

AI in Tax and Audit

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The Shift: Why Tax & Audit Are Being Transformed Now



Explosion of regulatory complexity



High volume of unstructured financial data



Demand for real-time compliance and continuous audit

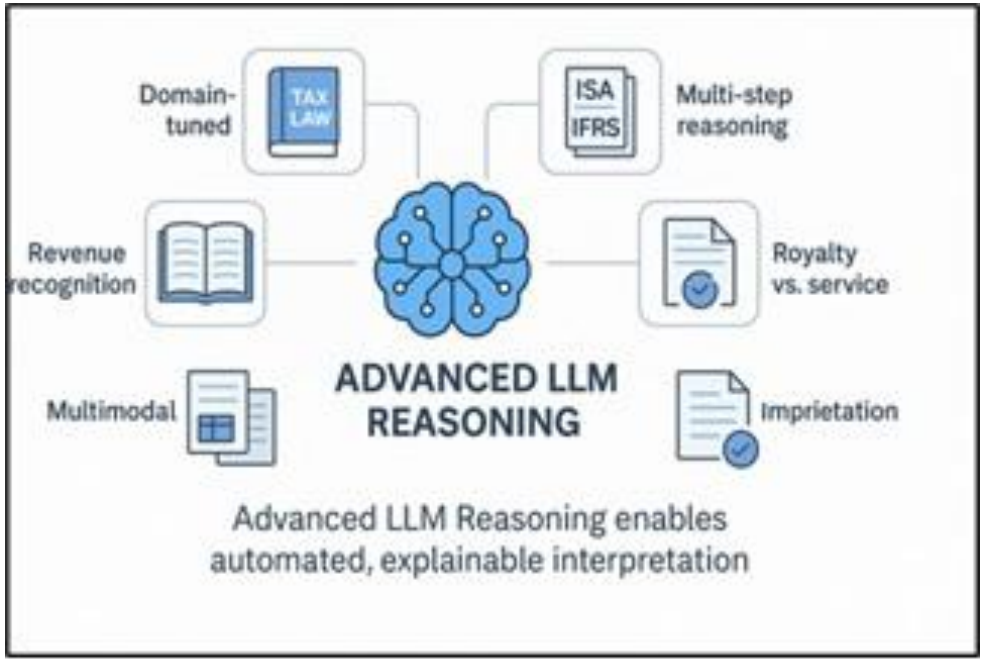


LLMs now capable of domain reasoning with citations



Enterprise AI deployment is now safe and compliant

Breakthrough 1: Advanced LLM Reasoning

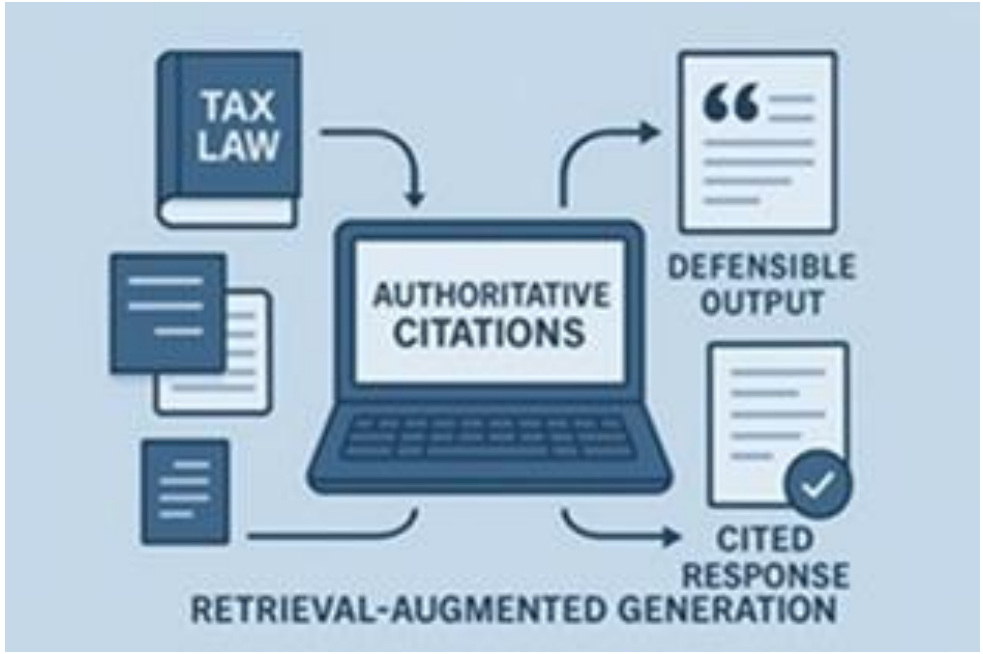


- Domain-tuned models for tax and audit
- Deep understanding of accounting, audit standards, and tax law
- Chain-of-thought logic for multi-step interpretations
- Long-context models (100k–1M tokens)
- Multimodal reasoning (PDFs, tables, statements)

