AI, Ethics and Finance: A Whistle-stop Tour

Tristi Tanaka
Head of Digital Innovation & Transformation
NHS Shropshire, Telford and Wrekin ICB

Other hats:
- BCS Digital Divide Specialist Group, BCS Women and Community Support Committee
- ForHumanity Fellow
- Member of The Shuri Network, AnalystX and All4Health&Care
- Supporter of Women in AI Ethics

1

2

3
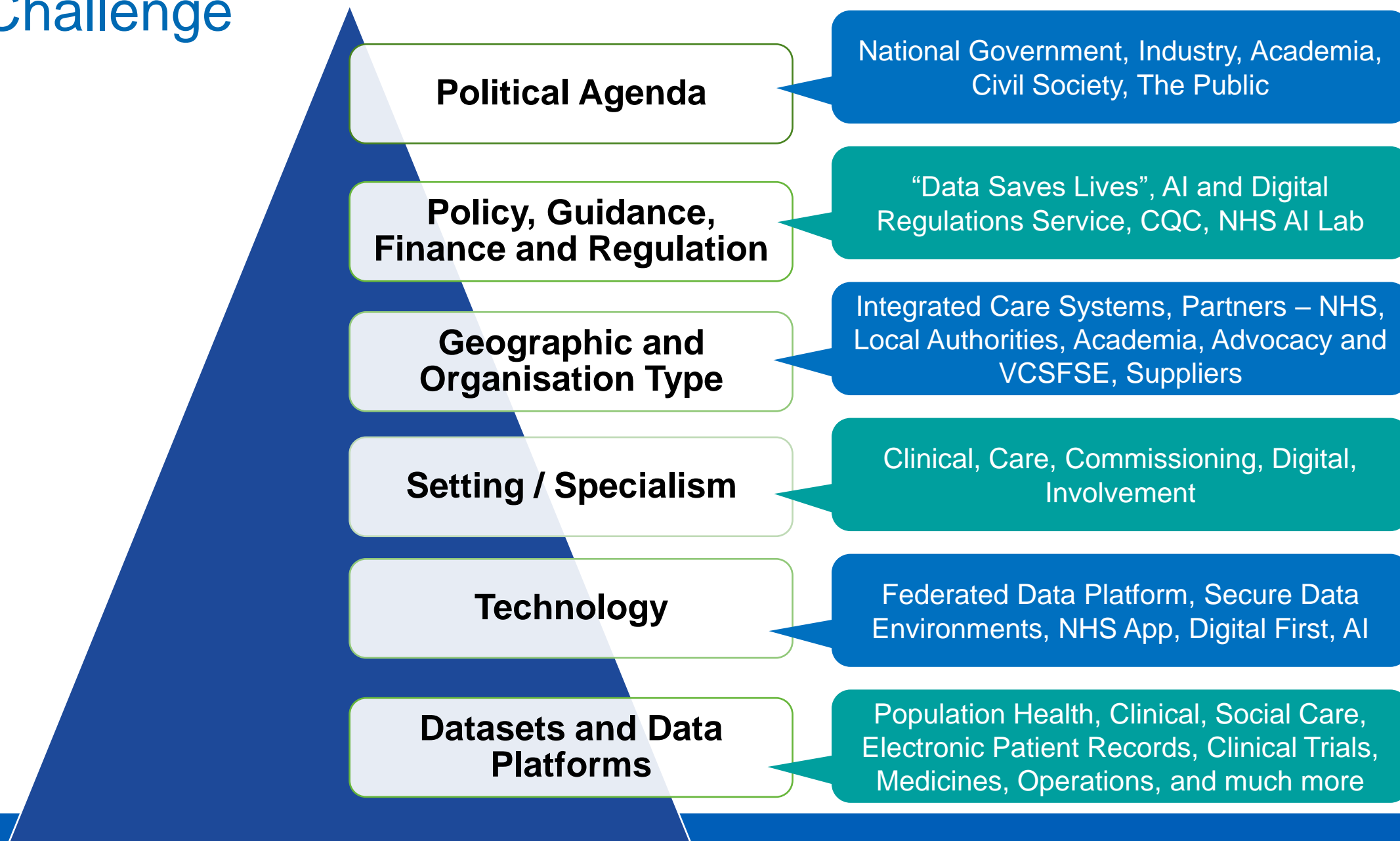
The workshop will explore:

