



DEMO

First chapter only

\$1,800 Budget MVP Execution Plan

Week-by-Week Guide to Building Production AI Commerce on Free Tiers

\$1,800 Budget MVP Execution Plan

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Code Examples

Code examples in this book are provided for illustration only. They may not be suitable for production use without additional validation, error handling, and security review.

Published by Pragma Vision LLC

First edition, 2026.

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The \$1,800 Challenge

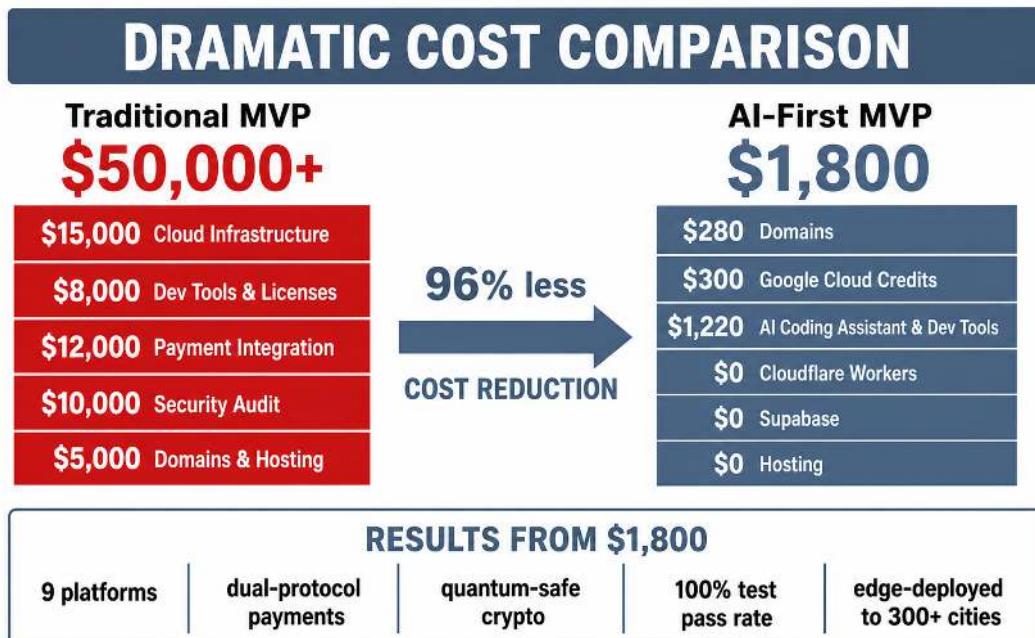


Figure 1. Traditional MVP costs stack to \$50,000+ (cloud \$15,000, dev tools \$8,000, payments \$12,000, security audit \$10,000, hosting \$5,000) against an AI-first \$1,800 build — 96% less — still delivering 9 platforms, dual-protocol payments and quantum-safe crypto

The conventional wisdom says you need \$50,000 to build a minimum viable product. That number is a decade out of date.

We built a production AI commerce platform—dual payment protocols, cryptographic signature verification, edge-deployed APIs, multi-platform architecture—for \$1,800 total. Not per month. Not for the first sprint. From first commit to production deployment, the entire system cost less than a decent used laptop.

This book is the exact playbook. Every dollar tracked. Every week documented. Every free tier pushed to its operational limit.

1.1 Who This Book Is For

This book is for technical founders with more ambition than capital. You can write code—or you can direct AI to write it for you. You have a product idea in the AI commerce space. What you lack is the infrastructure playbook for going from zero to production without a \$50K runway.

If you have built serverless applications before, you will move faster. If you have not, every concept is explained from first principles with working code examples you can deploy the same day.

1.2 What We Built

By the end of eight weeks, the Pragma.Vision ecosystem had:

- A unified API serving six platforms from a single Cloudflare Worker
- Dual-protocol payment support (Google AP2 and Stripe ACP) with 69.5% code sharing

- Quantum-safe hybrid cryptographic signatures (classical + ML-DSA-65)
- A Google A2A bridge for agent-to-agent orchestration
- Supabase PostgreSQL with row-level security on every table
- MCP server integration for AI assistant discovery
- End-to-end test coverage at 100% pass rate (306 of 306 tests)
- \$0 in monthly infrastructure costs

\$0/mo

Monthly infrastructure cost at launch

1.3 The \$1,800 Budget Philosophy

The budget is not a constraint—it is a design principle. Unlimited money enables unlimited mistakes. A tight budget forces better architectural decisions because every choice carries real weight.

Key Insight

Free tiers are not a compromise. Cloudflare Workers handle 100,000 requests per day. Supabase provides 500 MB of PostgreSQL with real-time subscriptions. Google Cloud offers \$300 in credits for new accounts. Stacked correctly, these free tiers support a production platform serving thousands of users.

The constraint forces three beneficial outcomes:

1. **Edge-first architecture:** Cloudflare Workers run your code in 300+ cities worldwide at zero cost. No origin servers to pay for.

2. **Protocol before interface:** When you cannot afford a design team, you build the API first. AI assistants become your primary interface—for free.
3. **Shared infrastructure:** Instead of nine separate backends for nine platforms, you build one unified API that serves them all.

1.4 About Pragma.Vision

Pragma.Vision is an AI-native commerce ecosystem—a growing family of interconnected platforms sharing infrastructure, identity, and payment systems. From wish.now (conversational commerce) to phantoid.com (AI agent marketplace) to trustauthority.ai (the Certificate Authority for AI agents), each platform serves a distinct market while running on the same edge-deployed stack described in this book.

Every architecture decision, code pattern, and budget line item here comes from building this system in production.

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