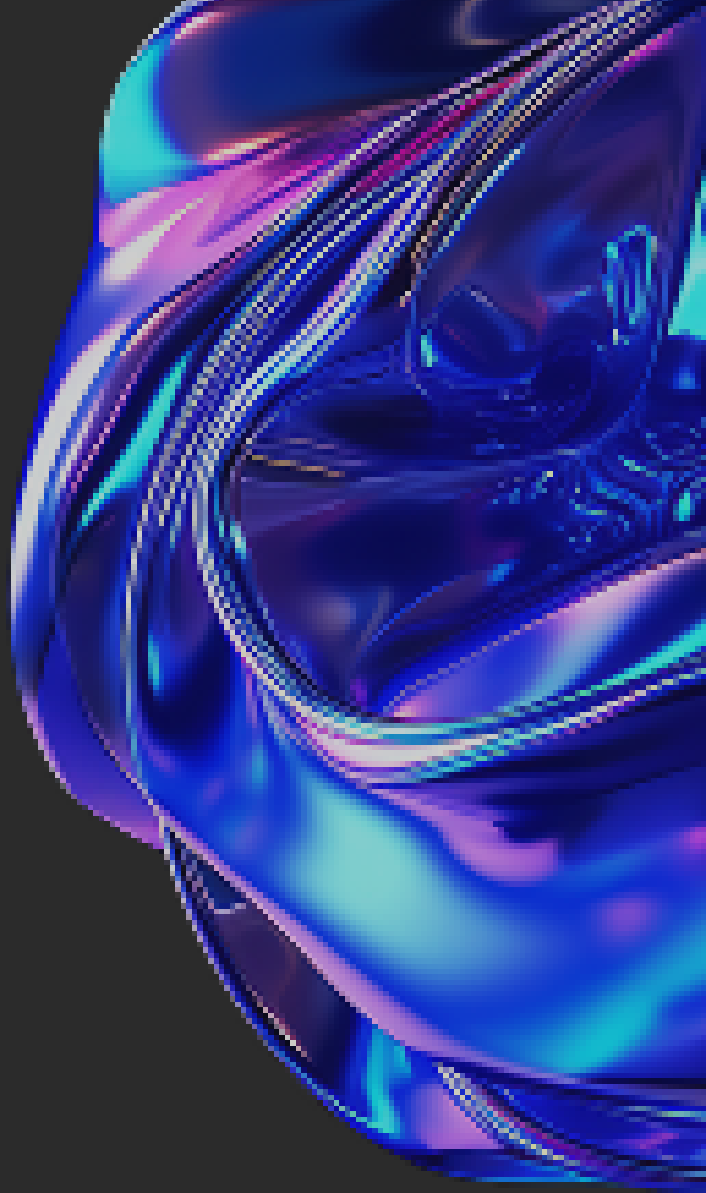




Case Study:

Accelerating AI Transformation for an Automotive Finance Platform

Prepared by



Executive Summary

A leading automotive platform. Their CMS-like software helps car dealers and lenders manage inventory, match buyers to vehicles, and offer financing—all through a unified dashboard trusted by major automotive partners.

The platform partnered with Flatiron Software to develop a next generation Generative AI powered platform for them in parallel to their existing team working on their current platform. This enabled their in-house team to focus on their core work without being distracted and for the new Flatiron team with one embedded engineer to focus on building the new AI platform.

The Challenge

The platform is robust, but the buyer journey was still held back by long, rigid forms and outdated workflows. Users often dropped out because the experience was complicated and filled with financial jargon. Meanwhile, the platform's core product ran on a legacy stack, making it risky to experiment with AI or overhaul the user experience without major disruptions to business and ongoing development.

Key Client Needs —

- Dramatically simplify car and finance discovery for end users—via natural, intuitive interaction.
- Integrate new AI capabilities deeply with existing systems and data, without duplicating work or disrupting the roadmap.
- Deliver a production-ready solution fast, with minimal load on the in-house engineering team.

Solution

Flatiron was engaged as an independent, expert engineering pod to build a next-generation, AI-driven experience—transforming both the technology and the customer journey for the company.

Key Deliverables

Conversational Car & Finance Assistant

- An AI-powered assistant lets users and sales reps search for cars and qualify for financing using natural language—by chat or voice. No forms. No jargon. Just a smarter way to buy a car.

Unified, Interactive UI

- More than just a chat window: a fully featured interface brings years of the platform functionality into a single, streamlined screen. As the conversation progresses, listings and finance options update in real time—no tool or tab-switching required.

Deep, Seamless Integration

- Flatiron's team built middleware that connects directly to the company legacy systems and live data. The solution works inside the existing UI, so users get a radically new experience on top of a proven platform—with zero duplication and no impact on the legacy roadmap.

Flexible, Secure AI Stack

- The AI architecture supports any leading model—OpenAI, Claude, Llama, Gemini, and more—and can be deployed on-premises or in the cloud for maximum data control and compliance. There's no vendor lock-in and all sensitive data remains within its own infrastructure.

AWS Advantage

- As an AWS Advanced Partner, Flatiron leveraged AWS-native tools for security and scalability, and secured partner-only funding—reducing project costs and accelerating delivery.

Delivery Process & Team Structure

Project Management & Transparency

Flatiron took full ownership of project management and delivery. We ran daily standups and optional daily updates for the client, did all sprint planning for maximum visibility, and held weekly demo/planning meetings to keep all stakeholders aligned.

Alignment & Quality

All code was written to the platform engineering standards, with code reviews for shared repos. The AI stack was built independently to minimize dependencies and risk. The project required almost no support from the company existing team, keeping their focus on the core business.

Specialized Team

- **AI Backend:** PhD-level AI engineer built a custom vector database, managed the LLM stack, and drove continual improvement for production use.
- **Full Stack Engineer:** Developed the UI and all interactive components, ensuring seamless integration and real-time updates.
- **Technical Lead/PM:** Provided deep technical leadership, ran code reviews, and handled day-to-day project management.

Sidebar

First 3 Months



Month 4

Working prototype, fully integrated and UI-complete.

Production-ready rollout to select the company clients.

Outcome

- AI-driven, natural-language experience for buyers and sales reps—no more friction or form fatigue.
- The entire platform's power, simplified onto a single screen, with live updates as conversations progress.
- All work delivered independently of the company engineering team, with no risk to the product roadmap or team priorities.
- Platform now fully "AI-proofed"—future-ready, secure, and built for model flexibility.

Strategic Impact

This project did more than add AI to a product—it showed the company how AI can be tightly woven into business workflows, future-proofing both technology and strategy. Flatiron's hands-off, high-impact approach allowed the company to innovate quickly and with minimal risk, while giving their leadership a playbook and technical roadmap for further AI integration.

Why Flatiron?

Flatiron delivers complex AI transformation projects at enterprise scale—fast, independently, and with no disruption to your existing teams. Our model lets you capture the value of AI while protecting your core business and product roadmap. From project management to technical delivery, we bring deep expertise, proven process, and clear accountability.

Ready to see what AI can do for your platform—without the risk or overhead?
Let's talk.

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