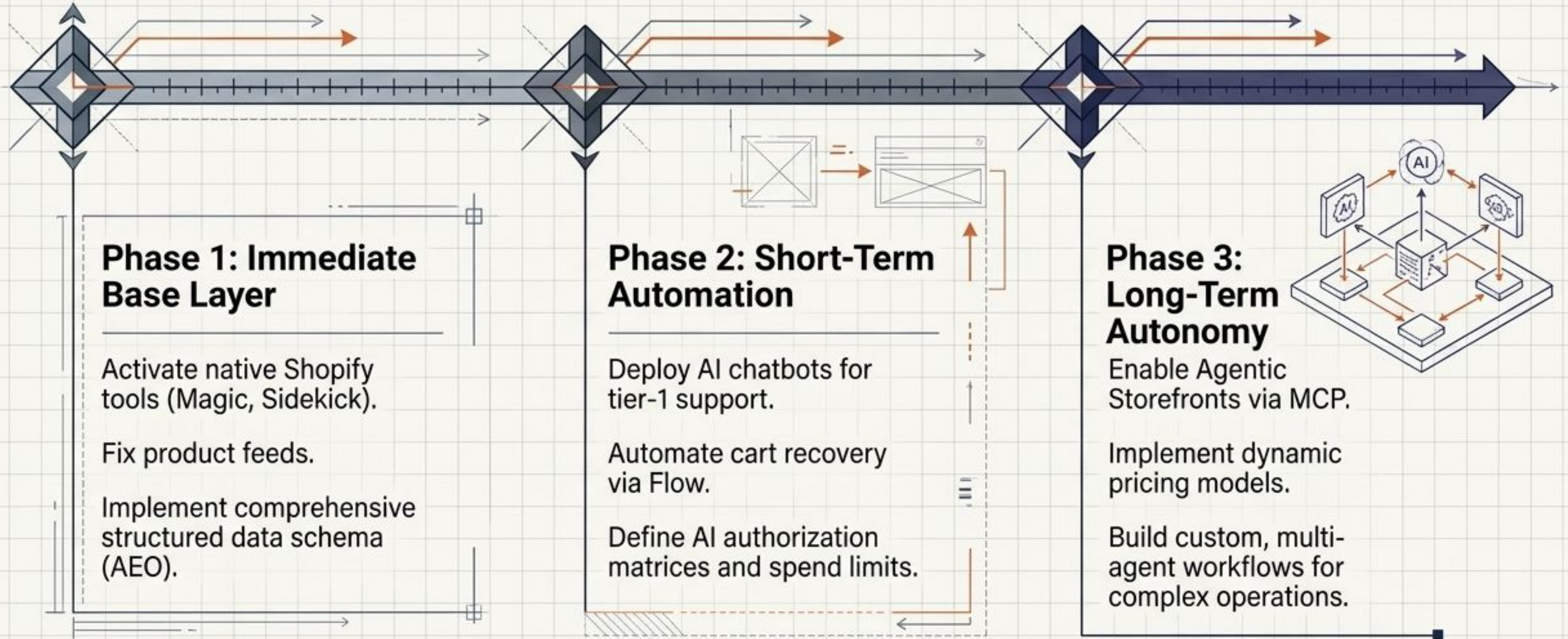


STRUCTURED DATA (AI/AGENT VIEW)

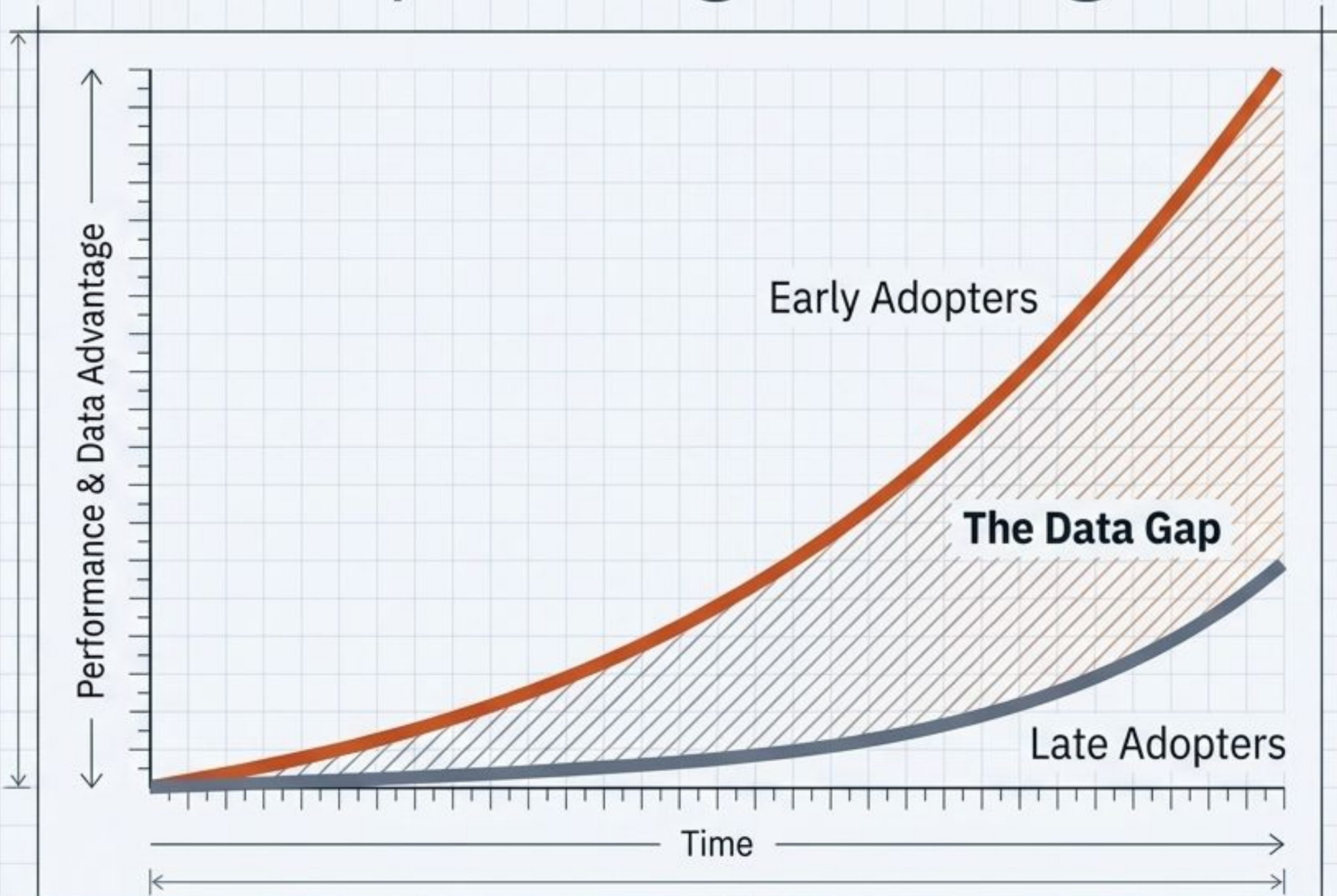


-  **The Mandate:** If a human can't find the exact spec instantly, an AI agent will not recommend it.
-  **Structured Data Imperative:** Comprehensive schema is required (Product, Organization, FAQ). Every attribute—material, dimensions, compatibility—must be explicitly defined.
-  **Authority Signals:** AI models gauge reputation via authoritative external citations, verified reviews, and consistent brand information across the web.

The AI-Commerce Implementation Roadmap

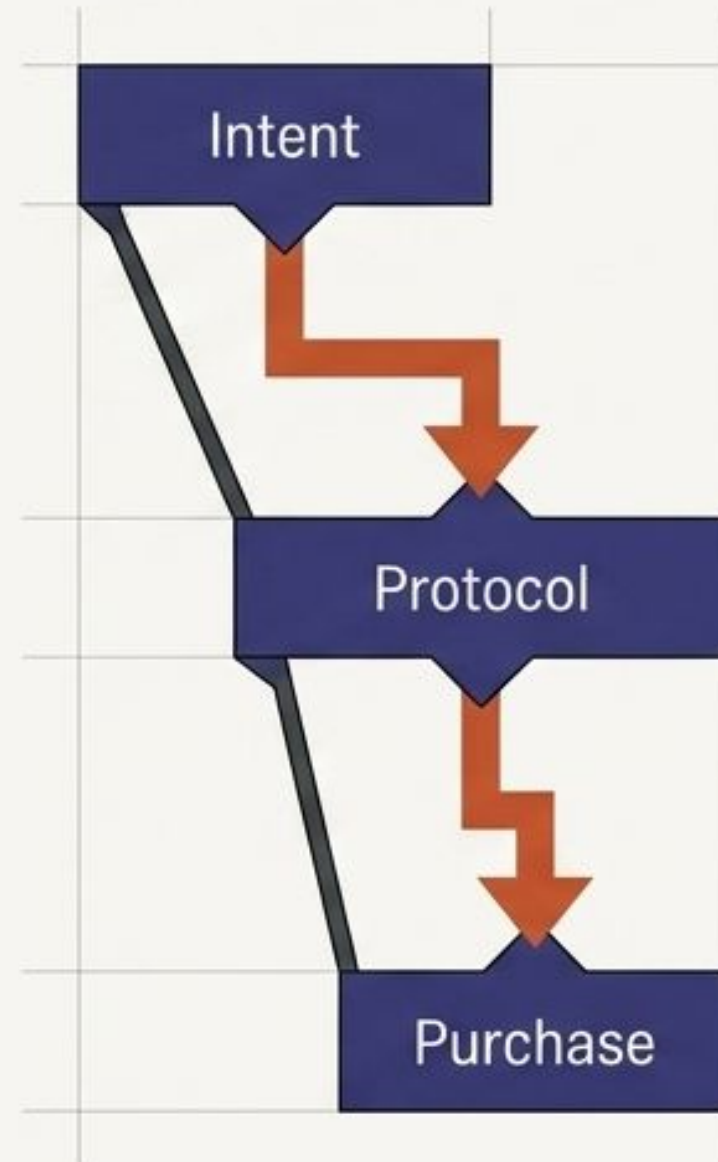


The Compounding Advantage



- AI is not a "set and forget" software tool; it is a performance system that learns and adapts.
- Early adopters gain a compounding advantage as their models train on months of highly specific store, inventory, and customer data.
- Late adopters who wait will be forced to play catch-up using generic algorithms against competitors with deeply trained, hyper-optimized systems.

The Collapsed Buyer Journey



1. AI Discovery: Agents surface specific products based on rich intent (e.g., 'blue top for a formal bridal shower').

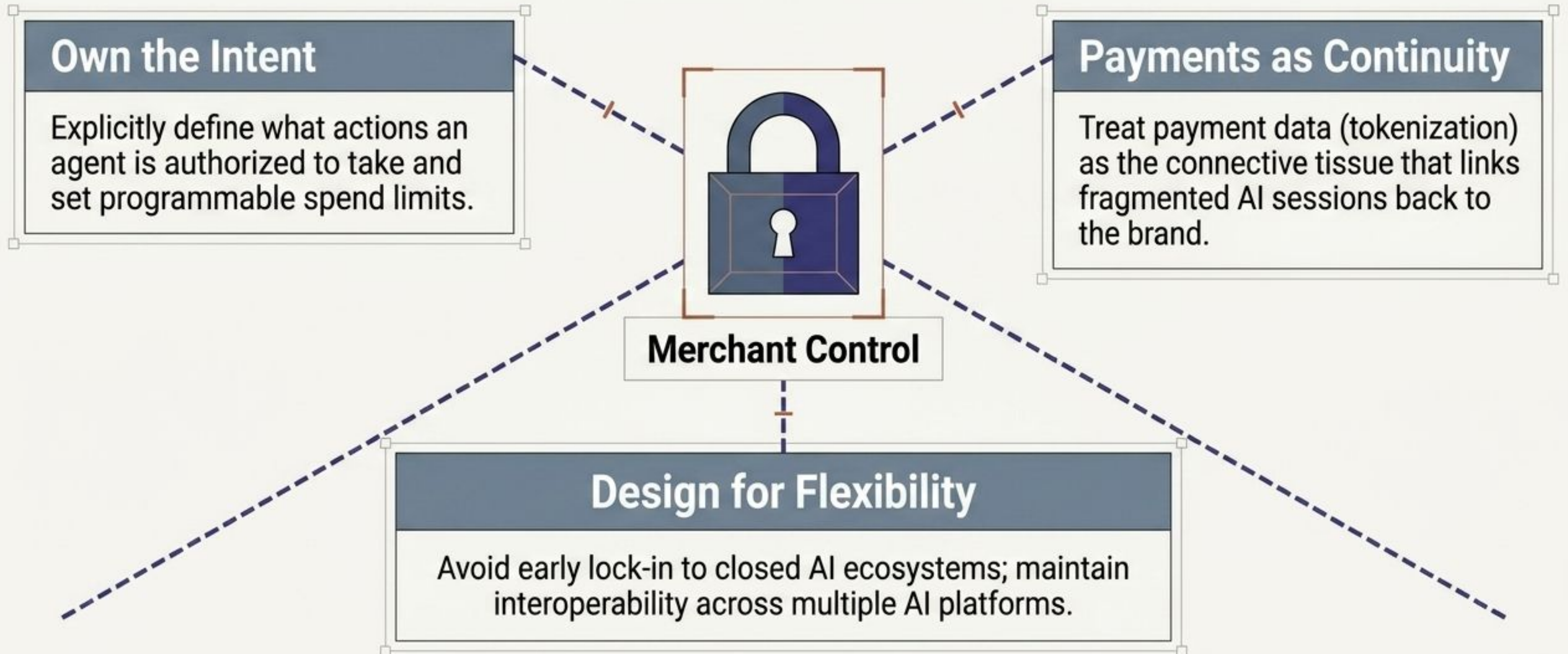
2. Transaction: Agents execute purchases via delegated credentials.

