

AI-Enabled Financial Crime Prevention Toolkit for Insurance

Transition to always-on, intelligence-led financial crime compliance.
Assess your maturity, benchmark against leading practices,
and take action to improve detection and drive efficiency and scalability.

Financial crime risk in insurance spans the full lifecycle from onboarding and underwriting to claims and payout requiring continuous, connected, and intelligence-led controls.

1 Where are you today?

Quick maturity snapshot

Tick what applies:

- AML, fraud, and claims investigations operate in silos
- Alert volumes are rising, with high false positives (>70–80%)
- Risk prioritization is limited or inconsistent
- Investigations rely heavily on manual processes
- Customer, policy, and claims data are fragmented
- Scaling requires increasing headcount
- Limited visibility into end-to-end financial crime risk



If you checked 3 or more:

Your operating model is likely limiting efficiency, scalability, and risk coverage.

2 The toolkit: Six core capabilities of Always-on Compliance

1 Risk alignment

- Map controls to insurance-specific risks (claims fraud, underwriting abuse, broker risk, identity manipulation)
- Prioritize high-impact scenarios, not all alerts equally
- Implement dynamic, risk-based scoring across the lifecycle

4 Investigation acceleration – agentic AI in action

- Automate:
 - Alert triage
 - Data enrichment
 - Case documentation
- Standardize workflows across teams
- Deploy agentic AI to execute and orchestrate multi-step workflows across systems, reducing manual intervention and accelerating end-to-end investigations, such as:
 - Gathering data across systems
 - Generating case notes with evidence
 - Recommend next-best actions
- Maintain human-in-the-loop oversight for key decisions
- Agentic AI shifts from assisting tasks to orchestrating end-to-end investigation workflows.

2 Connected intelligence

- Break silos across AML, fraud, underwriting, and claims
- Create a single, shared intelligence layer
- Enable entity resolution across customers, policies, and relationships
- Extend visibility across third parties (brokers, managing general agents, partners)
- Incorporate external and ecosystem data into risk models
- Improve data quality, standardization, and completeness across systems

5 Scalable operations

- Shift from linear scaling to AI-enabled leverage
- Enable autonomous handling of low-risk alerts
- Increase throughput without increasing headcount
- Maintain performance under growing alert volumes
- Enable progressive automation aligned to AI maturity levels
- Transition low-risk alerts to autonomous handling over time
- Reduce cost per alert and investigator workload through targeted automation

3 Smarter detection for Always-on Compliance

- Move from periodic reviews to continuous, always-on monitoring
- Continuously tune rules and models (not static thresholds)
- Apply AI-assisted alert prioritization
- Incorporate behavioral and contextual signals in real time
- Extend monitoring across the full customer and policy lifecycle (onboarding → policy → claims → payout)
- Always-on compliance enables continuous risk coverage, not point-in-time control.

6 Governance and control

- Align with expanding regulatory expectations for insurers, including more explicit AML requirements and increased scrutiny on effectiveness)
- Establish formal AML and financial crime frameworks
- Embed continuous risk assessment into operations
- Ensure: auditability / explainability / consistent reporting (e.g., SAR reporting and documentation)
- As automation increases, governance must evolve in parallel.

3 What good looks like

Traditional model

Siloed functions

Static, periodic controls

High false positives

Manual investigations

Reactive approach

Modern model

Integrated financial crime ecosystem

Always-on Compliance, adaptive, and learning systems

Low false positives with AI-powered risk-based detection

Agentic AI-orchestrated workflows

Proactive, intelligence-led

What defines maturity?

Shift from high-volume alerts to fewer, prioritized, high-quality alerts

Shift from manual effort to autonomous execution

Shift from periodic checks to continuous compliance

4 AI maturity in financial crime prevention

	Capability	What it looks like
Level 1: Rule-based	Static automation	Rules-based screening, high false positives, manual investigations
Level 2: AI-assisted	Decision support	AI models improve detection and prioritization, but workflows remain manual
Level 3: AI-augmented	Workflow automation	AI supports triage, enrichment, and case handling across processes
Level 4: AI-orchestrated	Orchestrated execution	AI executes multi-step workflows across systems with human oversight
Level 5: Always-on Compliance	Continuous intelligence	Real-time monitoring, adaptive models, continuous risk coverage

How to move up the curve

Start with high-volume, repeatable workflows (e.g., alert triage)

Introduce AI decisioning before full automation

Layer in agentic orchestration across systems

Ensure governance scales with automation

5 Action checklist

Assess

- Identify top 3 highest-risk financial crime scenarios to prioritize controls and resources
- Evaluate how effectively these scenarios are currently detected and investigated
- Assess gaps in monitoring, data and controls across the lifecycle, including real-time, always-on capability

Prioritize

- Select 1-2 high-volume workflows for optimization
- Identify where agentic AI can remove manual steps
- Define success metrics (e.g., alert reduction, time saved)

Act

- Pilot AI or agentic workflows in a targeted use case (e.g., alert triage or case review)
- Introduce risk-based prioritization in investigations
- Deploy AI/agentic workflows for the targeted use case (e.g., alert triage or case handling)

Strengthen

- Review governance for AI explainability and auditability
- Ensure regulatory alignment across reporting and controls
- Establish a roadmap to scale Always-on, AI-enabled operations

Bottom line

In a landscape of rising complexity and scrutiny, the ability to detect risk with greater precision and scale operations efficiently is becoming a defining advantage for insurers.

This requires moving beyond fragmented, rule-based controls toward agentic, always-on compliance models, where AI supports decisions, executes and continuously adapts to risk. Competitive advantage will be defined by how quickly and effectively insurers progress toward always-on, AI-enabled financial crime prevention.

Get in touch to discuss how your organization can redesign financial crime compliance operating model, reduce operational costs, improve effectiveness, and enable Always-on Compliance across the insurance lifecycle, powered by AI and agentic AI.

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