- a definition for AI and AI ethics
- why AI ethics matters to finance, procurement and commissioning
- some ethical challenges facing teams in this fast-moving technology space
- practical tips to develop ethical guardrails for AI initiatives

Definition – 'Sensemaking'

'How do we make sense of the world so we can act in it' … (knowing enough to make a contextually appropriate decision)

- D. Snowden, 2008

The Challenge

Political Agenda — National Government, Industry, Academia, Civil Society, The Public

Policy, Guidance, Finance and Regulation — "Data Saves Lives", AI and Digital Regulations Service, CQC, NHS AI Lab

Geographic and Organisation Type — Integrated Care Systems, Partners – NHS, Local Authorities, Academia, Advocacy and VCSFSE, Suppliers

Setting / Specialism — Clinical, Care, Commissioning, Digital, Involvement

Technology — Federated Data Platform, Secure Data Environments, NHS App, Digital First, AI

Datasets and Data Platforms — Population Health, Clinical, Social Care, Electronic Patient Records, Clinical Trials, Medicines, Operations, and much more

Agenda

AI and AI ethics

- Key definitions
- Key components
- Ethical decision-making

1

Finance & ethical choices

- You, Professions, System
- Opportunities
- Challenges

2

Your AI ethics toolkit

- Create some guardrails

3

Finance needs ethical guardrails for AI

AI and AI ethics

- Key definitions
- Key components
- Some challenges – part 1
- Ethical decision-making

1

What is Artificial Intelligence (AI)? A definition

Gov.uk

Use of digital technology to create systems capable of performing tasks commonly thought to require intelligence.

Generally:

- Machines [programmed to] use statistics to find patterns in large amounts of data
- Ability to perform repetitive tasks with [large amounts of] data without the need for constant human guidance

What is AI ethics? A definition

Gov.uk

AI ethics is a set of values, principles, and techniques that employ widely accepted standards to guide moral conduct in the development and use of AI systems.

Ethical Choices…*a community example*

- Ethical choice is awareness of a set of options to be made In the context of automated and intelligent systems, using a set of principles and rules concerning moral obligations and regards for the rights of humans and for nature, which may be specified by a given profession or group.

- The result, outcome or judgment is made using a shared moral framework. or set of moral principles based upon the entity's Code of Ethics.
- ForHumanity

Source: A guide to using artificial intelligence in the public sector, Gov.uk, 10 June 2019

Ethics: Examples of Principles and Values

Core Principles from Biomedical Ethics	Institute of Chartered Accountants in England and Wales (ICAEW)	Gov.uk Data Design Values	Gov.uk AI Actionable Principles
• Respect for [patient] autonomy, • Beneficence ("the patient's interests come first") • Non-maleficence ("above all do no harm") • Justice	• Integrity • Objectivity • Professional Competence and Due Care • Confidentiality • Professional Behaviour	• **Respect** the dignity of individuals • **Connect** with each other sincerely, openly, and inclusively • **Care** for the wellbeing of all • **Protect** the priorities of social values, justice, and public interest	• Fairness • Accountability • Sustainability • Transparency

Source: Principles of justice in health care rationing, BMJ, ICAEW Principles and Values and Principles from Gov.uk "Understanding artificial intelligence ethics and safety", 2019

Applying ethics in our work

"It's difficult to know how we, as individuals, can act in ways that are fair and ethical when the broader circumstances are so manifestly unfair."

- Polly Mitchell, ethicist

Some challenges - part 1

The Guardian
Newspaper of the year

Artificial intelligence (AI)

⏱ This article is more than **5 months old**

US eating disorder helpline takes down AI chatbot over harmful advice

National Eating Disorder Association has also been under criticism for firing four employees in March who formed a union

Source: https://www.theguardian.com/technology/2023/may/31/eating-disorder-hotline-union-ai-chatbot-harm

EXCLUSIVE   STAT+

UnitedHealth discontinues a controversial brand amid scrutiny of algorithmic care denials

By Bob Herman 🐦 and Casey Ross 🐦 Oct. 23, 2023   Reprints

MARK LENNIHAN/AP

U nitedHealth Group and Optum are getting rid of the name of their tech-driven care management company just months after the company faced congressional criticism over the use of its algorithms to cut off payments for patients' care.

