



ESRC Business and Local Government  
Data Research Centre

# The Behavioural Challenge of Sharing Data on Vulnerable People

James Cornford

Norwich Business School, UEA

[j.cornford@uea.ac.uk](mailto:j.cornford@uea.ac.uk)

Catalyst Conference 26 June 2019

[www.BLGdataresearch.org](http://www.BLGdataresearch.org)

# Thought for the day

---

The “dirty little secret” behind the promotion of data sharing is that not much sharing may be taking place (Borgman, 2012: loc. 1059).



# Problematic

- Why is sharing administrative data on vulnerable people (usually) so difficult?
- Understanding data sharing as **behaviour**
- How might that help?
- How can **you** help?



Invulnerable person

Data is not just *on* vulnerable people – sharing data can *make* people more or less vulnerable



# “Sharing”

- Why data *sharing*?
  - Because (market) **exchange** is hard to establish (data makes a problematic commodity)
  - Because **mandatory** bureaucratic procedures are seen as slow and cumbersome
  - Because **Open** Data is “too open” (for vulnerable people)



# Data (on vulnerable people)

- Data
  - Data is “**entangled**” (Carlson and Anderson, 2007) along the value chain and beyond
    - So you can’t (easily) share the data without sharing specific problematics and other frames of reference
  - “Raw data is an oxymoron” (Gitleman, 2013)
    - All data is already “**cooked**,” reflecting choices and biases
- (particularly) Vulnerable People’s data
  - Acknowledges **power** imbalances
  - Generates complex **rules**

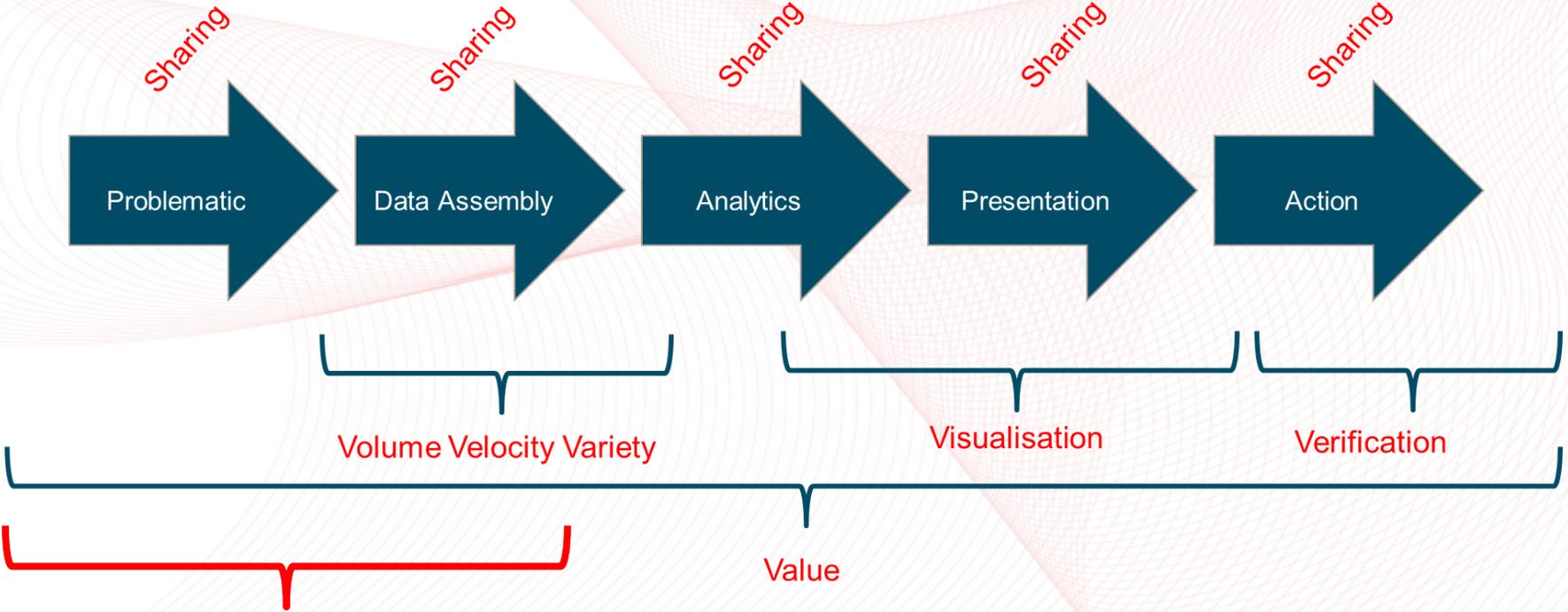


“This data is raw.”