Examples:

- LLM explains revenue recognition for complex SaaS contract
- LLM determines if payment qualifies as royalty under tax law

Breakthrough 2: Retrieval-Augmented Generation (RAG)

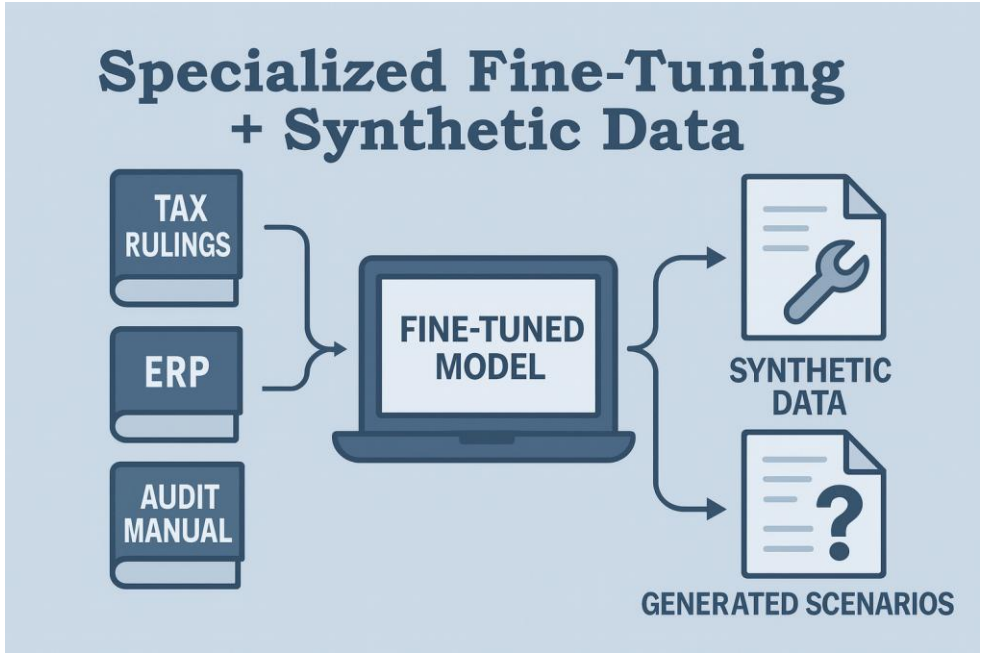


- Connects LLMs to authoritative tax and audit sources
- Enables cited, defensible outputs
- Dynamic retrieval from tax codes, standards, rulings
- Reduces hallucination by grounding responses
- Critical for regulatory and professional adoption

Examples:

- Auditor asks: “International Standards Audit (ISA) requirements for Journal Entry (JE) testing?” → Cited response
- Tax team asks: “Does 194C apply to cloud hosting?” → Cites rulings

