合规与监管中的人工智能

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交易监控与金融犯罪

合规是人工智能最有前景、也最为敏感的应用领域之一。传统交易监控系统会产生大量警报，其中大多数经人工审查后被证明并无根据。机器学习模型可以按警报属实的可能性进行排序，识别跨账户的模式，并分析新闻报道等非结构化信息。MAS注意到，银行普遍在反洗钱系统和欺诈侦测中使用此类模型。监管上的危险是双向的。一个压制了真实警报的模型，会使银行面临违反第H部分所述反洗钱规则的风险。一个无法解释其结果的模型，则难以在监管机构或法院面前为之辩护。MAS将监管风险列为人工智能的主要风险之一，并举例指出：用于支持反洗钱工作的模型若表现不佳，便会产生此类风险。[1]

此类模型所依赖的数据也已发生变化。自2024年4月1日起，六家大型商业银行可以通过COSMIC共享出现多重警示信号的客户信息。COSMIC是MAS依据《2023年金融服务与市场（修订）法》与这些银行共同推出的数字平台，初期重点是法人滥用、贸易融资滥用和扩散融资。[2]这类平台为分析模型提供了可资利用的结构化信号来源。其法律框架及其对打击洗钱的意义，将在第H部分讨论。

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第三方模型与集中度

大多数机构从少数几家全球供应商处购买生成式模型。MAS由此识别出三类风险：预训练数据带来的未知偏差、数据保护方面的顾虑，以及许多机构依赖同一底层模型所造成的集中度风险。银行的应对措施包括补偿性测试、应急计划，以及修订合同，在合同中约定性能保证、数据保护、审计权，并要求供应商在现有服务中引入人工智能时发出通知。[3]

最终版指引确立了一项原则。机构或许无法强制第三方供应商采用稳健的风险管理做法，但对于第三方人工智能在本机构内的使用方式，以及其可能对客户和其他利益相关方造成的影响，机构仍须承担责任。[4]第E部分第I章所述的外包规则和技术风险管理规则同时适用。

事件、监控与应急

指引将人工智能事件界定为涉及底层系统或模型失灵、故障或表现不佳的事件。MAS决定不为此类事件设立单独的报告制度。无论根本原因为何，机构都须继续依照现行技术风险和业务连续性要求报告事件。对于风险重要性高的用例，须制定应急计划。强化学习系统等能够自动更新的模型需要更严格的监控，因为它们的行为可能在运行过程中、在无人参与的情况下不断演变。[5]

对于智能体系统，监控应延伸至各工作流程中的信息流和决策路径，包括推理过程、所采取的行动和所使用的工具。这样的监控使机构能够在多个智能体组成的链条中重现单个行动，并找出故障的源头。MAS还提出，对工具和系统的访问范围可作为风险重要性的另一个维度，因为权限广泛的智能体可能加剧数据泄露的风险。[6]

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监管机构自身对数据的运用

自设立首席数据官一职以来，MAS便将数据分析运用于自身工作；FEAT原则发布时，该职位由David Hardoon担任。监管人员利用分析工具处理监管报表、筛查可疑交易报告，并识别市场滥用的模式。[7]这些工具并未改变监管关系本身。它们帮助监管机构挑选值得关注的机构和交易，而评估仍是依据第E部分第I章所述法规作出的人为判断。

注释

1. MAS，Information Paper，2024年12月，第2.1段：基于决策树的机器学习模型“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月访问）：于2024年4月1日推出；参与银行为DBS、OCBC、UOB、SCB、Citibank和HSBC；法律依据为Financial Services and Markets (Amendment) Act 2023及Financial Services and Markets (Information Sharing Scheme for Prescribed Financial Institutions) Regulations 2024；三个风险领域。 ↩
3. MAS，Information Paper，2024年12月，第7.2.1段：第三方人工智能带来的风险包括“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)–(d)段：补偿性测试、应急计划、含有“performance guarantees, data protection, the right to audit, and notification when AI is introduced”条款的法律协议，以及提高认识的措施。 ↩
4. MAS，Response to Feedback，2026年10月7日，第9.3–9.4段：金融机构“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”的定义；“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段和第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：金融机构可考虑将“the extent of access to tools and systems granted as an additional dimension for AI risk materiality assessments of agentic AI”。 ↩
7. 关于MAS在监管和可疑交易报告分析中运用数据分析和机器学习的情况，参见MAS自2018/19年度起的年报，以及MAS官员关于监管科技的演讲。 ↩

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