

Office automation using Artificial Intelligence in CA Practice

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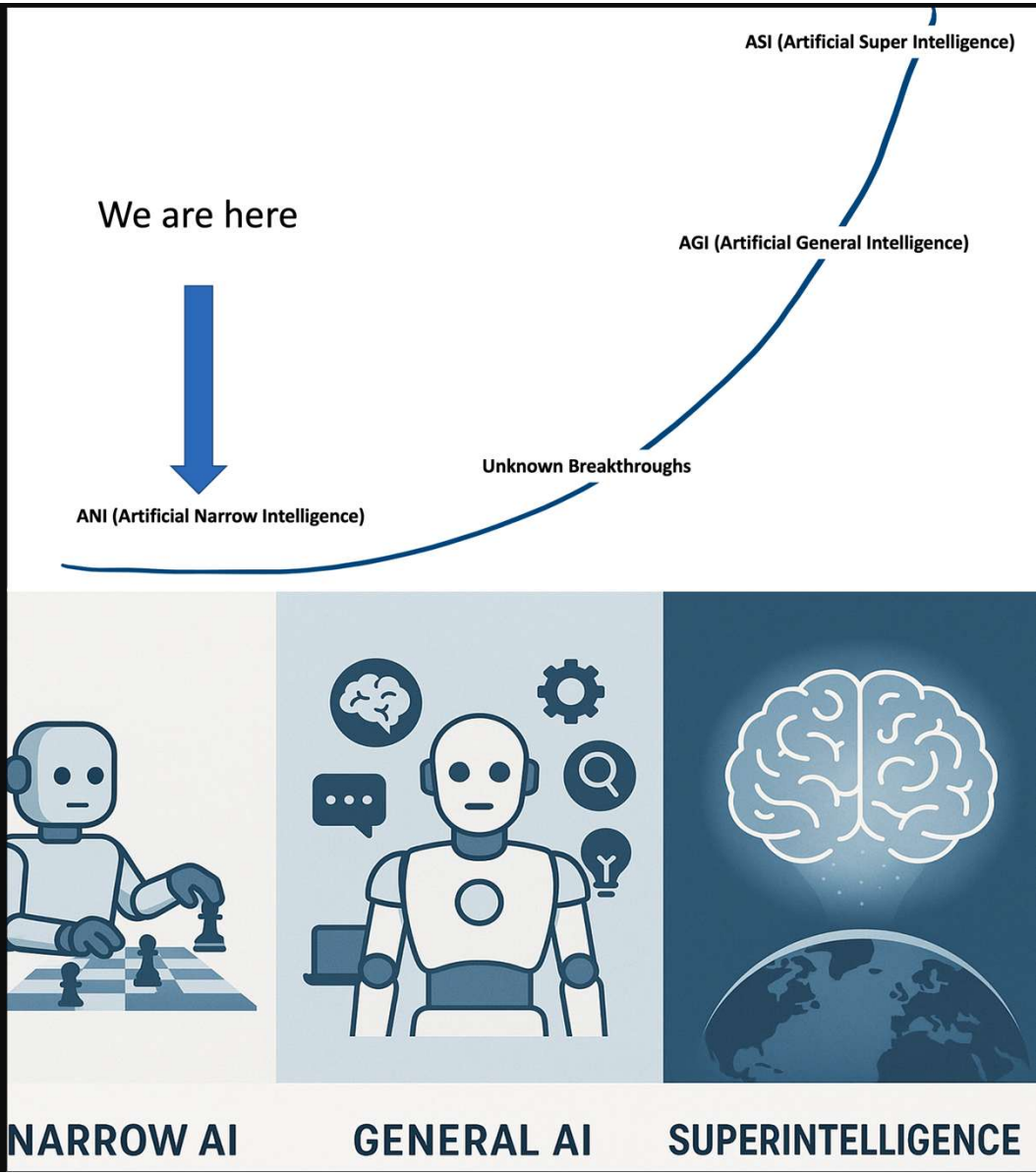
Why CAs Must Understand AI

- AI is a structural shift for the profession
- Past transitions: manual accounting to Tally, traditional tax to GSTN
- Importance for strategic decision-making
- Regulators are adopting
- Clients are adopting