3. Post-Purchase: Agents autonomously manage tracking, returns, and disputes.

The Strategic Threat: If intermediaries own discovery and checkout, brands fade into the background. Visibility must be engineered.

The Commerce Schematic

Retaining Merchant Ownership in an Automated World



Mastercard Agent Pay: Securing the AI Commerce Revolution

The Rise of Agentic Commerce



800M Active AI Users

OpenAI reached 800 million users by April 2025, doubling in just weeks



20% E-Commerce Automation

Agentic AI is expected to handle one-fifth of all e-commerce tasks by 2025.



High Consumer Readiness

53% of U.S. consumers plan to use generative AI for shopping in 2025.

The Agent Pay Security Pillars



"Know Your Agent" Accountability

Mastercard uses network taken to ensure only registered, traceable agents can conduct transactions.






Verified Order Intent

User intent is verified and consented to, making it central to every transaction.



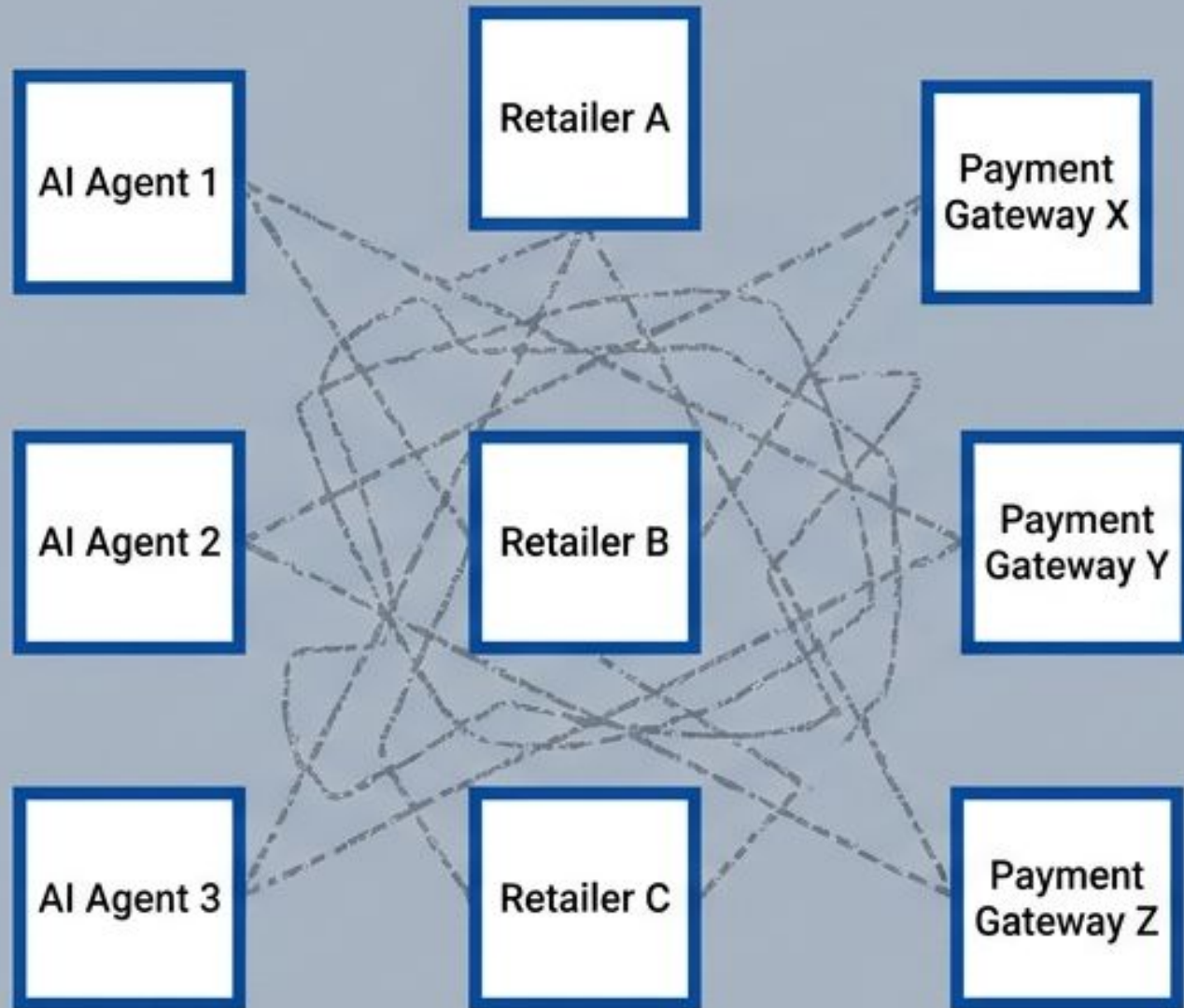
Universal Interface Standards

A universal data exchange protocol enables seamless personalization and instant global scalability.

Solution	Primary Function
 Decision Intelligence	AI-powered transaction risk monitoring and real-time fraud prevention.
 Dynamic Yield	Hyper-personalized consumer recommendations using advanced AI data sources.
 Brighterion	Advanced machine learning used by global organizations to fight fraud.

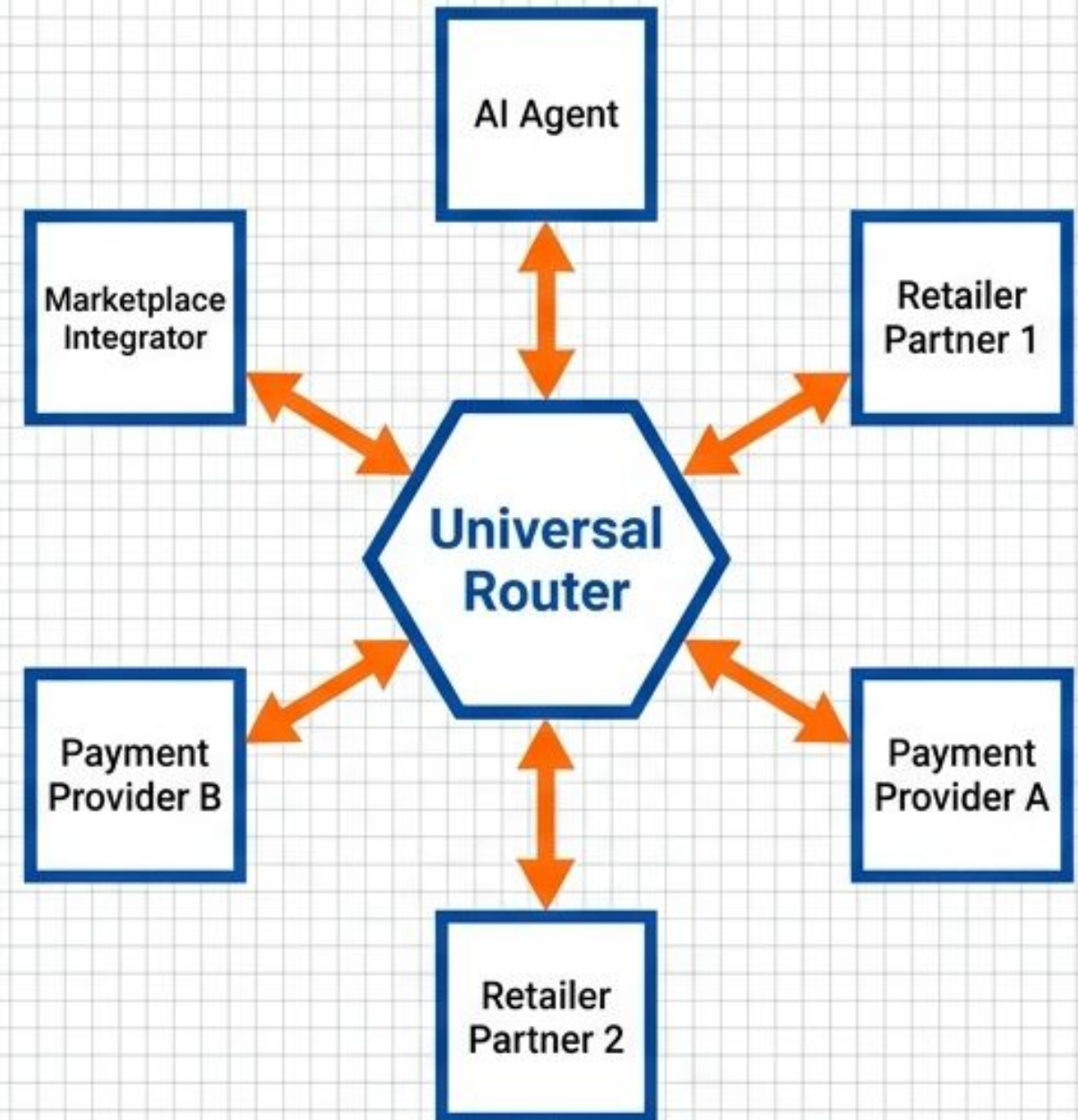
Point-to-point integrations create fragmented, high-friction shopping journeys.

Legacy Architecture



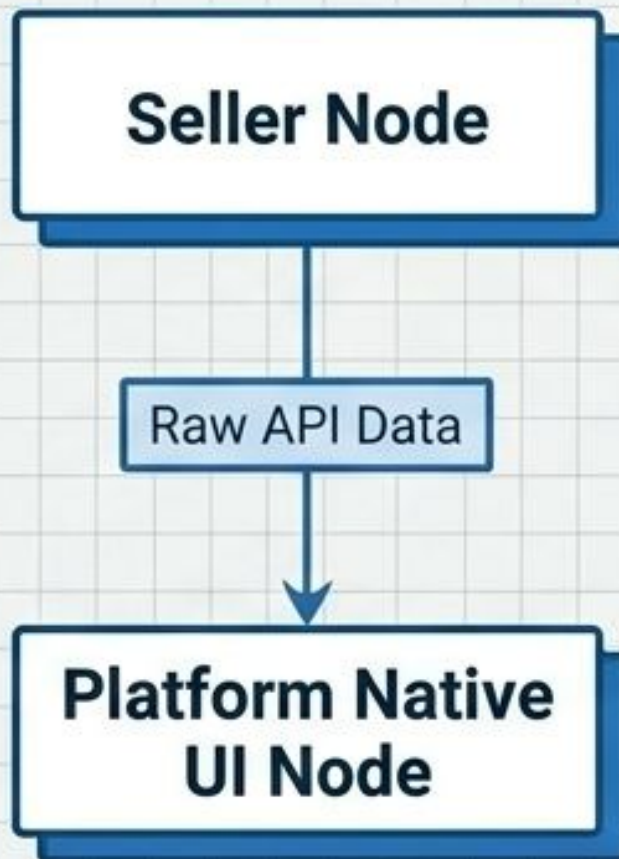
Fragmented journeys lead to **abandoned carts**.

