AI IN ACCOUNTING (III)

How Accounting Firms Use AI Tools & Key Practical Applications

The integration of AI into accounting practices represents one of the most significant transformations the profession has experienced in decades. While awareness is widespread, implementation remains limited, with only 14% of firms having a defined AI strategy. For SMPs and SMEs seeking to remain competitive, understanding both the practical applications and how to realistically deploy AI has become essential.

Current Adoption Landscape

The accounting profession's AI engagement differs markedly from other sectors. Rather than implementing adapted platforms, 52% of tax firms use generative AI on open-source tools like ChatGPT, while only 17% employ dedicated accounting software with integrated AI capabilities. In a way, this democratizes technology adoption for resource-constrained firms but creates compliance and accuracy risks when generic systems handle sensitive financial data without domain-specific safeguards.
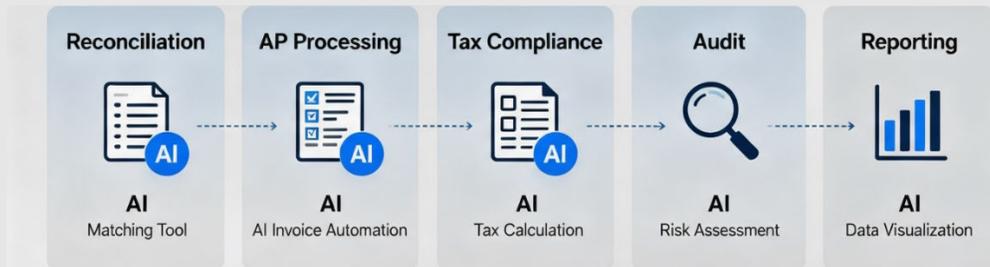
Key Practical Applications

Data-intensive automation forms the obvious starting point. Bank reconciliation and transaction matching—historically very time-consuming and error-prone—have become primary AI targets for accountants. AI-powered platforms process thousands of transactions in seconds, reducing reconciliation cycles from days to hours while capturing complete audit trails. For SMPs managing multiple client accounts, this redirects substantial staff hours toward advisory work.

Invoice processing delivers measurable impact. AI systems extract data from diverse invoice formats, perform automated matching against purchase orders, and route approval workflows appropriately. Organizations report 80% reductions in processing time and five-fold increases in credit note efficiency. Platforms like Vic.ai achieve 99% accuracy in accounts payable automation through neural networks that learn from accounting team behaviors.

Document analysis has proliferated with generative AI maturation. Rather than manually reviewing contracts or regulatory documentation, accounting teams use AI to extract key information and flag items requiring human review. This extends to audit trail analysis, where AI systematically examines transaction histories to identify patterns and anomalies human auditors might miss.

Fraud detection leverages AI's ability to process multidimensional data across historical patterns. Machine learning models identify unusual transactions, flag accounts showing manipulation signs, and detect patterns associated with financial statement irregularities. This creates genuine competitive advantage for firms implementing these capabilities.

Reconciliation	AP Processing	Tax Compliance	Audit	Reporting
AI	AI	AI	AI	AI
Matching Tool	AI Invoice Automation	Tax Calculation	Risk Assessment	Data Visualization

AI Workflow for the accounting function's key processes

Choosing the Right AI Solution

Selecting an appropriate AI tool is a critical inflection point for SMPs and SMEs. The market has grown dramatically—the AI accounting sector reached $6.68 billion in 2025 (70.4% year-over-year growth), with SMEs representing 68% of spending. With that, 64% of firms plan further AI investments this year, suggesting that current implementations remain partial. Making informed choices requires systematic evaluation across six dimensions.

Accuracy & Auditability
Accuracy claims are meaningless without transparency. Your firm's reputation depends on defensible financial reporting, and regulators reject "black-box" decision-making. Essential requirements include precision metrics showing the percentage of transactions auto-classified correctly in production environments (not curated demonstrations), confidence scores enabling reviewers to trace predictions back to source data, and robust error-handling workflows that flag low-confidence items for human review. Accounting Today identifies accuracy, integration, and industry specificity as primary evaluation criteria.

Data Security & Compliance
Client financial data represents your most valuable and vulnerable asset. Non-negotiable requirements include independent SOC 2 Type II certification with clear mapping to ISO/IEC 42001 AI governance controls, enterprise-grade encryption at rest and in transit, granular role-based access controls, and multi-factor authentication. Equally critical

are explicit data retention and model training policies preventing client data incorporation into public models. The Sage Copilot incident, where weak safeguards briefly exposed client data, illustrates these risks concretely.

