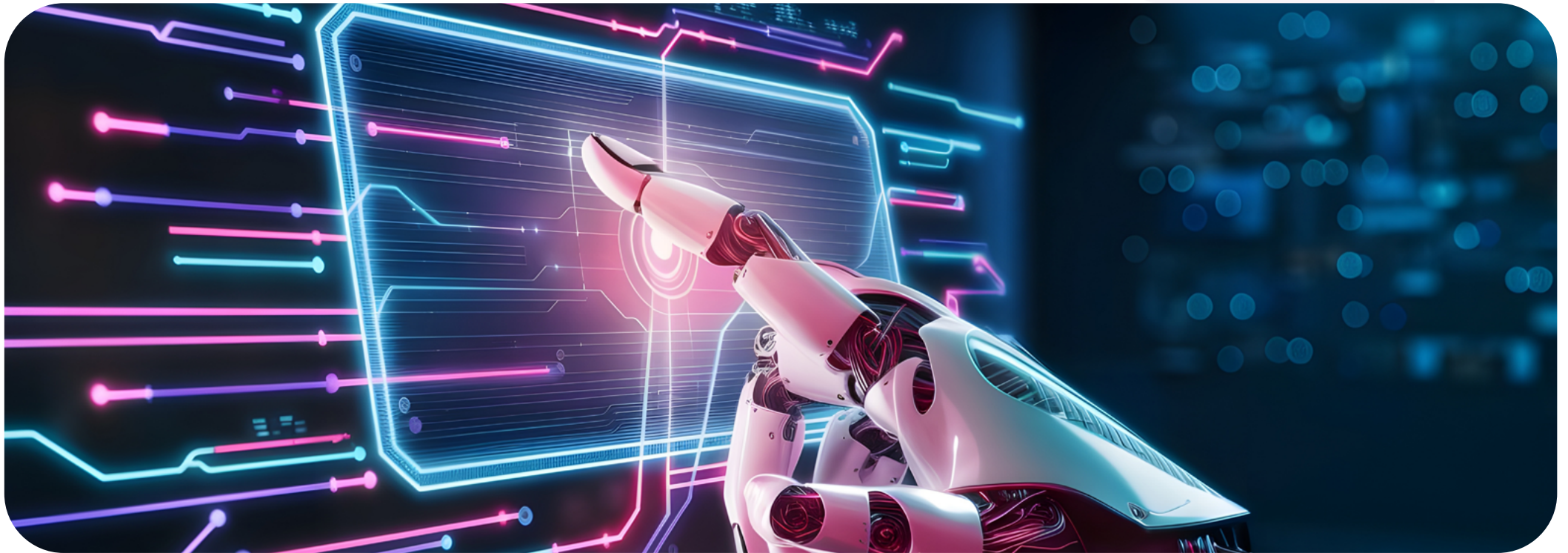


Early Impressions

AI Controls Framework for SOX 404 Compliance

Extending COSO to AI-Driven Financial Processes



A practical, audit-ready checklist for SOX program managers, controllers, and internal audit teams to assess, document, and monitor AI-specific internal controls in financial reporting.



How to Use This Checklist

This framework checklist is designed to be used as a working document. Print it, assign owners, and use it to drive your AI controls remediation and implementation program. Each section maps directly to the COSO framework components discussed in the companion article. The Status column should be updated as:

Not Started

In Progress

Complete

Checklist 1: Control Environment – AI Governance Foundation

These controls establish the organizational tone, structure, and accountability for AI used in financial reporting.

