The Operational Risk Audit

The 2025 Autumn Governance Series: Audit Committee Briefing on AI-Specific Op Risks

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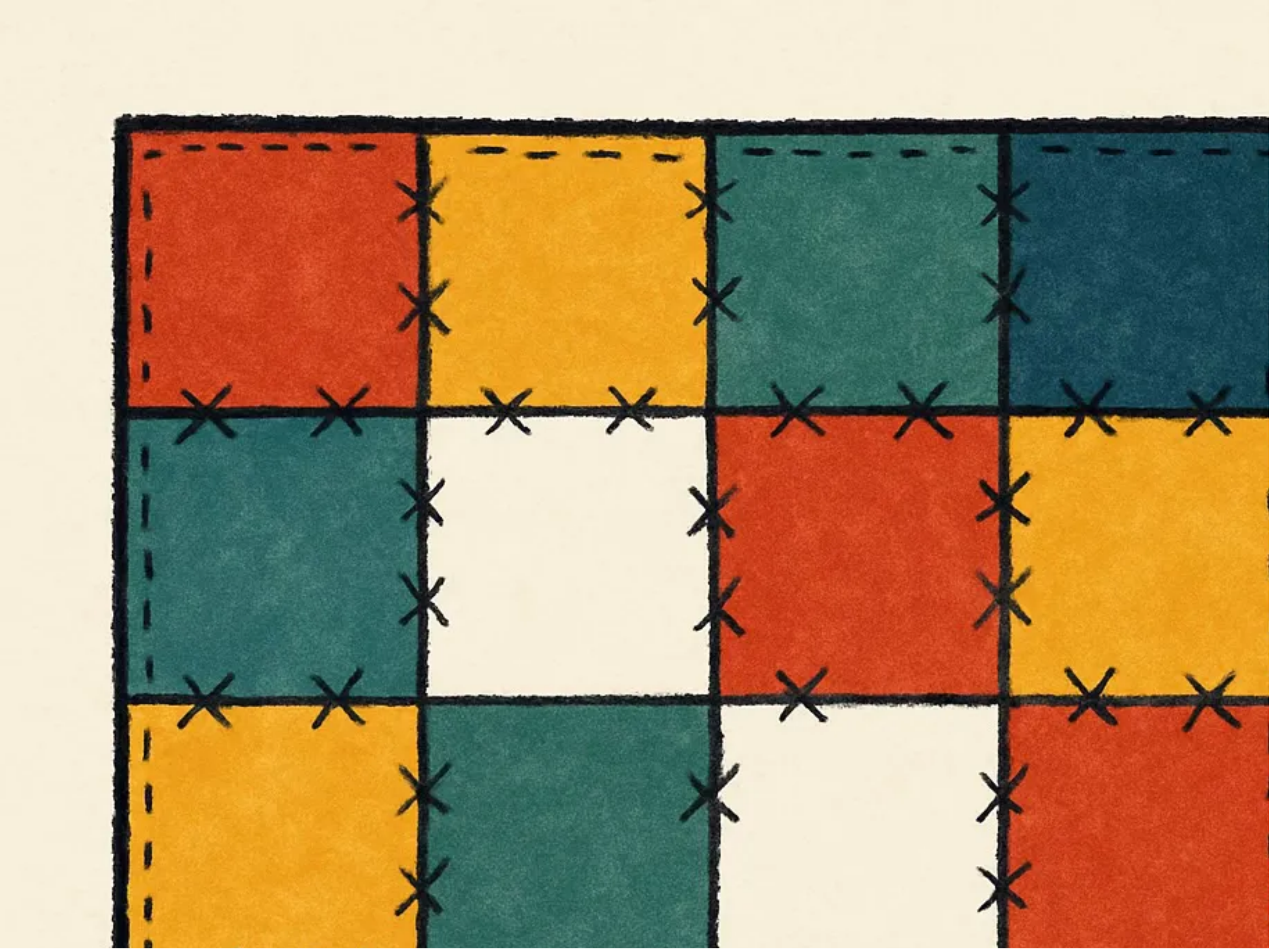

