人工智能在合規及監管中的應用

Dr Alexander Ressos, TEP
Attorney-at-Law (Switzerland and Germany),
Solicitor (England & Wales and Hong Kong)
Of Counsel, KGP Legal LLC
alexander.ressos@kgplegal.com.sg
www.ressos.com.sg

交易監察與金融罪行

合規是人工智能最具潛力、亦最需審慎處理的應用領域之一。傳統的交易監察系統會產生大量警報，其中大部分經人手審查後證實並無根據。機器學習模型可按警報屬實的可能性排序，偵測跨帳戶的模式，並分析新聞報道等非結構化資訊。MAS觀察到，銀行普遍在打擊洗錢系統及欺詐偵測中使用這類模型。監管上的危險是雙向的。模型若壓下真正的警報，銀行便可能違反第H部分探討的打擊洗錢規則。模型若無法解釋其結果，在監管機構或法院面前便難以辯護。MAS把監管風險列為人工智能的主要風險之一，並舉例指出，用於支援打擊洗錢工作的模型若表現欠佳，便構成這類風險。[1]

這類模型所依賴的數據亦已改變。自2024年4月1日起，六家主要商業銀行可透過COSMIC分享顯示多個警號的客戶的資訊。COSMIC是MAS根據《2023年金融服務及市場（修訂）法》與這些銀行共同推出的數碼平台，初期集中處理法人被濫用、貿易融資被濫用及擴散融資三個範疇。[2]這類平台提供結構化的信號，可供分析模型加以利用。其法律框架及對打擊洗錢的意義，在第H部分討論。

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第三方模型與集中風險

大多數機構向少數全球供應商購買生成式模型。MAS指出由此產生的三項風險：預訓練數據帶來的未知偏差、資料保護方面的疑慮，以及集中風險，即眾多機構依賴相同的底層模型。銀行的應對措施包括補償性測試、應變計劃，以及修訂合約，訂明表現保證、資料保護、審計權，並規定供應商在現有服務中引入人工智能時須作出通知。[3]

最終定稿的指引確立了原則。機構或許無法強制第三方供應商採用穩健的風險管理做法，但仍須就第三方人工智能在機構內的使用方式，以及對客戶和其他持份者可能造成的影響負責。[4]第E部分第I章探討的外判及科技風險管理規則同時適用。

事故、監察與應變

指引把人工智能事故界定為涉及底層系統或模型失效、故障或表現欠佳的事故。MAS決定不為這類事故另設申報制度。不論根本原因為何，機構須繼續按現行科技風險及業務持續規定申報事故。風險重要性高的應用案例須設有應變計劃。會自動更新的模型，例如強化學習系統，須受更嚴格的監察，因為其行為可在運作期間於無人參與的情況下演變。[5]

就代理式系統而言，監察應伸延至各工作流程中的資訊流及決策路徑，包括推理過程、所採取的行動及所使用的工具。這種監察令機構能夠重構代理鏈中的個別行動，並找出故障源頭。MAS亦建議，可把工具及系統的存取範圍作為風險重要性的另一個衡量維度，因為權限廣泛的代理會加劇數據外洩的風險。[6]

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監管機構本身對數據的運用

自設立首席數據官一職以來，MAS已在本身工作中應用數據分析；FEAT原則公布時，該職位由David Hardoon出任。監管人員利用分析工具處理監管申報表、篩查可疑交易報告及偵測濫用市場的模式。[7]這些工具並沒有改變監管關係本身。它們協助監管機構挑選值得關注的機構及交易，而評估仍屬人的判斷，並按第E部分第I章所述的法例行使。

註釋

1. MAS，Information Paper，2024年12月，第2.1段：以決策樹為基礎的機器學習模型"commonly used in anti-money laundering (AML) systems to detect suspicious transactions, and in fraud detection systems"——MAS，Information Paper，2024年12月，第2.2段："Regulatory risks, e.g., poor performance of AI used to support AML efforts could lead to non-compliance with regulations." ↩
2. MAS，"COSMIC"（mas.gov.sg，2026年11月瀏覽）：2024年4月1日推出；參與機構為星展銀行、華僑銀行、大華銀行、渣打銀行、花旗銀行及滙豐銀行；法律依據為Financial Services and Markets (Amendment) Act 2023及Financial Services and Markets (Information Sharing Scheme for Prescribed Financial Institutions) Regulations 2024；三個風險範疇。 ↩
3. MAS，Information Paper，2024年12月，第7.2.1段：第三方人工智能的風險包括"unknown biases from pre-training data, data protection concerns, as well as concentration risks due to increased interdependencies"——MAS，Information Paper，2024年12月，第7.2.2(a)至(d)段：補償性測試、應變計劃、載有關於"performance guarantees, data protection, the right to audit, and notification when AI is introduced"條款的法律協議，以及提高認知的工作。 ↩
4. MAS，Response to Feedback，2026年10月7日，第9.3至9.4段：金融機構"remains accountable for how third-party AI is used within its

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organisation”；“the onus is on the FI to ensure that risks arising from its use of third-party AI are appropriately managed”。 ↩

5. MAS，Response to Feedback，2026年10月7日，第10.69段：“AI incidents”的定義；“MAS does not intend to introduce AI-specific incident reporting requirements at this juncture”——MAS，Response to Feedback，2026年10月7日，第10.67及10.70段。 ↩
6. MAS，Response to Feedback，2026年10月7日，第12.8段——MAS，Response to Feedback，2026年10月7日，第7.7段：金融機構可考慮把“the extent of access to tools and systems granted as an additional dimension for AI risk materiality assessments of agentic AI”。 ↩
7. 關於MAS在監管及分析可疑交易報告時運用數據分析及機器學習，參見2018/19年度起的MAS年報，以及MAS官員有關監管科技的演講。 ↩

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