

UNIVERSITY OF KENTUCKY BOARD OF TRUSTEES

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UK INTERNAL AUDIT IN THE AGE OF ARTIFICIAL INTELLIGENCE (AI)

TRUST, TRANSPARENCY AND TECHNOLOGY

AI: Magnifying Value and Risk

| Area | Landscape | Value | Risk |
|----------------------|--|--|--|
| Academics | Shaping how students learn and how faculty teach and assess progress | AI-powered tutoring and personalized learning | Inaccurate or biased AI content impacting learning outcomes |
| | | Grading efficiency and consistency through AI rubric-based tools | Lack of transparency or disclosure undermining trust and fairness |
| | | Accelerated research data analysis through AI | Research/scholarly integrity may be compromised by AI hallucination |
| Health Care | Supporting diagnostics, triage, patient scheduling and communication | Reduced clinician workload through more efficient and accurate transcription and documentation | Overreliance on AI without human validation creates patient safety concerns |
| | | Streamlined operations and improved patient access resulting from triage, diagnostic and scheduling AI | Biased or incomplete AI training data can deprioritize or misclassify patient groups |
| | | Reduced administrative burden resulting from patient engagement and communication with AI chatbots | Protected health information (PHI) disclosure without auditability threatens HIPAA compliance |
| Administrative Units | Advising on business decisions, messaging and planning | Predictive analytics for budgeting, risk modeling and decision support | Unreviewed AI outputs driving misaligned or risky decisions |
| | | Automated candidate screening , benefits guidance | Unexplainable decisions or biased models creating legal exposure |

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Snapshot of UK Internal Audit’s (UKIA) Insights on AI Risk Landscape*

| Domain | Risk Area | Description | UKIA Risk Factors |
|------------------------------|---------------------------------|---|---|
| Academics and Research Areas | Governance | Inconsistent adherence to faculty policies on AI use leads to unclear expectations and equity concerns | <ul style="list-style-type: none">Public ExposureExternal FactorsControl Environment 1 |
| | Academic Integrity | Undisclosed or unauthorized student use of AI undermines fairness and learning outcomes | |
| | Research Integrity | Use of AI in research processes without attribution or validation threatens academic standards | |
| Health Care Areas | Patient Safety | AI-supported clinical decisions without human review may compromise safety and accountability | <ul style="list-style-type: none">Public ExposureExternal FactorsControl Environment 2 |
| | HIPAA Compliance | Use of AI tools in patient interaction without privacy controls creates regulatory exposure | |
| | Transparency and Explainability | Inability to trace or justify clinical outcomes derived from AI recommendations | |
| Administrative Areas | Operational Oversight | Shadow AI adoption bypasses procurement, IT or data governance review processes | <ul style="list-style-type: none">Control Environment 1Control Environment 2Materiality |
| | Data Privacy | Sensitive data entered or intellectual property relinquished into public AI tools outside of information security control environment | |
| | Equity | Use of AI in screening, scoring or messaging without bias controls | |

*Not all inclusive

AI is Built into UKIA's Strategy by Design

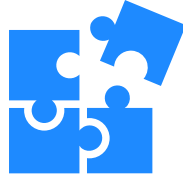


Intent

AI is not an add-on — it is embedded into UKIA's **strategic plan as a core competency**.

This integration reflects our commitment to modernizing audit functions by **leveraging emerging technologies** to enhance how we:

- Monitor risk;
- Support compliance; and
- Deliver actionable insights.



Objectives

UKIA is committed to:

1. **Exploring appropriate AI applications** to enhance mission delivery.
2. **Developing tools** that enable continuous monitoring of high-risk areas.
3. **Evaluating AI-related enterprise-wide risks** to inform oversight.
4. **Providing governance and guidance** for safe, consistent AI use across the University.



Outcomes

Strategic alignment with:

- Institutional priorities
- Information security
- Regulatory compliance
- Long-term sustainability

Multi-faceted assurance:

- Internal controls
- Risk management
- Compliance monitoring
- Decision support

Continuous improvement to drive:

- Real-time risk visibility
- Proactive issue identification
- Enhanced audit efficiency and depth

Operationalizing our Strategy: Three Pillars of Structured Engagement

Adoption of AI

Enhance audit coverage and performance by leveraging strategic partnerships and developing in-house AI capabilities. This initiative will be accomplished in four phases:

1. Control Evaluation Assistance
2. Trend Analysis
3. Continuous Auditing
4. Strategic Risk/Advisory Modeling

Assurance for AI

Strengthen audit frameworks by enhancing the audit universe and protocols, improving risk identification and mitigation, and advancing audit execution and root cause analysis.

