

# AI CAN HELP FRAUD DEFENCE AND AML WORK TOGETHER: **EVERYONE WILL BENEFIT**

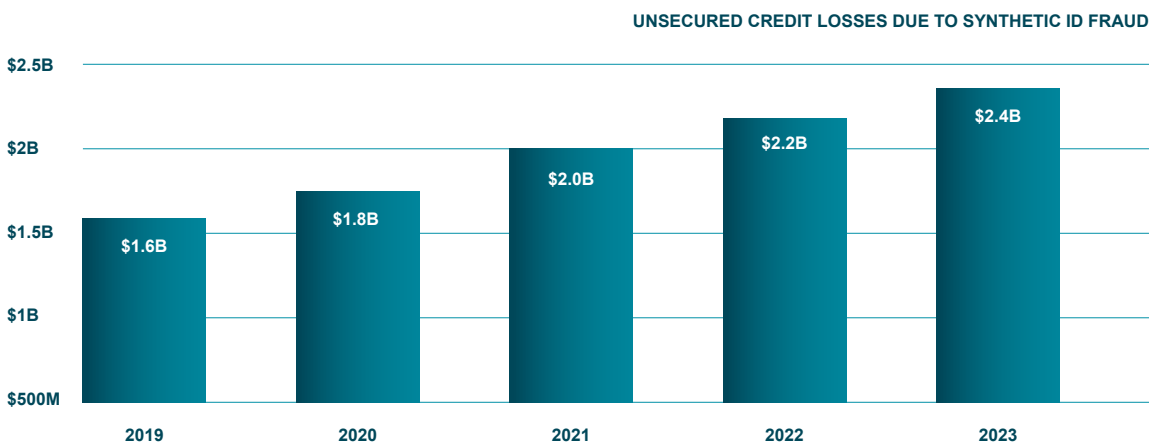


Criminals are becoming more professional, while financial institutions face increasing cost pressures and growing compliance burdens. These factors make improving operational efficiency and getting better value from fraud defense essential. **Halyna Hermanns** and **Dr. Stephan Lemkens** from **INFORM GmbH** explain why banks should bring their fraud and AML functions together – and how technology can help make this happen.



Europe’s financial institutions may pride themselves on their rigor and ingenuity – but the world’s criminals are proving just as nimble and creative. In recent years, new fraud types such as Account Takeover and Synthetic ID fraud have rocketed both in terms of attack frequency and value lost to fraud. Criminals are even offering “Crime as a Service” on sites on the DarkNet, promising to procure sums of money from financial scams to order.

