

**FOR THE BOARD** | EXECUTIVE BRIEF | ASSET SERVICING

Your institution processes, safeguards, and reports on assets belonging to thousands of the world’s largest investors. Every custody record, every NAV calculation, every corporate action, every securities lending transaction — these are fiduciary acts performed on behalf of clients who trust you with their most sensitive financial data. AI is now embedded in those operations. The question for the board is whether the governance of that AI matches the governance standard your clients expect of everything else you do.

**THE NUMBERS THAT MATTER**

<p><b>\$130T+</b> in combined AUC/A held by the three largest global custodians — BNY, State Street, and Northern Trust</p>	<p><b>100+</b> markets in which global asset servicers operate custody, settlement, and reporting operations</p>
<p><b>78%</b> of enterprises run mission-critical AI workloads on infrastructure they cannot independently audit</p>	<p><b>127 hrs.</b> mean time to detect incidents on provider-managed infrastructure vs. 34 hrs. with institution-controlled encryption</p>
<p><b>\$4.7T</b> estimated global assets now influenced by AI-driven investment decisions — serviced by your operations</p>	<p><b>92%</b> of advanced AI chips fabricated by a single company in a geopolitically contested region</p>
<p><b>T+1</b> settlement acceleration — AI is now critical to meeting compressed settlement windows across global markets, making AI infrastructure reliability a direct operational risk</p>	

**THE AI CONTROL ARCHITECTURE**

Score each cell 1 (Reactive) to 4 (Sovereign). Maximum total: 100 points. The distribution reveals whether your governance is balanced or structurally exposed — particularly in the Models and Agents columns where AI is now processing client portfolio data, executing reconciliations, and generating NAV calculations.

	Power	Compute	Data Centers	Models	Agents
Jurisdictional	___	___	___	___	___
Logical	___	___	___	___	___
Technical	___	___	___	___	___
Operational	___	___	___	___	___
Contractual	___	___	___	___	___

THE 5x5 CONTROL MATRIX

INSTITUTIONAL AI AI SOVEREIGNTY ASSESSMENT THE 5x5 CONTROL MATRIX · 25 GOVERNANCE INTERSECTIONS · MAX SCORE 100 · © 2026 INSTITUTIONAL AI					
FIVE PILLARS x five ecosystems	1 — POWER Energy infrastructure	2 — COMPUTE GPU / chip infrastructure	3 — DATA CENTERS Cloud & physical infrastructure	4 — MODELS LLMs & AI systems	5 — AGENTS Agentic applications
<b>PILLAR 1 Jurisdictional Control</b> Where does it execute, under which law?	Where is energy data processed and under which jurisdiction? <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4	Under which jurisdiction does GPU compute actually execute? <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4	Can you prove where every data center workload executes? <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4	Which jurisdiction governs model training, storage, and serving — and does it grant access to weights? <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4	Where do agent actions execute and where do decision logs reside? <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4
<b>PILLAR 2 Logical Control</b> Who can access it, when, with what proof?	Who has privileged access to energy systems — and is it logged in your SIEM? <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4	Who accesses GPU clusters — including provider support engineers? <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4	Can you prove no unauthorized access in the past 18 months? <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4	<b>CRITICAL CELL</b> Can your model provider access your queries and outputs — in your logs? <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4	Who can approve or halt agents — are all actions logged in your systems? <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4
<b>PILLAR 3 Technical Control</b> Who holds the encryption keys?	Do you control encryption keys for energy and ESG data? <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4	Who controls keys for AI training data and model weights? <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4	Do you hold HYOK for all sensitive data — or does your cloud provider? <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4	<b>CRITICAL CELL</b> Does your model provider process your data in plaintext on their infra? <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4	Do you have cryptographic controls over what agents can access and output? <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4
<b>PILLAR 4 Operational Control</b> Do you have real-time visibility?	Real-time visibility into energy use and carbon intensity per workload? <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4	Real-time visibility into compute utilization and cost across all GPUs? <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4	Can you detect a residency violation or breach within minutes, not hours? <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4	Real-time visibility into model behavior, quality, and decision provenance? <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4	<b>CRITICAL CELL</b> Can you monitor, pause, or audit every agent action in real time? <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4
<b>PILLAR 5 Contractual Control</b> Do you have enforceable rights?	Do energy contracts include audit rights, portability, and exit provisions? <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4	Do compute agreements protect against unilateral capacity restrictions? <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4	Do data center agreements include audit rights and deletion certification? <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4	<b>CRITICAL CELL</b> Do you own your query logs and outputs — or does the provider retain? <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4	<b>CRITICAL CELL</b> Do agent agreements cover liability for autonomous decisions and data exit? <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4

25 governance intersections | Score 1–4 per cell | Max total: 100 points

THE ASSET SERVICING SOVEREIGNTY IMPERATIVE

Asset servicers occupy a unique position in the financial ecosystem: you are the infrastructure layer. Your clients — asset managers, pension funds, sovereign wealth funds, insurance companies — depend on your operations as the foundation of their own governance. When your AI systems process their portfolio data, calculate their NAVs, execute their corporate

actions, and generate their regulatory reporting, the governance of those AI systems is not just your obligation — it is a link in every client’s fiduciary chain.