✓	#	Control Requirement	Owner	Evidence Required	Status
☐	CE-01	The Board or Audit Committee has approved a formal AI governance policy covering financial reporting applications	CFO / GC	Board minutes, approved policy document	
☐	CE-02	AI governance policy defines acceptable use cases for AI in financial reporting and prohibited applications	CFO / CTO	Policy document with use case taxonomy	
☐	CE-03	Defined roles and responsibilities: AI Model Owner, Data Steward, Compliance Reviewer for each financial AI model	SOX PMO	RACI matrix, role descriptions	
☐	CE-04	Executive leadership has communicated expectations for responsible AI use in finance (tone at the top)	CEO / CFO	Internal communications, town hall recordings	
☐	CE-05	Competency requirements are defined for personnel who oversee, operate, or review AI models in financial processes	HR / CFO	Job descriptions, training records, certifications	
☐	CE-06	Code of conduct updated to include ethical AI principles specific to financial reporting integrity	GC / Ethics	Updated code of conduct, employee acknowledgments	
☐	CE-07	AI models inventory maintained, listing all models used in or impacting financial reporting processes	SOX PMO	Model inventory register with risk ratings	
☐	CE-08	Whistleblower and escalation channels available for reporting AI-related concerns in financial reporting	GC / Internal Audit	Hotline procedures, escalation matrix	

Checklist 2: Risk Assessment – AI Model Risk Taxonomy

These controls ensure that AI-specific risks are systematically identified, evaluated, and prioritized within the enterprise risk management and SOX scoping and risk assessment activity.

✓	#	Control Requirement	Owner	Evidence Required	Status
☐	RA-01	An AI model risk taxonomy developed specific to financial reporting processes (classification, estimation, reconciliation)	SOX PMO / Risk	Risk taxonomy document	
☐	RA-02	Materiality thresholds established for AI-processed transactions to determine control testing scope	Controller	Materiality analysis workpaper	
☐	RA-03	Fraud risk assessment updated to include AI-specific manipulation vectors (data poisoning, model tampering, adversarial inputs)	Internal Audit / SOX PMO	Updated fraud risk assessment	
☐	RA-04	Third-party AI vendor risk evaluation completed for all externally sourced models used in financial reporting	Procurement / IT	Vendor risk assessments, SOC 2 reports	
☐	RA-05	Regulatory change monitoring process includes AI-related guidance from the SEC, PCAOB, FASB, and AICPA	Technical Acctg	Regulatory monitoring log, policy updates	
☐	RA-06	Annual SOX scoping updated to include AI models as in-scope applications with associated controls	SOX PMO	Updated SOX scope memo, RCM	
☐	RA-07	Concentration risk assessed for processes where AI handles >25% (indicative %, to be assessed based on the nature of transactions processed) of transaction volume without human review	SOX PMO	Concentration analysis, coverage metrics	
☐	RA-08	Impact assessment completed for each AI model: what happens to financial reporting if the model fails or produces erroneous output?	Model Owner / Technical Acctg	Business impact analysis per model	

Checklist 3: Control Activities – AI-Specific Operating Controls

These are the hands-on controls that ensure AI outputs are accurate, complete, and appropriately reviewed before impacting financial statements.

✓	#	Control Requirement	Owner	Evidence Required	Status
☐	CA-01	Input validation controls verify data quality, completeness, and format before model ingestion	Data Steward	Validation rules, exception reports	
☐	CA-02	Output reconciliation performed: AI outputs are reconciled to independently derived totals or prior period benchmarks	Accounting Team	Reconciliation workpapers, variance analysis	
☐	CA-03	Human-in-the-loop (HITL) checkpoints enforced at defined materiality and confidence thresholds	Model Owner	HITL logs, threshold configuration docs	
☐	CA-04	Model access controls enforce segregation of duties (developers cannot promote to production; users cannot modify models)	IT Security	Access control matrix, role assignments	
☐	CA-05	Change management protocol (AI-CM) governs all model retraining, parameter updates, and data source changes	Model Owner	Change tickets, approval records, and test results	
☐	CA-06	Override documentation is required when AI recommendations are rejected by human reviewers, including rationale	Accounting Team	Override log with business justification	
☐	CA-07	Fallback procedures documented and tested for manual processing if the AI model becomes unavailable during financial close	Controller	Business continuity plan, test results	
☐	CA-08	Automated exception reporting flags AI outputs exceeding defined variance thresholds for manual review	Model Owner	Alert configuration, exception report samples	
☐	CA-09	Dual approval required for model retraining: Model Owner and SOX Compliance Lead must both authorize	SOX PMO	Approval workflow records	
☐	CA-10	Training data integrity is validated by the Data Steward before each retraining cycle, with sign-off documented	Data Steward	Data validation report, sign-off form	