UCP Standard



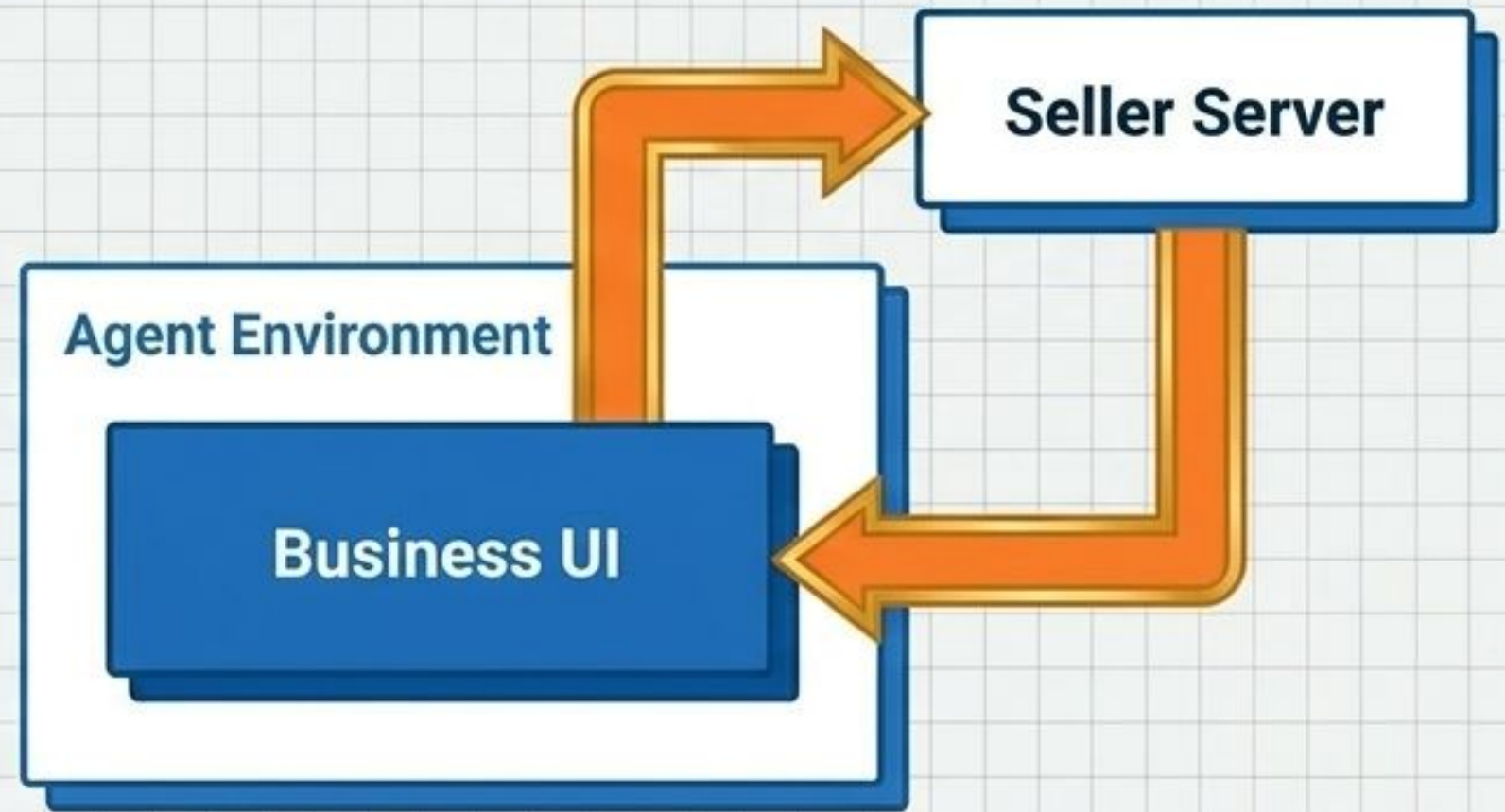
Unified checkout sessions support complex cart logic and dynamic pricing across millions of merchants.

Native Checkout



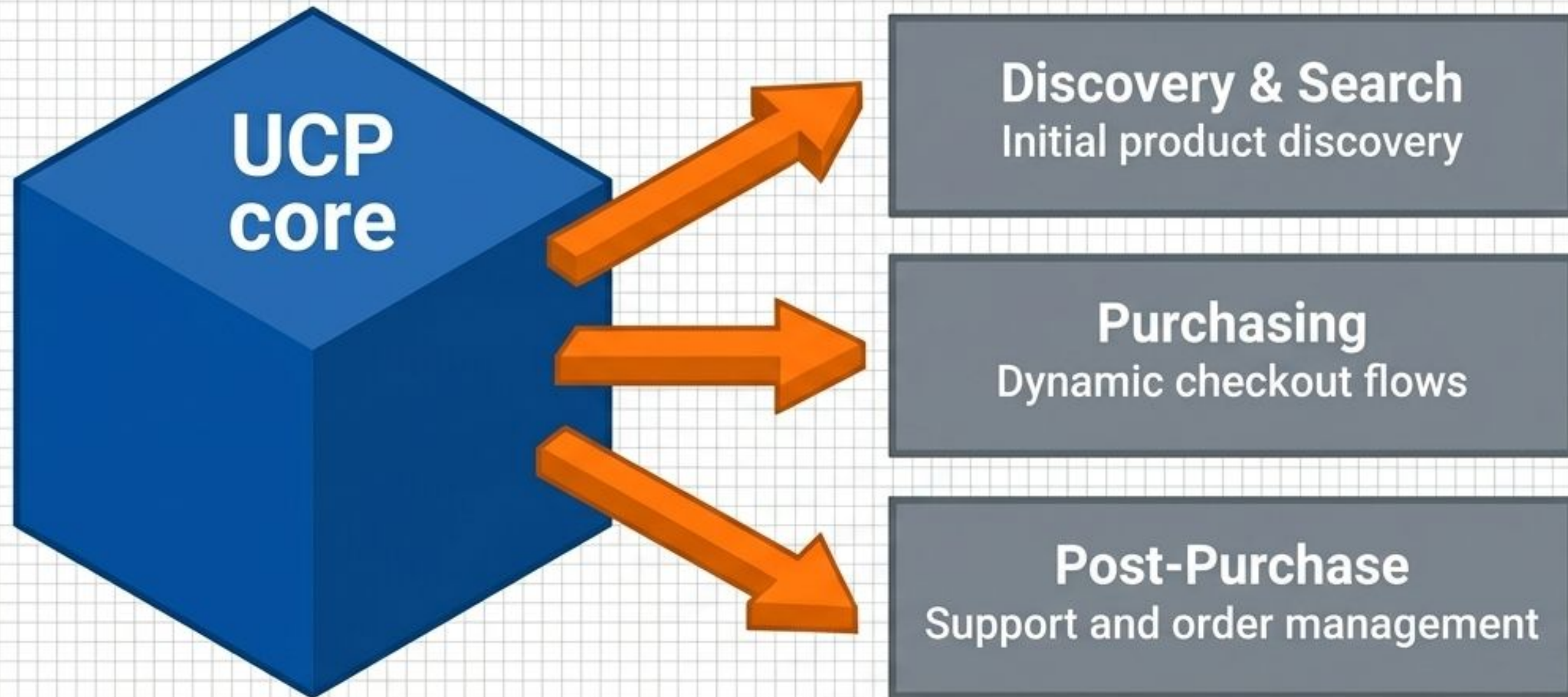
Integrate directly with seller's API.

Embedded Checkout



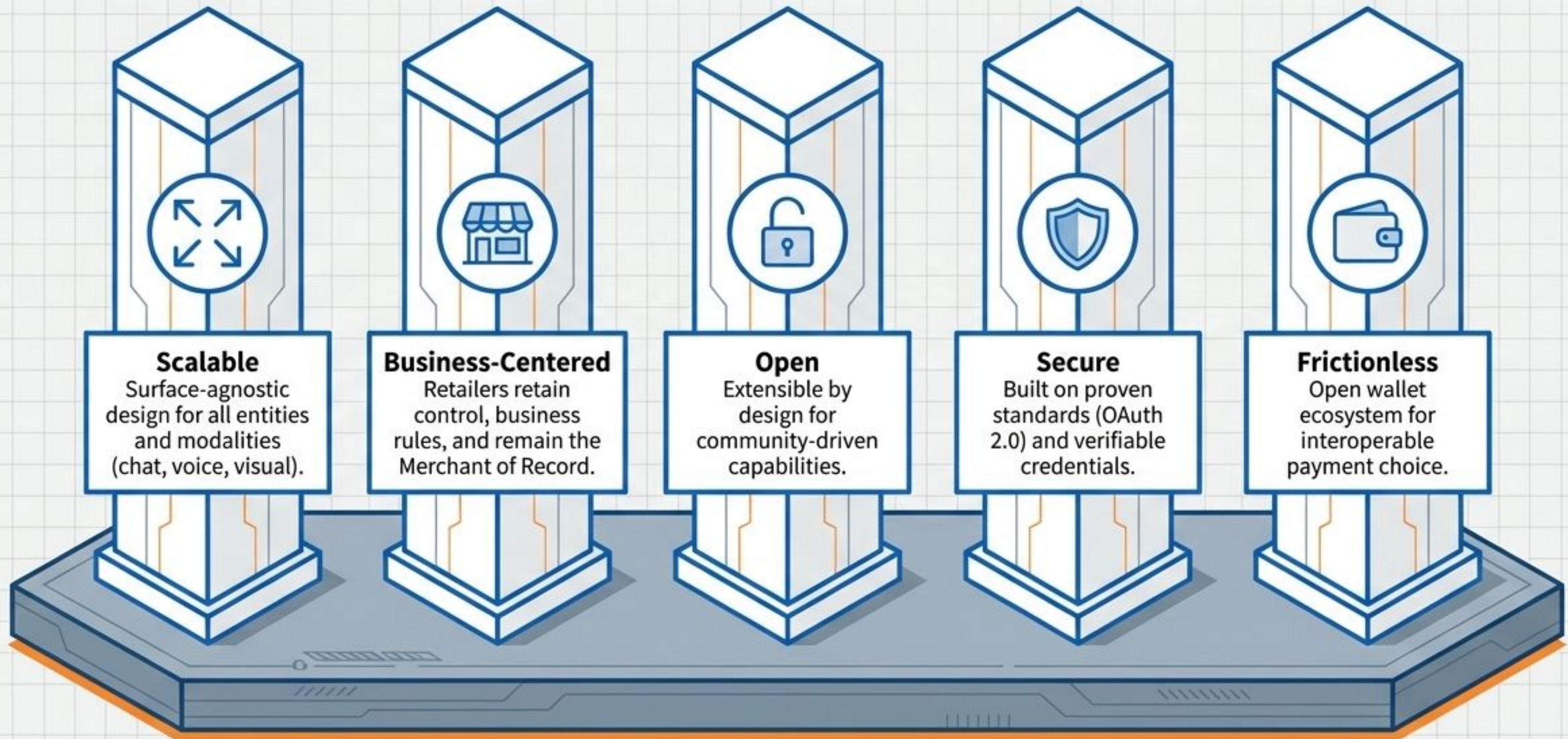
Bidirectional communication
Payment & shipping address delegation.

Universal Commerce Protocol (UCP) establishes a single language for platforms, agents, and businesses.