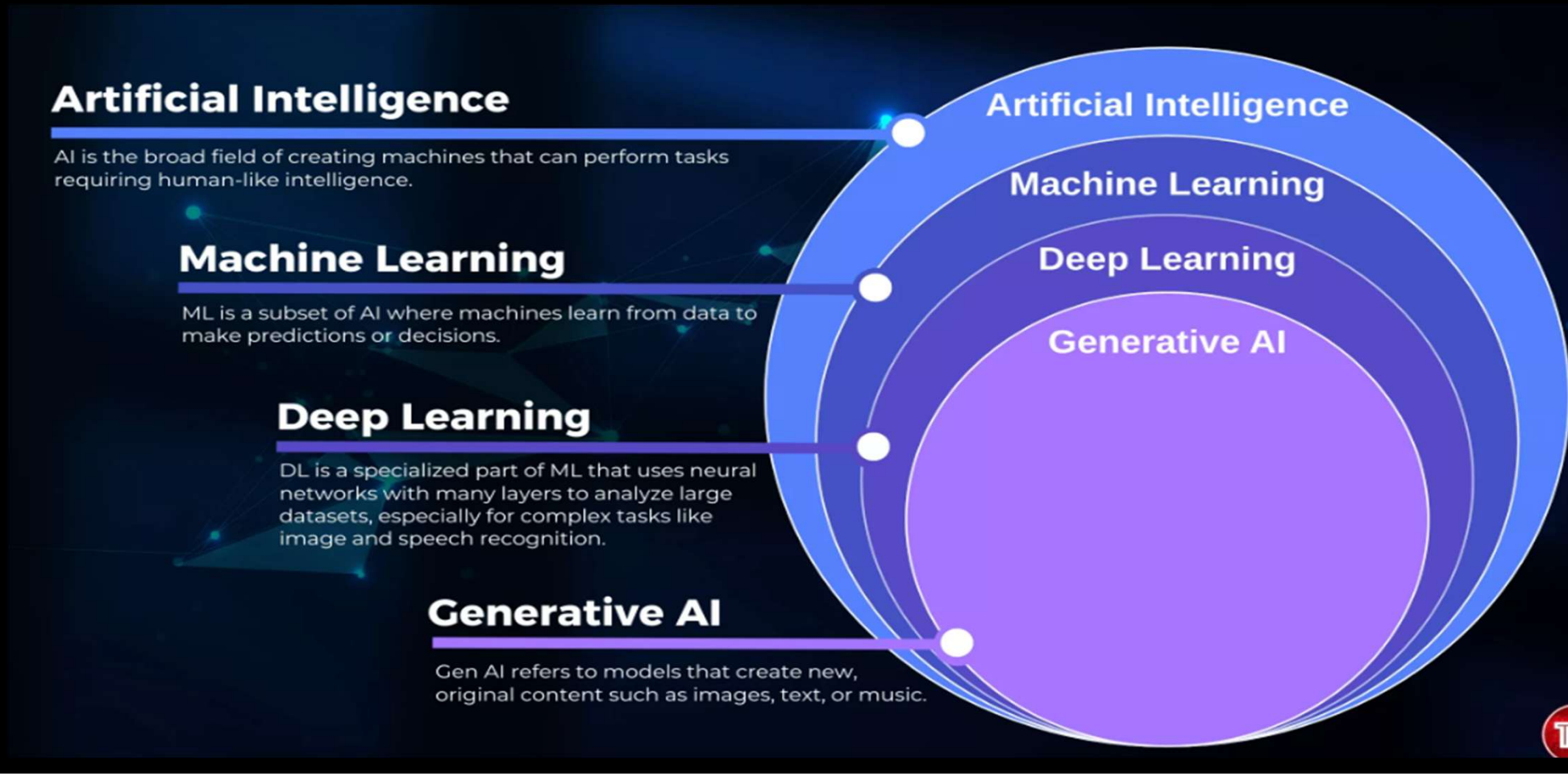
- Leadership in AI adoption
- Guiding teams and clients through
- AI risks and opportunities
- AI enables automation of data analysis, document review, draft generation

What is Artificial Intelligence?