# Sharing and the Big Data Value Chain

Sharing data means sharing along the whole value chain!



c. 80% of Effort

Adapted from Miller and Mork, 2013



# Three Logics of Data Sharing

|  | Design Logic   | Governance Logic  | Enculturation/<br>practice Logic   |
|--|--|---|--|
| Basic framing                                      | Data Sharing is a <b>design</b> problem  | Data Sharing is a <b>governance</b> problem                               | Data Sharing is a cultural, <b>behavioural</b> or <b>people</b> problem  |
| Central theme                                      | <b>Enabling</b> , facilitating   | <b>Controlling</b> , clarifying   | Encouraging, <b>motivating</b> , supporting, leading                     |
| Framing of the Problem Space                       | We <b>lack the tools</b> and procedures to share data securely and effectively | We <b>lack, or fail to understand, the rules</b> that govern data sharing | We don't have a <b>culture of data sharing</b>                           |
| Typical Product(s) (framing of the solution space) | A (software) <b>tool</b> , an information system/environment, <b>process</b>   | An information sharing <b>agreement/protocol</b> ; guidance; training     | <b>Stories, narratives, case studies</b> , best/good/promising practices |

(Adapted from Cornford, 2019)



# Many Behavioural Perspectives

---

- **Theory of Planned Behaviour**
  - Attitudes, (Subjective) Norms and Control → Intention → Behaviour
- **COM-B Behaviour Wheel** (Michie et al., 2011)
  - Capability, Opportunity, Motivation → Behaviour
- **Theoretical Domains Framework** (Atkins et al. 2017)
  - 14 domains; 128 constructs
- **“Information Behaviour”** – (e.g., Hepworth 2007; Godbolt, 2006)
  - e.g., Scientific Information Sharing (e.g., Borgman, 2012)
- **MINDSPACE** (Institute of Government, 2012)
  - Messenger, Incentives, Norms, Defaults, Saliience, Priming, Affect, Commitment, and Ego.
- **Normalisation Process Theory (NPT)** (e.g., May and Finch, 2009)
  - Coherence, cognitive participation, collective action, reflexive monitoring



# Six Core Traditions in Behavioural Science

---

- **Rules** and regulation
- **Roles** and identities
- **Rewards** and risks
- **Relationships** and networks
- **Routines** and habits
- **Rationales** and sense-making

+ Resources



# Rules (and regulations)

- Underlying model: people mostly follow (legitimate) rules
- But, for sharing vulnerable people's data
  - Rules are seen as missing or out of date
  - Where there are rules, they are seen as very complex and there is little agreement about what the rules mean in practice
  - Additional "guidance" seems to just add to the confusion
  - There is a "culture of anxiety" (Caldicott) about data sharing rules



# Roles (and Identities)

---

- Underlying model: people mostly act in role
- But, for sharing vulnerable people's data
  - There is no discrete "data sharing" role (cf. business and the rise of the "data wrangler")
  - It's not clear if it is *part* of any particular individual's role
  - Several roles intersect (e.g., sign-off versus actually extracting and delivering the data)
  - DS 'crafted' into, but also out of job role
  - Data sharing **role strain**



