



Appknox Case Study

Transforming mobile app security posture for a leading Payment Service Provider

Overview



Challenge

The PSP faced critical security hurdles for its mobile apps with high-volume and high-value transactions and sensitive data making them attractive targets for threat actors.

while reliance on labor-intensive, error-prone in-house testing left vulnerabilities undetected; Vague vulnerability reports, slow development cycles, and complex compliance challenges further hampered their security posture.



Solution

In addressing their security needs, the payment service provider sought the expertise of Appknox to enhance the robustness of their applications with automated assessments, insights, compliance monitoring, and pipeline integration helped reduce risks, streamline remediation, and ensure cost-effective regulatory compliance.

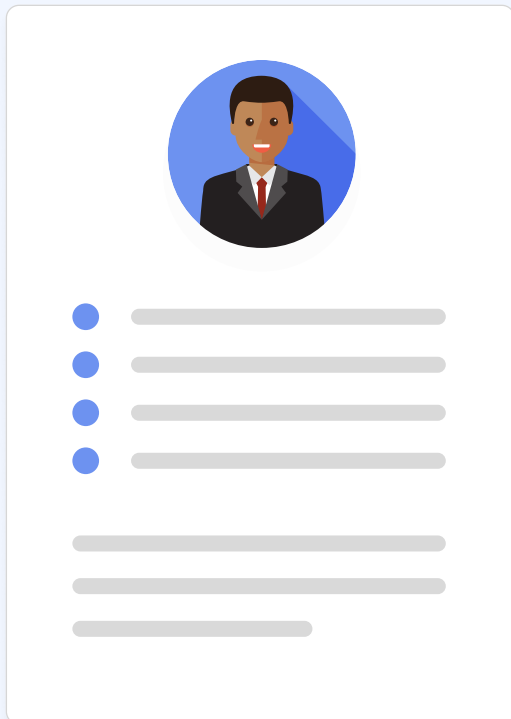


Results

Collaborating with Appknox, the payment provider uncovered 170+ vulnerabilities, including 53 critical threats. This pinpointed prioritization empowered swift remediation, significantly enhancing their security posture.

What Appknox helped achieve

- 01 Faster and more efficient vulnerability assessment and remediation based on criticality and impact
- 02 50% faster time-to-market with secure app updates
- 03 Reduced security expenditure by 50% and freed up resources, time, security and engineering team bandwidth hence reducing overall cost by 30%



Client profile

INDUSTRY

Financial Services

SERVICE LOCATION

Global

HEADQUARTERS

India

REVENUE

\$300-\$500 Million

EMPLOYEES

2500+

SECURITY TEAM SIZE

15-20



About the company

Founded in 2008, this Mumbai-based payments pioneer has revolutionized India's financial landscape.

From 13 Indian offices and 1 overseas branch, their 2,500+ employees tailor payment solutions for banks and merchants, backed by a staggering 65,000+ ATM network (including 8,000 white-label ones).

The challenges

Despite robust internal measures, the PSP company faced significant hurdles in ensuring the utmost security for its mobile applications owing to a range of factors like high-volume transactions and relying on in-house testing that's often labor-intensive.

Here's a list of some of the top challenges faced by the PSP.



Inadequate and expensive in-house testing

The PSP organization relied solely on internal manual testing leading to chances of missed critical vulnerabilities and making it a tedious, time-consuming and error-prone process. Apart from that, maintaining in-house security teams and infrastructure can be expensive for PSPs.



Lack of precision in analysis reports

The PSP needed detailed reports, not just 'vulnerability detected' flags that only indicated that a vulnerability existed and omitted crucial information like the criticality of the vulnerability and if it violated any compliance leading to delayed remediation and time spent on false positives.



High-volume of transactions

With constant access to highly sensitive financial data and processing a large number of transactions online made their mobile apps a prime target for attackers aiming to steal sensitive information or disrupt financial operations.



Compliance issues

PSPs are required to comply with regulations like PCI, DSS, and GDPR. Decoding and implementing requirements for features and data flows is labor-intensive and error-prone. Traditional methods rely on audits, creating a window for breaches and non-compliance.