Discontinuing the NaviHealth name is part of a broader rebranding of Optum's division that provides services to people at home and in post-acute facilities. The move also encapsulates how UnitedHealth is pushing to control every piece of patient care outside of the hospital

Example 1 -
ICAEW Ethical Decision-Making Framework

1. Gather the relevant facts and identify the problems

2. Identify the affected parties

3. Consider the ethical issues involved

4. Identify which fundamental principles are affected

5. Refer to the employing organisation's internal procedures

6. Consider and evaluate alternative courses of action

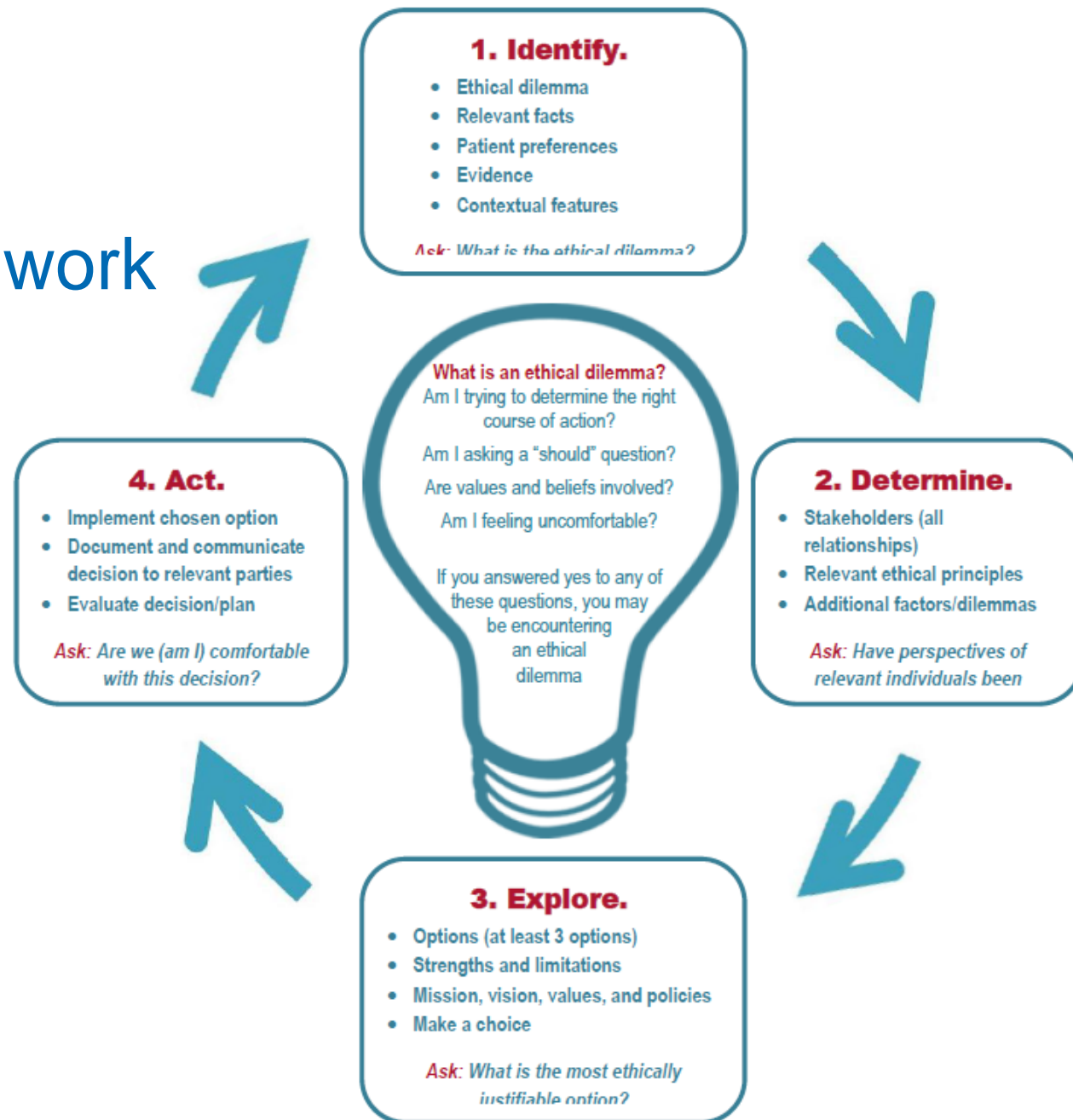7. Implement the course of action and monitor its progress