- Artificial intelligence simulates human intelligence in machines to think, learn, and solve problems.
- AI systems mimic human abilities such as learning and problem-solving to perform complex tasks automatically.
- The term "Artificial Intelligence" (AI) was coined by **John McCarthy** in **1955**



Understanding Artificial Intelligence



Boundaries of AI Capability



What AI can do:

- Process data, identify patterns, draft reports

What AI cannot do:

- Ethical reasoning
- Professional judgment and accountability
- Context understanding

- AI assists but cannot replace decision-making
- CAs interpret, validate, and finalize outputs

Overview of today’s session

- Prompt engineering
- New era of search
- Creating knowledge base
- Automation using VBA
- Gmail automation
- Html automation
- MS-office automation
- Workflow automation



Anatomy of a Good Professional Prompt

- Role definition
- Context
- Objective
- Constraints
- Output format

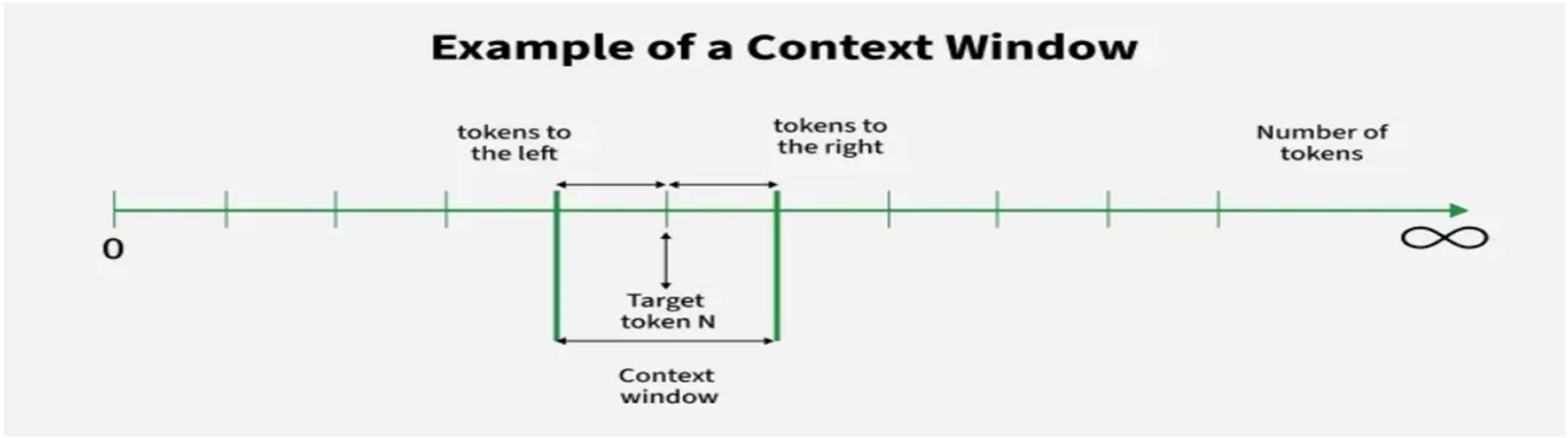
Types of Prompt Engineering

- Zero-shot prompting
- Few-shot prompting
- Self-consistency
- Prompt chaining
- Tree of thoughts prompting

Context Window

What is Context Window?

