# Seizing the Potential of AI to Detect Emerging Financial Crime Risks

# 掌握以人工智能檢測新金融犯罪風險的潛力

*The landscape of Financial Crime Compliance (FCC) is undergoing a significant transformation due to the accelerated adoption of Artificial Intelligence (AI). While many discussions centre around optimising existing processes, the real potential of AI lies in its ability to detect new and emerging FCC risks that traditional systems may overlook. As financial institutions grapple with increasingly sophisticated illicit activities, AI offers innovative solutions to enhance compliance frameworks and protect both customers and the integrity of the financial system.*

人工智能（AI）的採用日趨頻繁，金融犯罪合規（FCC）的發展也因而有重大改變。雖然許多討論都圍繞優化現有流程展開，但AI的真正潛力在於它能夠檢測傳統系統可能忽略的新興和正蘊釀的FCC風險。金融機構正致力應對日益複雜的非法活動，AI提供了創新的解決方案以增強合規框架，並保護客戶和金融系統的誠信。

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recent development is the use of virtual assets. Criminals are increasingly leveraging technology, cryptocurrencies, and global networks to obscure their activities. This necessitates a proactive approach to FCC, focused on identifying patterns and anomalies that could indicate illicit behaviour.

The unique advantages of AI give it an edge in combating financial crime. Rule-based systems often rely on historical data and predefined parameters, which limit their effectiveness in detecting novel risks – an approach that is no longer sufficient in the modern-day fight against illicit activities.

AI, particularly machine learning (ML) algorithms, can analyse vast amounts of data from diverse sources, enabling banks to identify previously unknown risk indicators. For instance, AI can detect unusual transaction patterns, correlations between seemingly unrelated activities, or emerging trends in financial behaviour that may signal money laundering attempts.

FCC risks have become the new normal. Coupled with geopolitical tensions and emerging risks such as those that serve national interests and the trafficking of Fentanyl, which can be linked to US trade tariffs, we can only expect to see a continued level of enforcement by local regulators. The arrest in February 2024 of a group linked to Hong Kong's largest-ever money laundering case involving HKD14 billion (USD1.8 billion), serves as a reminder of how these risks have embedded themselves into the fabric of society.

Such cases have highlighted that money laundering is no longer limited to conventional methods. A

FCC 風險已成為新的常態，加上地緣政治局勢緊張和其他新冒起的風險，例如有關國家利益和走私芬太尼的風險，這些都與美國的貿易關稅有關。我們只能期待本地監管機構繼續保持執法水平。2024 年 2 月，一個與香港有史以來最大洗錢案有關的集團被捕，涉案金額達 140 億港元（18 億美元），顯示這些風險已深入社會結構。

這類案例突顯洗錢不再局限於傳統方法，最近的發展是虛擬資產的使用。犯罪分子越來越多利用技術、加密貨幣和全球網路來掩飾活動，這需要積極主動採取 FCC 行動，專注於識別存在非法行為的模式和異常情況。

AI 在打擊金融犯罪方面具有獨特優勢。以規則為本的系統通常依賴歷史數據和預定參數，這限制了檢測新風險的有效性——用這種方法打擊現時的非法活動已捉襟見肘。

AI，尤其是機器學習（ML）演算法，可以分析來自不同來源的大量數據，使銀行能夠識別未知的風險跡象。例如，AI 可以檢測異常的交易模式、看似無關的活動之間的相關性，或者預示洗錢企圖的金融行為新趨勢。

While ML algorithms are already being used by many banks to detect sophisticated tactics such as layering transactions across borders or exploiting vulnerabilities in digital currencies, their potential extends far beyond these applications. The real question remains: what other possibilities are being overlooked?

Rather than focusing solely on post-transaction analysis, AI can pave the way for more predictive methods of detection. Predictive detection does not mean gazing into a crystal ball; it means establishing an early warning system that identifies the onset of risk outbreaks within operations. This allows for faster response times, more effective containment, and ideally, the sharing of critical information to prevent wider spread.

For AI to reach its full potential, it needs to be embraced not just by compliance departments, but also by all business units as an integral part of doing business and driving growth. In this era of cost-cutting and evolving operating models, the second line of defence plays a

雖然許多銀行已經使用ML演算法來檢測複雜的策略,如跨境多層交易或利用數碼貨幣的漏洞,但這些技術的潛力遠遠超出了這些應用。真正的問題仍然存在:還有哪些其他可能性被忽略了?

AI不止於專注交易後分析,還可以為更具預測性的檢測方法鋪路。預測性的檢測方法並不是說有水晶球可以預測未來,而是建立一個早期預警系統,識別營運中可能出現的風險。這樣可以加快反應時間,更有效地阻截風險,並在理想情況下共享關鍵資訊,防止更廣泛的傳播。

使AI充分發揮潛力,不僅需要合規部門採納AI,所有業務單位也要把AI視作開展業務和推動增長不可或缺的一部分。在這力求削減成本和營運模式不斷發展的時代,第二道防線在風險管理中至關重要。然而,業務單位本身必須推動AI規劃向前發展,因為最終還是由他們負責管理營運中的風險。

> *The proactive adoption of AI will be crucial for safeguarding the integrity of the financial system.*

crucial role in risk stewardship. However, it is the business units themselves that must drive the AI agenda forward, as they are ultimately responsible for managing the risks within their operations.