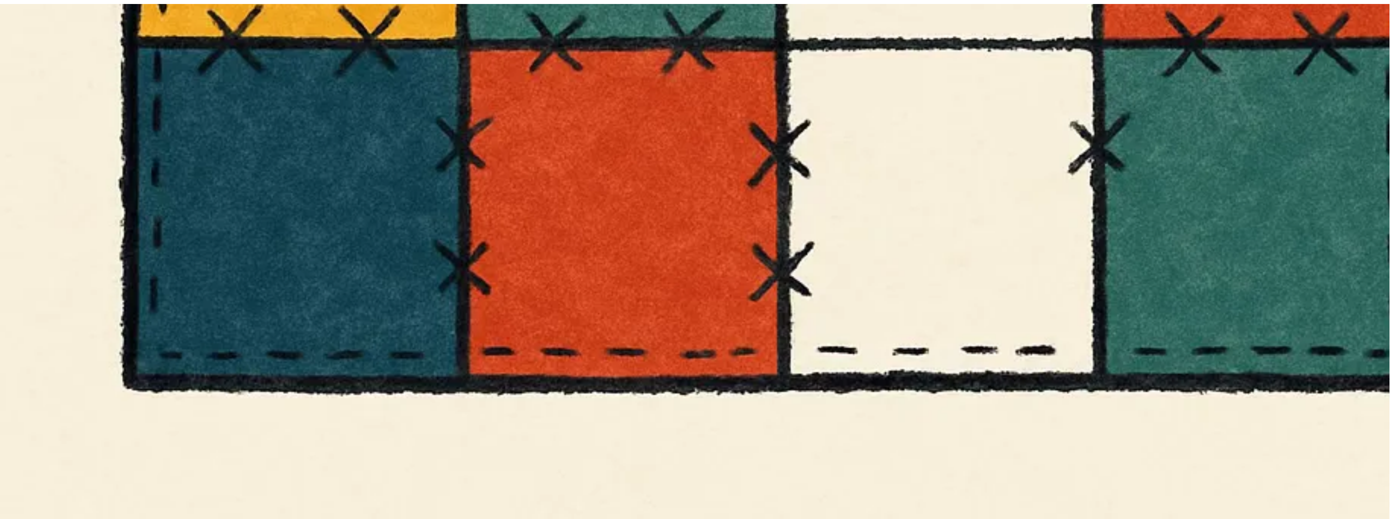

Artificial intelligence is transforming private equity, rapidly moving fro experimental pilot projects to the backbone of investment analysis anc portfolio company operations. Eighty-two percent of PE firms now rel for core decisions such as deal sourcing, portfolio monitoring, and exi Yet only one percent of those firms describe themselves as "operation mature." The gap between adoption and governance is wide — and boa increasingly exposed.

This briefing analyzes the operational risks of AI, explains why traditio insurance policies provide limited protection, and offers concrete ste boards can take. Case examples illustrate how AI failures have already valuations. A quantified assessment shows uninsured exposures could eight to thirty percent of fund value. The briefing closes with a roadm governance investment and insurance strategy, balancing risk with opportunity.

Key Takeaway: AI governance should not be treated as a compliance b When done properly, it preserves value, reduces insurance costs, and strengthens fundraising.

Technology Failures and the Quality Crisis

The adoption of AI in private equity has outpaced its reliability. Accord the Software Improvement Group (2024), three-quarters of AI systems from severe quality issues, particularly in maintainability — the ability update, repair, and safely extend systems. This matters because while equity funds often run on ten-year horizons, AI models can degrade w 12–18 months if not actively retrained.

This mismatch produces compounding risks. A degraded AI model ma misprice secondary opportunities, overlook early warning signs in por companies, or recommend investments in underperforming GPs. Each chips away at fund performance in ways that can be difficult to detect the damage is already realized.