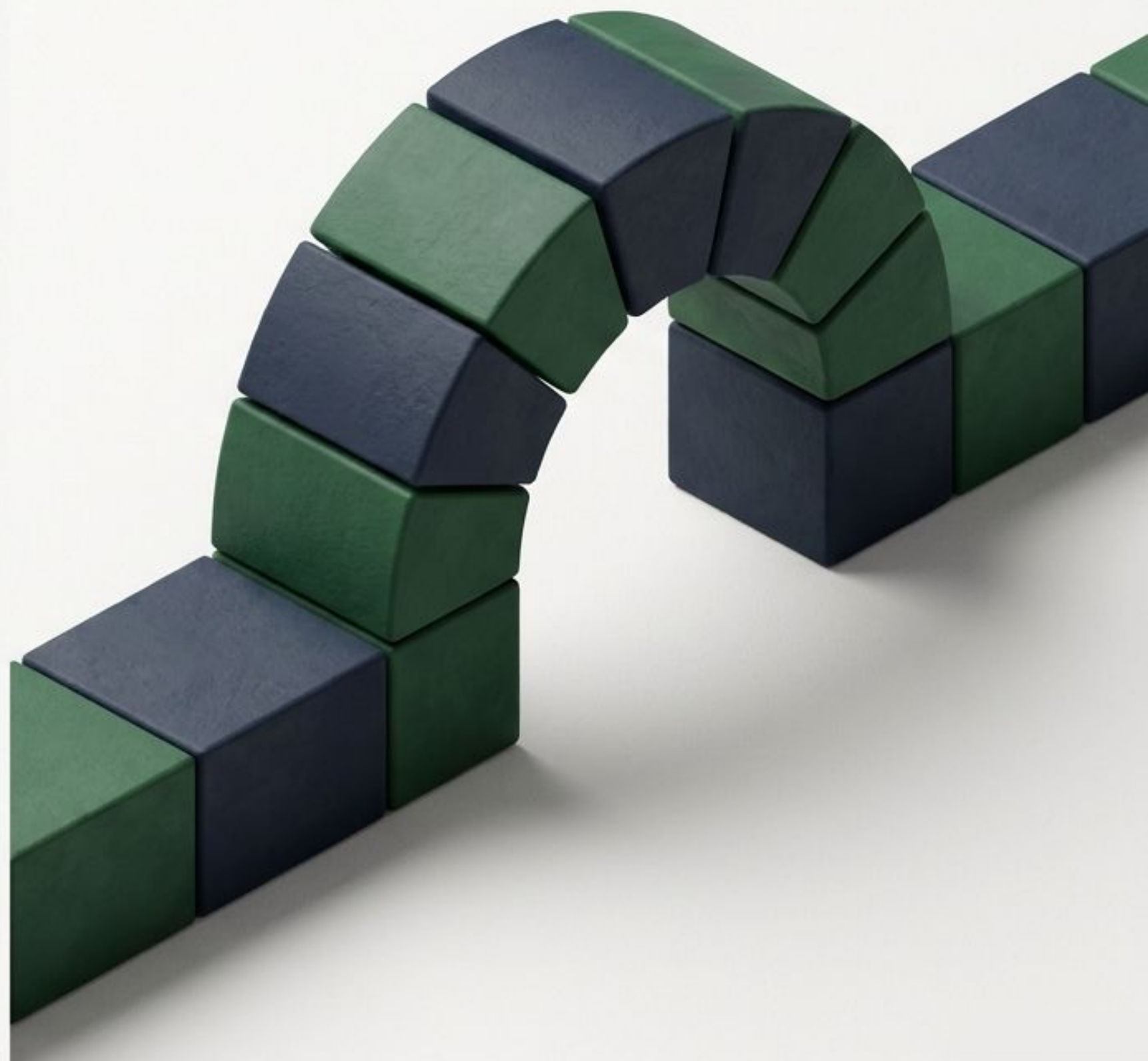
Allows the ecosystem to interoperate through one standard, without custom builds.

Five structural pillars support the scale and security of open-ecosystem commerce.



The Universal Commerce Protocol (UCP)

The common language for
platforms, agents, and businesses.



Universal Commerce Protocol (UCP): The Standard for Agentic Commerce

Strategic Pillars



Businesses at the Center

Retailers remain the Merchant of Record with full ownership of the customer relationship.



Zero Custom Integrations

One standard allows platforms and agents to interoperate without building individual connections.



Secure & Private Standards

Built on OAuth 2.0 and AP2 for verifiable credentials and secure payment mandates.

UCP is an open-source standard co-developed by industry leaders like Google, Shopify, and Walmart. It eliminates the need for custom builds between AI agents and retailers, enabling seaminess



Initial Launch Capabilities

Unified Checkout

Supports complex cart logic, dynamic pricing, and tax calculations across millions of businesses.



Ecosystem Support

Ecosystem Role & Key Adopters



Secure Identity Linking

Enables agents to maintain authorized relationships without sharing sensitive user credentials.



Real-Time Order Management

Powers status updates, shipment tracking, and returns across every channel via webhooks.

