10 JUN 26 Read Time: 10 Mins.

Case Study

India's Largest Bank Transforms Mobile Banking with a Strategic Platform Migration

Overview

One of India's largest banks was struggling with the limitations of its legacy KONY-based digital banking platform, leading to rising maintenance costs, complex upgrade cycles, and a shortage of skilled resources. These challenges began to slow down innovation and impact the bank's ability to deliver seamless digital experiences.

Tech Mahindra partnered with the bank to address these issues through a strategic modernization initiative, enabling a transition to a more agile and scalable Angular-based platform. This approach helped lay the foundation for faster innovation and a future-ready digital ecosystem.

Client Background and Challenges

India's largest bank, with a strong nationwide presence and millions of mobile banking users, plays a critical role in delivering scalable, secure, and customer-centric financial services. As customer expectations evolved and digital adoption accelerated, the bank aimed to modernize its mobile application to improve agility, reduce operational complexity, and enable faster innovation. To achieve this, it embarked on a strategic transition from a legacy development framework to a modern, Angular-based platform to enhance performance, maintainability, and overall user experience at scale.

Challenges Faced

Legacy Platform Constraints:

Frequent, complex upgrades, high licensing costs, and limited backward compatibility increased operational overhead and slowed innovation

Slow Release Cycles:

Lengthy development cycles restricted faster feature rollouts and delayed response to regulatory and compliance requirements

Skill and Resource Limitations:

Limited availability of skilled KONY developers and a lack of structured training programs created resource constraints and delivery risks

Fragmented Development Ecosystem:

Separate Android and iOS codebases, along with custom widgets and plugins, led to higher maintenance effort and inconsistent development

Solution and Approach

The bank evaluated three platform options for mobile app development. Native offered high performance and strong user experience but required significant development effort and resulted in a distributed codebase. Flutter provided strong cross-platform capabilities but presented a steep learning curve and complex state management. Angular was ultimately selected due to its maintainability, ability to reuse code across web and mobile, faster time-to-market, and alignment with the existing development team's expertise, enabling greater agility.

Migration Strategy

- Rebuilt the mobile UI layer using Angular by reusing the existing web codebase with minimal functional changes.
- Retained existing backend services during migration, with a defined roadmap for gradual transition toward microservices.
- Validated coexistence of legacy and modern frameworks through proofs-of-concept and parallel run models to mitigate risk.
- Leveraged existing KONY infrastructure during transition, with planned decommissioning after stabilization.

Architecture and Implementation

As-Is vs To-Be: Transitioned from KONY-centric architecture to an Angular hybrid, with improved modularity and plugin support

Security: Maintained high security standards using KONY libraries where needed, with additional 3rd-party plugins for device features, but eventually migrated to DexGuard/IXGuard-based enterprise security solutions

Resource Planning: Mixed resourcing strategy focusing on upskilling existing KONY developers on Angular and infusing Angular experts from outside, having a perfect balance

SDLC Optimization: Reduced UI/UX and backend development effort, streamlined testing, and project management

Business Impact

Easy Maintenance:

Enabled easier maintenance through a unified codebase, simplified upgrades, and reduced reliance on vendor-specific skills

Enhanced Performance and Experience:

Improved application performance and user experience using Angular's efficient data binding and optimized plugins

Accelerated Business Agility:

Enabled faster releases, simpler feature rollouts, and stronger web-mobile convergence

Cost Optimization:

Reduced overall costs by eliminating high licensing fees and lowering infrastructure and support expenses post-migration

Future Scalability:

Prepared the platform for new digital initiatives and rapid feature or channel expansion

Optimized Application Size:

Reduced application size by 60-70%, resulting in a lighter and more efficient mobile app

About Tech Mahindra

Tech Mahindra (NSE: TECHM) offers technology consulting and digital solutions to global enterprises across industries, enabling transformative scale at unparalleled speed. With 147,000+ professionals across 90+ countries helping 1100+ clients, Tech Mahindra provides a full spectrum of services including consult-ing, information technology, enterprise applications, business process services, engineering services, network services, customer experience & design, AI & analytics, and cloud & infrastructure services. It is the first Indian company in the world to have been awarded the Sustainable Markets Initiative's Terra Carta Seal, which recognises global companies that are actively leading the charge to create a climate and nature-positive future. Tech Mahindra is part of the Mahindra Group, founded in 1945, one of the largest and most admired multinational federation of companies. For more information on how TechM can partner with you to meet your Scale at Speed™ imperatives, please visit https://www.techmahindra.com/.

TECH mahindra

www.techmahindra.com
www.twitter.com/tech_mahindra
www.linkedin.com/company/tech-mahindra