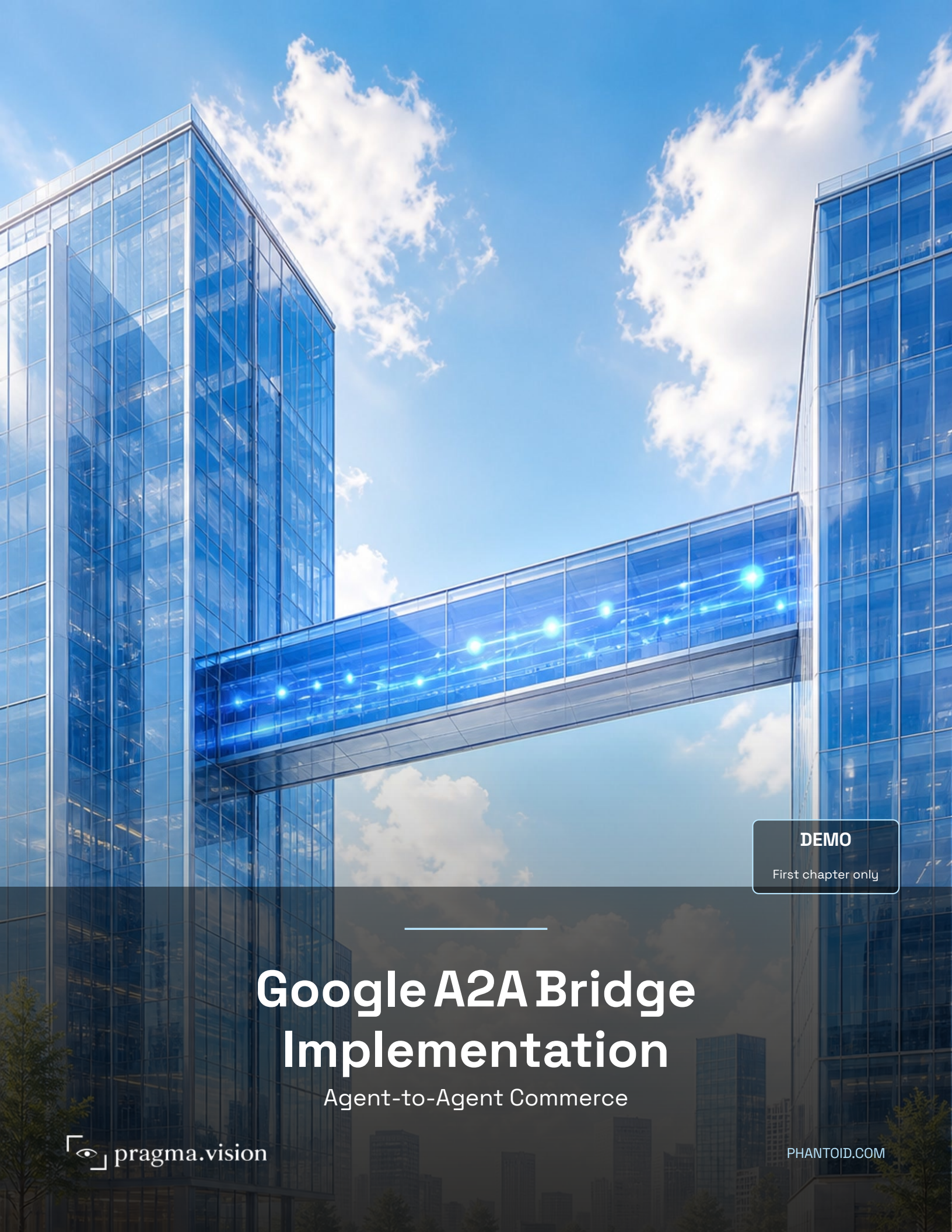

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First chapter only

Google A2A Bridge Implementation

Agent-to-Agent Commerce

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Google A2A Bridge Implementation

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The Dawn of Agent-to-Agent Commerce

