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CURRENT ETHICAL CHALLENGES WITH TECHNOLOGY IN ACCOUNTING

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AI & ETHICS PODCAST

THE LEDGER LINE

A podcast on ethics, technology and the accounting profession

Episode: Who is accountable when the algorithm is wrong?

Press play: a one-minute clip from "The Ledger Line"





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LEARNING OBJECTIVES

By the end of this session, you will be able to:

- Identify the core ethical risks of AI and data technologies in accounting practice
- Apply stakeholder and normative ethical lenses, alongside the AICPA Code, to technology decisions
- Recognize how IESBA and PCAOB standards are changing in response to technology
- Use a practical set of questions to evaluate an AI tool before your firm adopts it

SESSION ROADMAP

- Opening clip and discussion
- Purpose and ethical lenses
- Five risk areas, with short video cases
- Interactive: a poll and a scenario
- Putting it into practice
- Questions

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PURPOSE OF THE FIRM AND GOALS OF TECHNOLOGY

Every technology serves some goal. New tools should be held to the same standard as any other initiative: are they consistent with the firm's purpose and values?

- Short-term efficiency can quietly shift risk onto clients, employees and the investing public
- Ask: who benefits, who bears the risk, and who was never consulted?

FOR ACCOUNTANTS

- The AICPA Code asks members to serve the public interest and honor the public trust
- Efficiency gains from automation can't come at the cost of audit quality or independence
- Tools that optimize fees, staffing or client selection deserve the same scrutiny as any business decision

Further reading: Freeman, stakeholder theory; Stout, The Problem of Corporate Purpose; Frank, Can Socially Responsible Firms Survive in a Competitive Environment?

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ETHICAL LENSES FOR TECHNOLOGY DECISIONS

- **Consequences:** what outcomes, and for whom?
- **Duties and rights:** what do we owe clients, the public and the people in the data?
- **Character:** what would a person of integrity do?
- **Care and power:** who is vulnerable, and who has no voice?
- **Giving Voice to Values:** knowing what's right is half the job; acting on it is the other half

THE AICPA CODE ALREADY APPLIES

- Integrity and objectivity: an algorithm's output doesn't replace your judgment
- Due care: be competent with the tools you rely on
- Confidentiality: know where client data goes
- Professional skepticism: watch for automation bias

Further reading: Gentile, Giving Voice to Values; Vallor, on deontology, consequentialism and virtue ethics; Gilligan, ethics of care

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QUICK POLL

How is your firm using AI today? Hold up fingers:

1. Not at all, as far as I know
2. Individuals experimenting on their own
3. Approved tools, with a written policy
4. Built into audit, tax or advisory workflows





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SAFETY AND SECURITY

Often used interchangeably, but they are distinct:

- **Safety** is about the technology working as intended and avoiding unintended harm, such as an AI tool that invents a figure or a citation.
- **Security** is about protection from outside threats: unauthorized access, ransomware and impersonation.

CASE: THE DEEPFAKE CFO

- Early 2024: an Arup employee in Hong Kong joined a video call with the "CFO" and colleagues. All were deepfakes.
- Result: about US$25 million sent in 15 transfers
- Lesson: payment controls must assume faces and voices can be faked: call-back verification, dual approval

Further reading: Fjeld et al. (2020), Principled Artificial Intelligence (Berkman Klein Center)

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SAFETY AND SECURITY – SURVEILLANCE THREATS



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TRANSPARENCY AND ACCOUNTABILITY

Transparency is never the end goal. We ask for it so a decision can be explained, someone can be held accountable, and the people affected can challenge it.

- Can you explain how the tool reached its output, to a client, a regulator or a court?
- Is it ever ethical to rely on a technology you cannot explain?

FOR ACCOUNTANTS

- Document how AI-assisted evidence was produced and reviewed
- Tell clients when and how AI is used on their engagement
- The signature on the report is still yours

Further reading: Mulligan et al., Shaping Our Tools: Contestability as a Means to Promote Responsible Algorithmic Decision Making in the Professions

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PROFESSIONAL STANDARDS ARE CATCHING UP

- **IESBA Code, technology revisions (effective December 15, 2024):** sharper expectations on competence, due care and confidentiality when using technology, plus limits on tech-related non-assurance services for audit clients
- **PCAOB amendments to AS 1105 and AS 2301 (fiscal years beginning on or after December 15, 2025):** tighter requirements when auditors use technology-assisted analysis of electronic data
- **AICPA Code:** existing principles already govern AI use today

THINK ABOUT IT

- Your audit software flags 40 journal entries as high-risk and clears 12,000 as normal.
- How much do you rely on the 12,000?
- What would you need to know about the tool to defend that reliance?

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TRANSPARENCY & ACCOUNTABILITY – "CHEATING" WITH CHATGPT



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FAIRNESS AND JUSTICE

Algorithms learn from historical data, so they can repeat past discrimination at scale while looking objective.

- **Distributive justice:** who gets the benefits, and who carries the burdens?
- **Procedural justice:** is the process consistent, explainable and open to appeal?
- **Competing definitions:** equal selection rates and equal accuracy across groups often can't both be met

FOR ACCOUNTANTS

- Your firm's own recruiting, promotion and performance tools
- Client models for credit, lending, pricing and insurance
- The four-fifths rule: a selection rate under 80% of the top group's signals adverse impact, a test accountants can run
- Bias audits of algorithms: a growing assurance service

Further reading: Rawls, A Theory of Justice; O'Neil, Weapons of Math Destruction; Eubanks, Automating Inequality

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FAIRNESS & JUSTICE IN TECHNOLOGY — BIASED HIRING ALGORITHMS



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PRIVACY

Traditional privacy draws a line between public and private. But much of life now happens "in public" and is recorded.