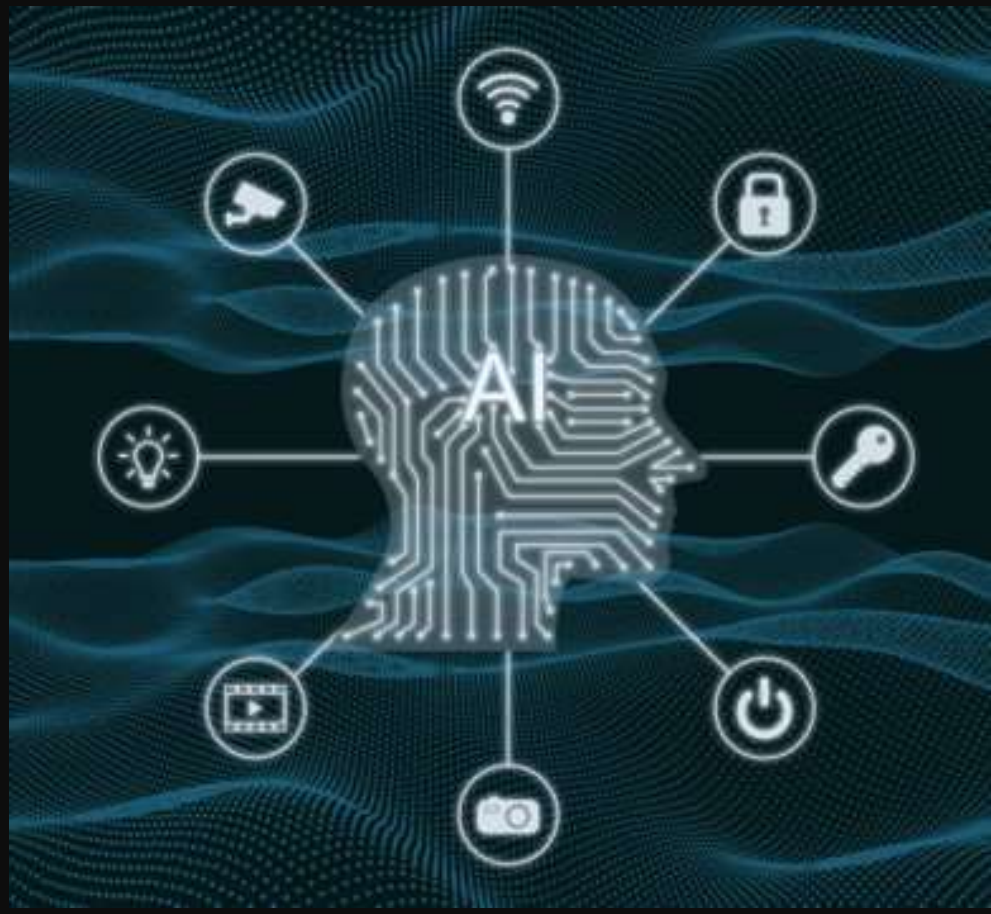
A **context window** refers to the span of text (usually in terms of tokens) that a model can consider at one time when making predictions or generating text. In simpler terms, it is the "lookback" or the amount of previous information that the model uses to make sense of the current input.



LLMs, such as GPT-based models, rely heavily on context windows to predict the next token in a sequence. The larger the context window, the more information the model can access to understand the meaning of the text. However, context windows are finite, meaning that models can only consider a certain number of tokens from the input sequence before the context is truncated.

AI tools based on LLMs

AI Tool	What it is best used for
ChatGPT	General-purpose tasks, drafting, analysis, brainstorming, coding, data analysis and learning
Claude	Long document analysis, detailed writing, summarisation and working with large amounts of text
Perplexity	Web research, finding current information, fact-checking and research with sources
Gemini	Integration with Google tools, research, multimodal tasks and working with Google Workspace
Copilot	Productivity within Microsoft Office, Excel, Word, PowerPoint and other Microsoft tools
Grok	Real-time information, current trends, conversational research and social-media-related insights
Meta AI	Everyday assistance, creative tasks and AI features within the Meta ecosystem such as WhatsApp and Instagram
DeepSeek	Reasoning, technical problem-solving, mathematics and coding



What are AI Hallucinations?

AI hallucinations are **confidently incorrect outputs generated by large language models (LLMs).** They happen because GenAI is designed to predict the most likely next word, not to verify facts.

TECH-DRIVEN AUDIT: PRINCIPLES FOR QUALITY & INTEGRITY

NFRA's mandatory framework for integrating AI and automated tools into statutory audits while maintaining professional standards.