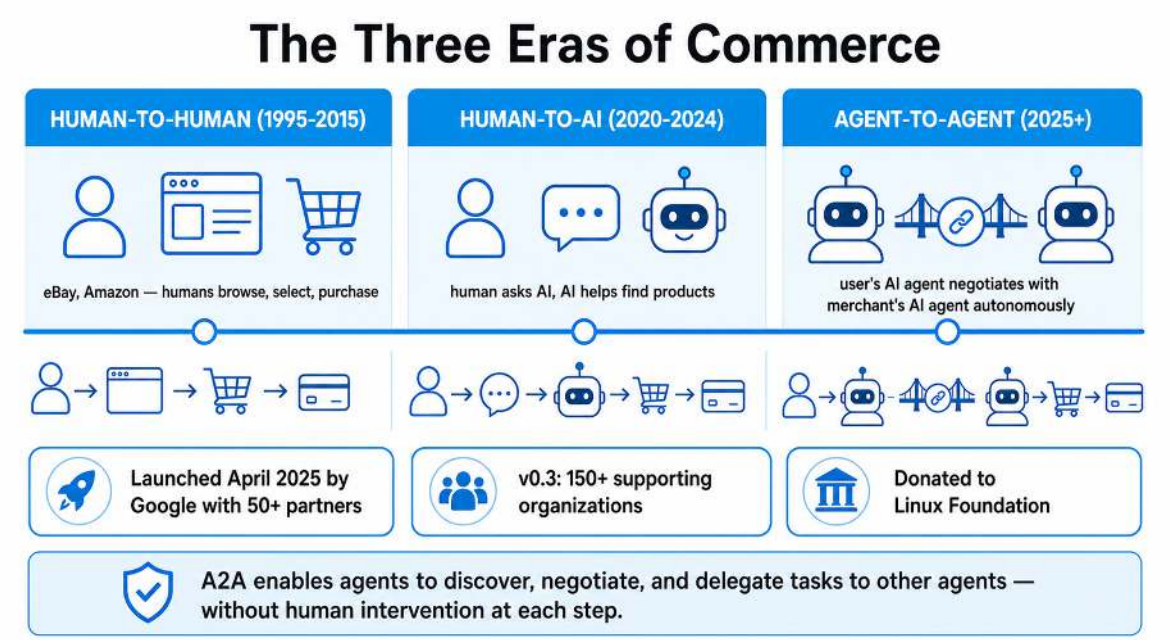

Figure 1. A three-era timeline runs from human-to-human browsing (1995–2015) to human-to-AI assisted search (2020–2024) to agent-to-agent negotiation (2025+), where a user's agent deals directly with a merchant's agent over the A2A protocol Google launched in April 2025 with 50+ partners and 150+ supporting organizations

For decades, software systems talked to each other through APIs designed by humans, maintained by humans, and invoked by humans. The communication was rigid: one endpoint, one schema, one expected response. If you wanted two systems to collaborate, you wrote an integration. If that integration broke, a human fixed it.

That era is ending.

On April 9, 2025, Google Cloud launched the Agent2Agent Protocol—an open standard enabling AI agents to discover each other's capabilities, delegate tasks, stream progress, and coordinate complex workflows across organizational boundaries. Within months, more than 150 organizations had joined the ecosystem, including Salesforce, SAP, ServiceNow, PayPal, Adobe, Atlassian, and every major consulting firm from Accenture to McKinsey. By July 2025, version 0.3 added gRPC transport, signed security cards, and extended SDK support. By the end of 2025, Google donated A2A

to the Linux Foundation, signaling that this was not a proprietary play but an industry standard.

Key Insight

The agentic AI market reached $7.29 billion in 2025 and is projected to exceed $139 billion by 2034 at a 40.5% CAGR. McKinsey estimates that agentic commerce alone could generate $3–5 trillion globally by 2030, with the US B2C retail market seeing up to $1 trillion in AI-orchestrated revenue. The infrastructure connecting these agents is the A2A protocol.

1.1 Why Agent-to-Agent Matters Now

The timing is not accidental. Three converging forces created the moment:

1. **Agent Proliferation**: Every enterprise software vendor shipped AI agents in 2025. Salesforce has Agentforce. SAP has Joule. ServiceNow has AI Agents. Microsoft has Copilot agents. The problem is no longer "how do we build agents?" but "how do agents from different vendors collaborate?"
2. **Protocol Maturity**: MCP (Model Context Protocol) solved tool integration for single agents. A2A solves coordination between multiple agents. Combined with AP2 (Authorization Protocol) and ACP (Agentic Commerce Protocol), the full stack—discovery, authorization, and payment—is now standardized.
3. **Commerce Readiness**: Stripe and OpenAI shipped ACP. Google shipped AP2. Payment rails exist for agents to transact autonomously with user consent. The missing piece was agent-to-agent orchestration, and A2A fills it.

150+

Organizations supporting the A2A protocol ecosystem by late 2025[1]

[1] Google, "Introducing the Agent2Agent Protocol," 2025.

1.2 What This Book Covers

This book is a practitioner's guide to implementing the A2A protocol for commerce use cases. It is not a theoretical overview—it is the implementation manual you need to build agents that discover each other, negotiate terms, fulfill orders, and settle payments through multi-agent chains.

Every pattern in these chapters comes from implementation experience building the Pragma.Vision ecosystem—an AI-native commerce platform model where a growing family of interconnected platforms shares identity, payments, and agent infrastructure. The A2A bridge pattern connects phantoid.com (the agent marketplace layer) to the broader agent network, enabling wish fulfillment chains where multiple agents coordinate across platforms.

1.3 Who This Book Is For

- **Platform Engineers** integrating A2A into existing agent infrastructure or building new multi-agent systems from scratch.
- **AI Agent Developers** who want their agents discoverable and transactable across the A2A network, not locked into a single platform.
- **Enterprise Architects** designing agent orchestration layers where agents from different vendors—Salesforce, SAP, custom—must collaborate on complex workflows.
- **Technical Founders** evaluating the agent-to-agent commerce opportunity and needing a proven architecture.

1.4 The Pragma.Vision Context

The Pragma.Vision model demonstrates what A2A commerce can look like at scale. When a user creates an $80 wish on wish.now, the platform can broadcast the context to compatible agents via A2A. A gift advisor on great.gift suggests an artisan set. A deal finder on profit.deals locates a 15% discount. A nearby checker on near.now confirms local stock. A delivery agent on daily.delivery arranges gift-wrap delivery. A quality agent on phantoid.com verifies the merchant. Five agents, five platforms, one coordinated fulfillment—modeled at $18.44 in platform revenue from a single wish. That is the 23% effective take-rate model that A2A commerce enables, compared to a traditional marketplace's 2.5%.

Case Study

Tyson Foods and Gordon Food Service are among the first enterprises to deploy A2A for commerce. Their agents share product data and sales leads in real time, creating an automated channel that reduces supply chain friction. Tyson's supply agent publishes inventory availability via A2A, and Gordon's procurement agent autonomously matches demand—eliminating days of manual coordination. This pattern—publish capability, discover need, negotiate terms, execute—is the template for all A2A commerce.

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This is a free preview of the full edition.

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