- A better question (contextual integrity): does this use of information match the norms of the setting where it was shared?
- Information shared with your accountant carries strong expectations of confidentiality

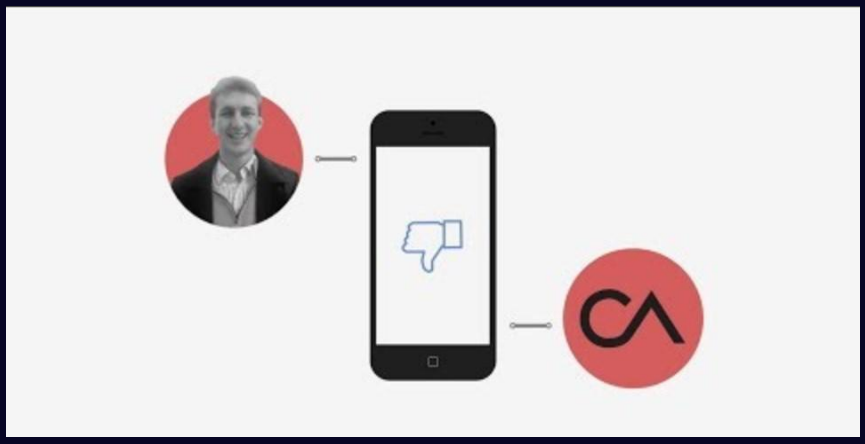
SHADOW AI AT YOUR FIRM

- Staff pasting client files into public chatbots
- Does the vendor keep your data, or train on it?
- An approved-tools list and a clear policy
- The confidentiality rule applies, whatever the tool

Further reading: Nissenbaum, A Contextual Approach to Privacy Online; Martin, Understanding Privacy Online

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PRIVACY – CAMBRIDGE ANALYTICA



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WHAT WOULD YOU DO?

It's 6 p.m. the night before a deadline. A senior asks you to paste the client's trial balance and key contracts into a free public AI chatbot so it can draft the memo faster. You:

A
Do it. It's faster, and every-one does it.

B
Remove client names first, then do it

C
Use only the firm-approved tool, or draft it yourself

D
Raise the concern with the senior or manager first

Then: If you chose C or D, what exactly would you say to the senior? (Giving Voice to Values)

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SURVEILLANCE

Surveillance is the persistent, hard-to-avoid tracking of people, often to influence or control them. Data collection, online and offline, has become an industry of its own.

- Unlike privacy, the issue is power: the watcher gains leverage over the watched

FOR ACCOUNTANTS

- Employee-monitoring software in remote and hybrid work
- Proportionality: collect only what you need, and say so
- Clients that monetize customer data face regulatory and reputational risk

Further reading: Lyon, From Big Brother to Electronic Panopticon

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SURVEILLANCE – FACIAL RECOGNITION



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EMERGING TECHNOLOGIES TO WATCH (WEF 2026)

1. EVERYTHING-TO-GRID ENERGY
New revenue streams when vehicles and buildings sell power back

2. DIRECT LITHIUM EXTRACTION
Critical-mineral supply chains and sourcing disclosures

3. PASSIVE RADIATIVE COOLING
Capex vs. energy-savings trade-offs; climate reporting

4. PFAS DESTRUCTION
Environmental liabilities and remediation estimates

5. PRECISION FERMENTATION
New products, IP valuation and supply-chain claims

6. EXOSOME DRUG DELIVERY
R&D costs and valuation in life sciences

7. PERSONALIZED MRNA CANCER VACCINES
Pricing, reimbursement and patient-data privacy

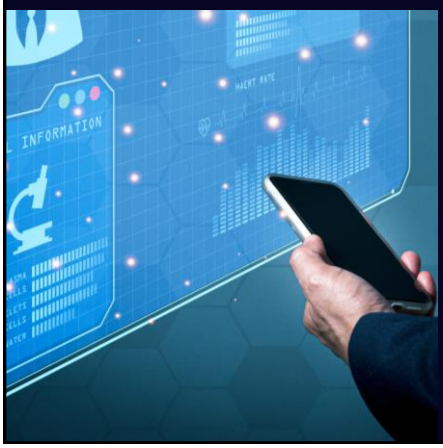
8. QUANTUM SIMULATION FOR DRUG DISCOVERY
R&D spending and intangible-asset valuation

9. WORLD MODELS (AI)
AI forecasts feeding estimates: who validates them?

10. LATTICE-BASED CRYPTOGRAPHY
Protecting client data against future quantum attacks

Accounting angle shown for each. Outlined: most directly relevant to practice. Source: World Economic Forum and Frontiers, Top 10 Emerging Technologies of 2026 (June 2026).

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PUTTING IT INTO PRACTICE

Before your firm adopts an AI tool, ask:

1. **Purpose:** does it fit our values and the public interest?
2. **Data:** what client data goes in, and is it stored or used for training?
3. **Explainability:** can we explain and document its outputs?
4. **Bias:** has it been tested on people and data like ours?
5. **Accountability:** who reviews the output, and who signs off?
6. **Security:** how could it be attacked or impersonated?
7. **Voice:** how can staff raise concerns safely?

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KEY TAKEAWAYS

- Technology doesn't change your professional obligations; it raises the stakes
- Accountability can't be delegated to an algorithm
- Know where client data goes before you use a tool
- Bias and opacity are audit and reputational risks, not just technical problems
- Standards are moving (IESBA 2024, PCAOB 2025): stay current

TURN TO YOUR NEIGHBOR

- What is one AI tool your firm uses today that no one has formally evaluated?
- Which of the seven questions would you ask about it first?

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QUESTIONS?

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