

CASE STUDY

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

Joseph Henderson



CASESTUDY
SOFTWARE SECURITY IMPLEMENTATION
SERVICES: STRENGTHENING APPLICATION
SECURITY AT EVERY LAYER

COE SECURITY LLC

USA | BRAZIL | UAE | INDIA



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

**We're
Hiring!**

Client Profile

A global e-commerce company handling millions of online transactions daily, requiring a robust software security implementation to protect sensitive customer data, prevent fraud, and comply with PCI DSS, GDPR, and cybersecurity regulations.

Challenges Faced

Modern software platforms face significant security challenges, including:

- **Code Vulnerabilities & Exploits** Addressing common software flaws such as SQL injection, cross-site scripting (XSS), and insecure authentication.
- **API & Microservices Security** Protecting API endpoints and microservices from unauthorized access and data breaches.
- **Regulatory & Compliance Risks** Ensuring applications meet PCI DSS, GDPR, ISO 27001, and NIST security standards.
- **Cloud & Container Security** Securing cloud-native applications, Kubernetes environments, and containerized deployments.

Solution

The organization partnered with COE Security to implement Software Security Implementation Services, ensuring end-to-end application security across the development, deployment, and operational phases.



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

Application Security Hardening & Secure Coding Practices

- Integrated secure coding standards aligned with OWASP Top 10, NIST, and ISO 27001 guidelines.
- Conducted source code analysis and vulnerability assessments to detect and mitigate security flaws early.
- Provided secure development training for engineering teams to reduce human-related security risks

API & Microservices Security Implementation

- Designed and implemented API security best practices, including authentication, encryption, and rate limiting.
- Deployed API gateways with access controls to prevent unauthorized interactions.
- Conducted penetration testing on API endpoints to identify potential risks before production deployment.

Cloud & Container Security Best Practices

- Implemented security controls for cloud-based applications, including identity access management (IAM) and workload protection.
- Secured containerized applications by enforcing runtime security policies and vulnerability scanning.
- Established logging, monitoring, and anomaly detection to identify security incidents in real time.

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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

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Compliance & Security Governance

- Aligned software security measures with industry regulations, ensuring compliance with PCI DSS, GDPR, and ISO 27001.
- Conducted security audits and gap analyses to validate regulatory adherence.
- Developed security policies and best practices for ongoing software security maintenance.

Results

With COE Security's Software Security Implementation Services, the organization achieved:

- Stronger Application Security Hardened application security, reducing exploitable vulnerabilities and attack surfaces.
- Improved API & Cloud Protection Implemented advanced security measures to protect APIs, microservices, and cloud workloads.
- Regulatory Compliance Assurance Ensured adherence to PCI DSS, GDPR, and other industry security mandates.
- Enhanced Secure Development Practices Equipped development teams with the skills to write secure, resilient code.
- Proactive Threat Mitigation Reduced the risk of security incidents by integrating security into the software lifecycle.



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

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Client Testimonial

COE Security provided a comprehensive approach to securing our software ecosystem. Their expertise in secure coding, API security, and cloud protection helped us mitigate risks, comply with regulations, and build customer trust

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

Joseph Henderson