**New fraud types like Synthetic ID are up 50% in 5 years**  
American Banker

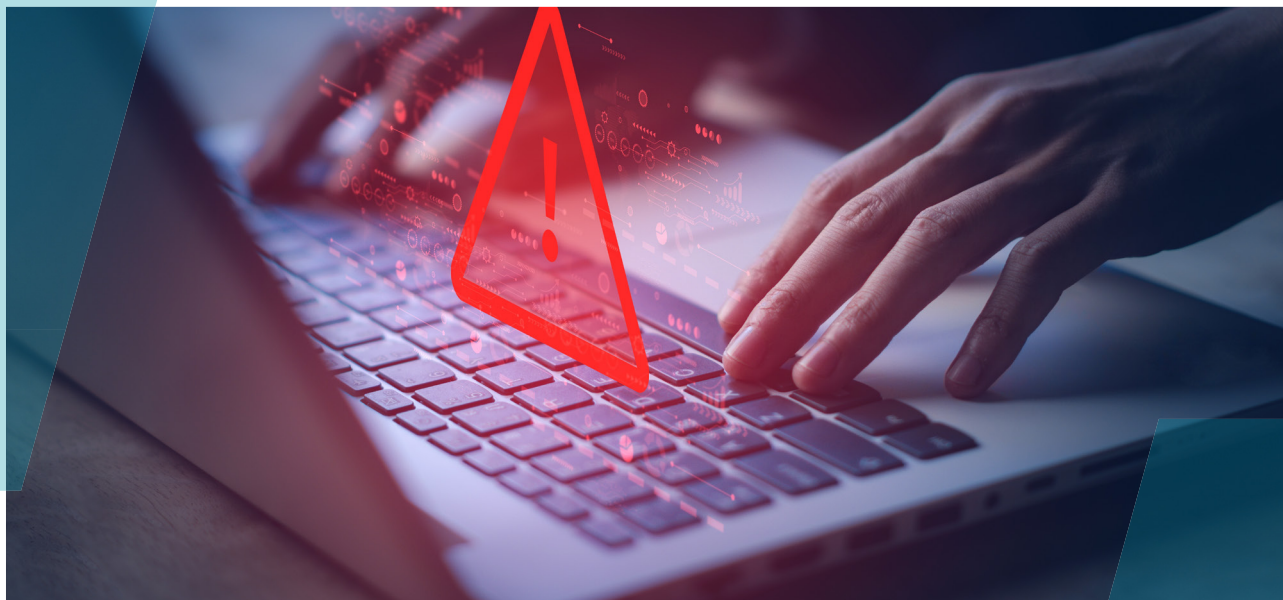


The dynamics of the global economy present their own challenge for financial institutions as the move to digital transactions and growth in cross-border e-commerce make it harder to track key data such as source of funds, ultimate beneficial ownership and more. To cap it off, Europe's banks and fintechs are grappling with a host of new regulatory demands, from the EU's Digital Operational Resilience Act (DORA), due in January 2025, to a new, expanded rulebook announced by the Anti-Money Laundering Authority (AMLA) in December last year<sup>1</sup>.

While incoming regulatory burdens carry cost implications and financial penalties for non-compliance, that's not the end of the story. At a time when investors are looking for improved revenues and margins, banks also have to battle for qualified, experienced Fraud and AML talent – despite Fraud and AML having several skill-sets in common. To thrive in this difficult context, banks must think smarter to improve performance, maintain customer satisfaction and deliver shareholder value.

1. See European Council, 7 December 2022, "Council agrees its position on a strengthened rulebook": <https://www.consilium.europa.eu/en/press/press-releases/2022/12/07/anti-money-laundering-council-agrees-its-position-on-a-strengthened-rulebook/>





## AI: a new era for Fraud and AML

Artificial Intelligence (AI) has brought a host of benefits to fraud defense in recent years. Previous waves of AI have improved banks' ability to spot anomalies in transaction data, identify fraudulent behaviour patterns and automate certain fraud detection functions, as well as automating compliance with certain AML rules at national and international levels. One 2020 survey of global banks<sup>2</sup> found 80% agreed that AI reduced payments fraud, while 63% said AI was a valuable tool for preventing fraud attempts before they happened. In talks with AML and financial crime heads of 14 major North American banks, McKinsey<sup>3</sup> discovered that over 80% had begun integrating machine learning solutions, expecting substantial efforts in embedding them within their AML programs over the next 2-3 years.

**“80% of global banks agree that AI is a powerful tool for reducing payments fraud; 80% of North American banks have integrated ML solutions in their AML programs.”**

Meanwhile, a new era of generative AI solutions has only just begun to make its presence felt. Generative AI uses Machine Learning (ML) to produce various types of content, including text, imagery, audio and synthetic data. In the area of AML, AI can be used to analyze large amounts of data. In addition, it helps optimize the validation of expert rules, for example, in

2. See PYMNTS, 1 December 2020, “How AI and ML improve fraud detection”: <https://www.pymnts.com/fraud-prevention/2020/ai-ml-improve-fraud-detection/>

3. See McKinsey & Company, October 7 2022, “The fight against money laundering: Machine learning is a game changer”: <https://www.mckinsey.com/capabilities/risk-and-resilience/our-insights/the-fight-against-money-laundering-machine-learning-is-a-game-changer/>

the enhanced detection of false positives. Examples include very high volumes of low-value transactions (as seen in gaming micropayments), and repeated transactions just below so-called “flag levels” set by banks above which transactions are subject to greater scrutiny.

At **INFORM**, we believe that Fraud and AML teams should be using a single, shared technology to benefit everyone: Our software solution therefore collects cross-organizational data from all application areas and merges it into a 360° profile of a customer. By using shared resources, financial institutions can strengthen their overall risk management thanks to improved collaboration and communication between Fraud and AML teams.