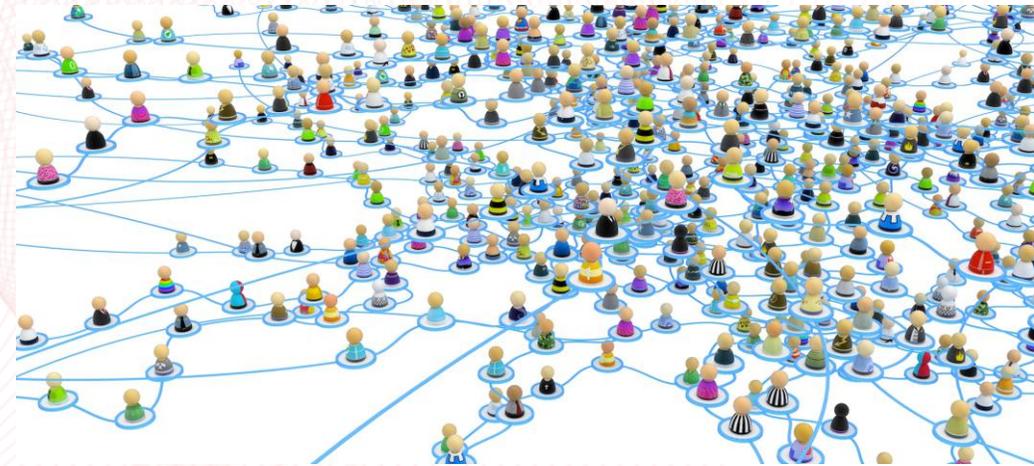
# Rewards (and Risks)

- Underlying model: People mostly respond to rewards and avoid punishment
- But, for sharing vulnerable people's data
  - The rewards are seen as ambiguous and uncertain
  - Risks are seen as large and well defined
  - **“No one ever got sacked for saying no to data sharing”**



# Relationships

- Underlying model: behaviour is shaped by personal (social) networks of relationships
- But, for sharing vulnerable people's data
  - Relationships may be missing or tenuous
  - They take time to build up
  - Developing relationships is impeded by **constant changes of personnel**



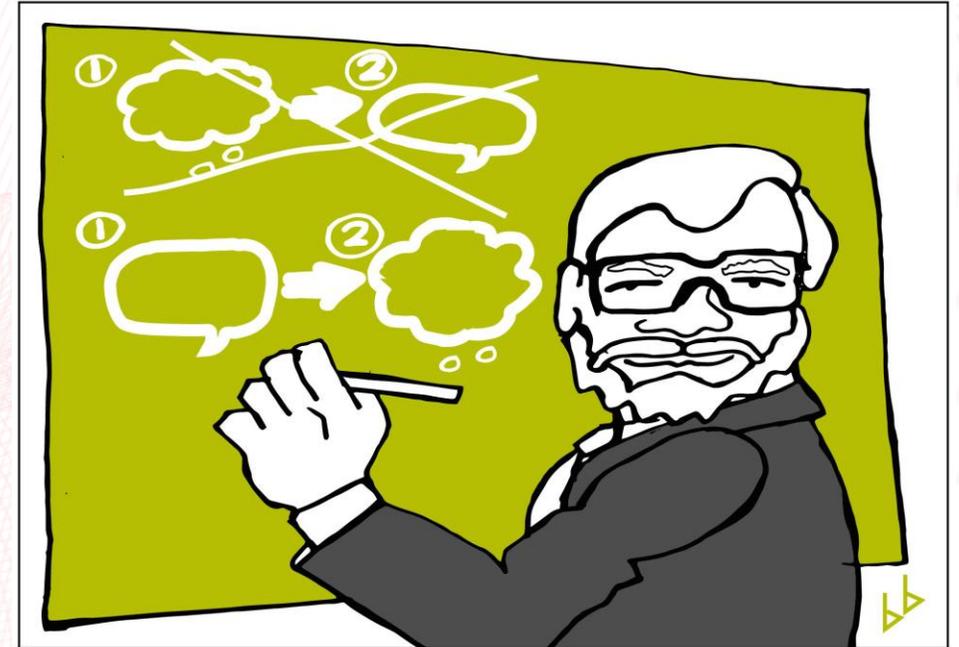
# Routines and habits

- Underlying model: people are creatures of habit
- But, for sharing vulnerable people's data
  - Most routines don't include or are inimical to data sharing
  - It is difficult to establish a routine in the context of constant change in personnel, rules, etc.,
  - **'Its hard to get the data sharing habit'**



# Rationale & Sense-making

- Underlying model: people try to make sense of a baffling reality
- Rationale & Sense-making activity
  - The powerful (plausible, useful) story or narrative helps data sharing to 'make sense' to us



## Ode to Dr. Karl Weick

The University of Michigan professor in organizational behavior and psychology asserts that what we say determines what we think, not the reverse.

