

AI in auditing:

Building organizational resilience and creating stakeholder value

Organizations today are operating in an environment of heightened uncertainty, shaped by geopolitical tensions, market volatility, cyber risks, regulatory change, and rising stakeholder expectations, which has made resilience a top boardroom priority. As a result, boards, audit committees, investors, regulators, and management increasingly expect audit to deliver more than compliance—they want insight that strengthens governance, supports better decision-making, and helps organizations remain resilient. At the same time, as organizations move from Artificial Intelligence (AI) experimentation to enterprise-wide deployment, governance, trust, and risk management are becoming essential to scaling AI successfully and ensuring that it contributes to resilience rather than creating additional risk.

Employee access to AI tools expanded by 50 percent during 2025, yet governance readiness across surveyed organizations stood at only 30 percent—an imbalance that represents both a challenge and an opportunity for audit and risk functions across the region. The focus is shifting from deploying AI to governing it, ensuring decisions are transparent, reliable, and aligned with organizational values. Drawing on input from over 3,200 senior leaders across 24 countries, the study found that AI investment continues to climb, even as organizations place more emphasis on governance, trust, and responsible deployment. The chart below summarizes the headline trend.

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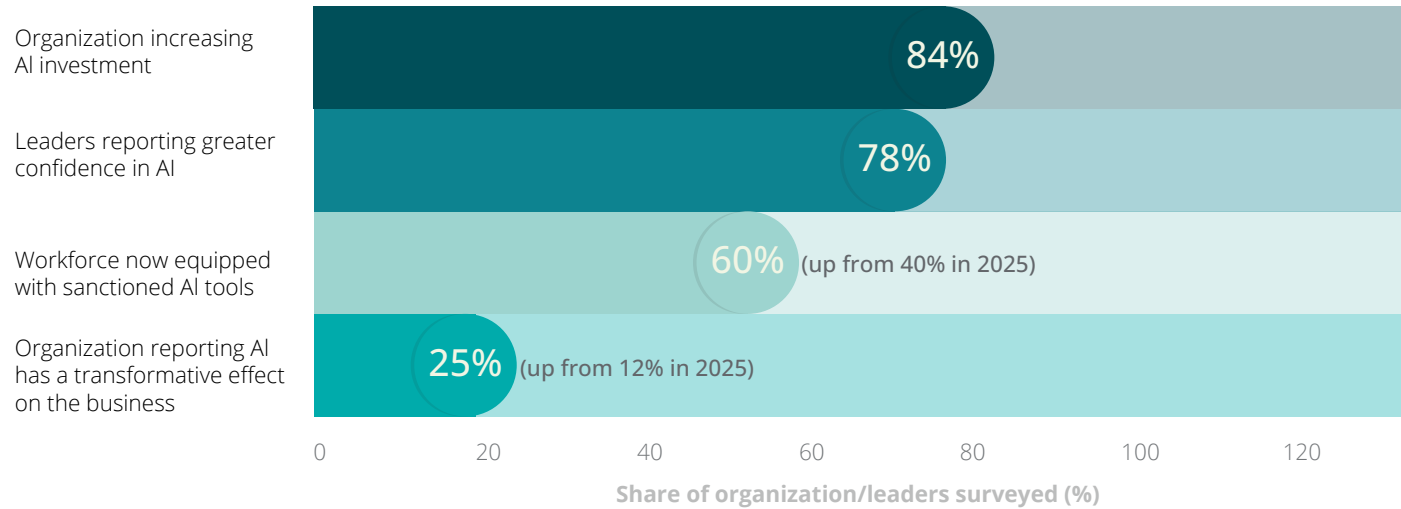


Figure 1: AI investment and adoption signals

Source: Deloitte State of AI in the Enterprise 2026 (n=3,235 leaders, 24 countries)

From vision to value in the Middle East

Across the Middle East, national digital transformation agendas are accelerating AI adoption, making effective governance and risk oversight more critical than ever.



Figure 2: Digital initiatives in the Middle East

Across the GCC, the AI market is projected to exceed US\$23 billion annually by 2030, driven by sovereign-backed national strategies and expanding enterprise adoption.⁴ This trajectory reflects both the scale of regional ambition and the importance of building the governance foundations to sustain this growth.