Breakthrough 3: Specialized Fine-Tuning + Synthetic Data

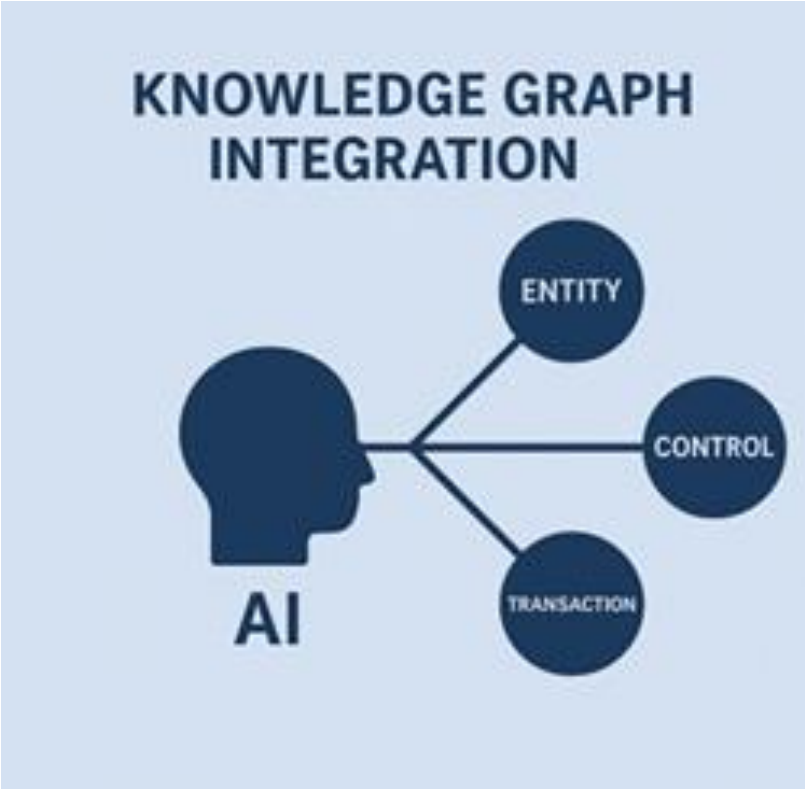


- Models tuned on tax rulings, audit manuals, ERP data
- Parameter-efficient fine-tuning (LoRA, QLoRA)
- Synthetic rare-scenario generation (complex fraud, edge-case tax situations)
- Higher accuracy for niche, domain-specific tasks - Learns industry-specific accounting patterns

Examples:

- Model predicts control weaknesses from historical data (a.) People have access to systems they shouldn't b.) Reconciliations are not done properly
- Synthetic invoices used to train fraud detection models

Breakthrough 4: Knowledge Graph Integration

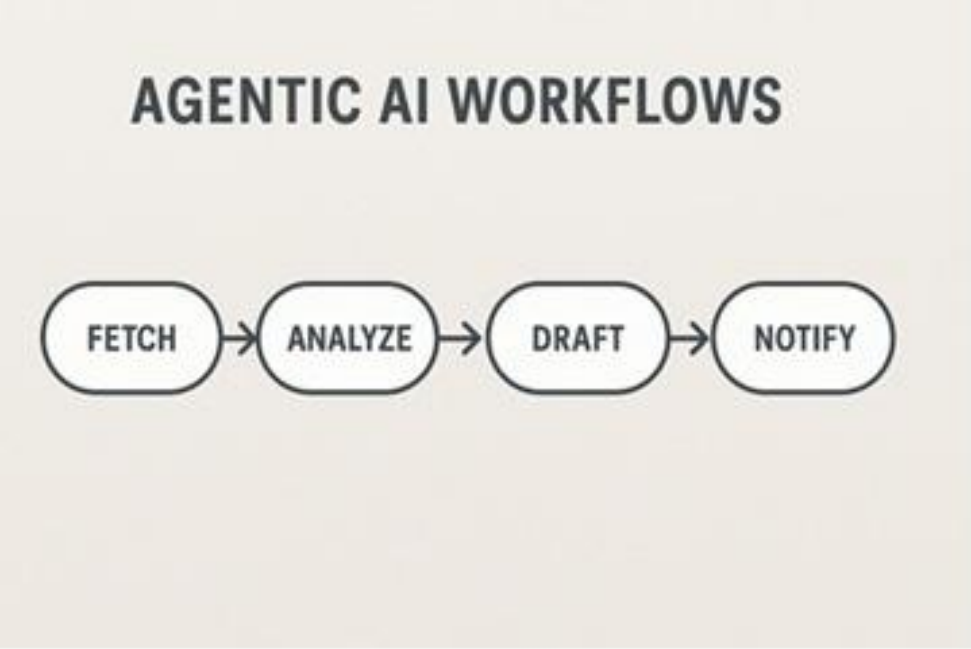


- Structured mapping of entities, transactions, controls
- AI understands relationships, dependencies, and risk paths
- Ideal for fraud detection, transfer pricing, related-party analysis
- Facilitates contextual audit and compliance intelligence

Examples:

- Vendor A sells to Vendor B, Vendor B sells to “Company X”, but Vendor A and Company X are secretly connected. (same company loop)
- Maps hidden related-party connections - Person A ⟶ Director of Company 1, Person A’s spouse ⟶ Director of Vendor 2 , Vendor 2 sells services to Company 1. This should have been disclosed—but was not.

