



Image credit : Vincent Callebaut

Privacy and Sharing in a Data-Driven World
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World 2050

Population : 9.5bn
Urbanising, Ageing

Technology Trends

- Driverless cars : increase
- Tele-work : increase
- Tele-education : increase
- Tele-health : increase
- Smart grids : ubiquitous
- Smart factories : ubiquitous



Autonomous Vehicles

Quite Cool
Safer
More efficient
Sharable

but possibly

- ... more annoying
- ... more reason for traffic jams
- ... creates ethical challenges
- ... susceptible to hacking
- ... may lead to more invasive sponsored experiences



Privacy and Sharing in a Data-Driven World

Artificially Intelligent Autonomous Devices

Quite Cool

Can augment humans

Can be more efficient

Uses in manufacturing,
agriculture, hospitality

Can you tell?
Does it matter?
How is it qualified?
Who is responsible?
Can you trust it?
What is happening to my data?



Shudu
Lil Miquela
Alexa
Siri



Image Source: Instagram

Can you tell?
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What is happening to my data?

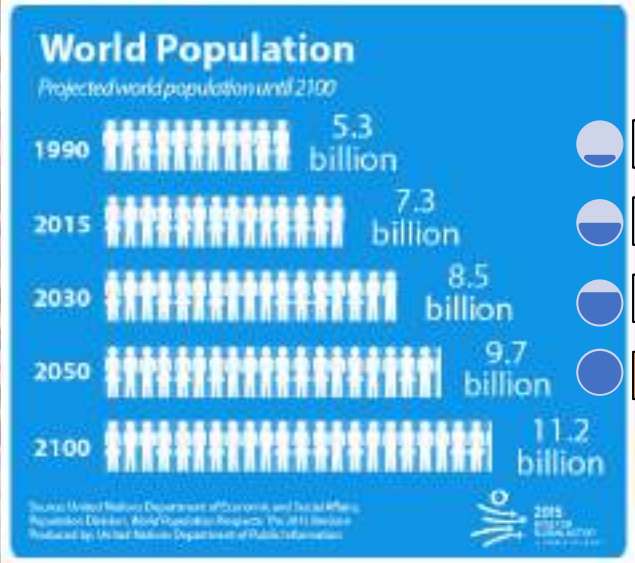
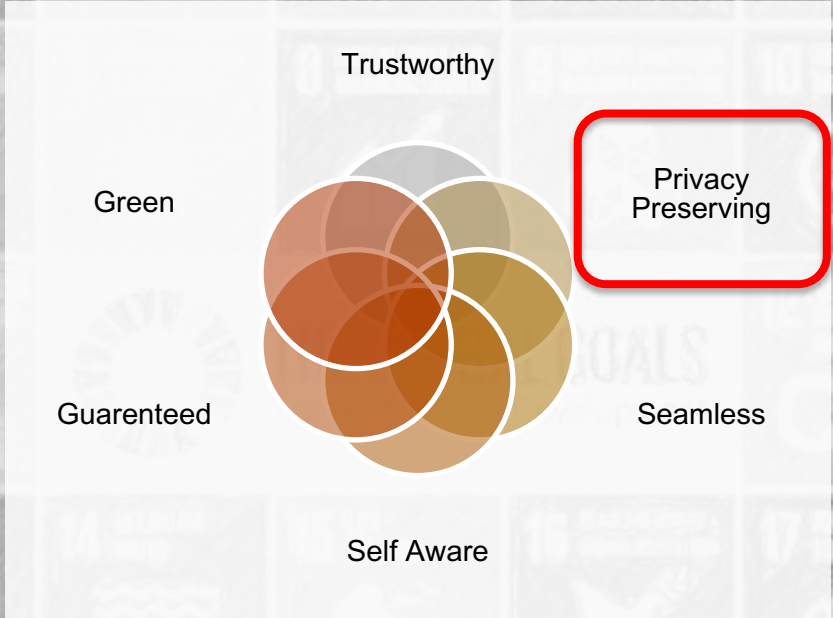
Quite Cool
Highly Personalised
Can be more efficient for
individual and service
provider



But what about ...