AI powers the next wave of audit

The Organization for Economic Co-operation and Development (OECD) has documented a similar pattern among supreme audit institutions worldwide, which are increasingly using AI for anomaly detection, predictive risk work, document review, and continuous auditing.² Its 2026 review of public audit institutions found strong institutional momentum behind that shift, as the following chart shows. >

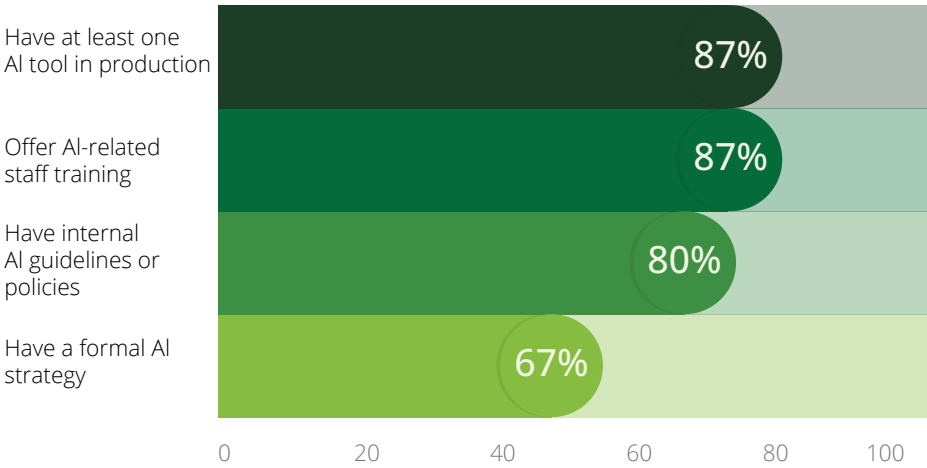


Figure 3: AI capacity among supreme audit institutions (SAIs)

Source: OECD, The state of Artificial Intelligence in public audit (2026) – 15 institutions consulted across 14 countries and the EU

Strengthening governance through intelligent audit

For decades, audit has been grounded in sample-based testing of historical financial information, an approach that remains important but is increasingly strained by the scale, speed, and complexity of modern business. Intelligent audit, powered by AI, offers a more responsive model: one that can analyze entire populations of transactions, detect unusual patterns, and surface emerging risks in near real time. In doing so, it shifts audit from a predominantly backward-looking control function toward a more dynamic source of insight for governance and oversight.

This evolution is not simply about efficiency; it is about strengthening the quality and relevance of assurance. Through predictive analytics, continuous monitoring, and more sophisticated anomaly detection, intelligent audit enables organizations to identify financial, operational, and compliance risks earlier, giving management and boards greater visibility over issues before they escalate. By moving beyond sampling toward a fuller view of the underlying data, audit can deliver deeper assurance, sharper insight, and greater confidence in the decisions that shape organizational resilience.

From data to decisions

Data becomes valuable when analytics turns raw numbers into clear patterns, anomalies, and visuals that help decision-makers focus quickly on what matters. In audit, this means testing entire populations of transactions rather than relying only on samples, making it easier to identify unusual items, concentrations of risk, and exceptions that require closer review. Research also shows that greater use of data analytics is linked to stronger audit quality and effectiveness.

It is important, however, to distinguish between data analytics and AI. Data analytics helps auditors understand what is happening in the data by highlighting trends, outliers, threshold breaches, and other risk indicators. AI builds on that foundation and helps interpret results at scale, connect multiple signals across datasets, and prioritize the cases most likely to need attention. Put simply, analytics identifies patterns and risks; AI helps turn those insights into faster, more targeted decisions.