*If the AI systems performing your custody, fund administration, and transfer agency operations are running on infrastructure you cannot audit, in jurisdictions you cannot verify, under terms you have not negotiated for AI-specific processing — your clients’ governance depends on assurances you cannot independently confirm.*

## THE GLOBAL OPERATIONS DIMENSION

Global asset servicers operate across 100+ markets, dozens of regulatory jurisdictions, and multiple time zones. AI deployed in these operations creates governance complexity that single-jurisdiction firms do not face:

Operational Domain	AI Governance Risk	Jurisdictional Complexity
Global Custody & Settlement	AI-driven trade matching, settlement prediction, and exception management processes client positions across jurisdictions with different data sovereignty laws	CSDR (EU), SEC 15c6-1 (US), HKMA, MAS — each with distinct data residency and audit requirements
Fund Administration & NAV	AI-assisted NAV calculation, pricing validation, and fair value estimation processes fund-level data that determines investor returns	UCITS (EU), SEC/ICA (US), CSSF, CBI, FINMA — fund domicile determines governing regulation
Transfer Agency	AI processes investor identity data, transaction records, and distribution payments across global investor bases	AML/KYC regimes vary by jurisdiction; GDPR, CCPA, and local privacy laws apply to investor PII
Securities Lending	AI-driven collateral optimization, borrower assessment, and automated lending programs process beneficial owner data	Beneficial owner data sovereignty; SFTR reporting (EU); SEC Rule 10c-1 (US)
Middle Office Outsourcing	AI performs reconciliation, trade confirmation, and position management on behalf of asset manager clients	Client data processed in your infrastructure under your AI governance — your governance becomes their governance
Regulatory Reporting	AI generates and validates regulatory filings across dozens of jurisdictions simultaneously	EMIR, MiFIR, SFTR, Form PF, CPO-PQR — accuracy obligations attach to your AI systems

## THE CRITICAL REGULATORY CONTEXT

Framework	Implication for Asset Servicers
DORA (Digital Operational Resilience Act)	Directly applicable to custodians and fund administrators in the EU. ICT risk management, incident reporting, and third-party risk oversight requirements extend to AI infrastructure.
OCC / Fed / FDIC Guidance	Bank-regulated custodians face interagency guidance on AI risk management, model risk (SR 11-7), and third-party risk. AI in custody operations is subject to safety and soundness examination.
NIS2 Directive	Asset servicers designated as essential entities face mandatory cybersecurity and supply chain governance requirements, including AI system resilience.

Framework	Implication for Asset Servicers
GDPR / Global Privacy	Investor PII processed by AI in transfer agency, KYC, and client reporting operations must satisfy data residency, purpose limitation, and data subject rights.
CSDR / T+1 Settlement	AI systems supporting settlement must be operationally resilient. Settlement failures caused by AI system errors create direct financial liability.
UCITS / AIFMD	Fund administrators using AI for NAV calculation, pricing, and compliance monitoring must demonstrate governance of those AI systems to fund boards and regulators.
SEC Custody Rule / Form ADV	Qualified custodians using AI in custody operations face SEC examination of AI governance as part of custody rule compliance.
Basel III / G-SIB Requirements	G-SIB custodians face heightened operational resilience and risk management standards that extend to AI systems in critical operations.

### FIVE QUESTIONS FOR THE BOARD

1.	When AI calculates a NAV, reconciles a position, or processes a corporate action on behalf of a client, can we prove — with technical evidence, not provider assurances — where that processing occurred and who had access?
2.	If our primary AI or cloud provider experienced a 48-hour outage, what happens to custody settlement, NAV publication, transfer agency processing, and securities lending operations across 100+ markets?
3.	Can we produce a complete audit trail of any AI-influenced operational decision from 18 months ago — a NAV calculation, a trade match, a corporate action election — for a regulator or a client within 24 hours?
4.	Do our clients know that AI is now processing their portfolio data, investor records, and fund calculations — and have we disclosed the governance framework governing that AI to their boards?
5.	Are we confident that our AI governance satisfies DORA, OCC examination standards, NIS2, GDPR, and every client’s own due diligence requirements — simultaneously, across every jurisdiction we operate in?

Completion: 60–90 min | Score: 0–100 | 25 control questions | [information@institutional.ai](mailto:information@institutional.ai)

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