The Evolving Role of CMAs in AI Implementation and Auditing

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Abstract:

In the accounting world, AI is not a threat but an opportunity. The integration of artificial intelligence (AI) is rapidly transforming the accounting and auditing landscape, reshaping traditional roles and introducing new challenges and opportunities. This article explores the evolving role of Cost and Management Accountants (CMAs) in this AI-driven environment, emphasizing their expanding responsibilities beyond routine tasks towards strategic oversight, AI logic development and ethical governance. It also highlights the specific areas where CMAs can contribute and the corresponding impacts of AI. The study offers strategic guidance for CMAs to approach AI advancements with curiosity and willingness, enabling them to remain at the forefront of this evolving trend.

Introduction

The accounting profession, traditionally characterized by meticulous processes, thorough record-keeping, and rigid adherence to regulations, is undergoing a major shift driven by Artificial Intelligence (AI). The evolution of accounting has been inextricably linked to advancements in technology, shaping the way financial data is recorded, processed, and analyzed. What began with manual ledger books gradually progressed to Enterprise Resource Planning (ERP) systems, which integrated various business functions and provided real-time access to financial information. Each technological milestone has not only enhanced productivity but also redefined the scope and complexity of accounting practices, paving the way for more strategic and data-driven decision-making in modern businesses (Scapens & Jazayeri, 2003). AI is taking over repetitive tasks like data input, transaction sorting, and regulatory compliance, enabling accountants to concentrate more on analysis, forecasting, and strategic planning. As a result, the role of Certified Management Accountants (CMAs) is evolving, requiring new skills and offering greater opportunities to contribute to business decisions (Raza, 2025).

AI Implementation in Accounting and Auditing around the World

As anticipated, the Big Four accounting firms are at the forefront of driving AI adoption in accounting and auditing. An analysis of their use of AI technologies reveals two clear trends. First, the accounting industry is increasingly investing in AI and incorporating it into fundamental business operations. Second, the Big Four emphasize that AI will be a crucial factor in shaping the future success of the accounting profession (Zhang, Xiong, Xie, Fan, & Gu, 2020). According to article published in Accounting and Business journal in April 2025 Shankari Raman, a Chennai-based partner with the Indian member firm of EY Global says, “In my experience, 70%–80% of Indian corporates are at various stages along the digital value chain, embracing technologies like AI to transform their businesses.” (Accounting and Business, 2025). In 2023, EY has introduced multiple digital technology initiatives in India, including EYQ, an internal conversational AI assistant to provide secure access to advanced large language model capabilities. According to EY, AI empowers audit teams to detect risks, verify data, and deliver predictive insights with remarkable speed and accuracy. A major advancement of AI in accounting field is the launch of the CA GPT platform by the Institute of Chartered Accountants of India. The ICAI’s CA GPT platform, developed with data from more than 5,000 companies and over 250,000 prompts, has successfully trained upwards of 8,000 chartered accountants so far, aiming to

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expand this number to 20,000 by March 2025 (Accounting and Business, 2025). According to (Griffin, How Artificial Intelligence Will Impact Accounting, 2019) small businesses that do not adapt to changing times run the risk of being left behind. As technology has advanced and integrated into accounting, it has become crucial for organizations of every size to stay current with technological trends to remain competitive.

Evolving Role of CMAs

The role of today's accountant is vastly different from what it was two decades ago, and it is expected to change just as significantly in the next twenty years. In fact, over the coming decade, the responsibilities and expectations for accountants are set to undergo a major transformation. Accountants will need to embrace specialization and adopt advanced technologies as part of their roles. However, there are varying perspectives on how exactly the accountant's responsibilities will evolve in the future (Greenman, 2017). According to a recent study by the University of Oxford, accountants face a 95% likelihood of job displacement as machines increasingly take over tasks such as number-crunching and data processing (Griffin, 2019). However, as highlighted in a recent Deloitte report, technological progress has traditionally phased out certain jobs while simultaneously generating new ones. There is no reason to expect this trend to change. Even with the advent of revolutionary AI technology in the near future, its widespread adoption and accessibility are unlikely to happen immediately. It will take time before such technology is broadly implemented (Hasan, 2022). Accountants and auditors, together with their stakeholders, are required to adapt the transformations brought about by AI technology and prepare for a deeper integration of AI within accounting and auditing practices. The 2024 Generative AI in Professional Services report by the Thomson Reuters Institute reveals almost half (49%) of the organizations have no plans to adopt GenAI in the near future (Thomson Reuters Tax and Accounting, 2024).