Advising on AI

Deliver expertise in designing controls, policies and governance frameworks that drive and sustain innovation.

AI Tools for Use Internally by UKIA

Adoption of AI

UKIA, in collaboration with the UK Center for Applied Artificial Intelligence (CAAI), has launched the STRIDE (Strategic Technologies for Risk, Insight, Data Analysis and Efficiency) Initiative to responsibly integrate AI across the audit lifecycle using a structured, four-phase approach.

Phase I: Control Evaluation Assistance (In Progress)

AI is being piloted to assist in evaluating standard audit documentation — such as SOPs, policies and evidence — using advanced AI-supported techniques.

Target Completion Date: Fall 2025

Phase II: Trend Analysis (Commences Fall 2025)

Use AI to analyze trends in observations and data across audits, identifying early indicators of systemic risk or emerging governance gaps.

Target Completion Date: TBD

Phase III: Continuous Auditing (TBD)

Use AI to monitor transactional activity and control events in near real-time, flagging exceptions or anomalies that may indicate breakdowns or emerging threats.

Phase IV: Strategic Risk/Advisory Modeling (TBD)

Use AI to simulate control design decisions, risk scenarios or organizational change impacts, providing leadership with forward-looking insight.

Impact:

- **Efficiency:** Reduce manual review burden and redirect auditor time to higher-risk areas
- **Standardization:** Increase consistency in how evidence is evaluated across engagements
- **Transparency:** Provide traceable and explainable AI outputs to support findings
- **Innovation Readiness:** Build fluency and credibility with AI tools and advise others on experiences, outcomes and best practices

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Risk-Based Framework for Evaluating AI Use Across the University

Adoption of AI

Assurance for AI

Current Initiative:

UKIA is actively planning a **shadow AI assessment** to identify and evaluate the decentralized use of AI tools within selected academic and operational units. This effort aims to:

- Assess associated **risks**;
- Recommend **safeguards** to protect institutional data;
- Promote **awareness** of approved AI alternatives; and
- Support **compliance** with institutional and regulatory standards.

Expected Impact:

- **Risk Visibility:** Uncover gaps where AI tools are used without proper procurement or IT security oversight
- **Control Effectiveness:** Evaluate the adequacy of oversight, auditability and security protocols in AI applications
- **Regulatory Compliance:** Ensure adherence to relevant laws and policies (e.g., Kentucky Senate Bill 4, HIPAA, FERPA) across all AI use cases
- **Assurance Maturity:** Develop a scalable and repeatable risk-based model for ongoing AI oversight across the enterprise

UKIA's Role in Advancing AI Governance at the University

Adoption of AI

Assurance for AI

Advising on AI

Current Activities:

- **Collaborating** with UK Innovate and UK CAAI to evaluate governance models using IBM watsonX
- **Participating** in AI governance and use-case discussions with Microsoft Azure
- **Developing** institutional guidance for acceptable use, AI inventory protocols and tiered risk classification frameworks

Expected Impact:

- **Preventive Assurance:** Integrate oversight into early AI governance planning to minimize the need for remediation after deployment
- **Policy and Control Alignment:** Support departments in aligning AI initiatives with institutional policies on data governance, ethics and cybersecurity
- **Strategic Enablement:** Ensure that AI innovation aligns with accountability and transparency standards
- **Enterprise Coordination:** Help shape a unified, university-wide AI governance strategy that supports responsible AI adoption across all units

The Path Forward: Clarify. Align. Prevent.

Advising on AI

By engaging early, addressing AI strategically and leading with intention, UKIA aims to:

- **Clarify** ownership, governance expectations and institutional thresholds for responsible AI use.
- **Align** AI-driven innovation with regulatory mandates, ethical principles and institutional goals.
- **Prevent** control failures and compliance gaps proactively, minimizing remediation time and cost.

CAVEAT:

UKIA's objective is not to slow **innovation**, but to ensure that it:

- **Is governed** with the same **rigor, foresight and accountability** that define the University's core missions.
- Provides **assurance** that AI is used **transparently, ethically** and **in alignment** with institutional **values**.

This assurance **strengthens trust, supports transparency, reinforces our compliance posture** and enables the University to **lead** confidently and securely in **AI innovation**.

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Internal Audit's **current** and **planned** engagements ensure that AI **supports**, rather than **risks**, the University's goals and commitment to **Advancing Kentucky Together**.

QUESTIONS

