

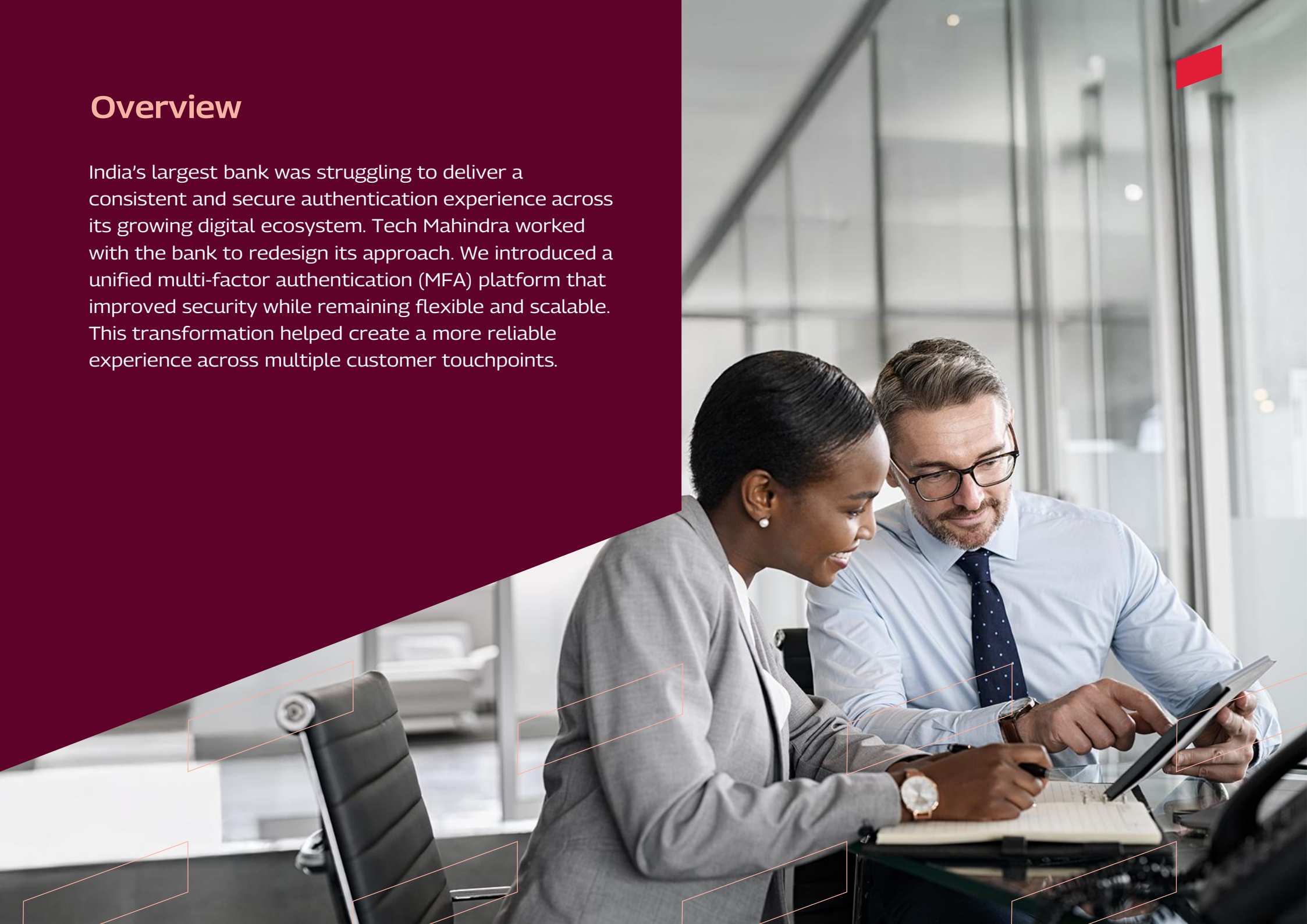
Case study

# India's Largest Bank Elevates Trust, Security with a Unified Digital Authentication Experience



## Overview

India's largest bank was struggling to deliver a consistent and secure authentication experience across its growing digital ecosystem. Tech Mahindra worked with the bank to redesign its approach. We introduced a unified multi-factor authentication (MFA) platform that improved security while remaining flexible and scalable. This transformation helped create a more reliable experience across multiple customer touchpoints.





## Client Background and Challenges

The client is the largest bank in India, operating nationwide across retail, corporate, and merchant banking, and serves millions of customers through its extensive digital channels. As digital threats increased and regulatory requirements evolved, fragmented authentication created security risks and inconsistent customer experiences, impacting trust, compliance, and the bank's ability to deliver seamless, secure digital access at scale. Key constraints included:

- **Fragmented Authentication:** Authentication remained siloed across channels, lacking a unified application.
- **Limited 2FA Options:** Restricted to SMS OTP and a basic secure OTP, the system lacked support for QR, push notifications, or biometrics.
- **Regulatory Pressure:** The RBI's mandate to offer multiple out-of-band (OOB) authentication options and restrictions on SMS OTP created compliance challenges.
- **Customer Experience:** The lack of a unified, user-friendly authentication experience across digital platforms forced users to juggle multiple authenticators, degrading overall user experience.

## Our Approach and Solution

We partnered with the bank to design a unified, secure authentication platform that addressed growing cyber risks, regulatory complexity, and fragmented user experiences.

- **Unified Multi-channel Access:** A single authenticator application allowed customers to securely register and access retail, corporate, and merchant channels, eliminating tool sprawl.
- **Flexible Multi-factor Authentication:** Created multiple 2FA options, such as OTP, push notifications, QR codes, and biometrics, balancing security with convenience.
- **Personalized and Governed Experience:** Allowed users to choose authentication modes, while administrators retained centralized control to enforce compliance.
- **Enterprise-Grade Security:** Implemented SIM and device binding, AES-256 and RSA-2048 encryption, MPIN/biometric login, and secure communication protocols.
- **Seamless User Journeys:** Simplified onboarding, device change, and activation workflows with linking across banking channels.



## Our strategic engagement delivered immediate and measurable results:

- Delivered a unified, flexible, and secure authentication experience across all channels.
- Proactively aligned operations with evolving security and regulatory requirements.
- Reduced support overhead by streamlining onboarding and improving incident response.
- Enabled rapid onboarding of new channels and features through a cloud-native, API-driven architecture.
- Significantly reduced fraud risks using strong encryption, device binding, and multi-modal authentication.



## 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 consulting, 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 recognizes 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/>.

\*Figures as per Q4, FY 26.



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