What is the problem?
Identify the basis of your concerns
It may help to set down the issues in writing

Is there any evidence to support your concerns?
Check the facts and other information available to you.

Should you act on your concerns?
Check the available facts and information. If there is still no evidence to support your concerns it may be helpful to talk through them with your manager, a colleague, the ethics partner or someone independent (such as one of ICAEW's ethics advisors or support members).

Despite the lack of evidence, is there a genuine basis for your concerns that needs to be acted on?

No further action is needed at this stage

Who is affected?
Identify everyone affected by the issues – it may be helpful to list them, identifying their status and the impact on each. Consider which stakeholders might be useful allies in tackling the issues.

Consider the legal issues
Are any legal issues involved? Is there any relevant legislation that needs to be considered such as the Money Laundering Regulations.

Create a written record
Keep a note to show the steps you have taken:
- Outline the facts, those affected and the ethical principles
- list the options considered
- detail advice sought
- show your thought processes and decision

Keep a copy of your notes at home for your own use.

What ethical principles are involved?
Consider which fundamental principles are at risk (integrity, objectivity, professional competence and due care, confidentiality, and professional behaviour.

Is there detailed ethical guidance that applies?
There may be detailed guidance in the ICAEW Code of Ethics or your organisation's own code, policies or procedures including its whistleblowing arrangements.

Can you adopt a threats and safeguards approach?
Consider the facts and other information available in order to identify the threats arising. Consider whether the available safeguards can eliminate or reduce the threats to an acceptable level?

Does one course of action stand out as most appropriate?
Consider the available alternatives and their potential impact on the stakeholders, the reputation of your organisation and the profession and how the different options might affect the public interest and stand up to scrutiny by your peers, family or friends and even the press.

It may be helpful to talk through your concerns with your manager, a colleague, the ethics partner or someone independent (such as one of ICAEW's ethics advisors or support members) to help you decide on an appropriate course of action.

Put the course of action in place
Record your reasoning and decision, take action, monitor its progress and review the outcome

Source: Institute of Chartered Accountants in England and Wales, ICAEW framework - how to resolve ethical problems

Example 2 -
Southern Health, Canada
Ethical Decision-Making Framework

1. Identify

2. Determine

3. Explore

4. Act

1. Identify.
- Ethical dilemma
- Relevant facts
- Patient preferences
- Evidence
- Contextual features

Ask: What is the ethical dilemma?

What is an ethical dilemma?
Am I trying to determine the right course of action?

Am I asking a "should" question?

Are values and beliefs involved?

Am I feeling uncomfortable?

If you answered yes to any of these questions, you may be encountering an ethical dilemma

2. Determine.
- Stakeholders (all relationships)
- Relevant ethical principles
- Additional factors/dilemmas

Ask: Have perspectives of relevant individuals been

4. Act.
- Implement chosen option
- Document and communicate decision to relevant parties
- Evaluate decision/plan

Ask: Are we (am I) comfortable with this decision?

3. Explore.
- Options (at least 3 options)
- Strengths and limitations
- Mission, vision, values, and policies
- Make a choice

Ask: What is the most ethically justifiable option?

Source: Ethical Decision Making Framework and Worksheet, Southern Health-Sante Sud, Canada

Example 3 - Ethical AI Governance Framework

Process-Based Governance Framework for AI Project Workflows

Problem Formulation → Data Extraction & Acquisition → Data Preprocessing → Modeling, Testing, & Validation → Deploy, Monitor, & Reassess

- Stakeholder Impact Assessment
- Discriminatory Non-Harm Self-Assessment
- Safety Self-Assessment
- Dataset Factsheet
- Fairness Position Statement

Targeted Consideration | Governance Action

Ethical choices

- Challenges – part 2
- Ethical choices
- You, Professions, The System

2

Some challenges – part 2

Regulatory Concerns Among CFOs

Among future regulations, only a quarter of CFOs say they are focused on AI management and ethics.

