Frameworks, principles, and accreditation

Data Research Access and Governance Network

Making data governance work

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15 minutes of fun

- The Five Safes in data governance and access
  - History
  - Why it helps
  - Why it's not enough

- Attitudes and principles
  1. Effective goal-setting: Principles-based planning
  2. Personal/institutional approaches: "EDRU"

The Five Safes: a useful structural framework

'Five safes' approach

The Five Safes

- Five components:
  - o Is this an appropriate use of the data? *safe projects*

  - o How trustworthy are the users? *safe people*

  - o Does the environment prevent misuse? *safe settings*

  - o Is the data detail appropriate? *safe data*

  - o Is there a residual risk in published outputs? *safe outputs*
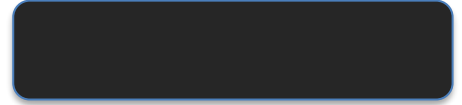
  = <u>safe use</u>

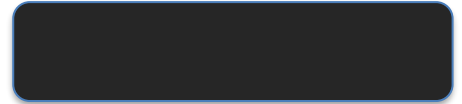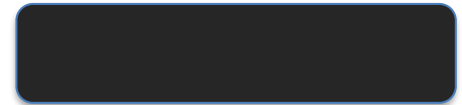- Consider <u>jointly</u> and <u>severally</u>

'Five safes' approach
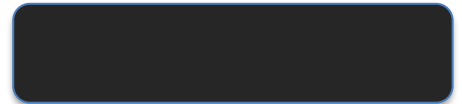
- Five components:
  - Is this an appropriate use of the data?

  - How

  - Does   ?

  - Is the

  - Is there a residual risk in published outputs?

Public use files

safe data

= **safe use**

- Consider <u>jointly</u> and <u>severally</u>

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'Five safes' approach

The Five Safes

- Five components:
  - Is this an appropriate use of the data?   *safe projects*

  - How   *safe people*

  - Does   e?   *safe settings*

Secure use files
('TRE', 'SDE', 'safe haven', RDC)

  - Is the   *safe data*

  - Is there a residual risk in published outputs?   *safe outputs*

- Consider <u>jointly</u> and <u>severally</u>   **= safe use**

'Five safes' approach

The Five Safes

- Five components:
  - Is this an appropriate use of the data?

  - How

  - Does

  - Is the

  - Is there a residual risk in published outputs?

  Scientific use files
  ('end user licence')

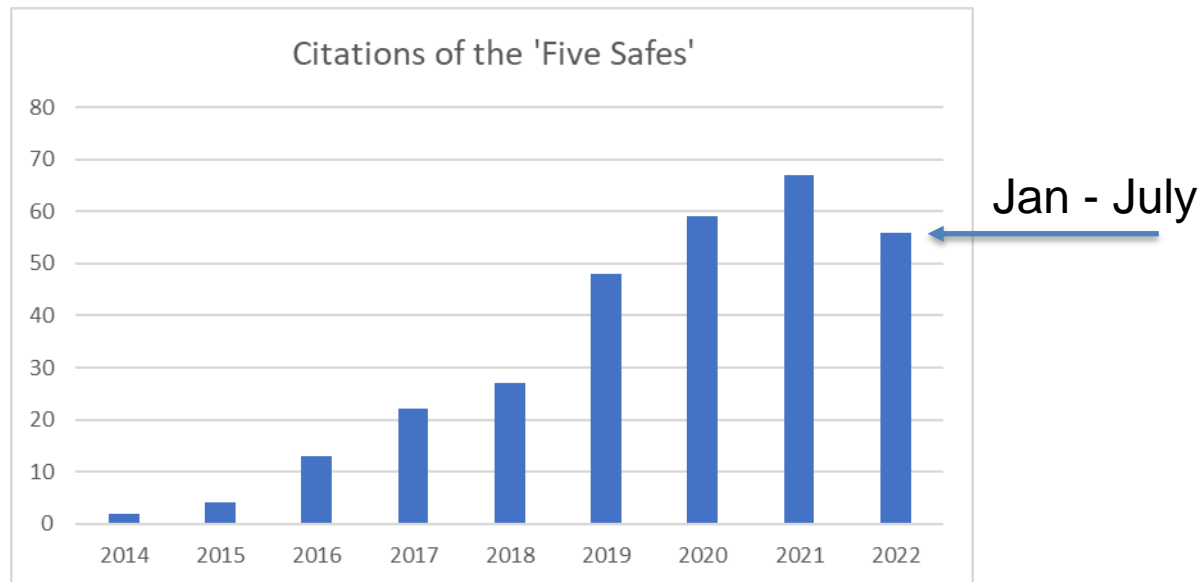| safe projects |
| safe people |
| safe settings |
| safe data |
| safe outputs |