Checklist 4: Information & Communication – AI Documentation Standards

These controls ensure that AI model documentation is complete, current, and accessible to all relevant stakeholders, including external auditors.

✓	#	Control Requirement	Owner	Evidence Required	Status
☐	IC-01	AI model cards are maintained for each financial reporting model, documenting purpose, inputs, logic, limitations, and performance	Model Owner	Completed model cards (see template below)	
☐	IC-02	Version-controlled change logs are maintained for all model modifications, retraining events, and parameter changes	Model Owner / IT	Version control system, change log records	
☐	IC-03	Incident reporting protocol established for AI model failures, anomalies, or unexpected outputs affecting financial data	Model Owner / IT	Incident response plan, incident log	
☐	IC-04	Audit committee receives periodic reporting on AI risk posture, control effectiveness, and emerging issues	CFO / CAE	Board reporting package, meeting minutes	
☐	IC-05	Cross-functional communication protocol ensures IT, Finance, Compliance, and Data Science are aligned on AI changes	SOX PMO	Meeting minutes, communication matrix	
☐	IC-06	AI control narratives developed for each in-scope process, supplementing traditional process walkthroughs	SOX PMO	AI-enhanced process narratives	
☐	IC-07	External auditor proactively briefed on AI usage and control framework during audit planning phase	CFO / CAE / Controller / SOX PMO	Auditor briefing materials, planning meeting notes	
☐	IC-08	Data lineage documentation traces training data from source systems through transformation to model input	Data Steward	Data lineage diagrams, ETL (Extract, Transform, Load) documentation	

Checklist 5: Monitoring – Continuous AI Control Effectiveness

These controls ensure the ongoing effectiveness of AI controls through continuous monitoring, periodic revalidation, and independent testing.

✓	#	Control Requirement	Owner	Evidence Required	Status
☐	MO-01	Continuous drift detection is deployed with defined tolerance thresholds, triggering alerts, and escalation	Model Owner	Drift monitoring dashboards, alert logs	
☐	MO-02	Performance metrics (accuracy, precision, recall) tracked over time with trend analysis	Model Owner	Performance trend reports	
☐	MO-03	Periodic revalidation schedule established and aligned with financial close calendar (minimum quarterly)	SOX PMO	Revalidation schedule, completed assessments	
☐	MO-04	Internal audit includes AI controls in the annual audit plan with defined testing procedures	CAE	Audit plan, test scripts, workpapers	
☐	MO-05	Benchmarking against industry standards and peer practices is conducted annually	SOX PMO / CAE	Benchmarking analysis, gap assessment	
☐	MO-06	Key Risk Indicators (KRIs) are defined for each AI model with automated reporting to control owners	CRO / Model Owner	KRI definitions, automated report samples	
☐	MO-07	Deficiency evaluation criteria defined for AI control failures are aligned with the SOX severity framework	SOX PMO	AI deficiency evaluation matrix	
☐	MO-08	Remediation tracking for AI control deficiencies is integrated into the existing SOX remediation process	SOX PMO	Remediation tracker, closure evidence	

Checklist 6: PCAOB Inspection Readiness — Anticipated Auditor Questions

Use this checklist to prepare your team for the questions external auditors and PCAOB inspectors are most likely to ask about AI in financial reporting. For each question, confirm that evidence is prepared and identify any gaps requiring remediation.