CORE PRINCIPLES OF TECHNOLOGY ADOPTION

NON-DELEGABLE AUDITOR RESPONSIBILITY

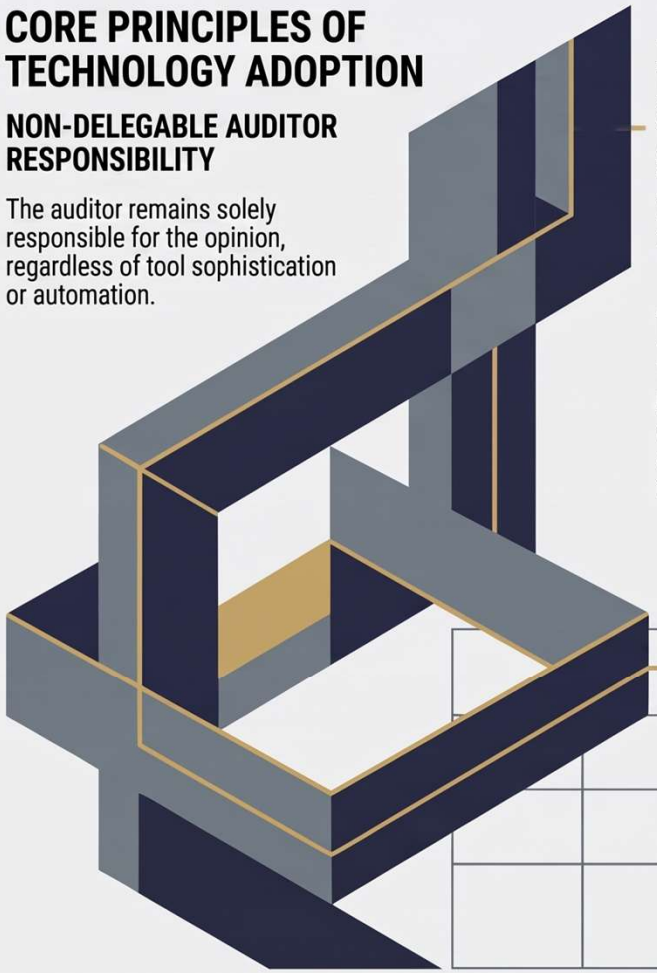
The auditor remains solely responsible for the opinion, regardless of tool sophistication or automation.

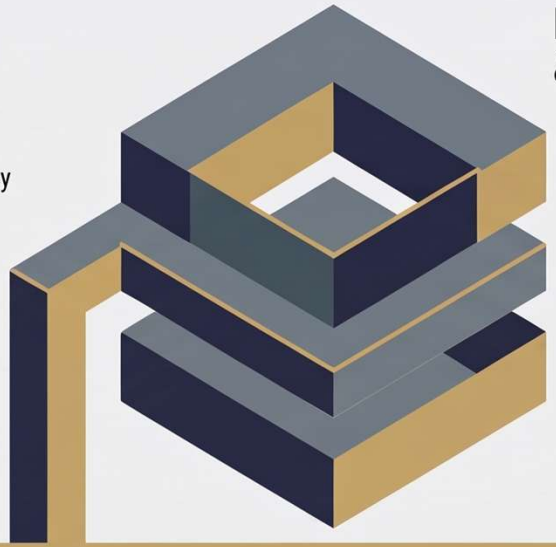
PRESERVE PROFESSIONAL SKEPTICISM

Auditors must actively counter "AUTOMATION BIAS"—the tendency to over-rely on plausible-looking machine outputs.

TECHNOLOGY-NEUTRAL EVIDENCE STANDARDS

Machine outputs only qualify as audit evidence after rigorous evaluation of relevance and reliability.





RISK-BASED GOVERNANCE & GUARDRAILS

GOVERNANCE MUST PRECEDE DEPLOYMENT

Tools must be validated and approved by the firm before use on live engagements.

DATA STEWARDSHIP & PRIVACY

Firms must protect client data independently of vendor terms or tool convenience.

