AML Transaction Monitoring: rules-based system efficiency, machine learning and agentic AI

- > Client Risk Rating, Client Segmentation, Rules (Selection, Parametrisation & Tuning)
- > Community detection, graph-based representations, detection of anomalies

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Machine Learning: useful techniques for Transaction Moniroting

13.50 Machine learning for improved transaction monitoring systems.

- Community detection leads to the segmentation of clients.
- Graph-based representations uncover hidden relationships.
- Feature engineering creates detailed representations of customers.
- Al for the detection of anomalies identifies money laundering rings.

Dr. Dimosthenis Pasadakis

The three components of an efficient AML TM rules-based system and the usage of Machine Learning

14.50 Client Risk Rating

- Goal of CRR, typical risk factors to be considered and examples of rule-based approaches.
- Data sources, triggers and interaction with Compliance processes.
- Testing and assessment: key methodologies.

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15.40 **Client Segmentation**

- The benefits of Client Segmentation and differences between a segmentation for business and financial crime purposes.
- Top-down segmentation driven by business input.

- Data-driven bottom-up client segmentation.
- Analytics to test the client segmentation.

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16.10 Rules: Selection, Parametrisation & Tuning

- Rule based monitoring: from simple to complex rules.
- Parameter selection and tuning for efficient AML TM systems and why the input from client risk rating and segmentation is important.
- Above and below the line testing: validation based on statistical samples.
- Machine Learning models as an enhancement or complementary solution to rule-based systems.

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Future Trends

16.50 Agentic AI for AML Compliance

- What is Agentic AI?
- How can it benefit the AML function and what are its limitations?
- Discussion of existing use cases and key factors for success.
- Outlook to future developments.

Dr. Madan Sathe and Dr. Konrad Schwenke

17.30 of the seminar

ZURICH, WEDNESDAY 10 DECEMBER 2025, ZURICH SHERATON HOTEL, 13.50-17.30 /ONLINE

INFORMATION & REGISTRATION

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