

Module 7 Summary: The Compliance Problem

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Digital Finance — BSc Course

L1: AML, KYC & Financial Crime

- AML framework: CDD, EDD, SAR filing
- FATF 40 Recommendations: global standard
- Three stages of laundering: placement, layering, integration
- KYC as barrier to financial inclusion

L2: RegTech

- RegTech = technology solutions for regulatory compliance
- Functional categories: identity, monitoring, reporting, risk
- Automates costly manual processes at scale
- FCA Innovation Hub pioneered RegTech as a sector

L3: Regulating the New

- MiCA: EMTs, ARTs, utility tokens classification
- EU AI Act: high-risk classification for credit scoring
- DORA: operational resilience for financial entities
- GDPR “right to explanation” constrains algorithmic decisions

L4: Model Risk Governance

- SR 11-7: foundational US model risk guidance (2011)
- Three lines of defense: business, risk, audit
- Model risk = incorrect outputs + misuse of correct outputs
- PRA SS1/23: UK equivalent (2024)

Module 7 answers: How do we prevent financial crime and govern algorithmic decision-making without stifling innovation?

AML Framework

CDD (Customer Due Diligence): Standard identity verification at onboarding.

EDD (Enhanced Due Diligence): Deeper scrutiny for high-risk customers (PEPs, high-risk jurisdictions).

SAR (Suspicious Activity Report): Filed with the Financial Intelligence Unit when transactions trigger red flags.

MiCA Token Classification

EMT (E-Money Token): References a single fiat currency (e.g., USDC, EURO). Regulated like e-money.

ART (Asset-Referenced Token): References multiple assets or currencies. Stricter reserve requirements.

Utility Token: Provides access to a service on a DLT platform. Lightest regulation.

SR 11-7 Model Risk Definition

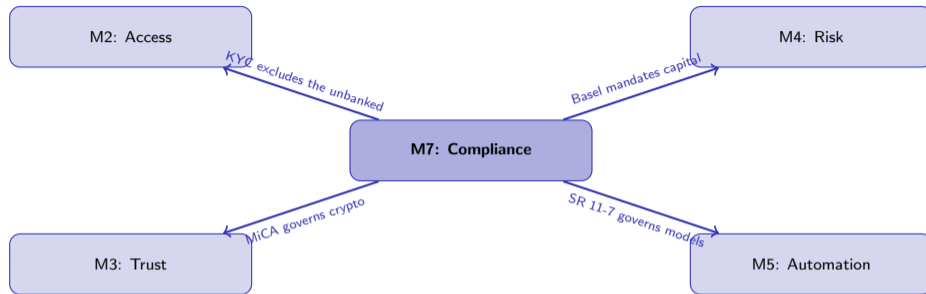
“The potential for adverse consequences from decisions based on incorrect or misused model outputs and reports.” Risk arises from: (1) model development errors, (2) incorrect implementation, (3) inappropriate use.

Three Lines of Defense

1st Line: Business units (model owners). **2nd Line:** Risk management (independent validation). **3rd Line:** Internal audit (assurance).

Regulation reacts to crises: Basel after bank failures, AML after scandals, MiCA after crypto collapses, SR 11-7 after model failures.

Connections to Other Modules



- **Compliance** → **Access (M2)**: KYC requirements designed for crime prevention exclude 1.4 billion people without formal identity documents
- **Compliance** → **Trust (M3)**: MiCA creates the first comprehensive crypto-asset regulatory framework, classifying tokens and requiring reserves
- **Compliance** → **Risk (M4)**: Basel III/IV sets minimum capital requirements; each revision responded to a financial crisis
- **Compliance** → **Automation (M5)**: SR 11-7 and the EU AI Act impose governance requirements on ML models used in financial decisions

Compliance is the tension between safety and access: every rule that prevents crime also raises the barrier to entry.