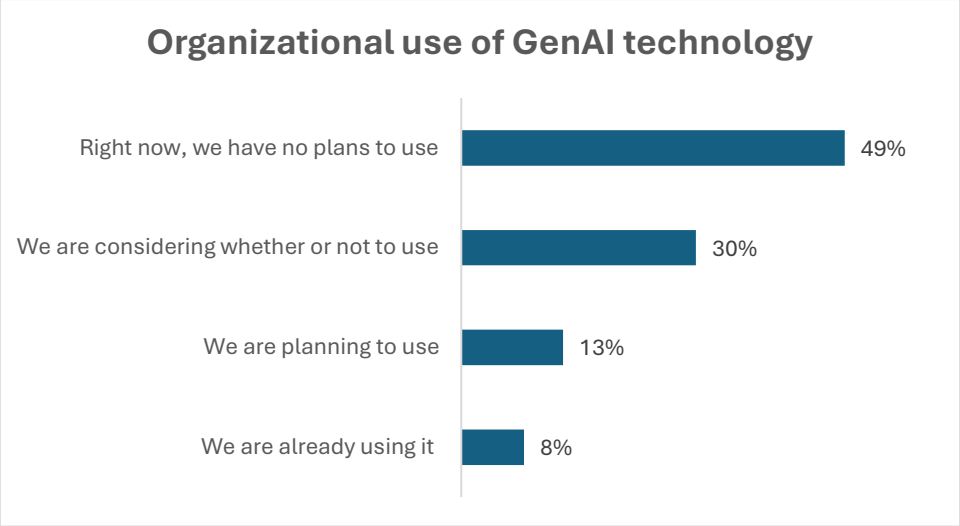

Figure 1: Source: Survey results from (Thomson Reuters Tax and Accounting, 2024)

Interestingly, the same report reported that accountants appear to prefer using personal, open-source GenAI tools for their work rather than industry-specific solutions. Among tax firms surveyed by Thomson Reuters Institute, 27% of those already utilizing GenAI tools rely on open-source technologies like ChatGPT, while just over 8% use tools designed specifically for their industry (Thomson Reuters Tax and Accounting, 2024). When interviewed a selected 100 participants who are directly involved with financial auditing, AI technology or regulatory compliance in financial sector in India with varying levels of experience it was observed that a large majority of respondents (70%) have at least a basic understanding of AI in auditing, reflecting increasing awareness of AI technologies within the financial sector. Nevertheless, a notable portion (30%) still remained unfamiliar with these

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advancements, underscoring the need for enhanced education and awareness initiatives aimed at auditing professionals (Manochithra & Mohan, 2025).

Current State of AI in Accounting and Auditing Firms

The current state of AI in Accounting and Auditing Firms (especially in India) are still rule-based or template-driven. Behind the scenes, finance professionals manually define logic, thresholds, and assumptions. It's still automation — not autonomy. Table 1 shows the current state and the required AI enhanced state that needs to be achieved across various stages of accounting.

Table 1: Current State vs required AI enhanced state in various stages of accounting

Stage	Current State	AI-Enhanced State
Templates & Rules	Excel models, hard-coded rules	Prompt-driven dynamic forecasting
Human-Led Forecasts	Manual budgeting, scenario planning	GPT-trained models simulate multiple outcomes
Transaction AI	Invoice classification, auto-reconcile	AI that understands accounting context
Reporting & Analysis	Static dashboards	Interactive, real-time narrative reports
Audit & Compliance	Checklists, samples	Continuous AI auditing with red-flag alerts

In India, we are currently in a transitional phase, shifting from rule-based systems to knowledge- and learning-based AI models. In the field of accounting, several AI-driven solutions have emerged, such as Gruve.ai, AI Accountant (integrated with platforms like Tally and Zoho), and Finanalyzer. Despite these advancements, many Indian companies have yet to adopt even basic tools like Power BI dashboards—relying heavily on Excel spreadsheets and PowerPoint presentations for financial reporting and analysis. However, considering the rapid pace of technological advancement over the past two decades, a broader transformation is likely to occur sooner than expected. That said, several factors may slow down AI adoption in India's finance sector: the strong preference for traditional tools like spreadsheets and PPTs among SMEs and senior management, a shortage of AI-trained finance professionals, dependence on legacy systems, and certain regulatory or audit requirements that demand manual intervention.

Challenges in AI Adoption

As per the survey conducted over 100 participants who are directly involved with financial auditing, AI technology or regulatory compliance in financial sector in India with varying levels of experience it was observed that 40% of the respondents cited Data privacy concerns as the most significant regulatory hurdle for AI adoption, followed by Compliance with Companies Act, especially regarding how AI can be integrated within existing corporate governance framework (Manochithra & Mohan, 2025). This highlights the heightened sensitivity surrounding financial data and underscores the growing need for adherence to data protection regulations like the Digital Personal Data Protection Act, 2023.