Retail & Platforms



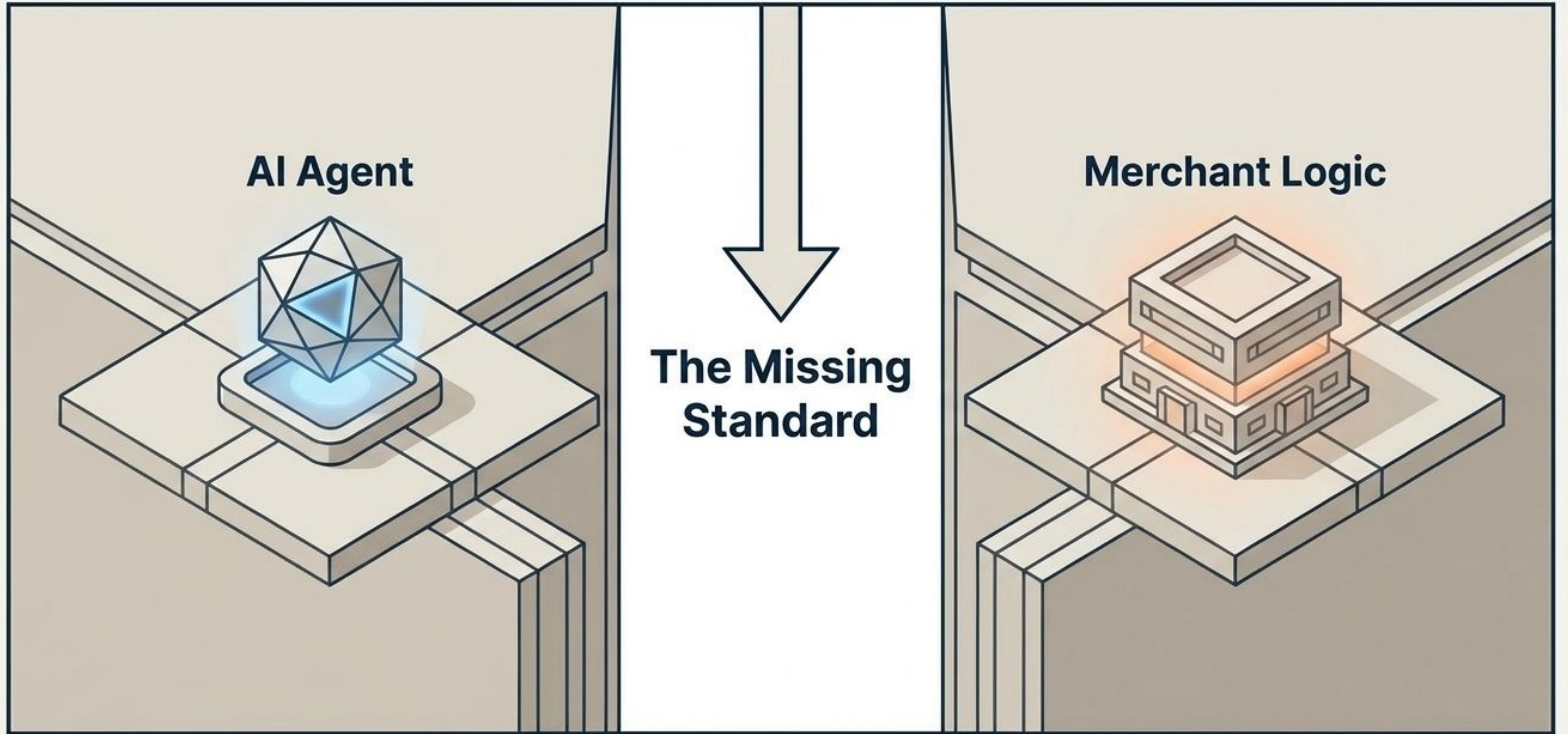
Payments & Fintech



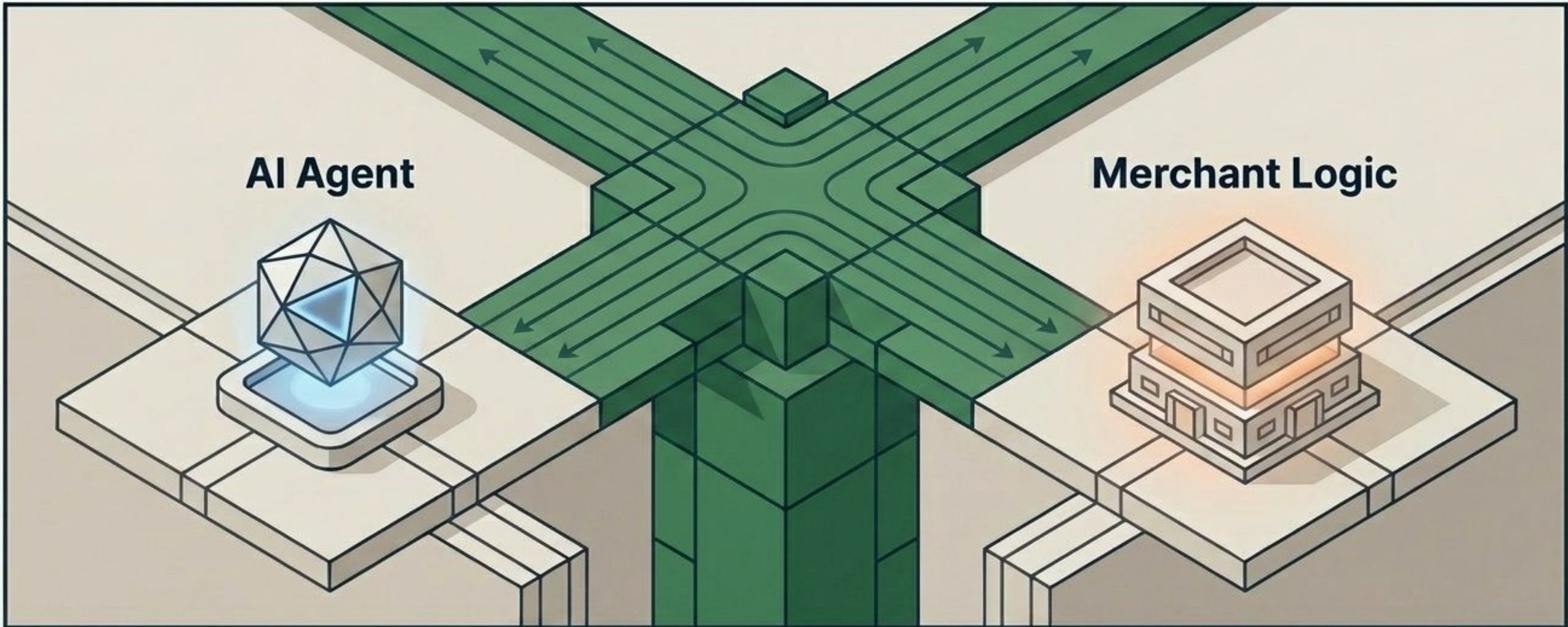
Global Retailers



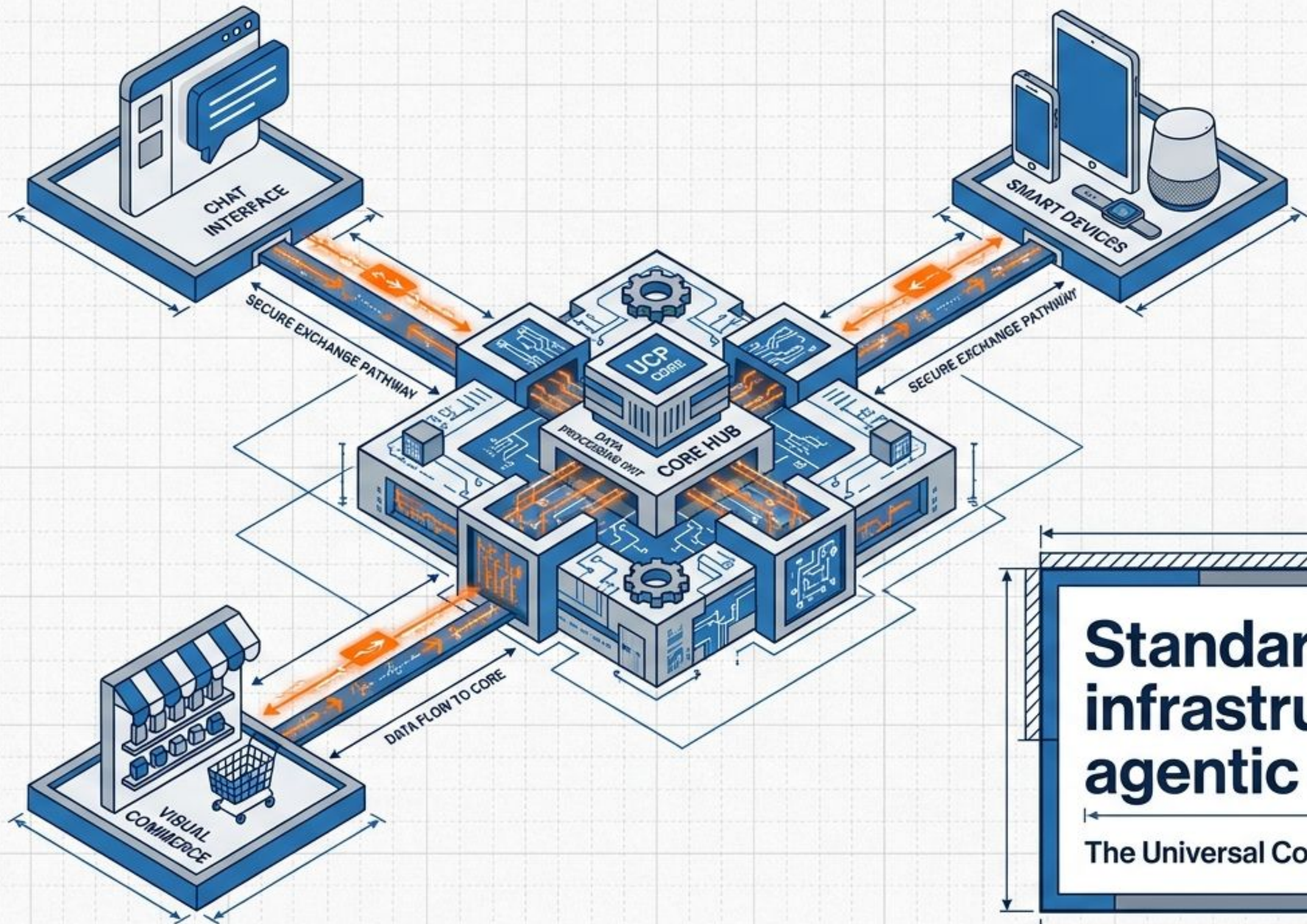
AI assistants and shopping agents require a completely new way to transact.



UCP provides the definitive building blocks for interoperable agentic commerce.



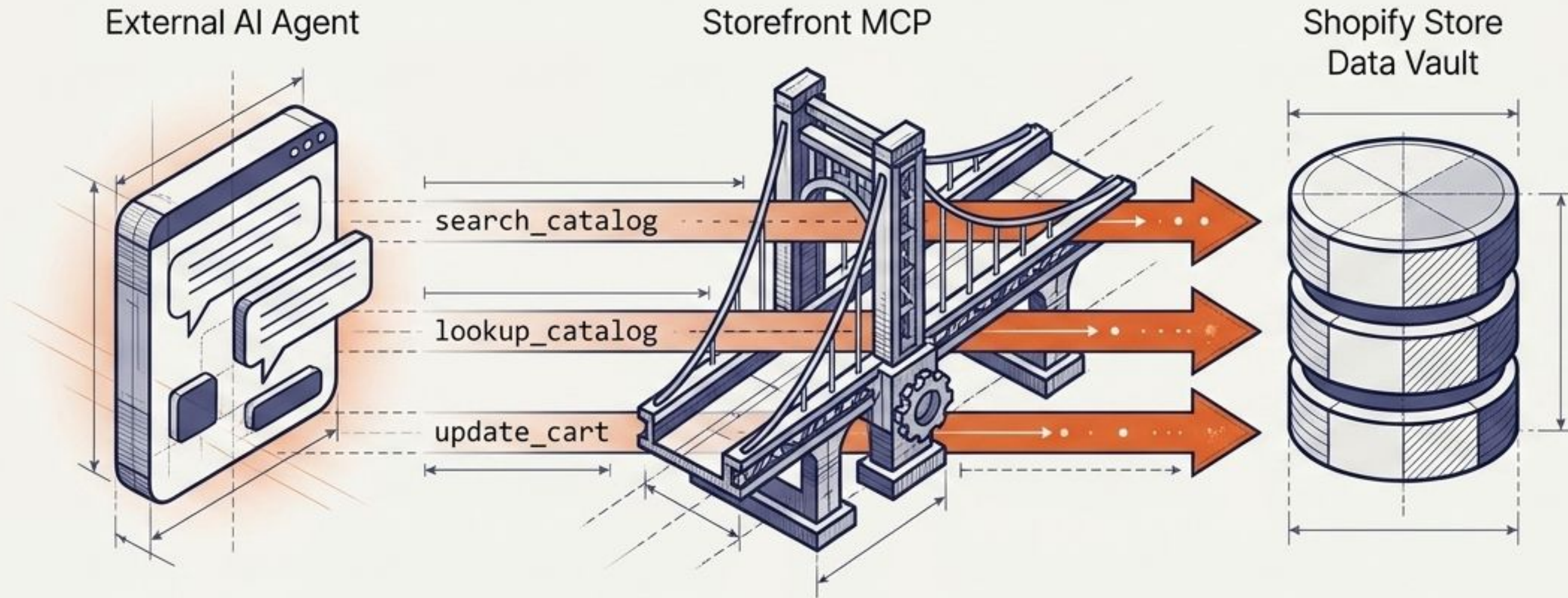
One standard for discovering, buying, and post-purchase experiences—zero custom builds required.



Standardizing the infrastructure for agentic commerce.

The Universal Commerce Protocol Schematic

The Agentic Storefront: UCP & MCP



The Protocol

The Model Context Protocol (MCP) and Universal Commerce Protocol (UCP) allow persistent, structured communication between external AI and Shopify.

The Capabilities

Agents utilize protocol functions to read product specs, build carts, and answer store policy questions autonomously without human UI interaction.

A universal standard aligns the incentives of developers, retailers, platforms, and payment providers.

For Developers

Build on an open-source foundation designed for next-gen commerce.

For Businesses

Meet customers in AI interfaces while remaining the Merchant of Record.

UCP Router

A central orange circle labeled "UCP Router" is connected to four surrounding boxes. The boxes are arranged in a 2x2 grid. The top-left box is titled "For Developers" and contains the text "Build on an open-source foundation designed for next-gen commerce." The top-right box is titled "For Businesses" and contains the text "Meet customers in AI interfaces while remaining the Merchant of Record." The bottom-left box is titled "For AI Platforms" and contains the text "Simplify onboarding with standardized APIs compatible with MCP and A2A." The bottom-right box is titled "For Payment Providers" and contains the text "Enable open interoperability with authorizations backed by cryptographic proof." The central circle has a glowing effect and is surrounded by a grid of lines. Arrows point from the central circle to each of the four boxes.

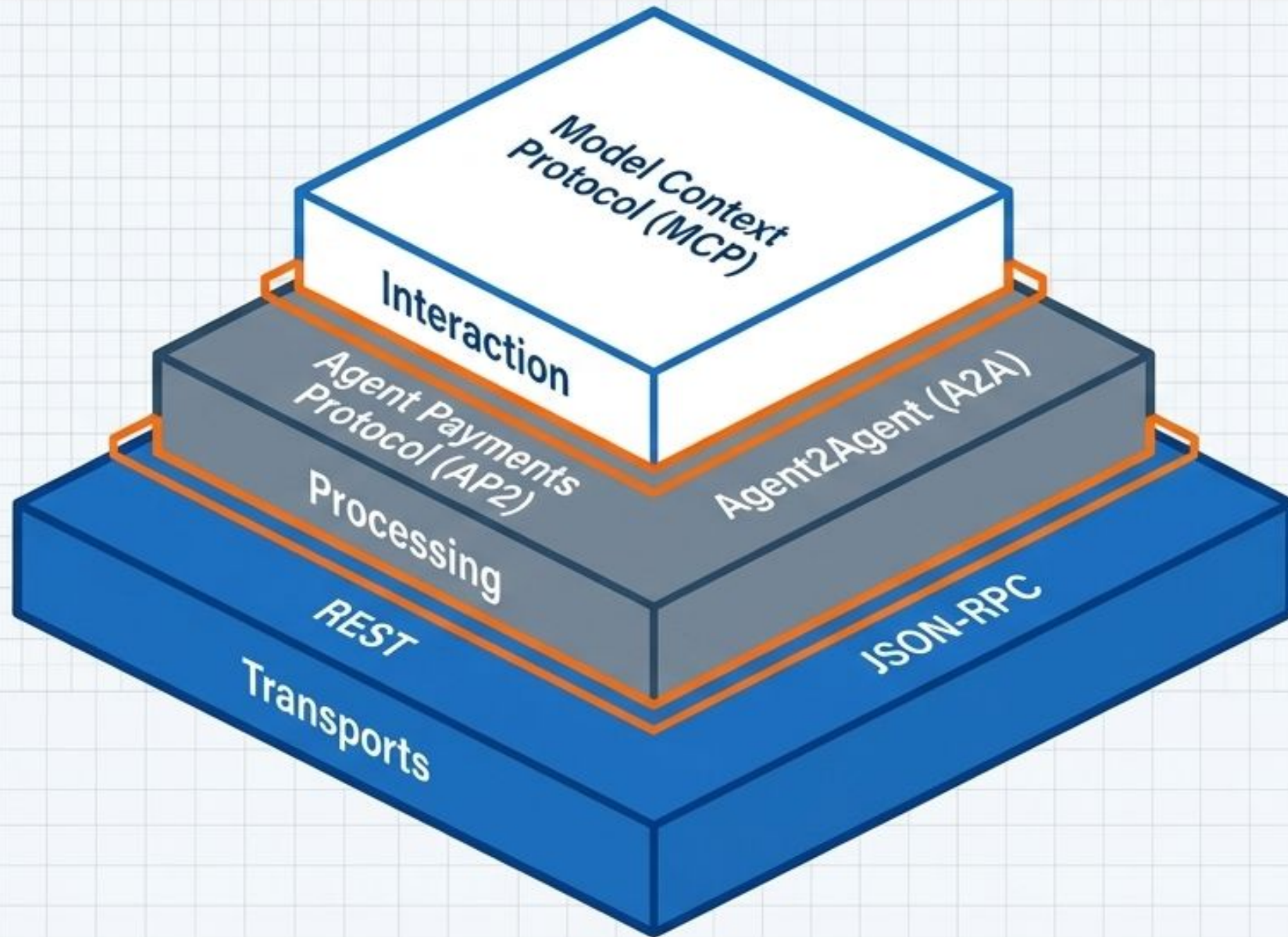
For AI Platforms

Simplify onboarding with standardized APIs compatible with MCP and A2A.