### Three steps banks can take to transform their anti-money laundering frameworks

To fully harness the potential of AI in detecting new anti-money laundering (AML) risks, banks must undertake a strategic transformation of their compliance frameworks.

1. **Invest in robust data infrastructure.** The effectiveness of AI in AML hinges on the quality and accessibility of data. Banks need to invest in robust data infrastructure that can centralise and integrate disparate data sources, enabling real-time processing and seamless information flow across departments. This includes ensuring data accuracy, relevance, and timeliness through robust data governance policies. Additionally, creating a centralised repository will provide analysts and compliance officers with the readily available data they need for effective monitoring and analysis.

### 銀行改革反洗錢框架的三個步驟

為了充分利用 AI 在檢測新反洗錢風險的潛力，銀行必須對其合規框架進行戰略轉型。

1. **投資於強大的數據基礎設施。** AI 在反洗錢中的有效性取決於數據的質素和是否容易取得。銀行需要投資於強大的數據基礎設施，以集中和融合不同的數據來源，從而實行實時處理和跨部門的無縫資訊流通。這包括通過強大的數據管理策略確保數據的準確性、相關性和及時性。此外，建立集中儲存庫將為分析師和合規主管提供有效監控和分析所需的現成數據。

2. **建立跨職能團隊。** 許多銀行的團隊結構已經過時，需要進行重大改變。為了有效利用 AI，銀行需要建立跨職能團隊，利用技術、合規和風險管理的專業知識，將網路犯罪和欺詐結合起來處理。這些團隊可以在結構上聯成一體，而不僅僅是協作，以開發和實施針對銀行或金融機構的獨特風險，量身定製以 AI 驅動的解決方案。



> " 積極採用 AI 對於維護金融體系的誠信至關重要。 "

2. **Build cross-functional teams.** The team structures many banks have today are outdated and need significant change. To leverage AI effectively, banks need to establish cross-functional teams – this includes combining cybercrime and fraud – that utilise expertise in technology, compliance, and risk management. These teams can combine structurally, not just collaborate, to develop and implement AI-driven solutions tailored to the bank or financial institution's unique risk profile.

This approach should include fostering open communication between IT, compliance, and business units to ensure that AI tools align with organisational goals. Equally important is providing comprehensive training programmes for staff to develop a strong understanding of AI technologies and their implications for AML. This knowledge empowers teams to make informed decisions and contributes to a more robust AML framework.

3. **Embrace a culture of innovation.** A cultural transformation is critical for the successful adoption of AI in AML. Banks need to foster an environment that encourages innovation and experimentation with new technologies. This cultural shift can drive the development of creative solutions to emerging AML challenges. To achieve this, banks can implement several strategies. For example, launching pilot projects allows banks to test AI applications in specific areas of AML, providing valuable insights and demonstrating the potential impact of AI on compliance efforts. Equally important is establishing mechanisms for continuous feedback and improvement, encouraging teams to share their experiences with AI tools and suggest enhancements.

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> *To fully harness the potential of AI in detecting new anti-money laundering (AML) risks, banks must undertake a strategic transformation of their compliance frameworks.* 99

這種方法應包括促進IT、合規和業務單位之間的開放式溝通,確保AI工具與機構目標保持一致。同樣重要的是,為員工提供全面的培訓計劃,以深入了解AI技術及其對反洗錢的作用。這些知識使團隊能夠作出明智的決策,並有助於建立更強大的反洗錢框架。

3. **擁抱創新文化。**文化轉型對於成功採用AI進行反洗錢起關鍵作用。銀行需要營造鼓勵創新和試驗新技術的環境,這種文化轉變可以推動開發創造性的解決方案,以應對層出不窮的反洗錢挑戰。要實現這一目標,銀行可以實施多種策略。例如,啟動先導計劃,在反洗錢的特定範疇測試AI應用程式,提供有價值的觀點,並顯示AI對合規工作的潛在影響。同樣重要的是建立持續回饋和改進的機制,鼓勵團隊分享他們使用AI工具的經驗並提出改善建議。

## The importance of a collaborative ecosystem

The fight against financial crime cannot be won in isolation. The borderless nature of modern financial crime necessitates regulatory synergy – a harmonised approach to combating financial crime across jurisdictions. To address this, Hong Kong's regulators are increasingly aligning with international frameworks such as the Financial Action Task Force (FATF) to promote consistency in AI-driven compliance practices. This effort includes adopting universal definitions for high-risk transactions and coordinating with overseas counterparts to trace cross-border illicit flows, such as those linked to decentralised finance (DeFi) platforms.