Breakthrough 5: Agentic AI Workflows



- AI executes multi-step audit and tax processes
- Function calling to ERP, GRC, and document systems
- Autonomous workflows (fetch → analyze → draft → notify)
- Long-running agents for continuous audit and monitoring

Examples:

- Agent retrieves high-risk JEs → analyzes → drafts findings
- Agent monitors GST mismatches and drafts notices

Breakthrough 6: Explainability & Governance for LLMs

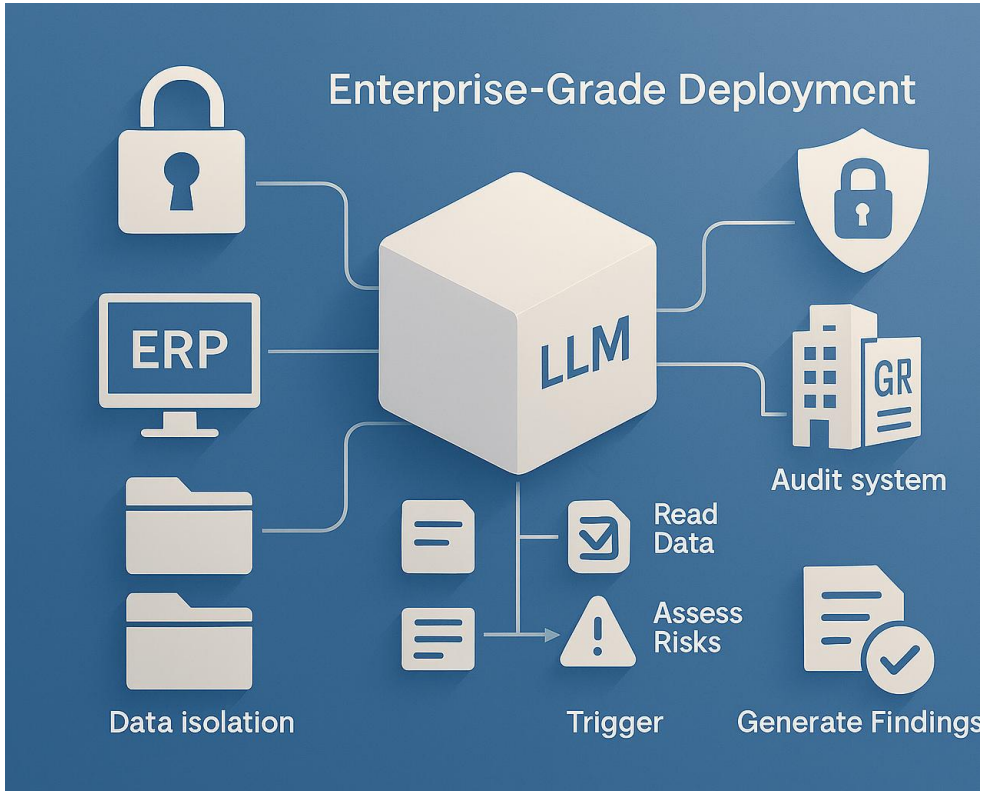


- Traceable reasoning chains
- Citations to standards and laws
- Model risk management tools (XAI) -
- Full audit trails for every AI decision
- Supports regulator and firm-level defensibility - AI's output can be trusted, proven, and defended if a regulator, tax authority, or audit reviewer questions it.

Examples:

- AI explains why JE was flagged as unusual
- Tax AI shows case-law lineage for interpretation

Breakthrough 7: Enterprise-Grade Deployment



- Private/on-prem LLM hosting
- Secure integration with ERP, tax engines, and audit systems
- Encryption, access controls, and data isolation - Protecting data so only authorized people can access it, it stays encrypted, and each client's data remains separate
- Integration with GRC, internal audit, investigation systems

Examples:

- Bank runs LLM audit engine fully on-prem
- Big 4 deploys client-specific secure RAG search

Transformation in Tax



- **REASONING** → AUTOMATED INTERPRETATION



- **RAG** → CITED TAX MEMOS



- **AGENTS** → AUTOMATED RETURN PREPARATION



- **KNOWLEDGE GRAPHS** → EVASION NETWORK DETECTION



AI DRAFTS GST MEMO FOR CROSS-BORDER DEAL



DETECTS FAKE INVOICE CHAINS

Transformation in Audit

LLM Enablers → Outcomes:	• **Reasoning** → Better risk assessments	• **Agents** → Continuous assurance	• **Multimodal LLMs** → Evidence extraction
• **Knowledge graphs** → Fraud linkage analysis	Examples:	• AI drafts full walkthrough from uploaded contract	• Flags risky JEs referencing prior-year issues

Conclusion — What It Means for Stakeholders in India



AI enables CAs, auditors, and tax professionals to:

- Focus on areas requiring professional judgment — interpretation of complex laws, audit risk evaluation, fraud assessment
- Deliver higher-value advisory services such as tax planning, structuring, business insights, and risk strategy
- Become more strategic partners rather than operational executors


Thank You



Questions