CONTINUOUS MONITORING VS. ONE-TIME APPROVAL

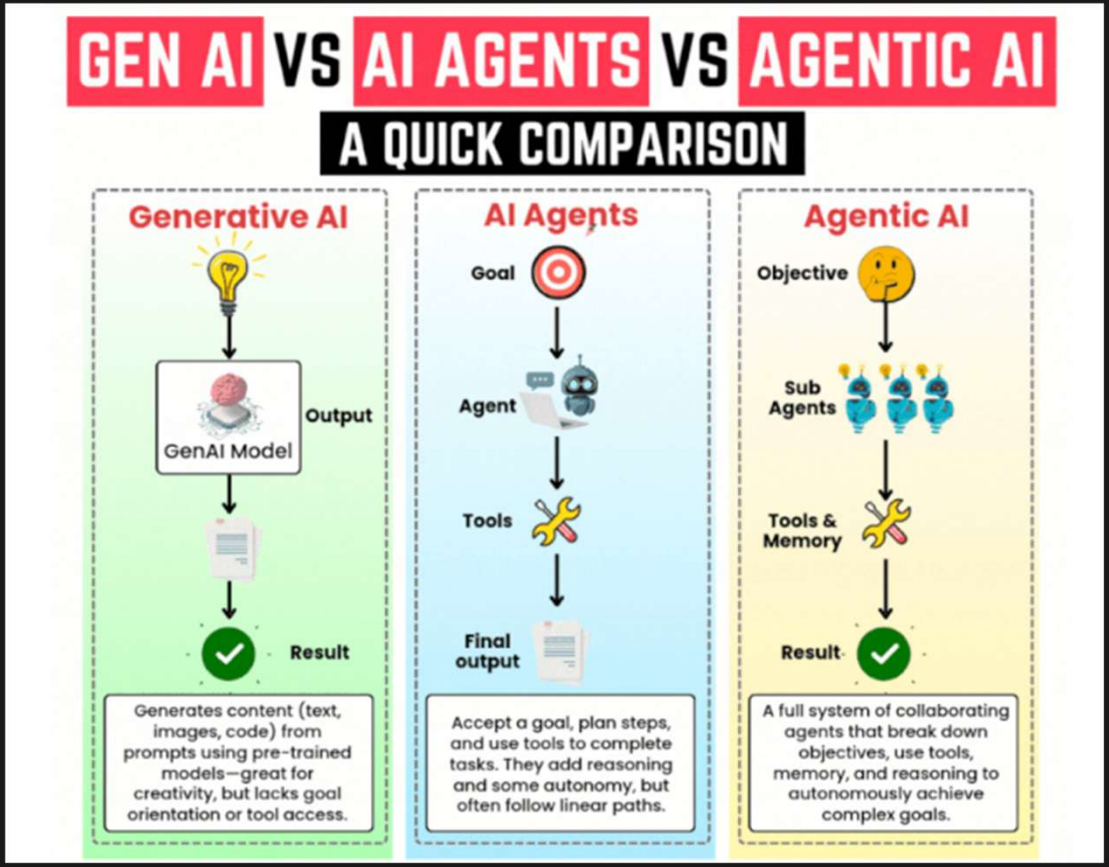
Performance must be monitored throughout a tool's life, with re-validation triggered by updates.

CRITICAL "DON'TS": PREVENTING COMMON PITFALLS

Prohibited Actions to Prevent Common Pitfalls in Technology-Assisted Audits.

RISK AREA	PROHIBITED ACTION (THE "DON'T")
RISK ASSESSMENT	Treating full-population testing as a substitute for substantive risk assessment.
TOOL INTEGRITY	Using unvalidated or locally-built spreadsheets/macros without firm-level approval.
VENDOR RELIANCE	Relying on vendor accuracy clalms without independent evaluation by the firm.

Gen AI Vs AI Agents Vs Agentic AI



High-Level Use Cases in CA Practice

Audit & Assurance

✓ Risk-based selection of samples

✓ Full-ledger scanning for anomalies

✓ Identification of unusual / repetitive / round-sum entries

✓ Automated working papers (human-reviewed)

Taxation

✓ Drafting responses to notices & queries

✓ Return data validation & mismatch detection

✓ GST ITC pattern analysis

✓ Scenario-based tax planning support

Accounting & Financial Reporting

✓ Automated bookkeeping review

✓ Month-end / year-end variance analysis

✓ Ind AS / AS disclosure checklists

✓ Financial statement drafting support

High-Level Use Cases in CA Practice

- **Advisory & Valuation**

✓ Financial modelling & sensitivity analysis

✓ Business & cash-flow forecasting

✓ Valuation working support

✓ Transaction due-diligence assistance

- **Internal Audit & IFC**

✓ Risk Assessment & Audit Planning

✓ Transaction & Control Testing

✓ Fraud & Red-Flag Identification

✓ Reporting & Continuous Monitoring

Compliance & Secretarial

✓ Compliance calendars & alerts

✓ ROC / SEBI filing assistance

✓ Drafting board resolutions & reports

✓ Regulatory gap analysis

Practice Management

✓ Engagement letters & proposals

✓ Time-sheet & billing analytics

✓ Knowledge retrieval from past files

✓ Client communication drafts

Limitations of AI in Professional Practice

- Hallucinations & Confident Errors
- No Legal Liability or Accountability
- Lack of Ethical Reasoning
- Over-Dependence Risks

Final Message

- AI is inevitable, misuse is avoidable
- AI amplifies, not diminishes, CA relevance
- CAs move higher up the value chain
- Professional insight becomes differentiator
- Early understanding prevents future risk
- Ethics remain unchanged, tools have changed
- Those who govern AI well will lead the profession
- The CA remains central, relevant, and responsible
- AI assists. CA decides. CA signs.
- Technology should enhance trust, not erode it

Thank you!

