

Scalable, Transparent, Trusted: IMTF's Hybrid AI Approach to Financial Crime

From its headquarters in Switzerland and operations across the globe, IMTF is redefining how financial institutions combat financial crime—leveraging a hybrid AI approach that combines real-time analytics with explainable, rules-based compliance.



Since its founding in 1987, the company has evolved from a pioneer in document management to a global leader in regulatory technology. As financial crime costs the global economy up to \$2tn annually, according to the United Nations, the stakes couldn't be higher.

IMTF is transforming compliance from a reactive burden into a predictive, intelligent operation. In an exclusive interview with FinTech Global as part of the prestigious FinCrime50, IMTF's co-CEO Dr. Sebastian Hetzler, laid bare the company's journey, its game-changing technology, and its vision for a future where financial crime is not just managed but anticipated.

A vision for change

IMTF's story began nearly four decades ago with a bold ambition: to lead businesses into the digital age. "IMTF was founded in 1987 with a clear vision: to help businesses embrace digital transformation through innovative technologies," Hetzler explains.

Initially focused on document management and process automation, the company quickly became a trusted partner for streamlining complex workflows. By 2002, IMTF

identified a growing need in the emerging anti-money laundering (AML) space. "We recognised that compliance operations would increasingly demand more efficient, accurate, and scalable tools," Hetzler recalls.

Today, IMTF's solutions are used by financial institutions worldwide to detect financial crime with unmatched precision. In 2023 alone, global AML spending reached \$13.2bn, underscoring the magnitude of the challenge.

A decade of AI-driven milestones

IMTF began investing in AI more than a decade ago—not for hype, but to solve real-world problems for its clients. The result: a steady stream of innovations that have redefined compliance technology.

In 2015, IMTF launched Intelligent Name Screening, dramatically reducing false positives in watchlist screening. By 2019, it introduced Advanced Analytics to uncover hidden compliance risks, followed by Smart View in 2020—bringing investigators contextual, AI-powered insights through visualisations.

Further advances included OCR (Optical Character Recognition) document intelligence, via a partnership with Parashift, the Transaction Deviation Score, and in 2023, a full suite of detection tools: the Alert Prediction Score (APS), Entity Behavioural Clustering (EBC), and the Entity Deviation Score (EDS).

Most recently, IMTF introduced GenAI-powered Alert Summaries, using natural language generation to produce readable, investigator-friendly narratives—reducing cognitive load and improving case clarity.

These advances have cemented AI as the backbone of Siron®One, IMTF's flagship compliance platform that now powers detection, triage, and investigation—with transparency and trust at its core.

AI's revolution in compliance

The broader compliance landscape is undergoing a seismic shift, and AI is at its heart. "AI is fundamentally reshaping the compliance landscape," Hetzler asserts.

"Traditionally, teams relied on rigid rule sets and reactive workflows—often overwhelmed by rising alert volumes and false positives. AI introduces precision, speed, and adaptability."

AI enables "faster identification of genuinely suspicious behaviour, reduces manual effort, and lets analysts focus on what truly matters", Hetzler explains.

The industry is moving toward an "AI-first" approach, aligned with the Financial Action Task Force's risk-based model, where AI prioritises cases based on actual risk.

"As a result, compliance is becoming more predictive, efficient, and data-driven," Hetzler notes.

Siron®One: A comprehensive AI arsenal

Siron®One is a masterclass in applied AI—integrating a full suite of tools across the compliance lifecycle. It transforms compliance from a traditionally reactive function into a proactive, intelligence-driven process.

Key tools include:

- Alert Prediction Score: Learns from historical investigations to prioritise true positives.
- Entity Behavioural Clustering: Groups customers based on behaviour and flags risky deviations.
- Entity Deviation Score: Detects subtle behavioural outliers within peer groups.
- Intelligent Name Screening: Uses machine learning to sharpen sanctions screening accuracy and speed.
- Smart View: Provides contextual visualisations that simplify investigations.
- GenAI Alert Summaries: Converts complex data into clear, human-readable summaries for investigators.

"Together, these tools transform compliance into a smarter, more focused operation," Hetzler says. "Siron®One doesn't just make compliance faster—it makes it more effective."

What sets IMTF apart is its hybrid AI approach, which marries explainable rules with advanced analytics. "Our hybrid AI approach combines the best of both worlds through human-in-the-loop design," Hetzler explains, citing "explainable, audit-proof rules working alongside precise AI-scores" and "preconfigured models for minimal implementation effort."

This flexibility allows clients to adopt AI at their own pace, building trust without sacrificing control.

Overcoming scaling challenges

Scaling AI in compliance has been no easy task. "Scaling AI in compliance extends beyond mere technological advancement; it encompasses integration, trust, and

adherence to regulatory standards," Hetzler acknowledges.

Key challenges include integrating solutions into clients' diverse infrastructures and ensuring trust in AI outputs.

IMTF's response has been strategic. "We've adopted a container-based architecture, enabling modular, cloud-ready deployment," Hetzler says, ensuring a performant and cost-sensitive infrastructure that scales with the needs of operations.

To build trust, IMTF prioritises explainable AI, with models designed to provide clear, auditable insights. Data quality is addressed through robust onboarding frameworks and client collaboration to fine-tune models.

Trust is the bedrock of IMTF's client relationships.

"Transparency and trust are foundational to our approach," Hetzler says. "We embed explainability into every layer of our AI models—providing clear visibility into how scores are calculated, what data is used, and why a specific case is flagged."

Analysts can trace logic, compare cases, and override decisions, ensuring control remains human.

Siron®One's configurability, allowing clients to adjust rules, thresholds, and workflows, further cements trust. "Nothing is hardcoded or enforced—our platform adapts to the institution, not the other way around," Hetzler emphasises.

The road ahead

As IMTF looks to the future, innovation remains its guiding principle. "A key focus is the advancement of AI-powered decision support, particularly through co-pilot features and the integration of agentic AI elements," Hetzler shares—supercharging AML programs in terms of effectiveness and efficiency by keeping the human as last decision-maker.

GenAI will expand to support dynamic case narratives and SAR drafting, while real-time alert triage will help teams prioritise effectively, freeing up investigators to focus on strategic decision-making.

IMTF is also scaling Siron®One globally, running pilots to validate AI scores in real-world settings and working toward certification for its machine learning models. Other priorities include enhancing decision behaviour analysis and monitoring model performance to prevent drift.

"Our innovation roadmap remains anchored in three pillars: transparency, control, and real-world impact," Hetzler concludes. "We're not just adding AI—we're transforming how compliance teams operate with scalable, human-centered intelligence—built on over three decades of proven innovation in compliance technology."●