Anticipated Auditor Question	Evidence Required	Prepared?	Gap Noted
Who approved AI deployment in the financial reporting process?	Board/committee minutes, risk assessment documentation	☐	☐
What is the model risk management framework?	AI governance policy, model risk taxonomy	☐	☐
How was training data validated for accuracy and completeness?	Data lineage documentation, validation reports	☐	☐
Were known historical errors present in training data?	Training data quality reports, remediation logs	☐	☐
How does the organization monitor for model drift?	Drift reports, threshold documentation, alert logs	☐	☐
What triggers model retraining or revalidation?	Change management protocol, retraining logs	☐	☐
Can the model explain its outputs for material transactions?	Explainability reports, SHAP/LIME outputs	☐	☐
What percentage of AI outputs receive human review?	HITL review logs, threshold documentation	☐	☐
How are model changes authorized and tested?	Change tickets, UAT results, and approval records	☐	☐
Are AI controls included in the annual SOX scoping?	Updated SOX scope documentation, RCM, and process flow charts/narratives	☐	☐
How are third-party AI vendor risks assessed?	Vendor risk assessments, SOC reports, contracts	☐	☐
Is there an AI incident response protocol?	Incident response plan, historical incident logs	☐	☐

Template A: AI Model Card for Financial Reporting

Complete one model card for each AI model used in or impacting financial reporting processes. This becomes the core documentation artifact for auditor review

Model ID / Name Unique identifier and descriptive name (e.g., REV-CLASS-v3.2)	Business Purpose The financial reporting process is supported, and a specific function is performed	Model Type / Algorithm Classification, regression, NLP, etc., and a specific algorithm used	Model Owner Name, title, and department of the accountable individual
Data Steward An individual responsible for training data integrity and lineage	Deployment Date The date model was placed into production for financial reporting	Training Data Description Source systems, date range, record count, known exclusions	Training Data Validation Validation procedures performed, results, and sign-off
Performance Metrics Accuracy, precision, recall, F1 score at deployment, and current	Confidence Threshold Score below which transactions are routed for manual review	Materiality Threshold Dollar threshold above which human review is mandatory, regardless of confidence	Drift Monitoring Frequency Daily, weekly, monthly; metrics tracked; alert thresholds
Retraining Schedule Planned to retrain cadence and triggering criteria	Change Management Protocol Reference to the applicable change management procedure ID	Explainability Method SHAP, LIME, feature importance, or other interpretability approach	Known Limitations Documented weaknesses, edge cases, or scenarios where the model underperforms
Regulatory Considerations Applicable standards (ASC topics, SOX requirements, PCAOB focus)	Last Revalidation Date Date of most recent independent revalidation and results summary	Version History Log of all versions, changes, approvals, and deployment dates	

Template B: AI Controls Maturity Assessment

Use this matrix to assess your organization’s current maturity level across key AI control dimensions. Circle or highlight your current state to identify priority areas for improvement. The target state for SOX-reporting companies should be Level 3 (Defined) at a minimum, with Level 4 (Managed) as the recommended standard.

Prepared?	Level 1: Ad hoc	Level 2: Developing	Level 3: Defined	Level 4: Managed	Level 5: Optimized
AI Governance Policy	No formal policy	Draft policy exists	Board-approved policy	Policy integrated into the SOX program	Continuous policy evolution
Model Documentation	No model inventory	Partial inventory	Model cards for all financial AI	Standardized cards with versioning	Automated documentation
Control Activities	No AI-specific controls	Basic output checks	Defined HITL + reconciliation	Automated monitoring + alerts	Self-healing controls
Change Management	No process	Informal tracking	Formal AI-CM protocol	Integrated with the ITGC lifecycle	CI/CD with embedded controls
Drift Monitoring	None	Manual periodic review	Scheduled metrics tracking	Continuous automated detection	Predictive drift prevention
Audit Readiness	Cannot answer basic questions	Can describe AI usage	Documentation audit-ready	Proactive auditor engagement	AI controls as a competitive edge

Scoring Guidance

- Level 1–2 across multiple dimensions:

Significant remediation required. Engage advisory support immediately.
- Level 2–3 across most dimensions:

Foundation exists, but gaps remain. Targeted remediation within 1–2 quarters.
- Level 3–4 across most dimensions:

Strong posture. Focus on continuous improvement and audit committee reporting.

