### **CASE STUDY**

"At COE Security, we build, operate, and transfer world-class security solutions, empowering businesses with resilience and trust."

Joseph Henderson



### COE SECURITY LLC USA | BRAZIL | UAE | INDIA

### **CASE STUDY**

### BUILDING SECURE CODE: HOW COE SECURITY HELPED A FINTECH FIRM SHIFT LEFT ON SECURITY



## Measurable Impact Our Security in Numbers



- 1,500+ Global Engagements
- 95% Client Satisfaction
- 10+ Years of Cybersecurity Excellence
- 15K+ Critical Vulnerabilities Identified
- 1M+ Security Incidents Managed
- \$350M+ Costs Saved
- \$2.5B+ Transactions Secured
- 24/7/365 Threat Monitoring & Response
- Proactive Threat Hunting
- Cutting-Edge Security Technologies
- Dedicated Security Advisors
- Zero-Day Exploit Mitigation
- Incident Response Planning & Execution
- Security Awareness Training
- Customizable Security Solutions

#### **Client Profile**

Our client is a rapidly growing fintech company headquartered in India, employing over 200 developers and serving thousands of users across mobile and web platforms. Due to increasing regulatory scrutiny and a prior incident involving a critical API vulnerability, the firm sought to embed security throughout its software development lifecycle (SDLC) to proactively mitigate risk and improve time-to-market with secure releases.

#### **Challenges Faced**

Key security concerns included:

- Security was only considered during the final stages of development ("shiftright" approach)
- Developers lacked training on secure coding best practices
- No formal threat modeling or secure design reviews
- Inadequate DevSecOps integration and vulnerability management

#### Solution

COE Security implemented a tailored Secure Software Development Lifecycle (SSDLC) Program, combining:

- Developer Security Training: Hands-on secure coding workshops and OWASP Top 10 education
- Threat Modeling Workshops: Proactive risk identification during planning and design
- DevSecOps Integration: Security tools embedded into CI/CD pipelines
- Code Review & Static Analysis: Automated scans and manual reviews for critical components



# Compliance & Regulatory Mastery



- ISO 45001
- HIPAA & HITRUST
- NIST & NIST 800-171
- ISO 27001
- PCI DSS
- CMMC
- CIS Controls
- SOC 2
- CCPA & NYDFS
- EU CRA
- FedRAMP
- GDPR
- UK Cyber Essentials
- Essential Eight Australia



#### Secure SDLC in Action

- Conducted 4 secure coding bootcamps with over 180 developers trained
- Built 12 threat models for critical applications using STRIDE methodology
- Integrated SAST and DAST tools with Jenkins and GitHub Actions
- Reviewed over 50,000 lines of code, remediating 130+ vulnerabilities
- Reduced code-to-deploy time by automating security checks in pipelines

### Governance, Strategy, and Security Maturity

- Developed an application security policy aligned with ISO 27034
- Established a Secure Code Champion program across development teams
- Created a metrics-driven dashboard for executive visibility into SDLC security
- Introduced a risk-based control framework for third-party software libraries

#### COE Security - Cyber Maturity Services Portfolio

- Secure SDLC Consulting
- Application Threat Modeling
- DevSecOps Enablement
- Code Review & Vulnerability Analysis
- Developer Security Training
- Secure Architecture Design
- Software Composition Analysis (SCA)
- Policy & Standards Development
- Static/Dynamic Application Testing
- Secure Code Champion Program



# Our Cybersecurity Arsenal: Beyond Protection- We Build Resilience



- Application Penetration Testing (Thick/Thin)
- Mobile Application Penetration Testing
- API Penetration Testing
- Network Penetration Testing
- Operational Technology Security Testing
- Cloud Penetration Testing
- AI & LLM Security Audit and Pen Testing
- Red Teaming & Social Engineering Services
- Product & Hardware Penetration Testing
- IoT Security
- Security Operations Center Services (24/7)
- Custom Security Services

#### **Implementation Details**

- Deployed SAST tools (e.g., SonarQube) across all dev environments
- Integrated security checks at pull request and pre-deployment stages
- Conducted live training, lab simulations, and role-based learning paths
- Developed centralized documentation for security procedures and coding guidelines
- Provided monthly vulnerability and remediation reports to stakeholders

#### **Results Achieved**

- 85% reduction in critical vulnerabilities across applications
- 40% increase in developer confidence with secure coding practices
- Security checks automated in 90% of CI/CD pipelines
- AppSec maturity score increased from Level 1 to Level 3 (based on BSIMM)

#### **Client Testimonial**

"Partnering with COE Security transformed our development culture. Security became everyone's responsibility not just the AppSec team. We've seen faster releases with fewer bugs and higher trust from stakeholders."



# Industries We Protect with Cutting-Edge Security



- Financial Services
- Healthcare
- Retail
- E-commerce
- Government
- Cryptocurrency
- Blockchain Technology
- Automotive
- Transportation/Logistics
- Energy & Utilities
- Hospitality/Tourism
- Entertainment/Media
- Manufacturing
- Education
- Telecommunications
- HiTech & Information Technology



### **COE Security LLC**

COE Security is a leading cybersecurity services provider, offering tailored solutions to evolving threats. We enable organizations to meet compliance, reduce risk, and strengthen cyber resilience through proven methods, expert execution, and a commitment to excellence.

"Peace of mind in a world of cyber threats. That's what we deliver."

Joseph Henderson