Through this approach, financial institutions will also improve fraud detection rates, speed up case handling and reduce the requirement for manual engagement in their Fraud and AML functions, creating greater operational efficiency. There are a number of specific AI typologies that can help to improve performance, including:

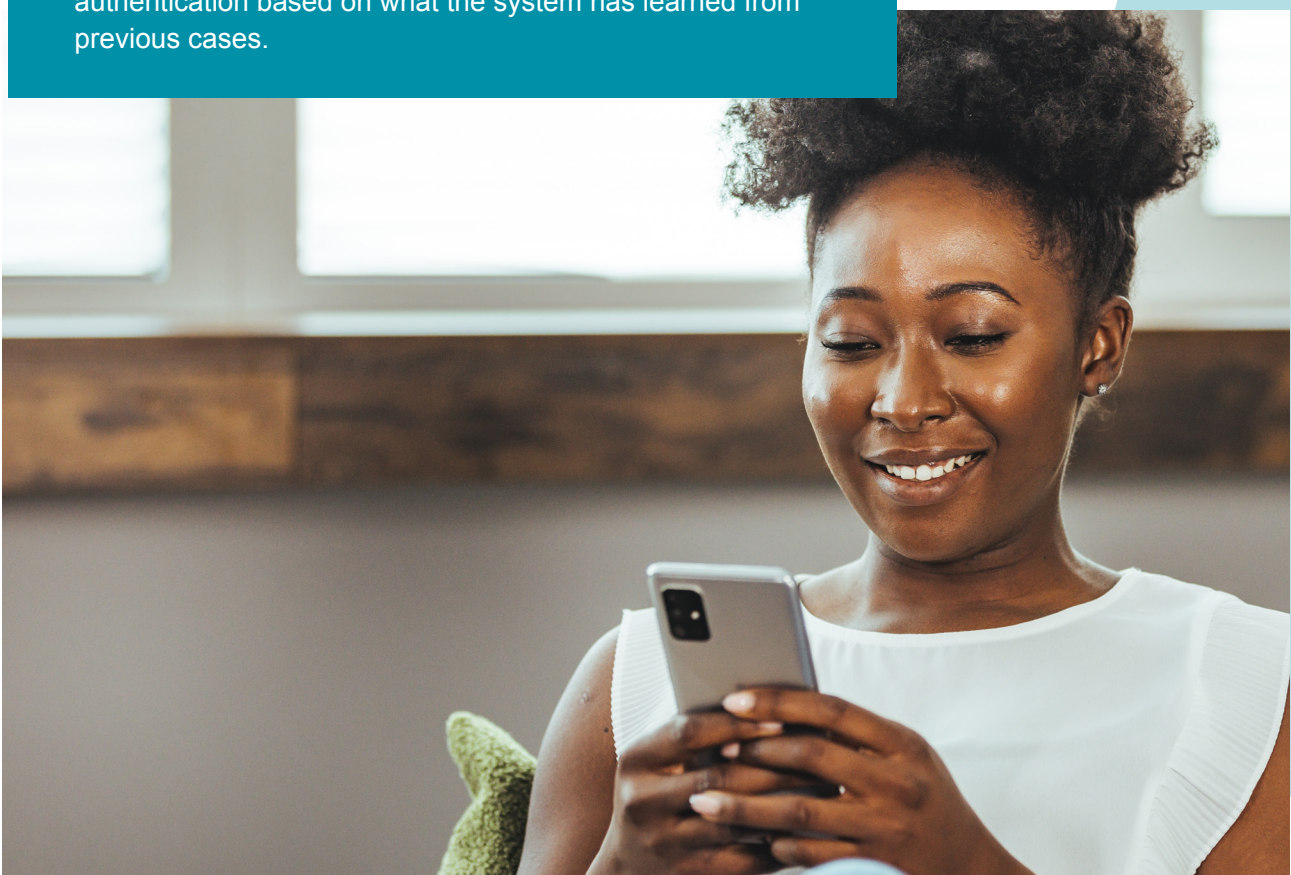
**Data-driven AI and Machine Learning.** With the ability to analyze large amounts of data quickly and accurately, Machine Learning (ML) algorithms detect patterns indicative of fraudulent or risky activity, even if those patterns are new or unknown. They also improve the accuracy of fraud detection and risk analysis. This helps organizations avoid emerging threats and identify potential fraud that may have gone undetected using traditional methods. For example, banks can develop dynamic customer typologies that change based on new customer behaviours and data – not limited to fraud events, but including significant changes in purchase patterns, frequency and other metrics as well. Using data-driven AI also helps banks to reduce their spending on the investigation of false positives and non-reportable events.