Implementation Roadmap: 12-Week Quick-Start

For organizations starting from a limited baseline, the following phased approach provides a structured path to audit readiness.

Weeks	Phase	Key Activities	Deliverables
1–2	Discovery	Complete AI model inventory for financial reporting; conduct maturity assessment; identify critical gaps	Model inventory, maturity scorecard
3–4	Governance Design	Draft AI governance policy; define roles (Model Owner, Data Steward, Compliance Reviewer); establish risk taxonomy	AI governance policy, RACI matrix, risk taxonomy
5–7	Control Design	Develop AI control narratives for each in-scope process; design HITL checkpoints; build model card templates	AI control narratives, model cards, HITL procedures
8–9	Monitoring Setup	Implement drift detection and performance monitoring; define KRIs and alert thresholds; establish a revalidation schedule	Monitoring dashboards, KRI definitions, alert configs
10–11	Testing & Validation	Perform walkthroughs of AI models and identify controls; conduct internal audit / SOX internal controls testing; identify and document deficiencies	Walkthrough documentation, test results, and deficiency log
12	Audit Readiness	Prepare auditor briefing package; update SOX scope and risk assessment documentation; conduct tabletop exercise with finance leadership	Auditor briefing deck, updated RCM, process flow chart/narrative, readiness report

Need Help Implementing This Framework?

Uniquis Consultech's AI Controls Gap Assessment is designed to take your organization from wherever you are on the maturity curve to audit-ready in as few as 12 weeks. Our teams combine deep SOX and PCAOB expertise with hands-on AI implementation experience — without the independence conflicts that constrain audit firms.

Contact us at www.uniquis.com to schedule a conversation.

About Uniquis Consultech:

Uniquis Consultech is a global tech-enabled consulting company that specializes in Accounting & Reporting, Governance, Risk & Compliance, Sustainability & Climate, and Tech Consulting. The Company is co-founded by consulting veterans Jamil Khatri and Sandip Khetan and backed by marquee investors such as Nexus Venture Partners, Sorin Investments, and UST. Anu Chaudhary, a global sustainability and climate specialist with over 25 years of experience, serves as the Global Head of Sustainability & Climate Consulting.

Uniquis has a global team of 700+ professionals led by 85+ Partners & Directors across eleven offices in the USA, the Middle East, and India. The company serves more than 400 clients, including marquee names in each of the markets it operates in. Uniquis is committed to leveraging technology and an integrated global delivery model to provide best-in-class consulting services to its clients.

About Our Accounting & Reporting Consulting Services:

In today's dynamic business environment, organizations are continuously required to adapt to the dynamic shifts in accounting & reporting standards and regulations. Enhanced management reporting requirements and accelerated reporting timelines necessitate increased automation within the finance function. Special events, such as preparing for an IPO/capital market transaction or fulfilling the reporting requirements arising from an M&A transaction, introduce additional complexities and challenges for the finance function.

As a result, organizations need to transform their finance functions from time to time with a focus on people, processes, and technology. Our Accounting & Reporting Consulting (ARC) practice is designed to partner with the finance function through these challenges. Our teams function as an extension of your finance teams to execute your plans seamlessly.

We bring the necessary technical expertise, skills, technology, and bandwidth, enabling you to navigate your plans in real time without adding additional manpower costs within the organization.

A Team That You Can Trust To Deliver



Sandip Khetan

Co-Founder, Global Head of Accounting & Reporting Consulting



Arda Kaya

Partner, Accounting & Reporting Consulting



Avinash Ramkumar

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