Case Example: In 2024, a mid-sized PE firm discovered during exit tha portfolio company's AI-driven sales recommendation engine had been degrading for years. The issue, identified by the buyer's diligence team expected valuation by 18 percent. The fund lost tens of millions, not fr market conditions, but from an overlooked AI system.

Board Actions

- Require an **inventory of all AI systems** used at the fund and portfo levels.
- Commission **annual maintainability scoring** of critical systems.
- Mandate reporting on **AI system degradation and retraining cycle**

The Insurance Coverage Gap

Traditional insurance is designed for human error — random, diversifi actuarially predictable. AI liability does not fit these assumptions. Rese (arXiv:2106.00839) highlights three differences:

1. **Concentration:** AI replaces multiple human decisions with one mo concentrating risk.
2. **Unpredictability:** Models perform well on known data but fail sudc new patterns.
3. **Systematic Errors:** When AI fails, it tends to make the same mistal everywhere, amplifying loss.

Insurers are responding not by innovating coverage, but by excluding Cyber policies exclude losses from model drift, adversarial manipulatic contaminated training data. D&O coverage is ambiguous on whether b are liable for inadequate AI oversight. E&O increasingly excludes liabili AI-based recommendations.

Case Example: A U.S. venture fund reported to its LPs in 2024 that a cy policy did not respond to losses after its AI monitoring system failed t fraudulent activity in a portfolio company. The insurer classified it as a "algorithmic error," outside the scope.

Board Insurance Roadmap

1. **Inventory policies** (D&O, E&O, cyber, fiduciary).
2. **Audit exclusions** for algorithmic decision-making.
3. **Engage AI-specialized brokers and legal counsel.**

4. **Quantify uninsured exposure** using AI adoption data.
5. **Explore alternatives**: captives, parametric triggers, or government backstop programs (arXiv:2409.06672).

Source: Willis Towers Watson (2023–24), ABA reviews, arXiv:2106.00839
Method: binary coding of coverage (0=excluded, 1=covered) across cyber,
and E&O policies vs. five AI risk categories. As of Oct 2025.

Portfolio Company Operational Risks

One in five portfolio companies now embeds AI into operations, from (forecasting to pricing. This increases efficiency but also creates depen that buyers scrutinize. Poor AI governance at the portfolio level transla directly into fund-level valuation risk.

Case Example: A European PortCo using AI for supply chain optimizati achieved 15 percent cost reductions. But at exit, the buyer discounted valuation after discovering the system relied on a single vendor with n portability provisions. The result: a 22 percent haircut and an extende process.

Governance Standards for Portfolio Companies

- **Pre-Investment:** Assess AI system quality, vendor dependencies, a ownership.
- **During Hold:** Conduct quarterly AI performance monitoring and a vendor risk reviews.
- **Pre-Exit:** Provide documentation of AI systems, vendor transferab regulatory compliance.

Cybersecurity as Financial Risk

AI introduces cyber risks that go beyond data breaches. Three stand o

- **Model Theft:** Competitors steal proprietary models, erasing years investment and eroding returns.
- **Training Data Contamination:** Attackers corrupt datasets, produci

flawed outputs for months.

- **Algorithmic Manipulation:** Adversaries cause systems to produce decisions at scale.

Each risk carries exposures ranging from $5 million to over $200 millic limited to no insurance coverage. When AI controls physical systems (logistics or manufacturing), cyber risks can morph into product recalls incidents, or business interruption — typically excluded under both cy property insurance.

Board Actions

- Add **AI-specific metrics** to cyber dashboards (e.g., number of adve attacks blocked).
- Require **annual penetration testing** of AI systems.
- Ensure **business continuity plans** include real-time decision contingencies, not just system recovery.

Vendor Concentration and Contingency Planning

AI vendor markets are highly concentrated. Three to five platforms do fund-level tools, while a handful of data providers supply benchmarks. disruption—whether bankruptcy, security breach, or sudden contract —could ripple across the industry.