**Knowledge-based Expert Systems.** As regulatory requirements and rules (such as the forthcoming AMLA global rule book or DORA) become more complex, Knowledge-based Expert Systems enable these rules to be quickly implemented. Expert rule systems are designed to be fast and efficient, enabling the processing of large amounts of data in real time. They are well-suited to applications where speed is critical, such as AML in instant payments, card transactions and real-time interaction scenarios.

Knowledge-based Expert Systems rely on pre-defined rules developed by subject matter experts with a deep understanding of the specific business processes involved. This allows for easy updates to reflect changes in the business environment or new types of fraud. These systems reduce false positives, in which legitimate transactions are flagged as potentially fraudulent, reducing the workload for fraud investigators and improving overall efficiency. However, they are limited by the rules' scope and unable to detect new, unknown fraud patterns. Also, the rule creation and maintenance process can be time-consuming and costly.

**Hybrid AI.** Compared to Data-driven AI or Expert Systems, Hybrid AI enables more profound, real-time analyses of transactional data, mitigating risk during high-speed situations such as instant payments. Instead of relying solely on data-driven machine learning methods, Hybrid AI technology blends machine learning with knowledge-driven techniques such as fuzzy logic-based scenarios and watch lists as well as dynamic profiling. This allows for effective fraud detection even when data is complex or imprecise.

Hybrid AI has a wide range of applications, including the automatic preparation of cases for review by internal staff or regulators, escalation of suspected fraud cases to the appropriate defense lines, or seeking additional client authentication based on what the system has learned from previous cases.





## RiskShield: a smart response to shifting threats

INFORM is constantly refining RiskShield to respond to the ever-changing landscape of threats that financial institutions face. Conceived from the outset as a flexible resource for Fraud and AML professionals, RiskShield provides a customer-centric, reliable, and fast software response to protect your organization against financial crime. It leverages Hybrid AI technology to deliver holistic monitoring across various application areas within financial institutions. To achieve even better results, RiskShield's solution uses the latest Machine Learning methods to ensure highly effective and always up-to-date fraud detection and prevention. With the ability for rule writers, data analysts, and case investigators to gain complete and transparent insights into all decisioning, the solution offering is not only audit-proof but can act as "one single point of truth" for all users across the complete customer life-cycle.

## Fraud and AML – coming together to deliver better

By sharing resources between Fraud and AML, banks can create a 360-degree view of all their customer engagements – rather than just seeing transaction information related to possible fraud or compliance rule breaches. By working more efficiently, costs can be reduced in various areas. A higher hit rate in case processing, for example, ensures that irrelevant cases are sorted out faster, while actual fraud cases can be examined in a more targeted manner. Dealing with just one system also means that operational costs for that system are also reduced.

“By sharing information from a single resource, bringing Fraud and AML together will lead to more effective problem-solving.”

From an operational point of view, banks can strengthen risk management across the board by becoming more responsive to dynamic risks. The implementation of new regulatory requirements and rules is also faster and more accurate, and likewise fraud detection and the identification of AML violations.

By sharing information from a single resource, Fraud and AML professionals can better identify patterns in AML breaches and fraudulent behavior. Bringing Fraud and AML closer together will lead to more effective problem-solving, including the rapid identification of new fraud types, changes in customer behaviors and more.

## AI: powering the future for AML and Fraud

At a time when banks are caught between investor pressure to improve revenue and margins on the one hand, and the need to deliver improved fraud and AML performance on the other, creating shared resources between Fraud and AML teams makes sound business sense. More than this, new shared solutions powered by learning AI can deliver real benefits – from reduced costs to improved performance – while opening the door to enhanced innovation by internal Fraud and AML teams, including the more rapid detection of new fraud types and a better understanding of customer behavior patterns.





To learn more about shared resources for  
your Fraud and AML functions, contact:

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