TELESOFT

BUSINESS SUMMARY

AI-DRIVEN FINTECH & CYBER OBSERVABILITY

'Telesoft are stem cells for network protocols'

GROUP CTO, GLOBAL SERVICE PROVIDER

EXECUTIVE SUMMARY

Financial market infrastructure has unique requirements that traditional observability tools are unable to meet, including:

- Nanosecond accuracy
- Non-intrusive and latency sensitive data gathering
- Bespoke protocol decode and analytics
- Scalability to 400G and multi 100G links
- Consolidation of logs, data and analytics from end-to-end

While typical IT observability is about monitoring network health, system performance, and cybersecurity, financial markets have added demands, needing ultra-low latency, real-time data flow, and secure transactional integrity. Here, even a nanosecond delay can lead to significant financial outcomes, highlighting the critical need for robust security against sophisticated threats such as data breaches, DDoS attacks, and insider activity.

With Telesoft's unified observability platform, InfoSec and cybersecurity come together across both standard IT and financial infrastructures without any performance trade-offs. This platform proactively detects an array of common threats—including malware, ransomware, API vulnerabilities, and advanced persistent threats (APTs)—allowing organisations to monitor network performance, ensure transaction integrity, and maintain cybersecurity, all in real time. This ensures that financial institutions can operate securely while meeting high throughput and strict regulatory standards.

'STEM CELLS FOR NETWORK PROTOCOLS'

Telesoft's advanced observability platform delivers comprehensive visibility across financial institutions' IT and trading systems. With bespoke decode of relevant network protocols, and powered by AI and ML, the solution provides real-time detection of threats, anomalies, and compliance issues without impacting latency.

By seamlessly integrating security and performance monitoring, firms can proactively respond to emerging risks - from fraud attempts to zero-day exploits - without compromising operational speed. This positions organisations to maintain operational integrity and regulatory compliance while staying ahead of evolving digital threats in today's high-speed financial landscape.
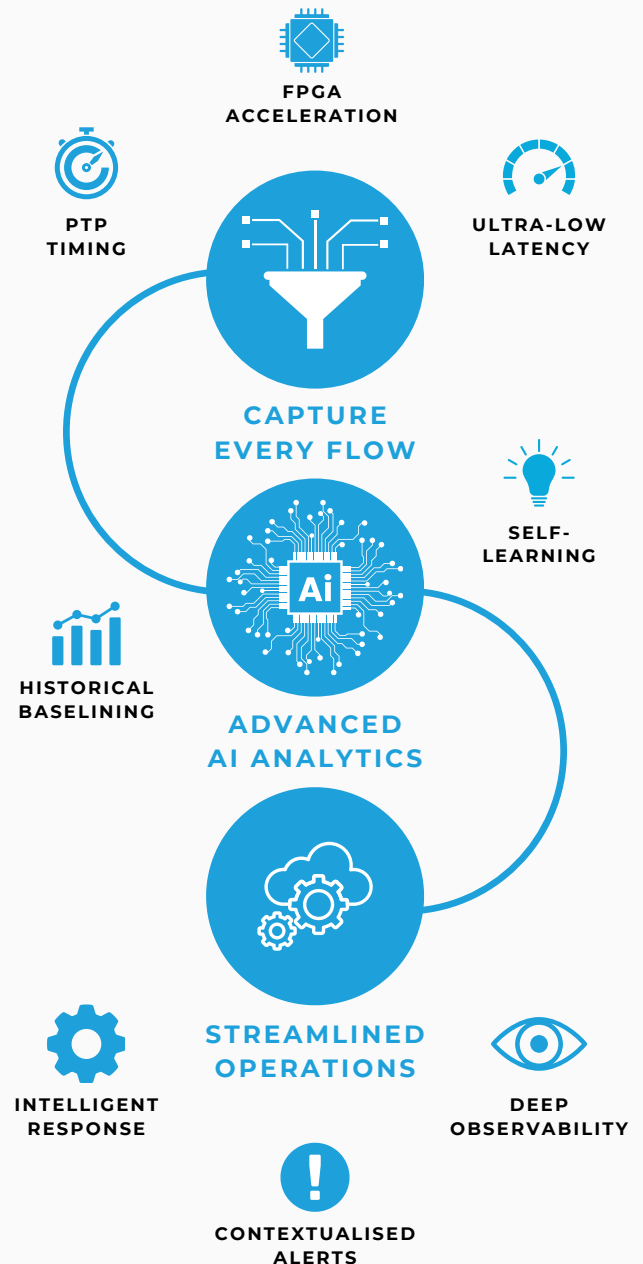
- **Hardware-Accelerated Performance:** FPGA-based architecture delivers true 400GbE monitoring with zero impact on trading latency.
- **Real-Time Protocol Analysis:** Dynamically decodes proprietary trading protocols and market data feeds for granular visibility, impossible with generic tools.
- **Advanced Anomaly Detection:** AI/ML-powered system identifies subtle trading anomalies and potential threats that conventional security solutions miss.
- **Regulatory Compliance Ready:** Enables compliance with stringent regulations like DORA, NIS2, and MiFID3 by providing the required level of detailed network visibility and security.
- **Efficient Infrastructure Design:** Compact, power-efficient solution replaces multiple racks of traditional monitoring equipment while delivering superior performance.
- **Future-Proof Architecture:** Flexible, programmable design adapts to new protocols and requirements, protecting technology investment.

