

Beyond the Data Science Bubble

Data Analytics Seminar

Wednesday 11 October 2017
Actuaries Institute • Sydney





Beyond the Data
Science Bubble

Data Analytics
Seminar



Wednesday 11 October 2017 • Actuaries Institute • Sydney

Solving Real Business Problems

Steve Millward, Chief Analytics Officer, Data Republic

- We need to make data more liquid
- Applying new data to old problems
- Examples
 - Health outcomes
 - Pooling industry data
 - Personalisation of risk

**Data is arguably the
world's most valuable
resource**

But it's illiquid



An aerial photograph of a tropical island archipelago, likely in Southeast Asia. The image shows numerous small, lush green islands of various shapes and sizes scattered across a vast expanse of turquoise and deep blue water. The water's color transitions from a light, shallow turquoise near the islands to a deeper blue further out. Some islands have visible white sandy beaches. The overall scene is serene and picturesque, representing a natural environment that is often a source of valuable ecological and geographical data.

**The most useful
datasets are still held
in islands**

We need rails for
data liquidity



‘Big data’ and ‘Data science’

Innovation will come from applying long-standing techniques to new, richer data sources (not size related)





Examples

Public/private data share – WBC, Qantas, IGA, Victorian Department of Health

300 Data Workspaces open 36 hrs

626 CPUs

1.89 Petabytes of storage

3.95 Terabytes of memory



+ 250 Contestants

60 Team submissions

6 Finalist Teams

1 Top winner



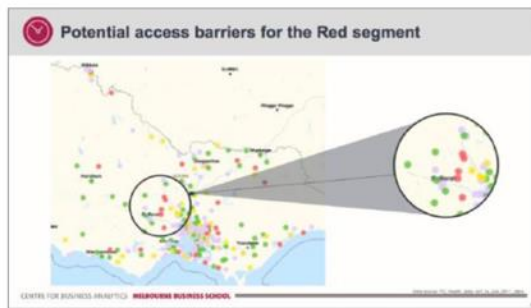
60 Teams



250 Contestants

Public/private data product – addressing immunisation rates

Using analytics to improve vaccination rates and save \$millions

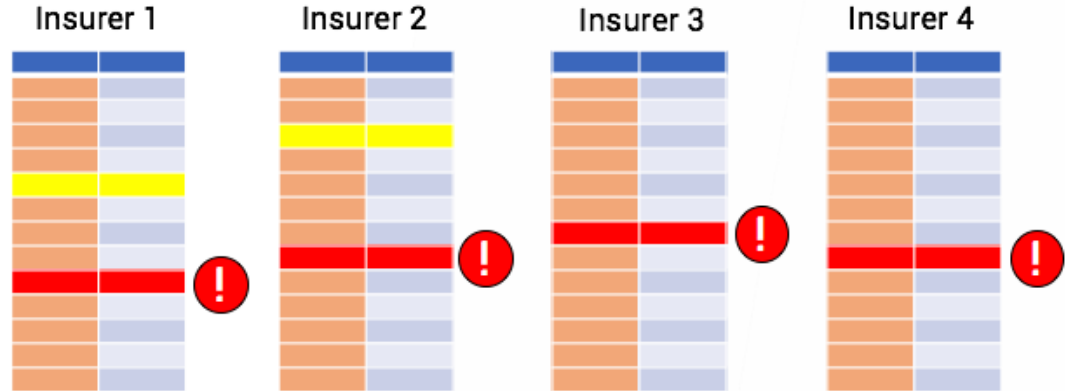


Pooling industry-wide data to benefit the entire industry

Most industries have needs to share data in a secure 'safe harbour'

- Personal insights
- Fraud detection
- Regulatory reporting
- Market insights

Applications across insurance
(travel, CTP, car, home, life)



New data sources for personalisation (marketing, risk, churn, best offer)

Data exists – but it's been inaccessible

Lifestages

Shopping transactions

Mobile phone plan

Starting a family

Grocery transactions

Relationships



Car purchase intent

House purchase intent

Health outcomes

Online behaviour

Travel behaviour

Hobbies and interests

Conclusions: Liquidity in data

The journey is underway:

- Data is becoming more liquid
- Companies will have access to more data than ever before, often from other companies
- Data from alternative sources providing a wider perspective on customers
- Outcomes need to be driven by you