ESG disclosures	63%
Cyber risk disclosures	49%
Domestic tax regulations	48%
Data privacy rules	43%
International tax regulations	40%
Industry-specific regulations	40%
Product standards and certifications	26%
AI management and ethics	25%
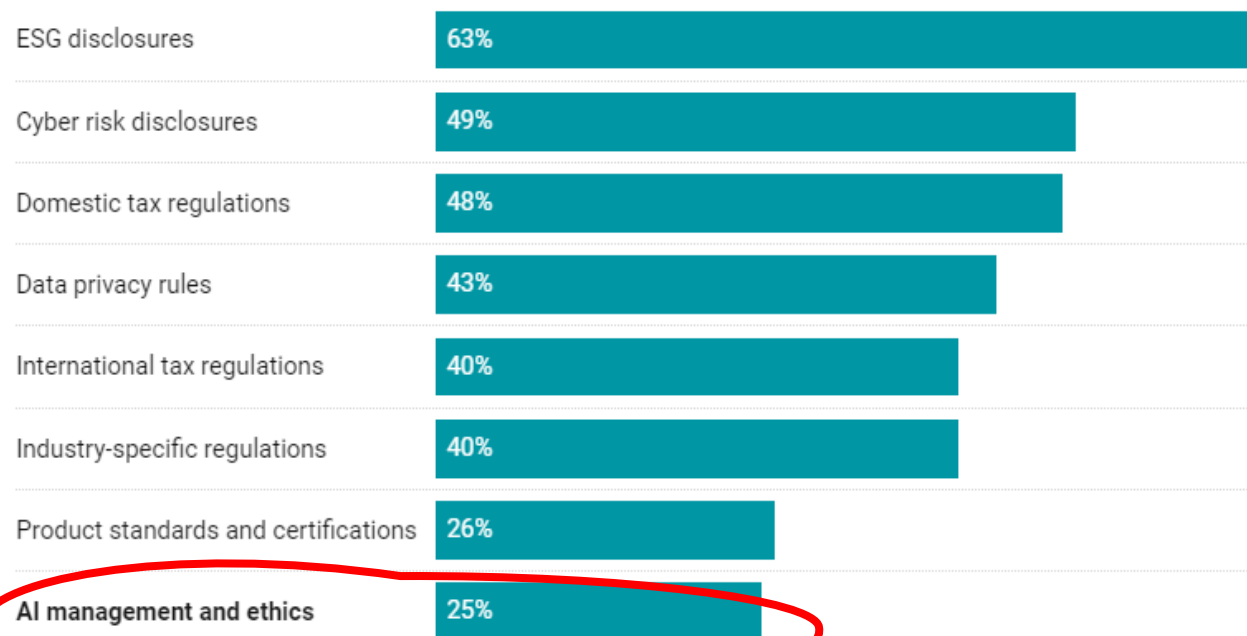
Source: Deloitte · Get the data · Created with Datawrapper

Where CEOs Want Their CFOs to Focus

CEOs are instructing their CFOs to focus on lots of things at once, data shows.