Regulatory authorities like SEBI, ICAI, and RBI should develop AI-focused regulations that specifically address areas such as algorithmic accountability, cross-border data flows, and the alignment of AI systems with current corporate governance frameworks. Establishing such guidelines would facilitate a more seamless adoption of AI while ensuring that the auditing and financial sectors remain in compliance with both domestic and global standards.

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Future Role of CMAs in AI Implementation and Auditing

Whether AI in finance today relies on rule-based or template-driven systems or moves toward more advanced predictive models in the near future, the involvement of domain experts remains essential. Management accountants, chartered accountants, and auditors play a critical role in guiding and overseeing these technologies. Their expertise is crucial for interpreting complex financial data, validating AI outputs, setting appropriate parameters, and ensuring that AI tools are applied accurately and ethically. As AI continues to evolve, the collaboration between technology and human professionals will be key to maximizing its potential while maintaining trust and accountability in financial processes. The three areas CMAs need to play a key role during AI implementation are:

1. **To be domain logic experts**: All AI systems need domain-specific logic during their implementation, a role that Certified Management Accountants (CMAs) are well-equipped to fulfill. The responsibilities of a CMA in this context can be summarized as mentioned in Table 2.

Table 2: CMAs collaboration with various functions across teams

Team Role	CMA's Responsibility
Business Analyst / SME	Explain accounting treatments, process flows, journal entries
Data Trainer	Label and curate financial data for model training
Validator	Review AI output for logic gaps or accounting misclassification
Trainer	Help finance teams understand and trust AI-driven decisions
Ethics Monitor	Ensure AI models align with financial ethics, professional standards

Specific areas where CMAs contribute and the corresponding impacts of AI along with the AI tools and technologies used in each area are provided in Table 3.

Table 3: CMAs contribution and impacts of AI along with AI tools and technologies

Area	What CMA Contributes	Impact on AI	Examples of AI tools / technologies
Chart of Accounts Logic	Designing and structuring accounts for clear, consistent financial reporting and compliance	AI automates classification and categorization, enabling real-time updates and error reduction	NLP-based tools, Automated data mapping systems.
Cost Allocation Rules	Establishing cost drivers and allocation methodologies aligned with business strategy	AI analyzes large datasets to optimize cost allocation and identify inefficiencies dynamically	Machine learning algorithms, Cost optimization software
Variance Analysis	Interpreting variances between actual and budgeted figures, identifying causes, and recommending actions	AI quickly detects patterns and anomalies, providing deeper insights into causes of variances	Anomaly detection tools, Predictive analytics platforms

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Area	What CMA Contributes	Impact on AI	Examples of AI tools / technologies
Revenue Recognition	Applying accounting standards to ensure accurate timing and criteria for revenue recognition	AI automates compliance with complex standards (e.g., IFRS 15), reducing errors and speeding up reporting	Automated revenue recognition software, Rule-based engines
Compliance & Controls	Defining and enforcing internal controls, monitoring regulatory adherence	AI continuously monitors transactions for compliance breaches, flags risks, and supports audits	Continuous auditing platforms, AI-powered risk management tools
Forecasting Models	Setting assumptions, reviewing projections, and incorporating business insights	AI enhances forecasting by analyzing vast datasets and market trends, improving accuracy	Predictive modeling software, Time series forecasting tools
Working Capital Logic	Managing cash flow, receivables, payables, and inventory policies	AI optimizes working capital by predicting cash flow needs and identifying bottlenecks	Cash flow prediction tools, Inventory optimization systems
Tax and Regulatory Rules	Interpreting tax laws, ensuring correct application, and managing filings	AI automates tax calculations, identifies deductions, and ensures up-to-date regulatory compliance	Tax automation software, Regulatory compliance AI systems