TOMORROW'S
INTELLIGENCE
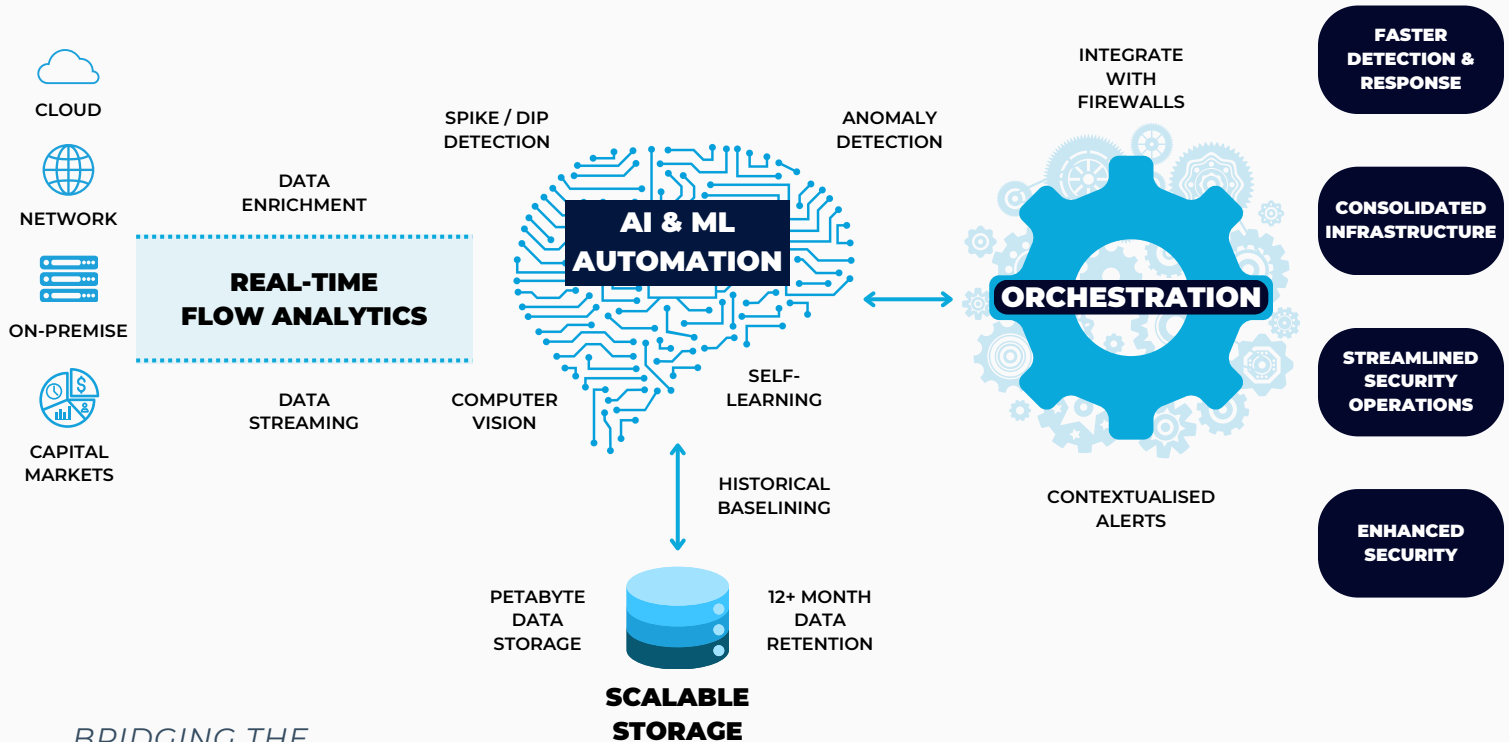TODAY

AI OBSERVABILITY WITH TELESOFT

Telesoft provides a unified observability platform, powered by custom FPGA solutions and ML-driven analytics, that does not compromise on performance or security.

Through our advanced observability tools and FPGA acceleration, organisations can seamlessly map the operations of both worlds—normal IT and financial capital markets—ensuring that ITSec and cyber security are not just integrated but empowered. This approach, enhanced by automated ML monitoring systems, allows businesses to monitor network performance, financial transactions, and IT security in real time, without adding latency.

FPGA ACCELERATION

PTP TIMING

ULTRA-LOW LATENCY

CAPTURE EVERY FLOW

SELF-LEARNING

HISTORICAL BASELINING

ADVANCED AI ANALYTICS

STREAMLINED OPERATIONS

INTELLIGENT RESPONSE

DEEP OBSERVABILITY

CONTEXTUALISED ALERTS

WHY TELESOFT?

By leveraging Telesoft's solutions, including their proprietary FPGA implementations and AI-driven analytics, financial institutions can gain comprehensive visibility into both their operational IT environments and financial market systems. This enables a proactive, automated response to threats, ensures transactional integrity, and allows real-time compliance monitoring, all without impacting system performance.

CLOUD

NETWORK

ON-PREMISE

CAPITAL MARKETS

