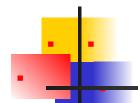
National Digital Id System through the Covid-19 backdoor?

Jon Crowcroft,

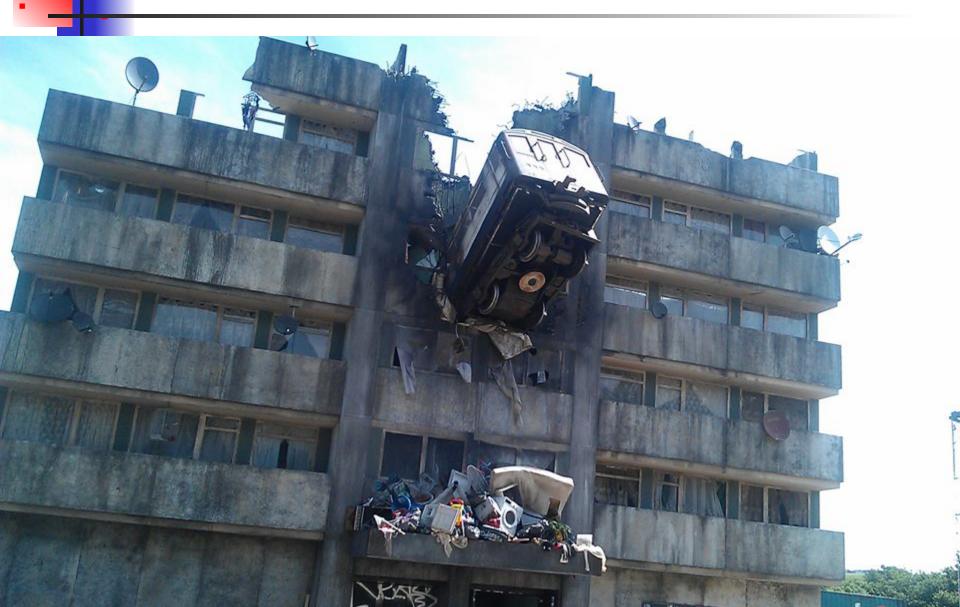
http://www.cl.cam.ac.uk/~jac22



pandemic, apps, and identity

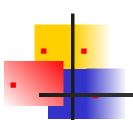
- contact tracing apps build graph of id's
- immunity passporting attributes an id
 - exposure notification warns of risky id
 - all may also map location
 - may be used to enforce compliance
- surveillance isn't all bad:
 - note also public health benefits
 - epidemiology-who/where is more

Do no harm...



tech solutionism or tech giant solutionism?

- original app (e.g. flu phone 2009)
 - driven by LSHTM/medical needs: critical to understand disease
 - tracking down people secondary
 - that benefit depends on tracing->isolation-> treatment or vaccines.
 - GAEN doesn't meet primary urgent medical need. You trust Gapple more than NHS?

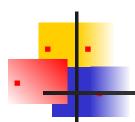


The UK has eschewed National Id Cards

- 1. Campaigners argued:
- 2. but we have

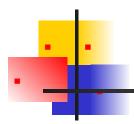


- national insurance numbers, driving licenses, passports, NHS numbers etc
- 4. And many private identifiers too
- 5. Why not simplify?



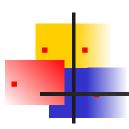
Plus points for unifying gov id

- 1. Joins over data help government
- 2. Also KYC 100\$ redux to 10cents
- 3. Assuming government competent
- 4. Assuming data accurate (HMRC stories)
- 5. Assuming unique ID (NHS stories)
- 6. What could possibly go wrong



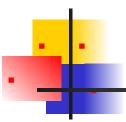
Methods for unifying

- 1. Single Id
- 2. Federate Id systems
- 3. Keep systems separate and let users do join
- 4. add yours here



Opportunities for improvement

- 1. Biometrics
- 2. Data Science/de-noise/wranglers
- 3. Users self-improve (google scholar/wiki style)
- 4. Claims (cost/benefit) that I don't believe :-)
 - 1. https://www.gov.uk/government/publications/joined-up-data-in-government-the-future-of-data-linking-methods/privacy-preserving-record-linkage-in-the-context-of-a-national-statistics-institute
 - 2. https://www.mckinsey.com/~/media/McKinsey/
 Business%20Functions/McKinsey%20Digital/Our%20Insights/
 Digital%20identification%20A%20key%20to%20inclusive%20g
 rowth/MGI-Digital-identification-Report.pdf



How too enforce separation

- Tech&Law
- Case study Immunity Passports
- or as we prefer, Antibody Certificates
- lame excuse
- war stories here:

This is to certify that Je soussigné(e) certif	fie que } John	ceascre	ST
whose signature follow dont la signature suit	ws }	date of Bir	rth }
has on the date indicat a été vacciné(e) ou rev	ed been vaccinated or revaccinated agai acciné(e) contre la fiévre jaune à la date	inst yellow fever. indiquée.	sex }
Date	Signature and professional status of vaccinator Signature et qualité professionelle du vaccinateur	Manufacture and batch no. of vaccine Fabricant du vaccin employe et numero du lot	Official stamp of vaccinating centre Cachet officiel du centre de vaccination
16 MOV 90	R. M. BÉHRENS MBCP CONSULTANT PHYSICIAN	WELLCOME BATCH No.	HOSPITAL FOR TROPICAL DISEASES TRAVEL CLINIC
201	BANA CHARLES	3/103	Dags Libos

References

- - <u>Digital Identity</u>: The missing piece of the Governments Exit Strategy, from Tony Blaiir's <u>Institute for Global Change</u>: https://institute.global/policy/digital-identity-missing-piece-governments-exit-strategy
 - Plus see also https://institute.global/policy/new-approach-digital-identity
 - Secure ABC: Secure AntiBody Certificates for COVID-19, https://arxiv.org/abs/2005.11833
 - https://arxiv.org/abs/2004.04059, TraceSecure: Towards Privacy Preserving Contact Tracing
 - <u>So why do either of these two apps need any moore than pseudonyms + linking service to NHS number?</u>



Who Am I?