- Personal information
- Cyber security
- Data Sharing





GSM

4G

6G

8G



GSM

3G

4G

5G

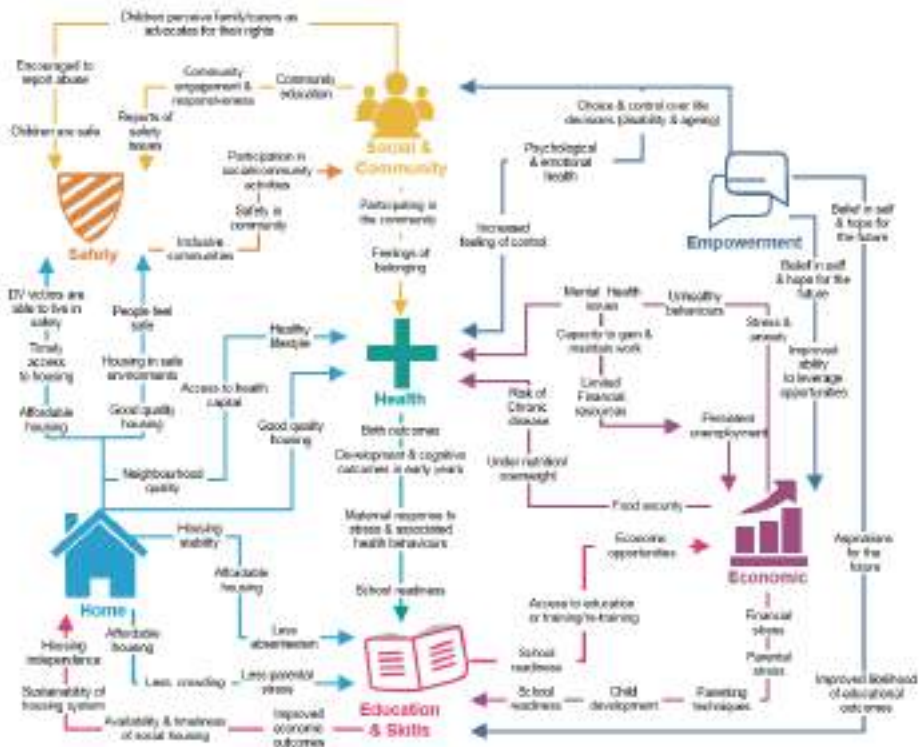
6G

7G

8G

Data Analytics Strategy for Outcomes Based Budgeting

... Supporting mapping in data of evidence pathways



Outcomes Framework

Role of the DAC

Build the dataset to support development or enrichment of evidence pathways such as the work done for out-of-home care (OOHC) services.

Help agencies identify cohorts and analyse pathways.

Data Analytics Strategy for Outcomes Based Budgeting

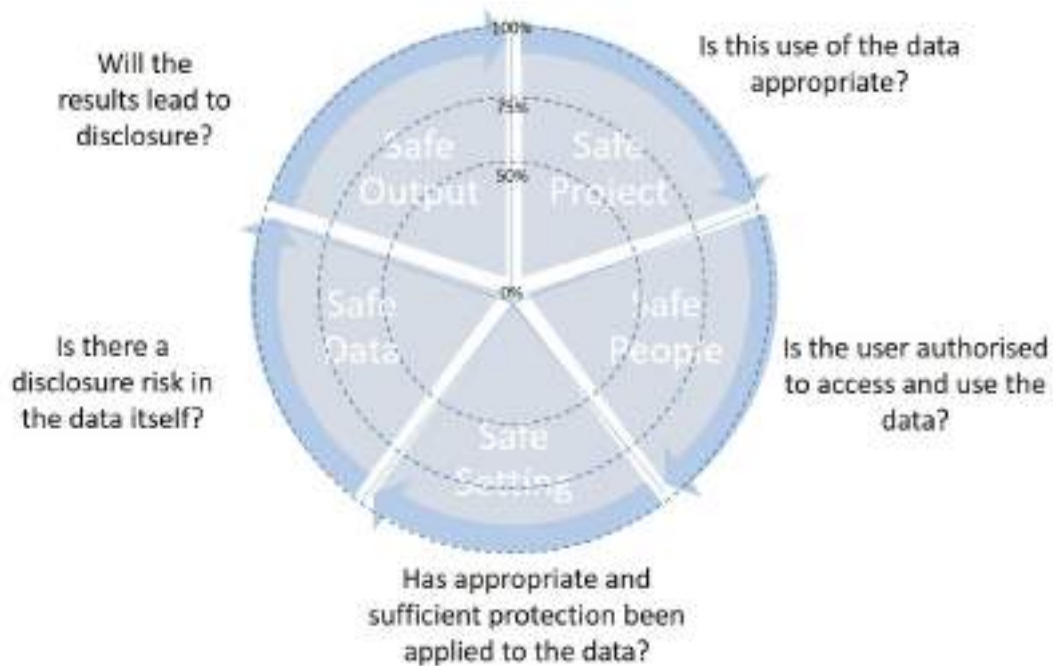
services mapped to place, contributing to outcomes frameworks, analysed against evidence pathways to inform policy