1) **Identify critical AI ethical concerns**: The use of Artificial Intelligence (AI) in finance is rapidly growing, offering tremendous benefits like automation, predictive analysis, fraud detection, and faster decision-making. However, it brings along several critical ethical concerns that professionals — especially CMAs and CFOs — must address proactively. One of the biggest challenges is algorithmic bias, where AI models trained on historical data may unknowingly discriminate against certain customer groups in lending, credit scoring, or pricing decisions. Another major issue is the lack of transparency — often referred to as the "black box" problem — where finance teams are unable to explain or audit AI-generated outputs, raising questions about the reliability of decisions made using these tools. In such an environment, fixing responsibility becomes complicated, as it's not always clear whether the fault lies with the data scientists, the finance department, or the AI system itself. There's also the concern of over-reliance on AI, where professionals might blindly accept outputs without applying judgment or skepticism. Furthermore, AI's access to sensitive financial data raises privacy and consent issues, especially in light of global and Indian data protection laws. There are several examples where rule-based automation led to over estimation of profit leading to fraudulent income statements. One such example is Kabbage, a major US fintech acquired by American Express in 2020, used AI/ML models to automatically process and approve loans for small businesses under the US Government's COVID relief program (PPP). Their system analyzed customer data — bank feeds, payroll, invoices — and made rapid lending decisions, often without human checks. (Ammam, 2024). In 2020–21, thousands of fraudulent or ineligible loans were processed and approved by Kabbage's system, including: (a) Loans to fake companies with no operations (b) Loans to shell entities with fabricated data (c) Some loans were processed without verifying tax records or payroll details (Ammam, 2024). To address these risks, organizations must implement robust AI governance frameworks. This includes assigning clear roles and accountability — such as requiring finance leaders to validate AI

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outputs, ensuring data scientists follow ethical modeling practices, and involving CMAs as domain experts to apply logic checks. There should be regular audits for bias, fairness, and explainability, and AI systems must be designed with transparency in mind. Regulatory bodies like the RBI and SEBI are increasingly emphasizing responsible AI in financial services, and global principles such as the OECD AI Guidelines and the EU AI Act stress fairness, accountability, and human oversight. CMAs, in particular, have a strong role in bridging the gap between AI and ethics. They ensure that financial logic is correctly embedded into AI tools, perform ethical checks on outputs, and educate finance teams to challenge AI when needed. By participating in model validation, data governance, and audit committees, CMAs act as guardians of integrity in an AI-driven financial environment.

2) **Identifying AI generated errors**: In the function of accounting and auditing – the element of trust and responsibility play an important role. In the context of AI, hallucination is common when an AI model generates information that is false and fabricated. The critical issue in AI hallucination is, it is very hard to discover, and we tend to make blind trust. Therefore, it is crucial to have human oversight—particularly by qualified professionals such as CMAs or CAs—to validate AI outputs and correct any inaccuracies that may arise.

Conclusion – Approaching AI with Curiosity

Accounting and finance landscape is undergoing a pivotal transformation as artificial intelligence (AI) begins to permeate core financial processes. What has long been a spreadsheet- and PowerPoint-driven environment - particularly within micro, small, and medium enterprises (MSMEs) - is now on the cusp of a gradual yet irreversible shift toward intelligent automation. By 2026, a growing number of mid- to large-sized firms are expected to leverage AI for routine accounting tasks such as invoice booking, bank reconciliations, statutory filings, and tax compliance. Simultaneously, capacity-building efforts led by professional bodies such as the Institute of Chartered Accountants of India and the Institute of Cost Accountants of India, along with government-backed digital initiatives, are fostering greater AI awareness and readiness among finance professionals. As a result, traditional Excel-based MIS reports are expected to give way to real-time dashboards, natural language querying, and predictive modeling for budgeting and cash flow management. As a result, traditional Excel-based MIS reports are expected to give way to real-time dashboards, natural language querying, and predictive modeling for budgeting and cash flow management.

Looking ahead to 2030, the finance function in forward-looking Indian enterprises will likely evolve into AI-first decision-making units. While AI systems autonomously manage repetitive and transactional tasks, finance professionals will transition into more strategic roles—focusing on oversight, interpretation of AI-driven insights, compliance assurance, and business partnering. India should look to incorporate global best practices in AI regulation—drawing insights from leading economies like the US, UK, and EU—while tailoring these frameworks to align with the unique needs of the Indian business landscape. Doing so would help close existing regulatory gaps and create a supportive environment for the responsible and effective adoption of AI.

The role of CMA will become more prominent in the evolving financial landscape. As AI takes over routine and repetitive tasks, the CMA's responsibilities are shifting toward more analytical and judgment-intensive areas. The work is also becoming more complex, particularly because digital systems often leave minimal paper trails, making oversight and traceability more challenging. Just as the CMA's role transformed during the transition from paper-based accounting to ERP systems and spreadsheets, a similar shift is now underway with the rise of AI. In this new era, CMAs must develop expertise in designing AI logic, setting ethical boundaries, and managing the risks of AI-generated inaccuracies—commonly known as hallucinations. The CMAs must adapt by combining deep domain knowledge with an understanding of intelligent technologies, new emerging threats and developments to remain relevant and valuable in the AI-driven future of finance.

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