Cost reduction	54%
Strategy and transformation	40%
Performance management	39%
Revenue growth	39%
Investments	36%
Capital and financing	34%
Working capital efficiency	32%
Risk management	27%
Stakeholder relationships	23%
Business developments	20%
Property/plant/equipment efficiency	6%
Other	2%
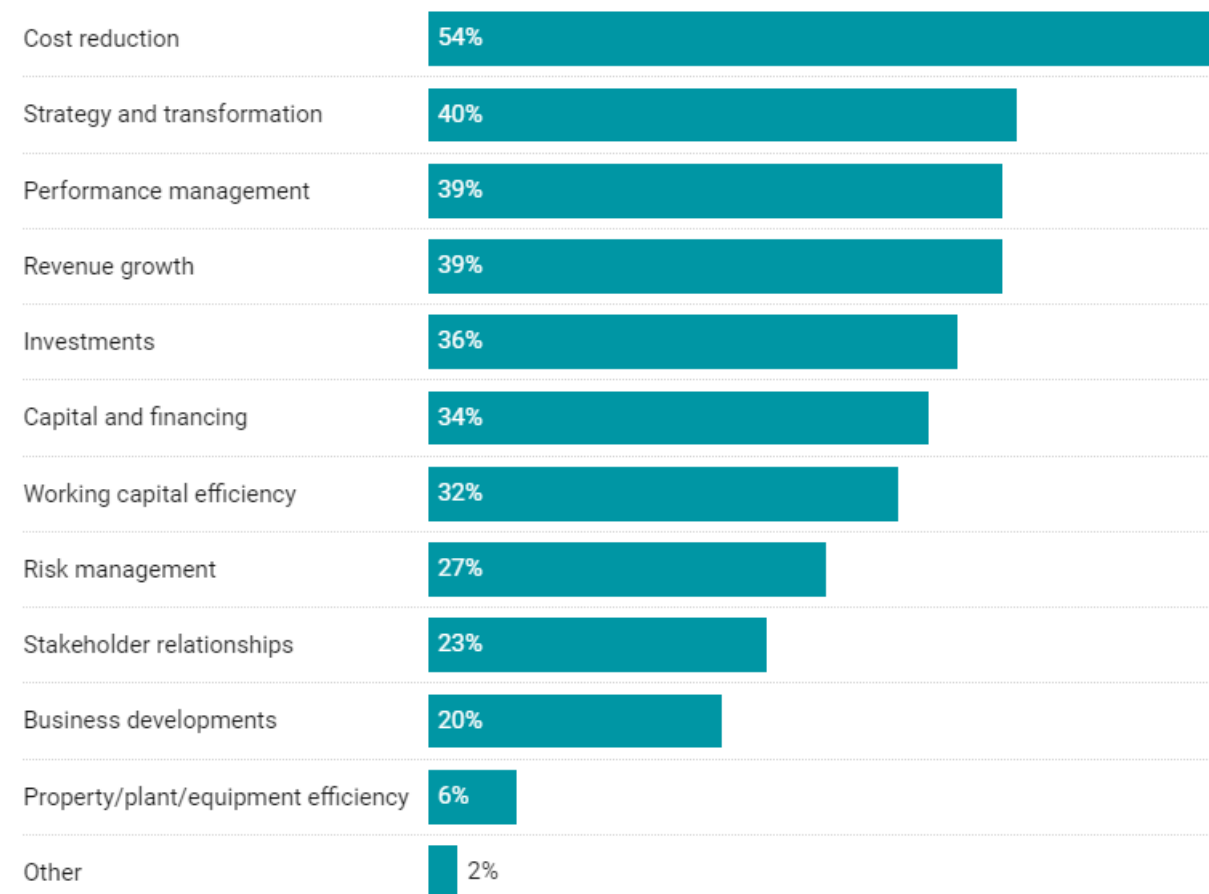
Source: Deloitte · Get the data · Created with Datawrapper

Source: https://www.cfo.com/news/only-25-of-cfos-are-prepping-for-ai-management-and-ethics-regulations-wee/686791/

Ready for ethical choices?

As protectors of the public purse in commissioning, procurement and sustainable finance in an era of continuous change...

You

- Beliefs and values
- Assumptions and biases on being professional, power, autonomy and agency, equity, justice, inequalities, sustainability
- Experience, current knowledge and skills

Profession and Industry

- Codes of conduct
- Policy and public sector guidance
- Emerging standards
- 'Best practice'
- Design and delivery frameworks
- Industry trends

The System

- Leadership
- Vision and strategy
- Planning and commissioning
- Procurement governance and decision-making structures
- Implementation and continuous improvement processes

Finance needs ethical guardrails for AI

An AI ethics toolkit

- Scoping and sizing
- Create some guardrails

3

How might we scope and size the challenges?

The System

1

Aligned priorities?

- Speed, and scale
- Safe, and effective
- The backlog and health inequalities

Readiness?

