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."

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