

CASE STUDY

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

Joseph Henderson



CASESTUDY

SECURING RETAIL OPERATIONS IN A DIGITAL-FIRST WORLD

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

Client Profile

A national retail chain with an extensive online and physical presence handling high volumes of customer transactions and sensitive payment data

Challenges Faced

As cyber threats targeting the retail industry continued to rise the client needed to strengthen its security framework to protect customer data ensure payment security and maintain business continuity

- Data Breach Prevention Addressing vulnerabilities in point-of-sale POS systems e-commerce platforms and internal networks
- Payment Security Ensuring compliance with PCI DSS and safeguarding cardholder data from fraud and theft
- Supply Chain Protection Securing third-party integrations and vendor networks from cyber risks
- Operational Resilience Enhancing incident response and disaster recovery capabilities to mitigate disruptions

Solution

The retail chain partnered with COE Security to develop a holistic security strategy integrating compliance fraud prevention and cyber resilience

**We're
Hiring!**



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

Risk Assessment and Security Gap Analysis

Conducted a comprehensive cybersecurity risk assessment focusing on vehicle components telematics and cloud infrastructure

- Mapped security gaps against ISO 21434 and UNECE WP29 requirements developing a tailored roadmap for compliance
- Established a secure-by-design framework for integrating cybersecurity into the vehicle development lifecycle

Payment Security and Fraud Prevention

Strengthened encryption and authentication protocols for secure in-vehicle and external communications

- Implemented intrusion detection and prevention systems to monitor and respond to real-time threats
- Developed secure software update processes including digital signatures and integrity verification

Supply Chain and Vendor Security Management

Assisted in meeting ISO 21434 cybersecurity standards and UNECE WP29 regulations for automotive security

- Conducted security validation and penetration testing to assess resilience against cyberattacks
- Provided training for engineering and security teams on best practices for automotive cybersecurity

**We're
Hiring!**



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

Incident Response and Business Continuity Planning

- Implemented an automotive security operations center for real-time monitoring and threat intelligence
- Developed incident response plans tailored to connected vehicle ecosystems
- Established a continuous compliance framework to adapt to emerging threats and regulatory updates

Results

Through COE Security's expert guidance the retail chain achieved

- Enhanced Payment Security Ensured PCI DSS compliance and reduced risk of payment fraud and data breaches
- Strengthened Cyber Resilience Improved ability to detect and respond to cyber threats minimizing operational disruptions
- Secure Supply Chain Implemented stringent security controls for vendors reducing risk exposure from third-party integrations
- Increased Customer Trust Reinforced brand reputation by demonstrating a commitment to data protection and security

**We're
Hiring!**



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

**We're
Hiring!**

Client Testimonial

COE Security transformed our approach to cybersecurity and compliance. Their expertise helped us safeguard customer data ensure payment security and build a resilient retail operation in an increasingly digital world.

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

Joseph Henderson