Case Example: In 2025, a U.S. analytics vendor discontinued a dataset to secondary pricing. Several PE firms had to retrain models for $2–3 r each, while performance degraded for nearly a year.

Board Actions

- Categorize vendors by criticality (Tier 1: irreplaceable, Tier 3: repla
- Require contracts with **audit rights, data portability, and escrow c**
- Test contingency plans with alternative vendors annually.

Business Continuity for Algorithmic Decision-Making

Traditional continuity planning focuses on restoring IT after outages. A requires a different lens: many investment decisions cannot wait. Deal opportunities, rebalancing, or crisis response often require action witl hours.

Boards must therefore test continuity under degraded AI conditions. T includes simulating model drift, adversarial attacks, and vendor outage just server failures. Manual override protocols should be drilled, and c vendor redundancy established.

Board Actions

- Run **semi-annual drills** simulating AI failure during critical decisio windows.
- Train staff in **manual override protocols.**
- Require **cross-vendor backups** for mission-critical processes.

Quantifying the Uninsured Exposure

Based on adoption rates and failure probabilities, uninsured AI exposu $2 billion fund are estimated as:

- **Conservative:** $165 million (≈8% of fund value).
- **Expected:** $335 million (≈16% of fund value).
- **Severe:** $630 million (≈31% of fund value).

For comparison, traditional operational insurance typically covers 1–3
fund value.

Source: V7 Labs PE AI *Survey* (Q4 2024), *Software Improvement Group* (
Bain & Co (2024), *McKinsey* (2025), *arXiv*:2106.00839 *&* 2409.06672. *Meth*

modelled loss estimates per $2B fund across five risk categories; scenaric lower/mid/upper bound assumptions. As of Oct 2025.

Governance Investment ROI

Governance is often seen as a cost center, but here it is demonstrably driver. A comprehensive AI governance program costs around $1 millic year, but delivers 5–15x ROI through:

- **Incident avoidance:** Preventing $5–20 million losses per failure.
- **Performance protection:** Preserving 1–2% IRR.
- **Insurance optimization:** Cutting premiums by 15–30%.
- **Fundraising advantage:** Attracting LPs with stronger governance narratives.

Opportunity Framing: With robust governance, AI is not just safer — it becomes a competitive differentiator. Funds with credible governance frameworks can reassure LPs, negotiate better insurance, and realize r from AI with fewer disruptions.

Source: EY AI Pulse Survey (2024), Private Funds CFO Forum (Feb 2026), McKinsey (2025). Method: scenario modelling of incident probability (3-y horizon) and uninsured exposure per $2B fund under Minimal, Moderat Comprehensive governance. As of Oct 2025.

Private Equity Audit & Risk Oversight GPT

A boardroom-ready governance co-pilot for private equity funds. It de operational risk audits, insurance coverage analysis, portfolio oversigh risk quantification, vendor stress-tests, governance ROI, and fiduciary checklists in one tool. Link Here.

Conclusion

AI has become integral to private equity, but the risks of poor governa now unavoidable. Insurance gaps, vendor concentration, cybersecurit threats, and portfolio dependencies expose boards to hundreds of mill uninsured risk. Yet the path forward is clear: invest in governance, em operational risk oversight, and treat insurance as a dynamic strategy r than a static policy.

The opportunity is significant. By moving early, boards can both reduc exposure and signal to LPs that they are leaders in responsible AI adop Governance becomes not just a shield, but a source of trust and value creation.

The insights from the Operational Risk Audit article resonate directly v governance frameworks I explore in *Shaping the Next Decade.* Both arg boards and committees must move beyond pedigree and static benchı learning to underwrite conviction edges while managing new risks intı by AI, regulation, and systemic concentration. What begins as a framev today's investment committees—scoring conviction and networks—be tomorrow's blueprint for fiduciary governance in an era where human algorithmic judgment, and long-horizon policy priorities intersect. Ava for purchase here.

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