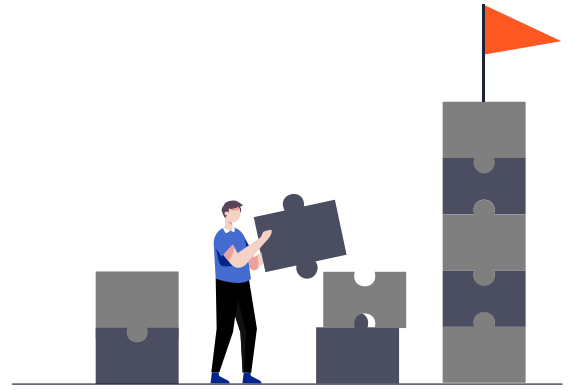
Slow Time-to-Market

Traditional security testing methods can significantly slow down app development and release cycles often posing security assessments as a roadblock for faster release cycles.

The solution

With the application being one of the major customer touchpoints, combating the threats in its operations was key to looking for mobile app security solutions.

Appknox's automated testing with the vulnerability assessment tool and a thorough manual pen-testing empowered the financial institution to easily identify potential security risks and seal off the loose ends in its network security.



Automated vulnerability assessment

Traditional in-house manual testing missed critical vulnerabilities. Appknox's automated scanning engines, alongside manual penetration testing by expert security researchers, identified even the most obscure flaws across platforms and significantly reduced the risk of data breaches.



Detailed and actionable threat intelligence

Vague "vulnerability detected" flags were largely unhelpful. Appknox provided detailed reports with exploitability scores, remediation steps prioritized by criticality, and references to OWASP standards helped developers focus on patching the most critical vulnerabilities first, saving time and mitigating risks quickly.



Continuous compliance monitoring

Deciphering complex regulations like PCI DSS and GDPR manually is laborious and prone to errors. To combat this, Appknox offered continuous compliance monitoring and automated gap analysis, ensuring apps stayed compliant with current regulations.



Frictionless integration and testing

Slow security assessments often hamper development cycles. Appknox seamlessly integrated with existing CI/CD pipelines, automating security checks throughout the development process that enabled rapid releases without compromising security, boosting overall time-to-market.



Cost-effective security expertise

Maintaining in-house security teams was expensive. Appknox offered a cost-effective alternative with its subscription-based model and on-demand access to security experts. This provided the PSP with robust security without breaking the bank.

The impact

After adopting Appknox in early 2021 in the security assessment workflow, the payment service provider was able to integrate **Appknox's robust vulnerability assessment capabilities** and detect a total of **170 vulnerabilities** within the first 90 minutes spent on each application.



Parameter	Before Appknox	After Appknox	Savings
Vulnerability coverage	Vulnerability checks only performed after development	Reduced risk of breaches and reputational damage	Up to 100% more vulnerability coverage with automated detection
Time	Relied solely on internal testing, potentially missing critical flaws	Prompt mitigation of critical vulnerabilities	90% faster identification of critical vulnerabilities
Remediation effort	Generic "vulnerability detected" flags with little actionable information	Faster and efficient vulnerability remediation based on criticality and impact	80% reduction in time spent on vulnerability analysis and remediation.
Release cycles	Security assessments delay app updates leading to slow release cycles	Faster time-to-market and quicker delivery of secure updates	50% faster time-to-market with secure app updates
Cost	High security costs owing to dedicated in-house security teams and infrastructure	Reduced security expenditure and freed up cost, and security and engineering team bandwidth	>50% cost savings on security personnel and infrastructure

KEY INSIGHTS

170

Vulnerabilities in 1st Scan

17

Applications Analysed

53

Critical Scan

The Appknox advantage

Appknox is an enterprise-grade security platform that helps developers, security researchers, and enterprises build a safe and secure mobile ecosystem faster with automated security checks.

THE APPKNOX IMPACT

<90 mins

comprehensive automated VA

<1%

false negatives

8+

compliances

Trusted by Gartner, loved by enterprises

- ✓ Recognized in Gartner Peer Insights Voice of Customer
- ✓ Gartner Hype Cycle for Application Security
- ✓ Gartner Notable Vendor

**Unleash the power of
superior scalable security
with Appknox today.**



Scan now to speak to a cybersecurity expert