- £ - Funding and/or investment priority
- People - Current capacity, upskilling, changing structures
- Process/ways of working – shared design, decision and prioritisation frameworks
- Tooling – AI registers

Your Profession

2

Explore the 'essential'

- AI ethics knowledge, related skills and methods
- Professional good practice
- Codes of conduct
- National policy guidance

Check in with leadership and organisational development

- What exists
- Gaps as opportunities
- Share learning and grow awareness

You

3

Get started

- Is this on your development plan?
- Where are you now
- What might you need
- Who might help on your journey

Go further

- Design a personal toolkit
- Share, build, align and develop with colleagues *and communities*

Start Now – A toolkit with ethical guardrails for AI

What's your biggest concern?

- Start where you are
- Check out the resources
- Identify any knowledge and skills needs
- Draft some learning objectives

What's the ask in your role?

- Look at the strategies and plans
- Focus on strategic and clinical priorities in the programme pipeline
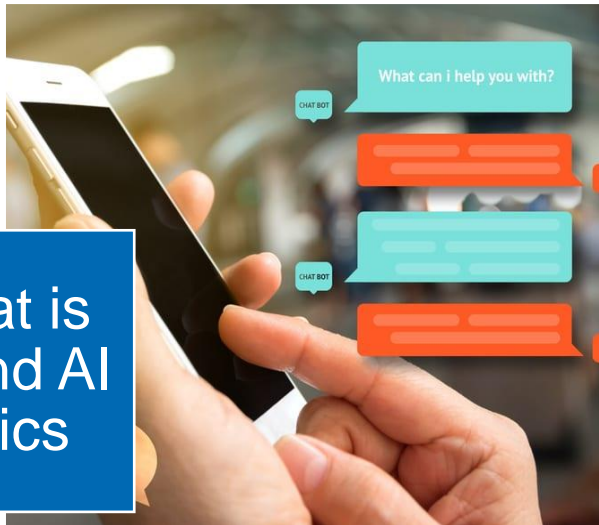- Update your needs

Where can you go for support?
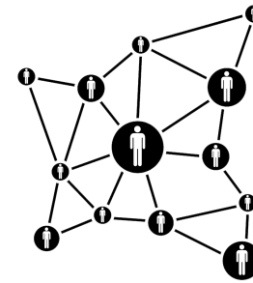
- Get out there and connect
- Identify networks and groups
- Discuss with your colleagues
- Update the team/ department's needs aligned to system plans

What can you do to fill gaps?
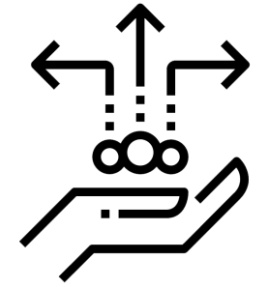
- Share your observations with the leadership
- Explore options on how to address observed gaps

A recap

What is AI and AI ethics

Ethical choices & Finance
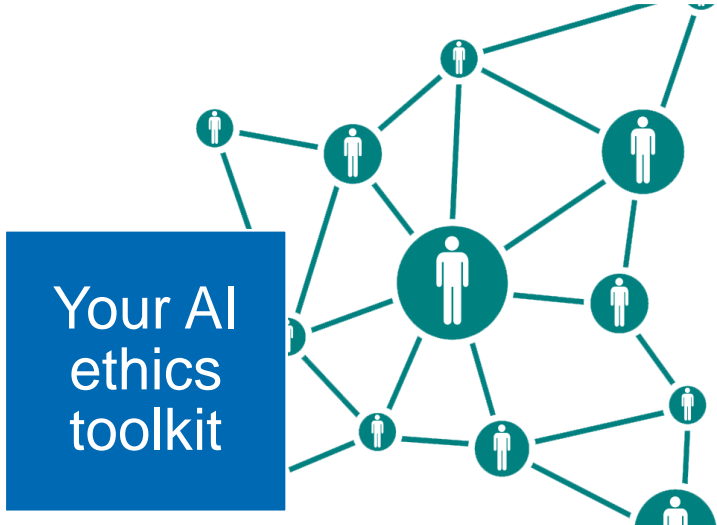
Your AI ethics toolkit

Start on your Ethical AI Toolkit!

Please connect and keep in touch…

Tristi Tanaka

- Head of Digital Innovation and Transformation

- NHS Shropshire, Telford and Wrekin ICB

Contact Details

- Email – T.Tanaka@nhs.net

- LinkedIn

- Twitter - @tristi_tanaka