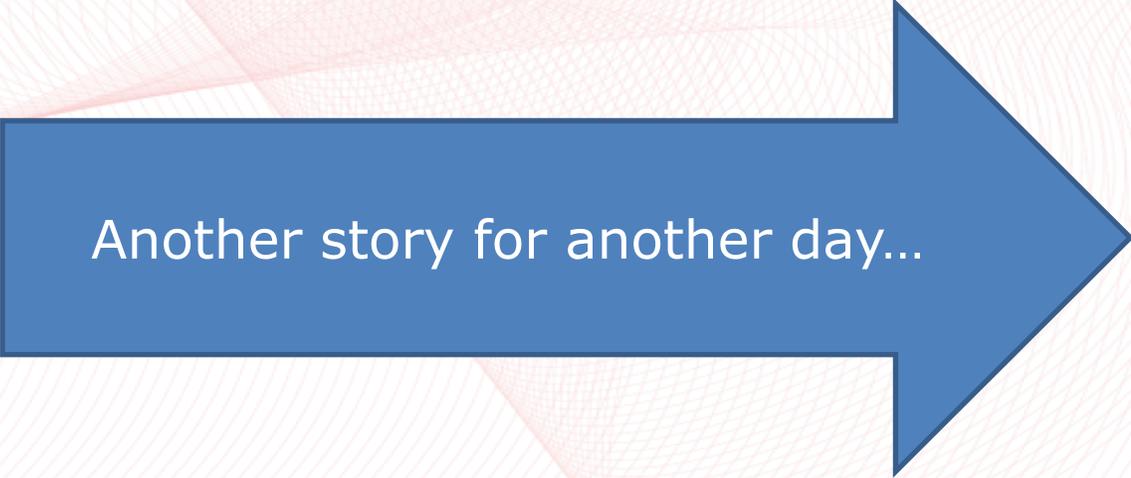
*Bea Boccalandro*



# A final R: Resources

---

- Data sharing is not costless
- Data sharing = cost sharing?



Another story for another day...



# 6 Padlocks to Unlock Data

- A checklist
  - Can we clarify the rules and regulations?
  - Are the data-sharing roles defined?
  - Do the potential rewards outweigh the potential risks?
  - Do we have the relationships to support this?
  - Can we make sharing data part of a “routine”
  - Have we got a powerful rationale (story or narrative) for data sharing
- + Have we allocated adequate resources to data sharing



# Sharing about Sharing: Over to You....

---

- Think of Practical Actions to Address Data Sharing behavioural challenge
- Short bullet points on the Big Post Its!
- Write big so we can read from distance!
- Stick up under the appropriate title
- Stand back and contemplate ...
- I will circulate results



# References

---

- Atkins et al. (2017) A guide to using the theoretical Domains Framework of behavior change to investigate implementation problems, *Implementation Science*, 12: 77.
- Borgman, C. (2015), *Big Data, Little Data, No Data: Scholarship in a Networked World*. Cambridge Mass: MIT Press.
- Carlson, S. and Anderson, B. (2007), 'What are Data? The Many Kinds of Data and Their Implications for Data Re-Use' *Journal of Computer-Mediated Communication*, 12(2), article 15. [Available at <http://jcmc.indiana.edu/vol12/issue2/carlson.html>]
- Cornford, J. (2019) Competing Institutional Logics of Information Sharing in Public Services: why we often seem to be talking at cross-purposes when we talk about Information Sharing, *Public Money and Management*, 39(5): 336-345
- Gitelman, L. (ed.) (2013) *Raw Data is an Oxymoron*. Cambridge Mass: MIT Press.



# More references

---

- Godboldt, N. (2006) Beyond information seeking: towards a general model of information behavior, *Information Research*, 11(4)
- Hepworth, M. (2007). Knowledge of information behaviour and its relevance to the design of people-centred information products and services. *Journal of Documentation*, 63(1), 33–56.
- May, C. and Finch, T. (2009). Implementation, embedding, and integration: an outline of Normalization Process Theory, *Sociology* 43 (3): 535-554
- Michie, S., van Stralen M.M. and West, R. (2011) The behaviour change wheel: A new method for characterising and designing behaviour change interventions, *Implementation Science*, 6: 42.
- Miller, H. G. and Mork, P. (2013) From Data to Decisions: A Value Chain for Big Data. *IT Pro*, Jan/Feb, 57-59.