Enhancing AI-driven FCC frameworks also depends on strong collaboration between financial institutions, regulators, and technology providers. This is being demonstrated in the increasing partnerships between financial institutions, third-party data analytics companies, and Regtech start-ups to co-develop innovative detection methods.

## 協作生態系統的重要性

獨力打擊金融犯罪難以取勝。現代金融犯罪無分國界，需要監管協作，互相協調，才可以打擊跨司法管轄區的金融犯罪。為解決這問題，香港監管機構已致力與財務行動特別組織（FATF）等國際框架協調，以促進與AI驅動的合規措施的一致性。有關工作包括為高風險交易作出通用定義，並與海外同行協力追蹤跨境非法資金流動，例如與去中心化金融（DeFi）平台相關的非法資金流動。

增強AI驅動的FCC框架還取決於金融機構、監管機構和技術供應商之間的緊密合作。金融機構、第三方數據分析公司和金融合規科技初創公司之間的合作夥伴關係日益緊密，正合力開發創新的檢測方法。

香港金融管理局（金管局）在促進協作生態系統發揮重要作用。推動採用反洗錢金融合規科

The Hong Kong Monetary Authority (HKMA) plays an important role in fostering this collaborative ecosystem. Promoting the adoption of AML Regtech continues to be one of the HKMA's key supervisory focuses, and more broadly, new avenues for AI use case testing are continually being introduced to support the financial services industry. The HKMA's Generative AI sandbox, for example, provides a controlled environment for banks to validate AI use cases under regulatory supervision and receive feedback to ensure compliance.

As regulatory expectations evolve, so must AI governance. Recent guidelines from the Securities and Futures Commission of Hong Kong and the HKMA emphasise strong AI governance for processes including know your client or customer (KYC) and AML checks. Banks are advised to integrate human oversight into AI workflows, such as deploying hybrid systems where algorithms flag suspicious activities for final review by compliance teams.

With Hong Kong regulators accelerating the issuance of new AI guidelines, it is crucial for financial institutions and AI developers to leverage this increased guidance and support. Early collaboration with regulators is essential to ensure that financial institutions adapt to policy shifts and embed compliance into AI design from the outset.

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技是金管局的主要監管重點之一。在更闊的層面上，金管局將繼續引入AI檢測的新途徑，以支援金融服務業。例如，金管局的生成式AI沙盒為銀行提供可控環境，以便在監管下檢測AI使用案例，並接收回饋以確保合規。

隨著監管期望演進，AI管理也須同步並進。香港證券及期貨事務監察委員會和金管局最近的指引強調對業務程序進行強力AI管理，包括了解您的客戶（KYC）和反洗錢檢測。建議銀行將人工監督整合到AI工作流程中，例如部署混合系統，讓演算法標記可疑活動，供合規團隊進行最終審查。

隨著香港監管機構不斷推出新的AI指引，金融機構和AI開發人員必須善加利用這些新加的指導和支援。盡早與監管機構合作，對確保金融機構適應政策變化，並在初始階段時將合規性納入AI設計至關重要。

## Conclusion

The recent 2025-26 Budget signalled a strong commitment to supporting AI innovation, with the Financial Secretary noting the potential technology presents to reshape key business and economic sectors, including banking and financial services. Hong Kong's openness to trying new things has long been a part of its success, and as banks embark on a wider digital transformation journey, AI should be at the forefront, with AML representing a critical area for AI application.

The proactive adoption of AI will be crucial for safeguarding the integrity of the financial system. With the right strategies in place, banks and financial institutions can not only meet regulatory requirements but also protect their customers and contribute to a more secure financial environment. However, the true potential of AI in AML lies not simply in meeting existing expectations but in exceeding them. By embracing a future-oriented approach, one that anticipates evolving criminal methodologies and leverages AI's predictive capabilities, banks and financial institutions can move beyond a reactive stance and become architects of a more secure and resilient financial system. **BT**

## 結論

剛發表的2025-26年度財政預算案顯示出堅定支援AI創新的承諾,財政司司長指出,技術潛力將重塑包括銀行和金融服務在內的主要商業和經濟行業。長期以來,香港之所以成功,一個原因是對嘗試新事物持開放態度。隨著銀行推廣更廣泛的數碼化轉型,AI應該走在最前端,而反洗錢則是AI應用的關鍵領域。

積極採用AI對於維護金融體系的誠信至關重要。通過實行正確的策略,銀行和金融機構不僅可以滿足監管要求,還可以保障客戶,為更安全的金融環境作出貢獻。然而,AI在反洗錢領域的真正潛力,不僅在於滿足現有期望,還在於超越預期。採用面向未來的方法,預測不斷發展的犯罪手法,並利用AI的預測能力,銀行和金融機構可以超越被動的立場,成為更安全、更穩健的金融體系建構者。**BT**

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