= safe use

- Consider <u>jointly</u> and <u>severally</u>

History

- January 2003 – 'VML Security Model' , 4 safes

- 2007 – 5 safes, generalised language

- 2012-ish – 'Five Safes'

Citations of the 'Five Safes'

Jan - July

Use

- UK
  - UKRI
  - Much of central govt
  - Devolved Govts
  - UK Data Archive, HDR, Health Foundation, Cancer Research UK…

- Internationally
  - Widespread in NZ, Canada, Australia
  - Increasing in Europe: France, Germany, Norway, Eurostat…
  - Important in non-Census Bureau US: ICPSR, NORC, HIPAA…
  - Growing in LMICs

Why?

- Simple

- Comprehensive

- Flexible

- Easy to explain

- Increasingly common – shared language

Problem: over-interpretation

- Framework, not an instruction manual
  - What is 'five safes compliant'?

I think this is a good idea

I'm only going to share the data with my mates.

I'll keep all the data at home – the kids aren't interested in it

I can't find anyone I know in the data

We'll only produce statistics

Problem: flexibility

- Where are the guidelines to design an efficient, effective data access regime?

- Solutions:
  - Existing standards (ISO9000)
  - Lots of evidence of good practice
  - CADRE guidelines etc

- Still missing: *how* you make decisions

Towards practical data management (1)

Principles-based thinking

Regulation regimes

- Rules-based
  - eg European financial regulation; UK Statistics of Trade Act

- Principles-based
  - eg Anglo-Saxon financial regulation; GDPR; UK DEA; Aus. DATA

- Increasingly, PB seen as better practice in data

  flexibility >> formal clarity

Principles-based governance

- What are you trying to achieve?
  - Outcomes
  - Operational goals
- What is important?

- Requires effort

+ More efficient / more sustainable solutions

- Still not enough

Towards practical data management (2)

EDRU: changing personal and institutional attitudes

Managing data

- Traditionally:
  - be very careful
  - Do nothing unless it's proven correct
  - Plan for worst cases
  - It's all about protecting data

- More effective: EDRU
  - Evidence-based
  - Default open
  - Risk-managed
  - User-centred
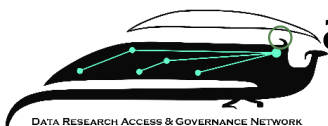
Data access 2.0 (E)DRU

- Evidence based

    "What if...?"

    →

    "The evidence shows..."

- We know lots
    - people are human
    - De-identification reduces risk considerably
    - research outputs have very little disclosure risk
    - and so on...

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Data access 2.0 E(D)RU

- Default open

  "Can we/should we...?"

  →

  "How do we do ... best?"

- **Use** of the data is the objective
  - Maintaining confidentiality is a **constraint**

Data access 2.0 ED(R)U

- Risk managed

  "We must minimise the risk…"

  →

  "We'll review risks and benefits to ensure the residual risk is acceptable to achieve these gains…"

- Benefits as well as risks exist
  - benefits are more important – **the objective**
  - risks **constrain** your actions

- The world is **uncertain** and **subjective**, not risky
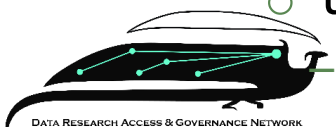
Data access 2.0 EDR(U)

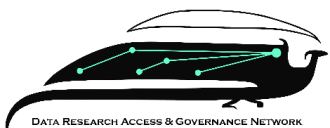- User centred

  "How do we protect this data?"

  →

  "What do users need, and what will they tolerate to get it?"

- User interests determine **benefit**

- User tolerances determine **success** of process
  - tolerances can be changed
    - eg principles-based output SDC

Bringing this together

Summary (1)