For Payment Providers

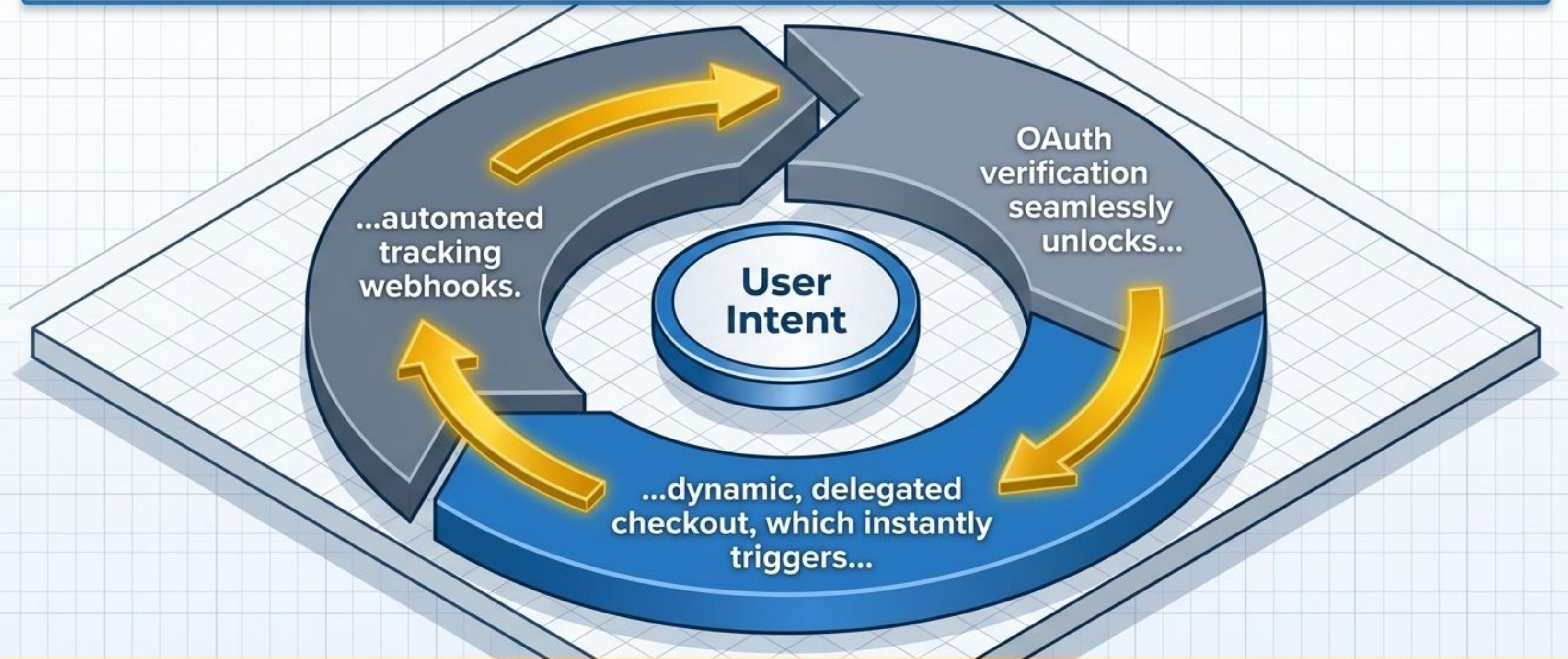
Enable open interoperability with authorizations backed by cryptographic proof.

Building upon proven industry standards accelerates adoption and interoperability.



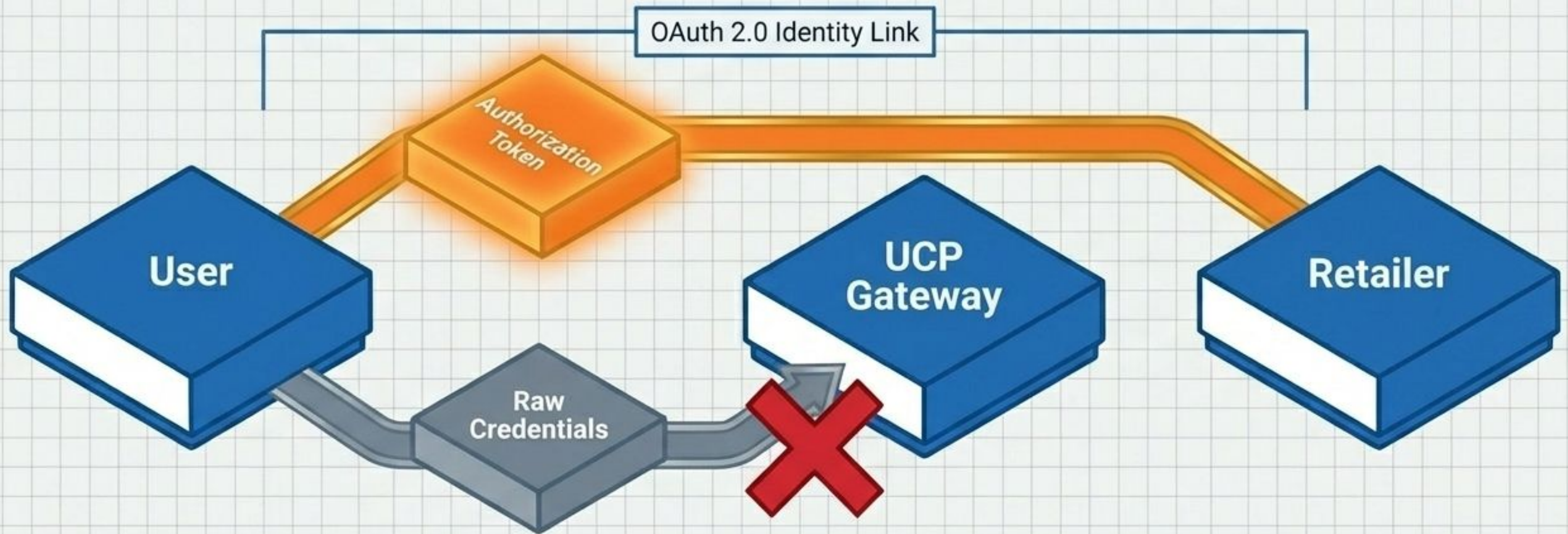
Different systems work together without custom integration by utilizing native support for proven data models.

UCP collapses isolated capabilities into a unified, frictionless commerce lifecycle.



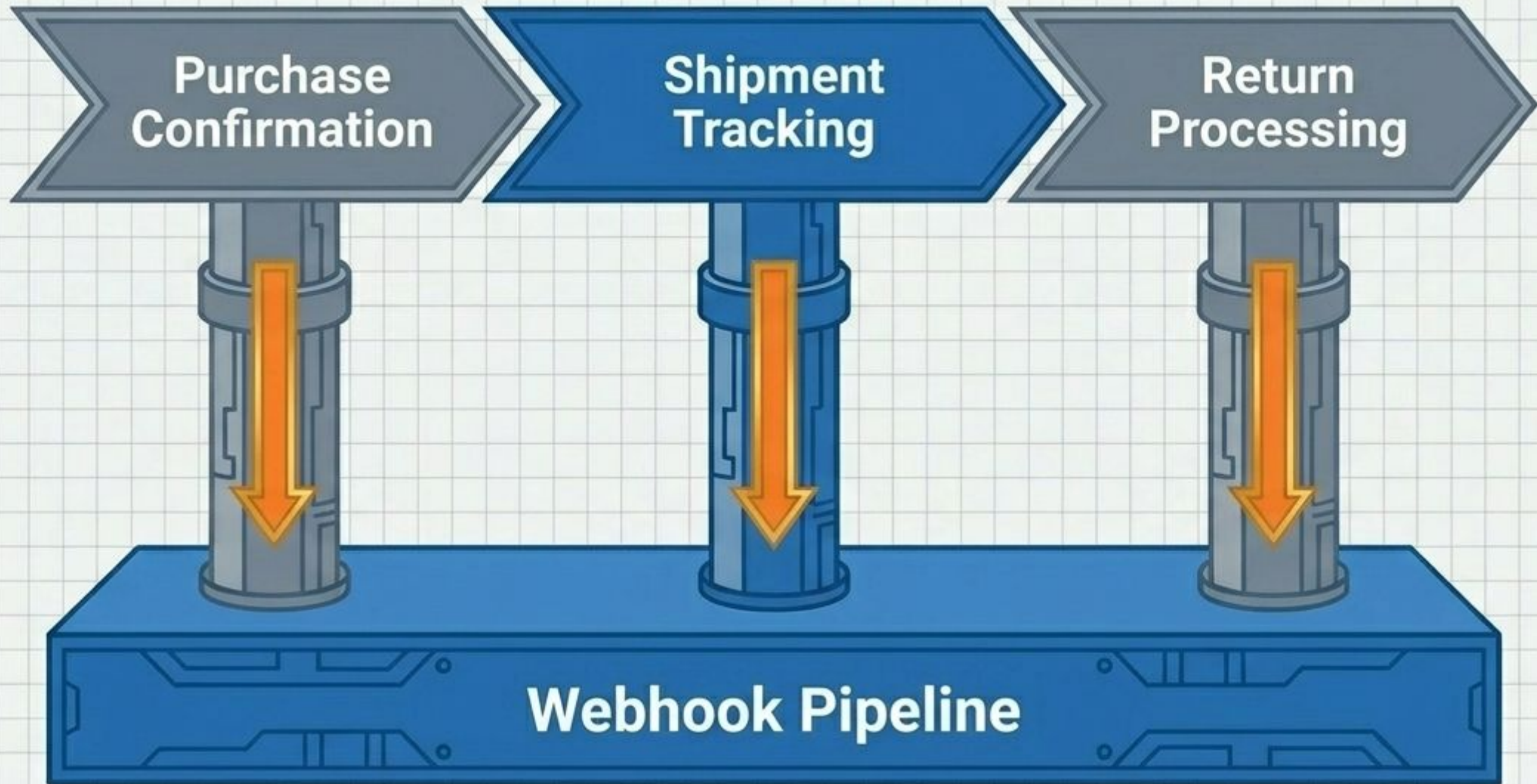
The user never leaves their preferred AI interface.

OAuth 2.0 integration secures relationships without exposing user credentials to third-party agents.

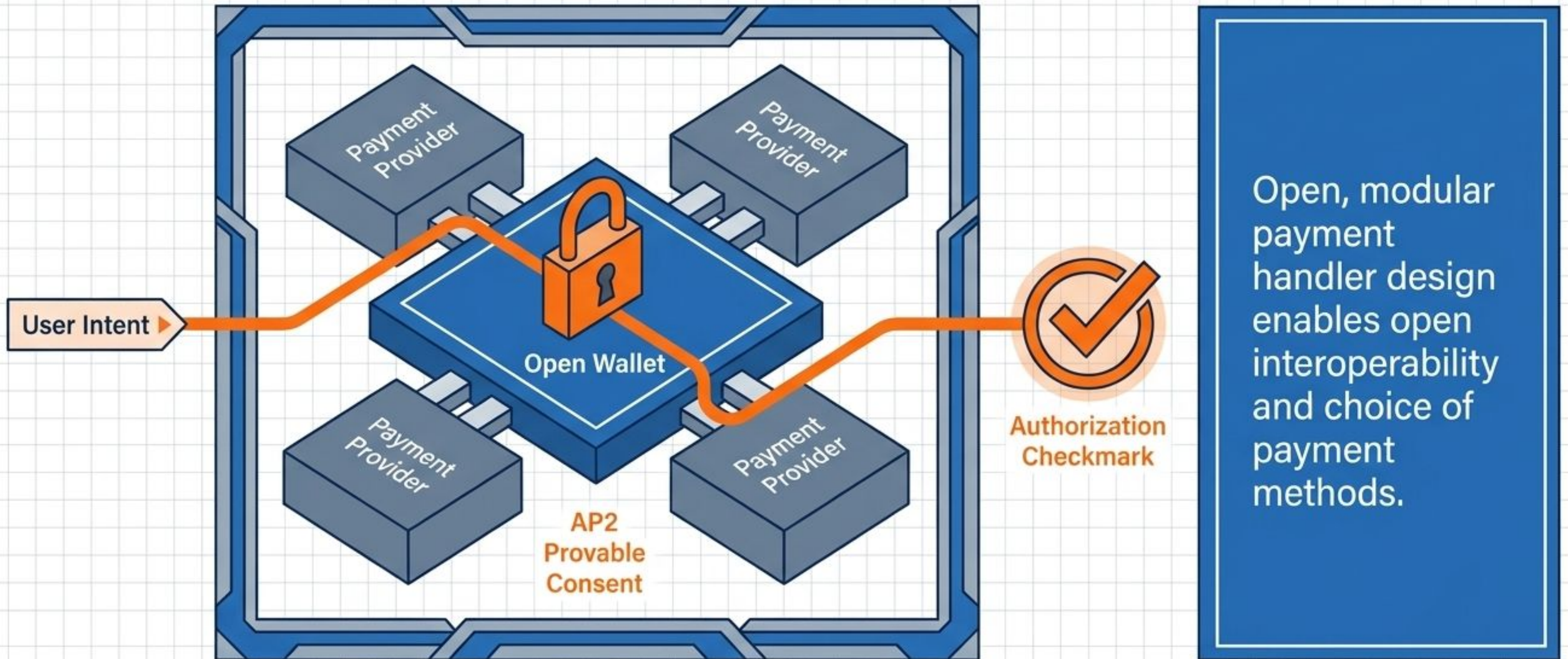


Agents maintain authorized state without ever holding raw credentials.