DATA ENRICHMENT

SPIKE / DIP DETECTION

ANOMALY DETECTION

INTEGRATE WITH FIREWALLS

FASTER DETECTION & RESPONSE

REAL-TIME FLOW ANALYTICS

AI & ML AUTOMATION

ORCHESTRATION

CONSOLIDATED INFRASTRUCTURE

DATA STREAMING

COMPUTER VISION

SELF-LEARNING

STREAMLINED SECURITY OPERATIONS

CONTEXTUALISED ALERTS

ENHANCED SECURITY

HISTORICAL BASELINING

PETABYTE DATA STORAGE

12+ MONTH DATA RETENTION

SCALABLE STORAGE

BRIDGING THE OBSERVABILITY GAP WITH AI

ADVANTAGES OF AI-DRIVEN OBSERVABILITY

Operational Performance Optimisation
Minimise Downtime & Maximise Efficiency
- Precision monitoring to ensure detect faults and ensure network up time
- FPGA technology enables real-time data analysis
- Automates threat identification and response

Cost & Resource Efficiency
Reduce Operational Expenses
- Automates security event triage
- Eliminates manual workloads
- Consolidates multiple monitoring tools into single platform
- Reduces need for extensive security staffing

Advanced Security Coverage
Proactive Risk Mitigation
- AI-driven continuous network monitoring
- Identifies hidden threats and unusual behaviours
- Adapts to emerging risks automatically

Regulatory Compliance & Trust
Ensure Operational Resilience
- Automated monitoring aligned with DORA and NIS2 requirements
- Reduces compliance-related risks
- Builds stakeholder confidence through robust security framework