Domain-Specific Expertise
Generic AI tools may suffice for content creation, but accounting requires domain-specific expertise. Tools "not grounded in authoritative data may be riskier than they're worth". Key evaluation criteria include training corpus composed of industry-specific documents (professional literature, invoices, financial statements) rather than general web content, vertical fine-tuning demonstrating understanding of bank reconciliation and month-end closing processes, and clear evidence the solution extends beyond basic automation wrapped in accounting terminology.
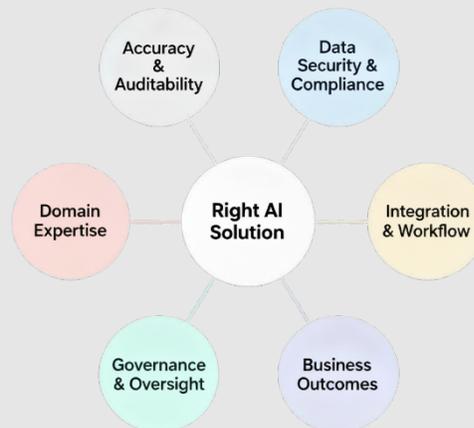
Integration & Workflow Compatibility
The Journal of Accountancy lists seamless workflow integration as the third critical requirement. The most valuable solutions enhance existing processes rather than requiring workflow redesign. Evaluate whether the tool connects with your current accounting software (Xero, QuickBooks, Sage), ERP systems, and client portals. Cloud-based solutions represented 62.4% of

2024 market value and maintain a 47.5% CAGR, enabling elastic compute layers and weekly algorithm refreshes that on-premise servers cannot match.

Governance & Oversight
AI systems require ongoing oversight to maintain reliability and compliance. Required governance elements include a named AI oversight committee with documented risk management processes, regular testing for bias and model drift with third-party audits for material implementations, and clear escalation procedures when AI recommendations conflict with professional judgment. Firms must prioritize security, compliance, and ethical considerations, ensuring tools align with industry standards.

Quantified Business Outcomes
Efficiency promises must translate to concrete results. Intelligent process automation should demonstrably reduce time spent on bookkeeping and reconciliation while enabling staff redeployment to advisory services. ROI validation requirements include quantified before-and-after metrics (hours per close cycle, FTE reallocation opportunities, error rate improvements), transparent pricing models aligned with value delivery, and reference customers from similar-sized firms willing to discuss implementation experiences. Studies show AI-using accountants finalize monthly statements within two weeks of month-end, versus significantly longer for non-adopters.

Writing Effective Prompts: Tips & Best Practices

Prompt engineering has emerged as a critical professional skill for accountants. As the AICPA notes, "The better prompt we make, the better question we make in AI, and making sure we word it the right way improves our chances of better results". The quality of AI outputs depends entirely on how well you guide the system. For accounting professionals where precision is paramount, mastering prompt construction determines whether AI becomes a productivity multiplier or a source of costly errors.

Understanding the Fundamentals
Generative AI tools don't truly "understand" concepts—they predict statistically likely responses based on patterns in training data. This creates the risk of "hallucinations," where AI generates plausible-sounding but entirely incorrect information. In accounting, hallucinations can lead to financial misstatements, compliance failures, and reputational damage. A well-crafted prompt provides the clarity, context, and constraints that reduce hallucination risk while maximizing output quality.

The STAR Framework
The STAR method (Situation, Task, Appearance, Refine) provides a structured approach recommended by accounting bodies including IFAC and professional training programs.

Situation establishes context by describing the accounting scenario, your precise role, your goal, and the accounting standards you need to follow. Example: "*I am a senior accountant at an SME preparing IFRS financial statements for a manufacturing client with complex lease arrangements.*"

Task specifies exactly what you want the AI to do. Be explicit and action-oriented: "*List the key lease terms from this contract that I need to input into our lease accounting software under IFRS 16, including commencement date, lease term, payment schedule, and renewal options.*"

Appearance defines output format, tone, length, and structure. Specify: "*Present the information as a structured table with columns for: Term Type, Value/Description, Location in Document, and Confidence Level. Use professional but accessible language suitable for review by audit committee members.*"

Refine involves iterating on the initial prompt. Don't expect perfection on the first attempt—treat it as a conversation where you provide feedback to improve subsequent responses.

Advanced Techniques

Specificity is critical. Incorporate precise accounting terms, standard numbers (ASC 842, IFRS 16), regulatory bodies, and jurisdictions. Compare: "*What is lease accounting?*" versus "*I am an accountant at a US-based private company lessee adopting ASC 842 for fiscal year beginning January 1, 2025. Explain the main balance sheet recognition requirements for operating leases under this standard, including calculation of the ROU asset and lease liability*".

Chain-of-thought prompting encourages AI to explain reasoning step-by-step before concluding, enhancing logical reasoning for complex financial analysis. Example: "*Before providing your conclusion, explain: 1) How you identified the performance obligations, 2) Why you allocated transaction price in that manner, 3) What revenue recognition pattern you selected and why.*"

Few-shot prompting provides examples to guide responses and improve accuracy. Show the AI 2-3 examples of the format or analysis style you want, then present the new case requiring similar treatment.

Breaking down complexity
improves results because AI generates responses sequentially. For complex requests, use stepwise prompts: "*Summarize the key terms of this revenue contract*" → "*Based on those terms, explain the correct accounting treatment under ASC 606*" → "*Draft the related revenue recognition schedules*".

Critical Constraints and Best Practices

Always specify constraints explicitly. Include: relevant accounting standards and jurisdictions, language requirements (UK English, US English), what the AI should not do ("*Don't make anything up; if information is missing, state that clearly*"), and confidence thresholds ("*For any term where confidence is below 80%, flag for human review*").

Furthermore, provide context beyond the immediate question (avoid including confidential information), validate all outputs, build prompt libraries (collect best practices), and realize that iterative refinement is normal.

Part 2 of this AI Guide by EFAA will be published soon.