

Client Details

Gokhan Kaluc, a U.S.-based entrepreneur and First Officer at American Airlines, partnered with co-founders to launch a digital tipping and payment platform. Operating in the FinTech and social commerce space, the venture targets service providers and everyday users seeking seamless peer-to-peer transactions. Based in Texas, the initiative is an early-stage startup with global scalability ambitions. The project plays a critical role in enabling the client to enter the digital payments ecosystem and build a new transaction-driven revenue stream beyond traditional income sources.

Problem Statement

The client lacked a unified digital platform to facilitate tipping and peer-to-peer payments, relying instead on fragmented solutions that created friction in user experience. Existing payment systems involved multiple steps, leading to higher drop-offs and slower transaction completion times (often 2–3x longer than QR-based flows). Additionally, dependency on a single payment gateway (Stripe) resulted in unexpected service fees and reduced margins. There was no scalable infrastructure to support real-time wallet transactions, QR payments, or multi-payment integrations. From a business standpoint, this limited user adoption, reduced transaction frequency, and delayed go-to-market for a competitive fintech product. The client needed a secure, scalable, and user-friendly platform to streamline transactions, reduce payment failures, and establish a sustainable, transaction-driven revenue model.

Approach / Solution

smartData addressed the challenge by designing a scalable, microservices-driven fintech architecture built on the MEAN stack with React Native for cross-platform mobile apps, ensuring faster time-to-market and consistent user experience. A modular wallet system was developed to support wallet-to-wallet, card-to-wallet, and QR-based transactions, integrated with multiple payment gateways (Finix, ACH, Apple Pay, Google Pay) to reduce dependency risks and improve success rates. To ensure security and compliance, the platform incorporated OTP-based authentication, encrypted transactions, and KYC-ready workflows aligned with U.S. financial standards. An admin web panel was built for real-time transaction monitoring, fraud detection, and reporting.

Technical Challenges

- Challenges

- ★ Finix payment gateway integration lacked proper documentation, causing delays and uncertainty in transaction workflows.
- ★ Ensuring real-time, secure wallet transactions with high concurrency and minimal failure rates.
- ★ Maintaining compliance (KYC/AML) and securing sensitive financial data across multiple integrations.

- How We Solved It

- ★ Worked directly with Finix support, reverseengineered APIs, and built a modular payment layer to handle gateway variations.
- ★ Implemented microservices architecture with asynchronous processing and robust validation layers for reliable transaction handling.
- ★ Integrated OTP authentication, encryption protocols, and designed compliance-ready workflows aligned with U.S. fintech standards.

Learning

Early dependency on a single payment gateway created avoidable risk, future pods should validate and sandbox multiple gateways from day one. Finix integration highlighted the need for deeper API due diligence before commitment, especially when documentation is limited. MVP scope was well-managed, but compliance (KYC/AML) considerations should be brought in earlier during architecture planning to avoid rework. Agile delivery and close client collaboration worked well, continue sprint demos and fast feedback loops to handle evolving fintech requirements.

Screenshots