Practical examples show how this works across key risk areas. In procurement, analytics can reveal split purchases just below approval thresholds and flag sole-sourced vendors with unusually high win rates despite limited or no competition. In payroll, it can detect potential ghost employees by identifying the absence of signs of genuine activity, such as badge access or benefit deductions. AI can then build on these findings by combining indicators, spotting more complex risk scenarios, and helping auditors focus on the cases where the potential risk is greatest.³

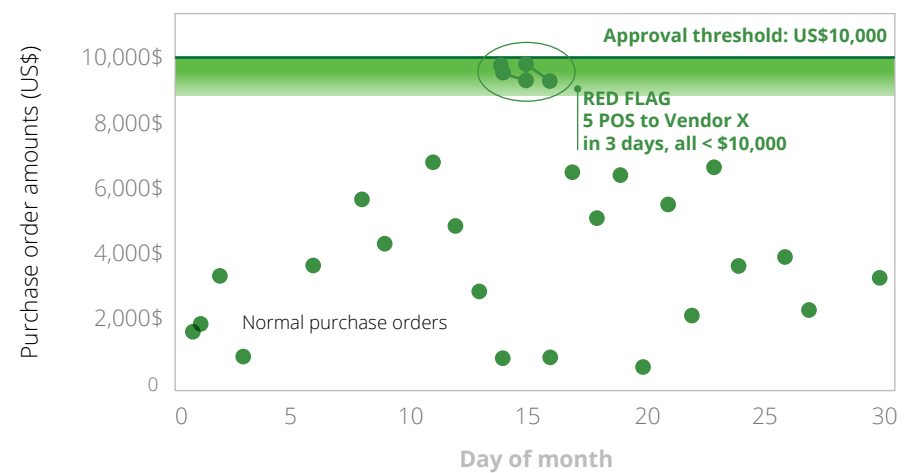


Figure 4: Split purchase pattern: Multiple POs just under the approval threshold

*Figure above: Five purchase orders to the same vendor within a 3-day window, each priced just under the US\$10,000 approval threshold — a split-purchase red flag

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From insight to intelligence

AI builds upon analytics by moving beyond identifying patterns to generating predictions, recommendations, and increasingly autonomous decision support. Organizations are deploying AI across a wide range of business functions, including financial forecasting, fraud detection, cybersecurity, and customer service. These applications enable organizations to process information at a scale and speed that would be difficult to achieve through traditional analytical methods. AI can improve operational efficiency, enhance forecasting accuracy, identify complex relationships across datasets, and support more informed decision-making.

Trusted AI for a resilient Middle East

In today's geopolitical environment, resilience has become a defining priority for Middle East economies. Regional tensions, supply chain disruption, energy market volatility, and shifting regulation are placing greater pressure on governments, businesses, and investors to make faster, better-informed decisions. As a result, stakeholders across the economy—from boards and regulators to sovereign investors and business leaders—need confidence that the systems supporting critical decisions are reliable, transparent, and responsive to risk.

Trusted AI can help build that confidence. As organizations across the Middle East accelerate digital transformation, AI is being embedded into finance, operations, procurement, compliance, and public services. But its value will depend not only on adoption, but on governance.

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Strong oversight across the AI lifecycle—from data quality and model design to monitoring, accountability, and risk management—is essential to ensure AI-enabled decisions remain fair, explainable, and aligned with organizational and national priorities.

For audit and risk functions, this creates a strategic opportunity. By providing assurance over the governance, controls, and performance of AI systems, they can help strengthen trust in digital decision-making when resilience matters most. In a region defined by ambition and transformation, trusted AI will be critical not only to driving efficiency and innovation, but also to protecting stakeholder confidence and supporting sustainable growth amid uncertainty.

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Endnotes

1. Deloitte AI Institute. State of AI in the Enterprise 2026. Available at: <https://www.deloitte.com/us/en/what-we-do/capabilities/applied-artificial-intelligence/content/state-of-ai-in-the-enterprise.html>.
2. OECD. The State of Artificial Intelligence in Public Audit (2026). Available at: https://www.oecd.org/en/publications/the-state-of-artificial-intelligence-in-public-audit_f4a6c658-en.html.
3. From Pen-and-Paper to Technology-Driven Analytics: Technology Usage in Internal Auditing. Journal of Information Systems, American Accounting Association (2025). <https://publications.aaahq.org/jis/article/39/3/39/13726/>.
4. Research And Markets, AI in the Middle East 2025: Adoption Trends, Readiness, and Risk Landscape.