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HCLTech Data TrustShield for banking, financial services and insurance

In collaboration with Intel



The future of banking, financial services and insurance

The BFSI sector is undergoing rapid transformation through digitalization, driven by emerging technologies like AI, data analytics, blockchain and remote banking services. The rise of hyper-personalization, accessible finance and inclusive banking is fueling this evolution. As these trends reshape the industry, financial institutions are facing a data revolution that accelerates innovation in key areas:

Personalized banking:

Advanced algorithms and AI provide exceptional, tailored experiences based on unique customer preferences and behaviors

Open banking:

Collaborative innovation across non-banking financial companies (NBFCs) and other institutions to create accessible and custom financial services, underwriting automation and streamlined claim administration

Embedded finance:

Integrating financial services into third-party platforms to offer seamless experiences

The need for responsible data innovation and security

As financial institutions generate unprecedented volumes of data, they must adopt responsible data practices that safeguard customer privacy and maintain regulatory compliance. Industry forecasts show that data growth in financial services will reach a compound annual growth rate of 26% by 2025, second only to healthcare.

The sector faces significant challenges:

Data breaches:

57% of data breaches in the financial sector stem from general hacking, making robust cybersecurity a non-negotiable priority.

Ethical data sourcing:

Transparency in data usage is critical. Financial institutions must understand the source, subject and geographic borders of their data, in line with regulatory frameworks.

Regulatory compliance:

From GDPR to FINRA and MiFID II, global and regional regulations demand strict data protection measures.

Privacy-preserved computation:

Ensuring privacy across multi-party computations, differential privacy techniques and secure data collaborations.



HCLTech Data TrustShield: Powered by Intel's confidential computing

HCLTech, a global leader in technology services, has developed the Data TrustShield solution for BFSI, leveraging Intel's confidential computing capabilities, including Intel® TDX (Trusted Domain Extensions) and Intel Tiber Trust Authority for attestation. This advanced solution enables secure, multi-party collaboration and privacy-preserving analytics for financial institutions without compromising sensitive customer data.

Key use cases:

Multi-party collaboration:

Securely exchange customer insights across financial service providers

Privacy-preserving machine learning (ML):

Maintain data confidentiality while harnessing AI-driven insights

Federated learning:

Enable financial institutions to collaborate on anti-money laundering (AML) and counter-terrorist financing (CTF) efforts without exposing sensitive data

What makes it different?

HCLTech's BFSI reference architecture enables organizations to leverage confidential computing to enhance data security across data storage, processing and sharing:



Data security:

Secure sensitive customer information, proprietary algorithms and transaction data from breaches and unauthorized access



Regulatory compliance:

Meet the highest standards of data privacy regulations like GDPR, CCPA and KYC



Collaborative innovation:

Drive innovation by securely sharing data with trusted partners and financial institutions using Intel's SGX/TDX technology



Scalability:

Scale effortlessly with up to 1TB enclave capacity using Intel latest generation Silicon Xeon processors



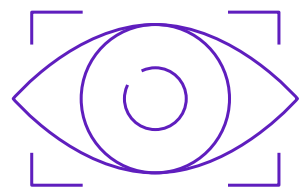
Why HCLTech?

- 1. Domain expertise:**
Decades of experience in BFSI, helping global financial institutions navigate the complex data security landscape
- 2. Confidential computing leaders:**
A specialized team focused on secure, privacy-preserving computing solutions
- 3. Tailored solutions:**
Bespoke services designed to meet your unique security needs, integrated seamlessly into your operations
- 4. Global reach:**
With offices worldwide, HCLTech is ready to assist with your secure computing needs no matter where you operate



Industry Insights and References

The BFSI (Banking, Financial Services and Insurance) sector is a prime target for security threats, given the sensitive nature of financial data and transactions. As a result, the BFSI security market has experienced significant growth and evolution in recent years. Here are some key insights into the BFSI security market:



Rising cyber threats

- **Sophisticated attacks:** Cybercriminals are becoming increasingly sophisticated, using advanced techniques like ransomware, phishing and social engineering to target BFSI institutions
- **Data breaches:** The risk of data breaches remains high, with sensitive customer information, financial transactions and intellectual property at stake



Regulatory compliance

- **Stricter regulations:** Governments worldwide are implementing stricter regulations to protect consumer data and prevent financial fraud (e.g., GDPR, CCPA and HIPAA)
- **Increased costs:** Compliance with these regulations can be costly, driving demand for security solutions that help organizations meet requirements



Digital transformation

- Increased attack surface: The shift towards digital banking and financial services has expanded the attack surface, making organizations more vulnerable to cyber threats
- Cloud adoption: The growing adoption of cloud-based solutions introduces new security challenges, such as data privacy and access control



Emerging technologies

- AI and machine learning (ML): AI and ML are being used to automate security tasks, detect anomalies and improve threat response
- Blockchain: Blockchain technology offers enhanced security and transparency for financial transactions, reducing the risk of fraud
- Quantum computing: While still in its early stages, quantum computing poses a potential threat to traditional encryption methods, driving the need for quantum-resistant security solutions



Key trends

- Cloud security: As more organizations adopt cloud-based solutions, cloud security has become a top priority
- Zero trust architecture: Zero trust principles are gaining traction, emphasizing the need to verify every request, regardless of its origin
- Security orchestration, automation and response (SOAR): SOAR platforms are helping organizations automate security tasks and improve incident response times
- Identity and access management (IAM): Strong IAM solutions are essential to protect against unauthorized access and data breaches



Challenges and opportunities

- Talent shortage: There is a significant shortage of cybersecurity professionals, making it difficult for organizations to fill critical roles
- Complex threat landscape: The evolving threat landscape requires organizations to stay informed about emerging threats and adopt proactive security measures
- Cost-benefit analysis: Balancing security investments with business needs can be challenging, as organizations must weigh the costs of security solutions against the potential risks of a data breach

The BFSI security market is dynamic and evolving rapidly in response to both technological advancements and the increasing sophistication of cyber threats. Staying ahead in this space requires ongoing investment in new technologies, regular updates to security protocols and a proactive approach to emerging threats.

For more information visit our [page](#).

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Unlock next-gen data security for BFSI

Partner with HCLTech today

Seize the future of financial services with a secure, compliant and privacy-driven infrastructure. Contact HCLTech to learn how our industry-leading architecture, powered by Intel confidential computing, can protect your data and drive innovation.

HCLTech | Supercharging
Progress™

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