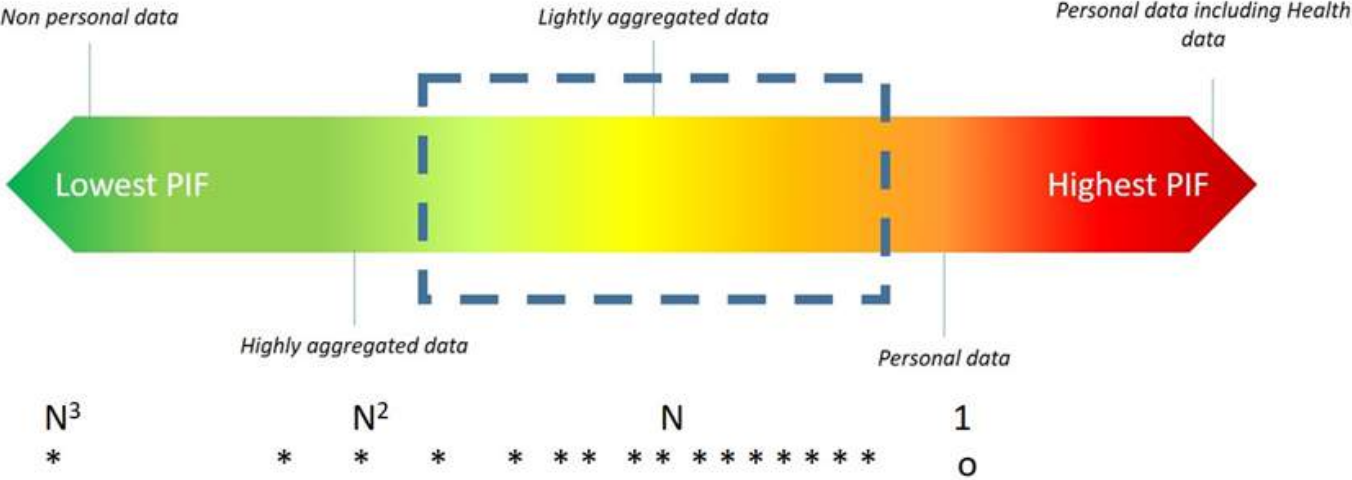
Outcomes Framework

Privacy Preserving Data Sharing

Quantified “Fives Safes”



Safe Data: Personal Information Factor



A Few Safes More

Safe Organisation

- refers to the systems and processes employed by an organisation to ensure the Safes Framework is applied throughout the project and with the long-term management of data and outputs. Safe organisations may include those which adhere to data protection, quality standards and cyber security standards.

Safe Outcomes

- refers to the ultimate uses of the project outputs. A variety of “Outcomes Frameworks” have been developed which can be informed by the outputs of individual data linkage and analysis projects. An example framework is the Human Services Outcomes Framework developed by NSW Government. See reference for a high-level summary of the framework underpinned by a range of quantitative and qualitative parameters¹¹.

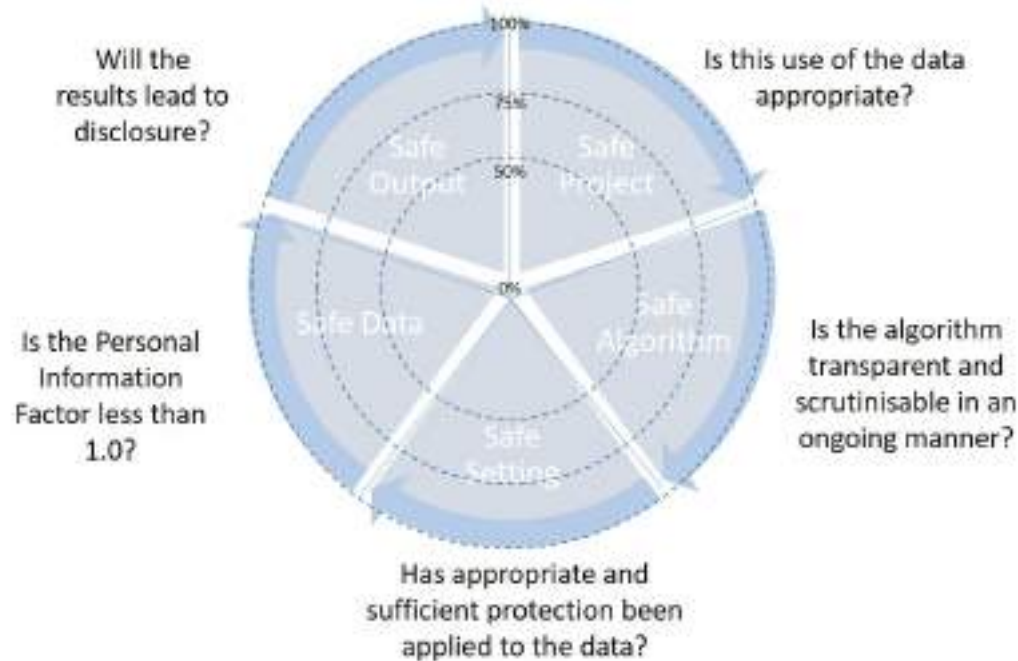
Safe Lifecycle

- refers to the time sensitivity of a data set or output. Data may be highly sensitive for a specific period and then may be not sensitive at all. For example, a city plan that might involve the mandated acquisition of an individual’s home to enable the construction of a new road may be very sensitive until the home is demolished. At this time there is no remaining value in protecting the data or output. Considering the complete lifecycle of a data set may add additional insight and tools to help effectively anonymise and protect privacy rights.

¹¹ See NSW Innovation Website <https://www.innovation.nsw.gov.au/social-innovation/human-services-outputs-framework>



What happens when “People” are “Algorithms”?



Standards Needed

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