Real-time webhook pipelines maintain end-to-end visibility from purchase to return.



Cryptographic proof of user consent guarantees provable, frictionless authorizations.



Standardizing integration drastically reduces operational overhead and time-to-market.

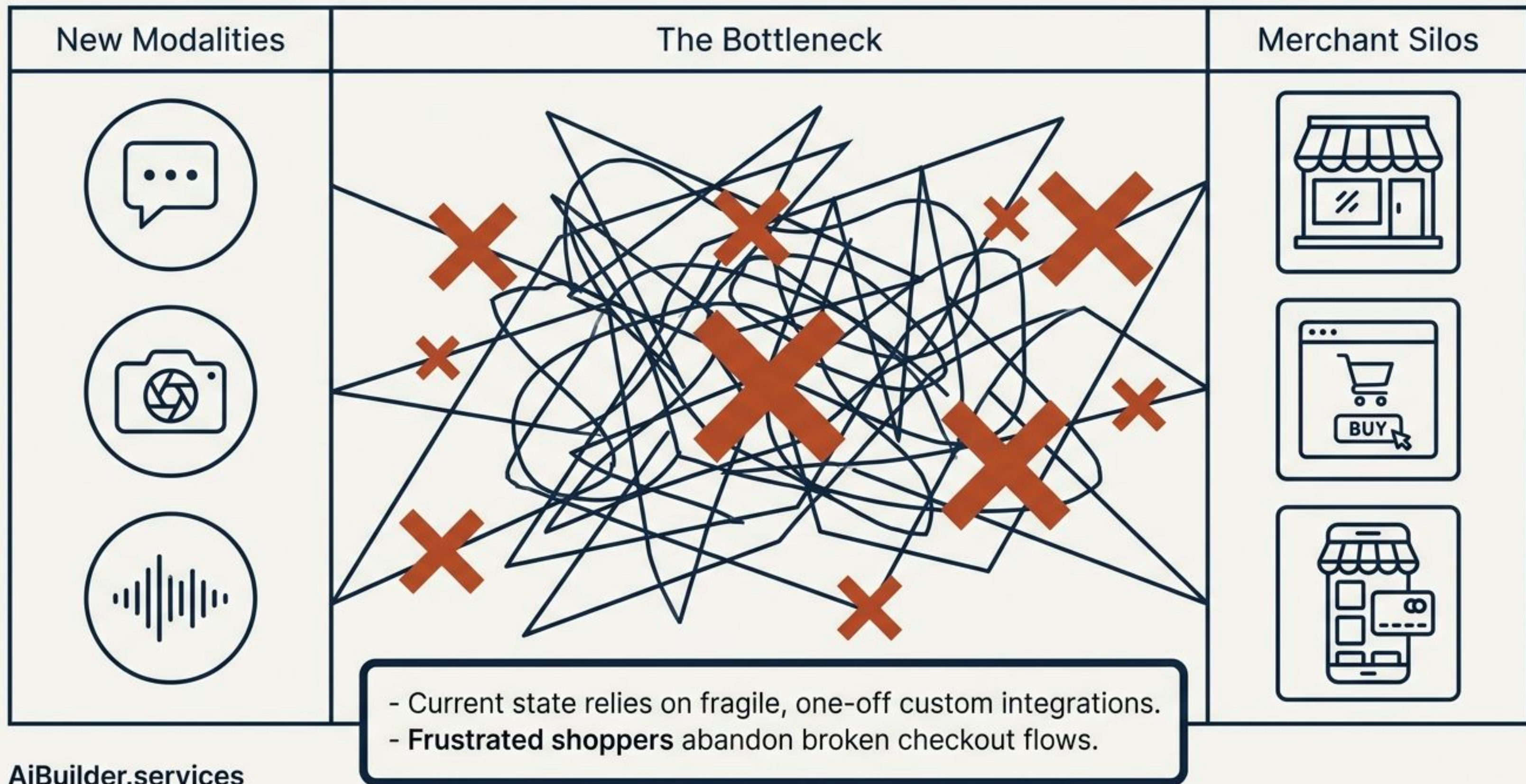
	Legacy Point-to-Point	UCP Open Standard
Scalability	Linear/custom builds	Exponential (Surface-agnostic)
Security Model	Exposed credentials	Tokenized (OAuth/AP2)
Modality Support	Single-channel/Siloed	Multi-modal natively supported
Merchant Control	Disjointed business logic	Retailer remains Merchant of Record

The world's largest platforms and retailers are actively co-developing the UCP standard.

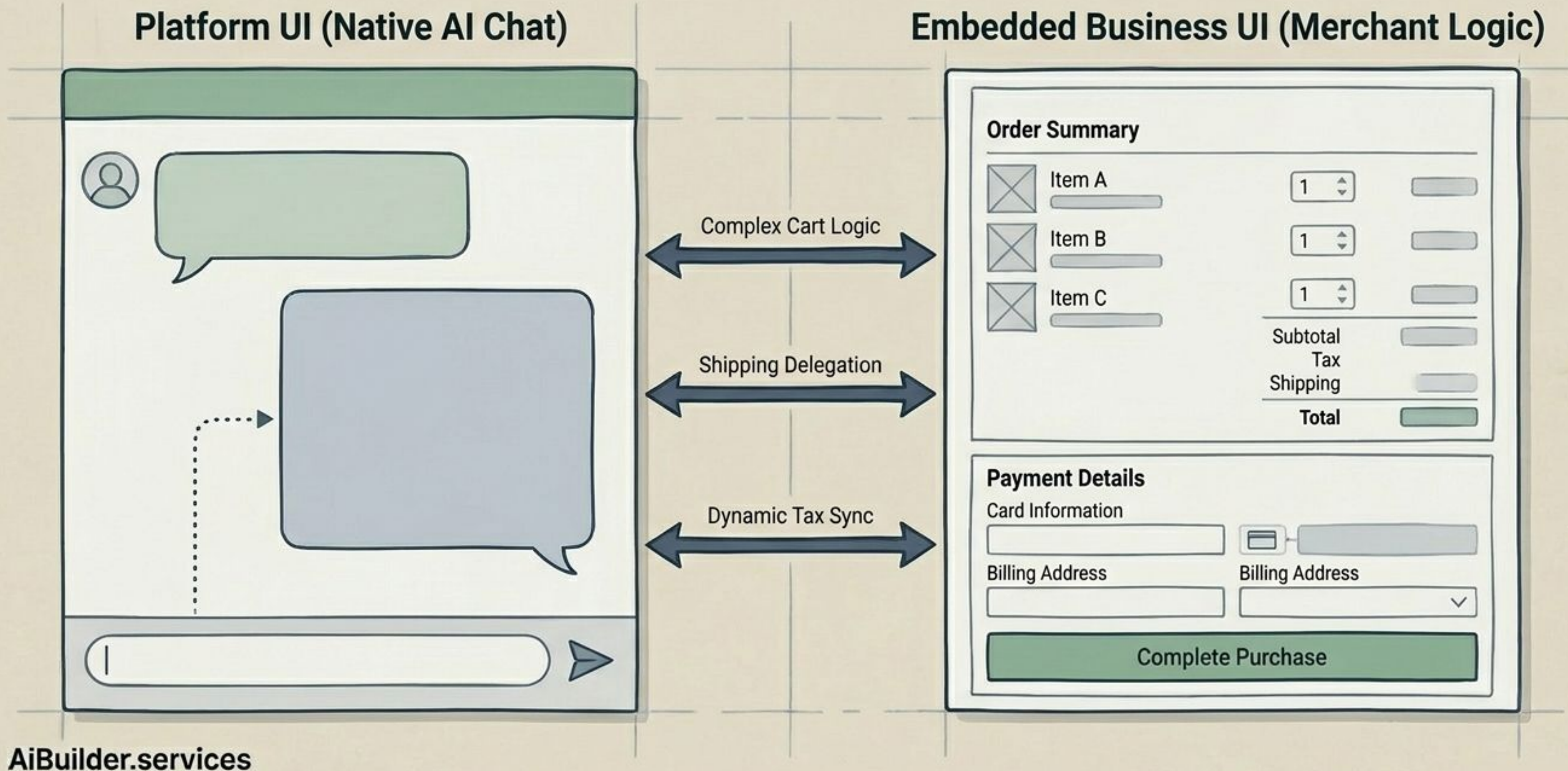


Built by the industry, for the industry.

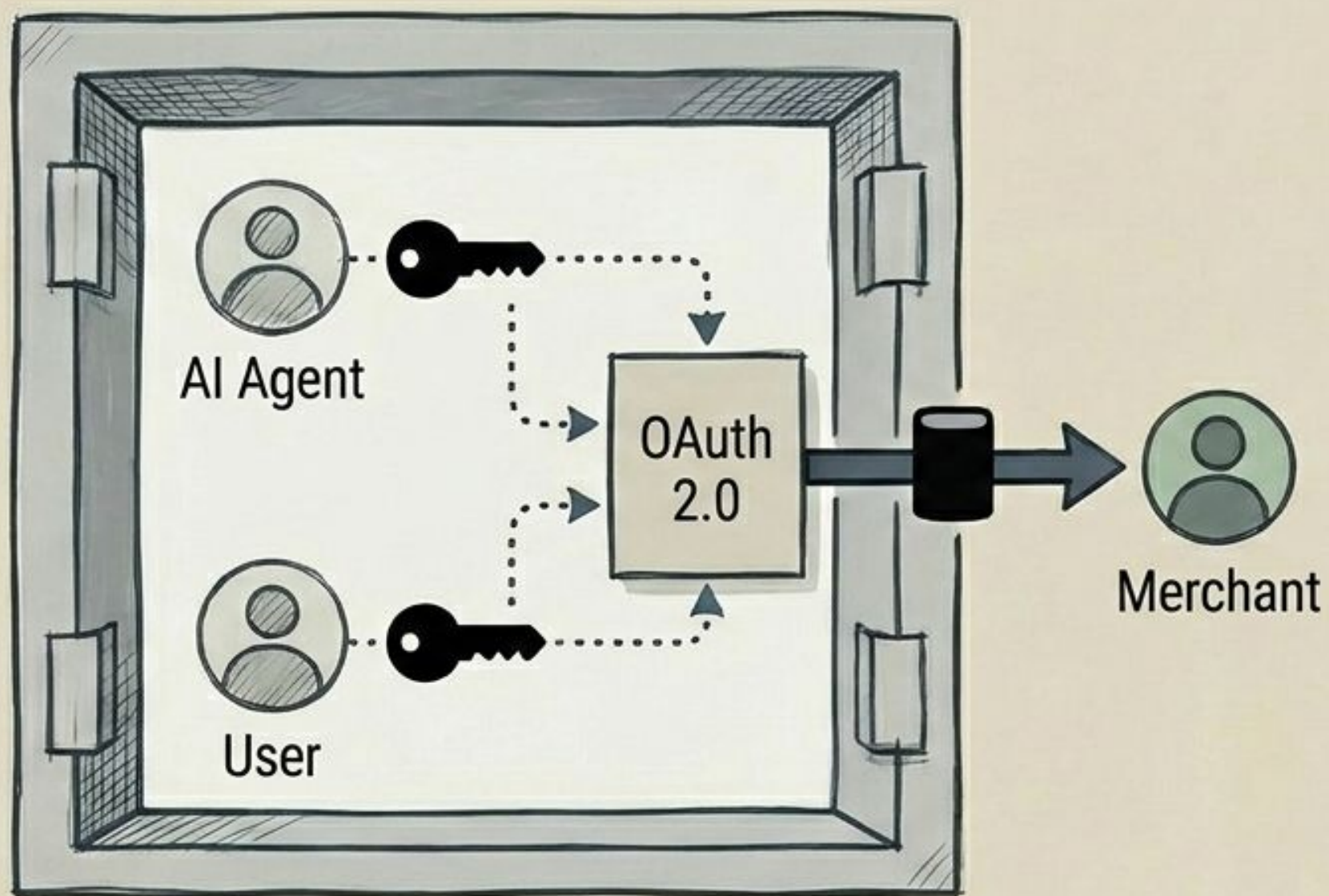
Fragmented shopping journeys across new modalities lead directly to abandoned carts