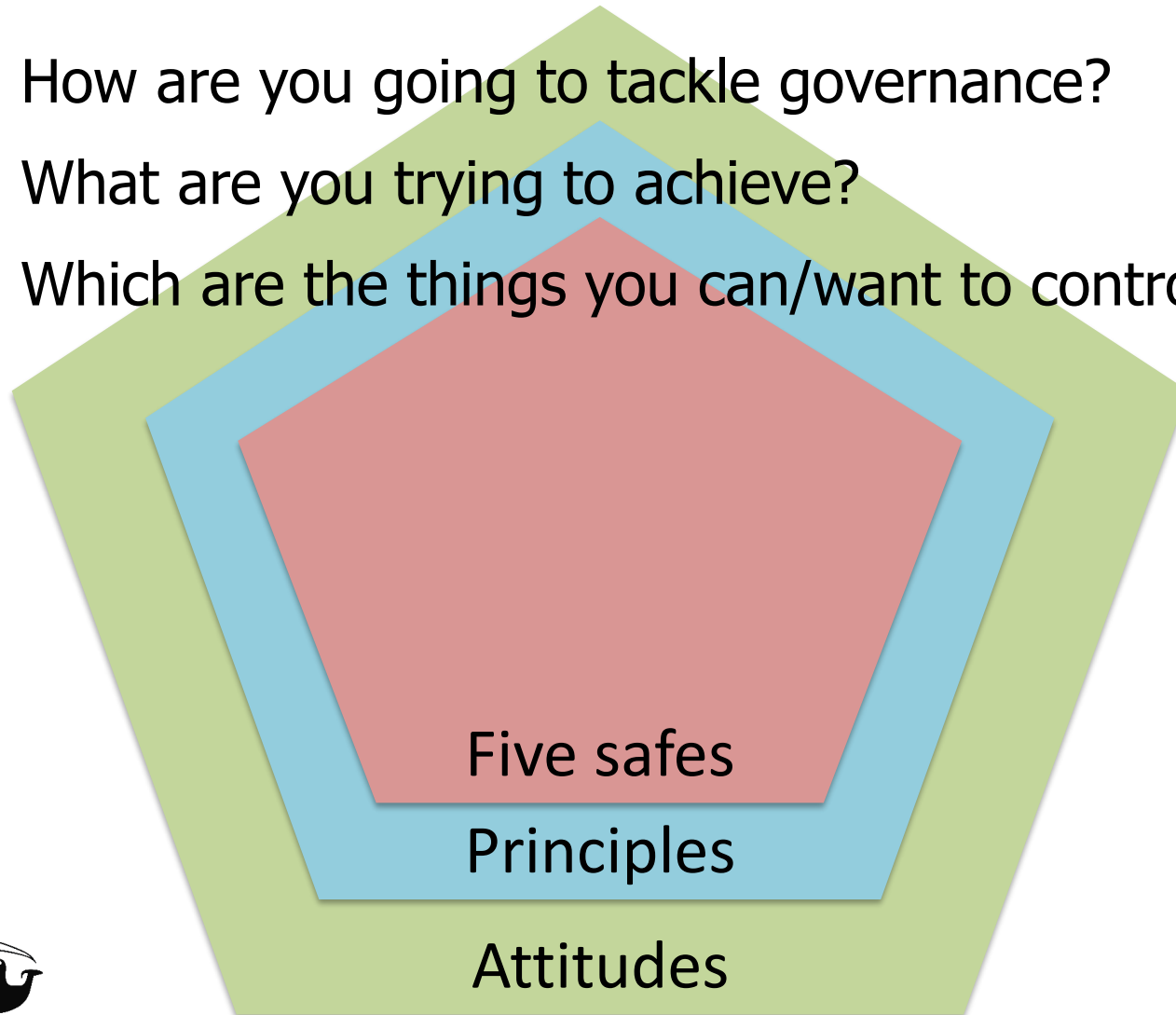1. How are you going to tackle governance?

Attitudes

Summary (1)

1. How are you going to tackle governance?
2. What are you trying to achieve?

Principles

Attitudes

Summary (1)

1. How are you going to tackle governance?

2. What are you trying to achieve?

3. Which are the things you can/want to control?

Five safes

Principles

Attitudes

Summary (1)

1. How are you going to tackle governance?
2. What are you trying to achieve?
3. Which are the things you can/want to control?
4. What is good practice in each area?

Standards

Five safes

Principles

Attitudes

Summary (1)

1. How are you going to tackle governance?
2. What are you trying to achieve?
3. Which are the things you can/want to control?
4. What is good practice in each area?
5. What is my solution?

Solutions — Everywhere

Standards — In places

Five safes — Becoming common

Principles — Becoming common in law

Attitudes — Hen's teeth

Summary (2)

- Sort out your goals
  - assume that everything is possible

- focus on objectives rather than constraints

- focus on principles not historical precedent

- Use structures to frame thinking, not replace it

Further reading:

Ritchie, F. & Green E. (2020) Frameworks, principles and accreditation in modern data management . Working Papers in Economics. https://uwe-repository.worktribe.com/output/6790882

Ritchie, F. (2021). Microdata access and privacy: What have we learned over twenty years?. Journal of Privacy and Confidentiality, 11(1), 1-8. https://doi.org/10.29012/jpc.766

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