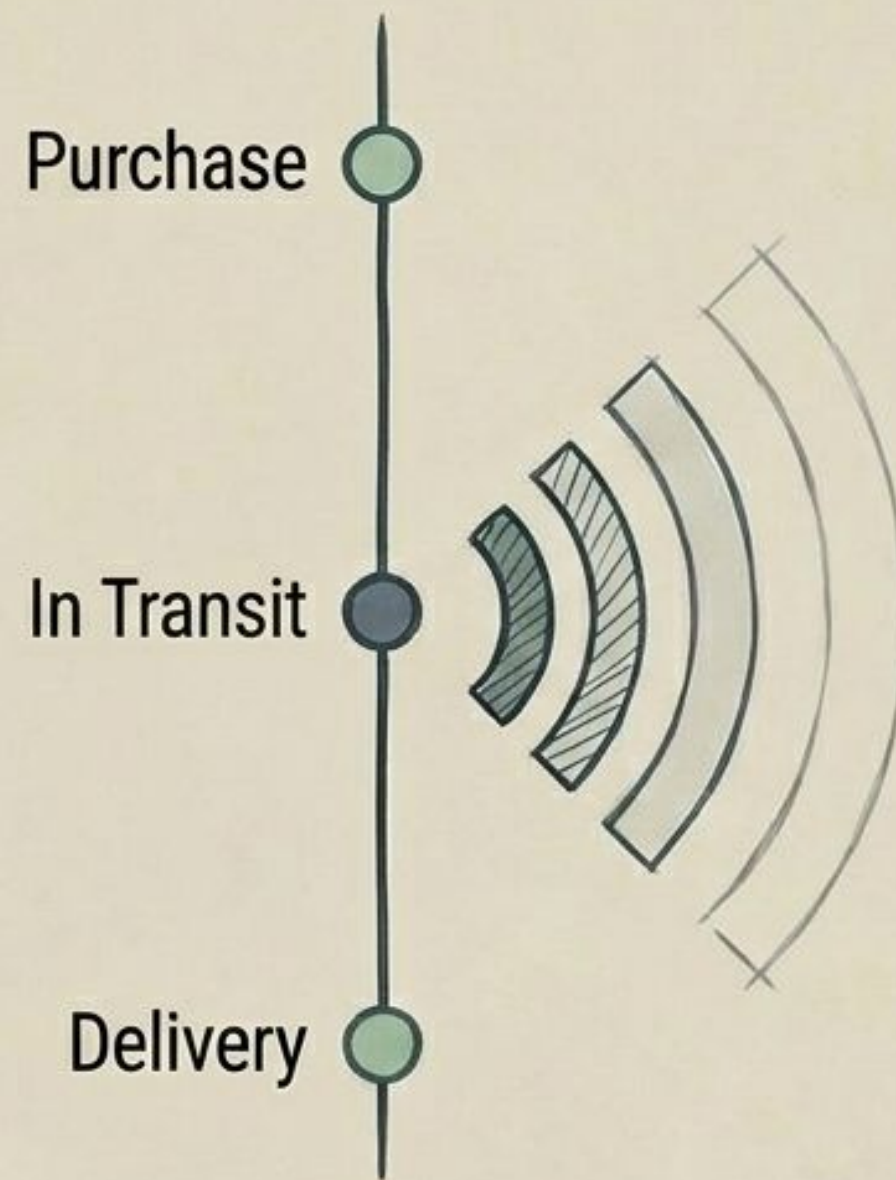
Unified checkout sessions seamlessly embed business logic directly into native platforms.



Secure tokenized identity and real-time order webhooks maintain trust without exposing raw credentials.



Tokenized identity linking requires zero raw credential sharing.

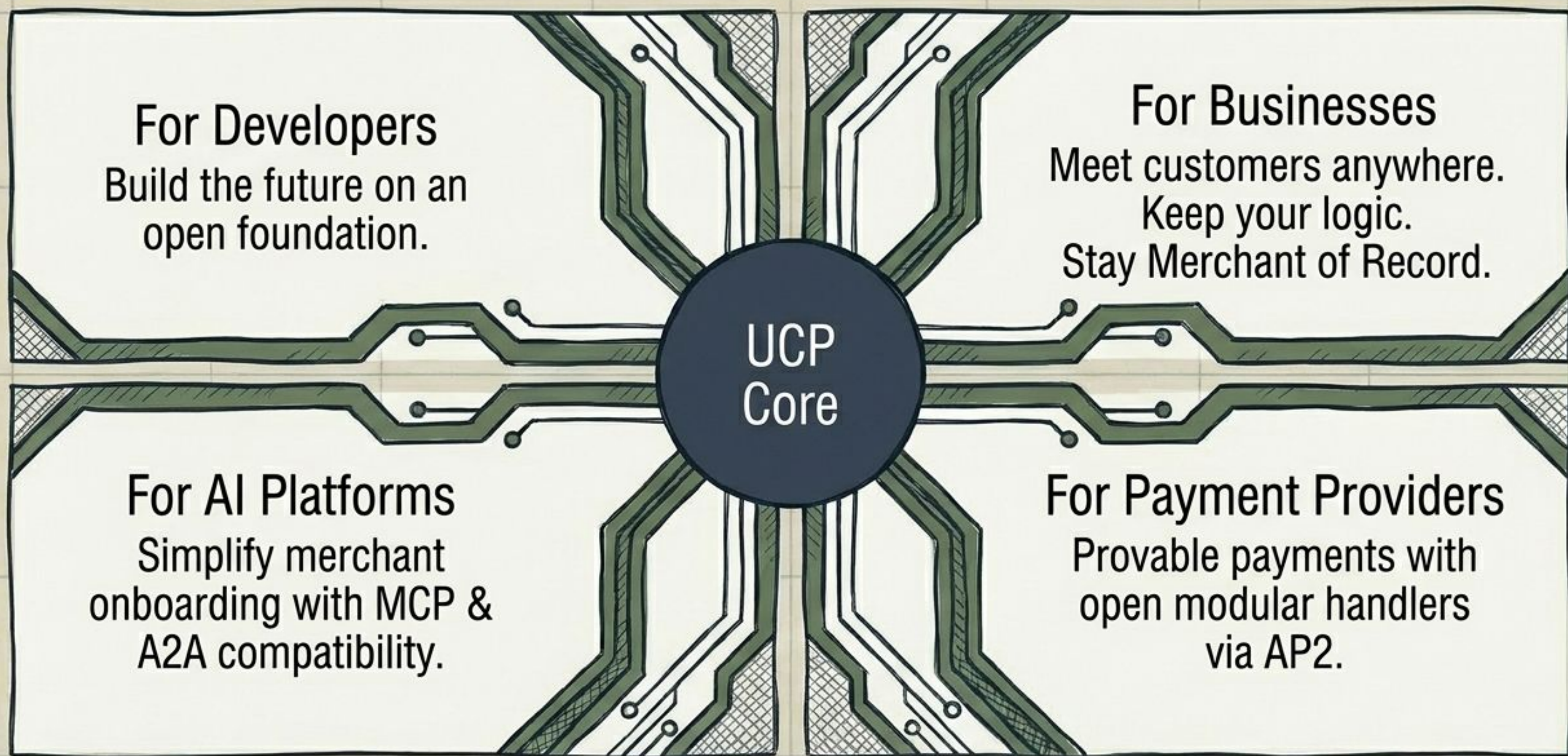


Real-time webhook pings update agents continuously.

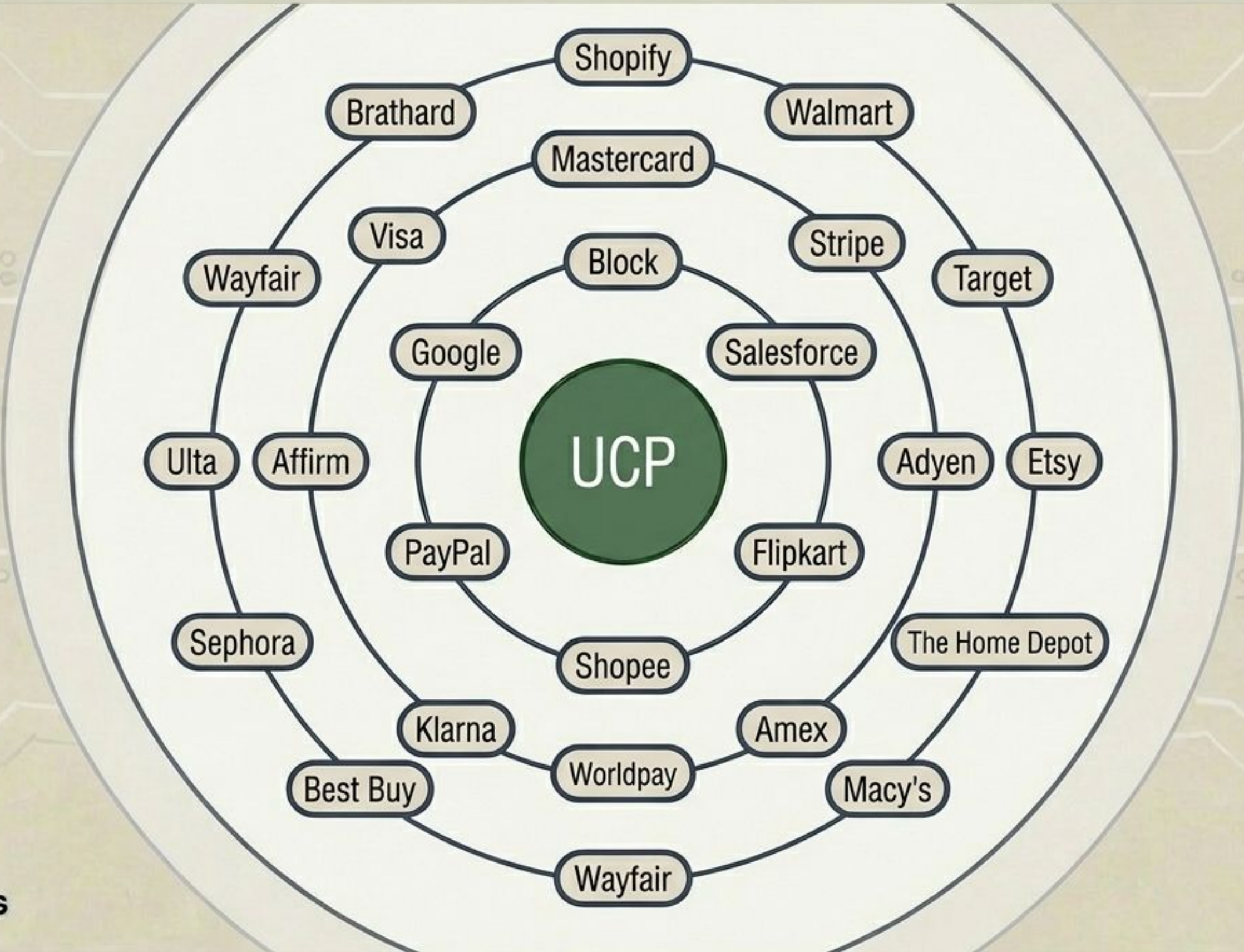
Replacing fragile custom integrations with universal, secure interoperability.

	1-to-1 Custom APIs (The Old Way)	Universal Commerce Protocol
Scalability	✗ Linear scaling effort	✓ 1-to-many interoperability
Security Model	✗ Shared credentials risk	✓ Cryptographic proof (AP2/OAuth)
Merchant Control	✗ Platform dictates terms	✓ Retailer remains Merchant of Record
Buyer Friction	✗ High friction drop-off	✓ Open wallet choice

A single standard aligns the incentives of all four major commerce stakeholders simultaneously.



The standard is actively co-developed and endorsed by the defining players in modern commerce.



Join the open-source community building the next generation of digital commerce today.



Download
Run the code samples and reference implementations.

An illustration of a computer window with a dark blue border and three green dots in the top-left corner. The window contains a white background with a green download icon (a downward arrow pointing to a document) at the bottom center. The text is centered within the window.

Experiment
Test the protocol and explore different agent roles.

An illustration of a computer window with a dark blue border and three green dots in the top-left corner. The window contains a white background with a green experiment icon (a flask with a beaker and two gears) at the bottom center. The text is centered within the window.

Contribute
Submit feedback and code to the public GitHub repository.

An illustration of a computer window with a dark blue border and three green dots in the top-left corner. The window contains a white background with a green GitHub logo (a branching diagram) at the bottom center. The text is centered within the window.

Open-source. Open standard. Ready for experimentation.