

Change • Challenge • Opportunity

Injury & Disability Schemes Seminar



12 - 14 November 2017 • Sofitel • Brisbane



**Actuaries
Institute**



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Reflections on the future
Injury & Disability Schemes
Seminar - 2017

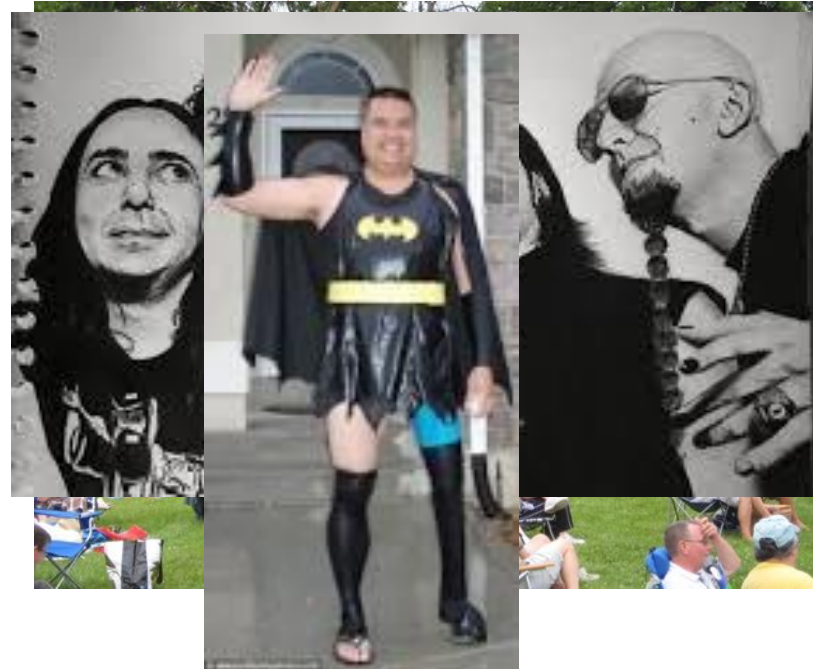
Some simple Maths – How private are you?

There are 25m people in Australia -
You are 1 in 25m

If I know your postcode -
You are 1 in 1500

If I know your day of Birth -
You are 1 in 4

If I know your year of Birth -
I know you



Aggregating Data is Powerful



What about the simple Water Meter – what does it tell me?



Knowing average shower volumes – how many people live in the household

Daily usage patterns – Commercial v Residential

When Holidays are being taken

Daily rhythms of the household – cooking times, wake times, ablutions – time & frequency

This is just on old datasets – have you considered the new datasets – Uber, Smart Watches, your phone meta data



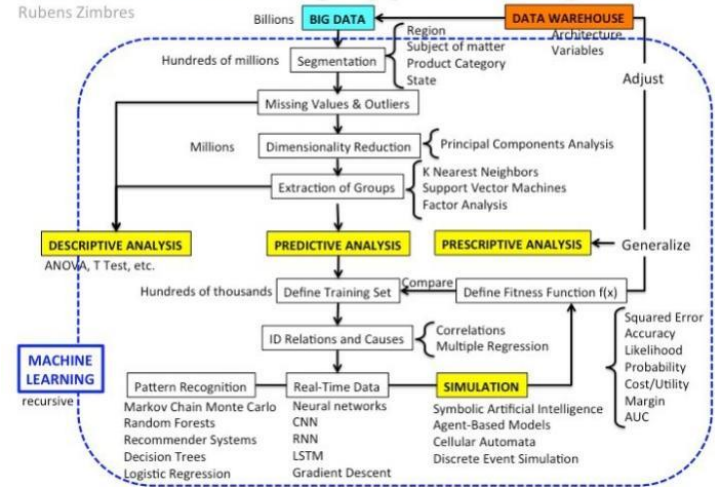
Scientific Method v Machine Learning



Scientific Method – we can understand the world's complexity by reducing a problem to the key drivers

Machine Learning – we don't need to know why but rather what can we predict based on patterns

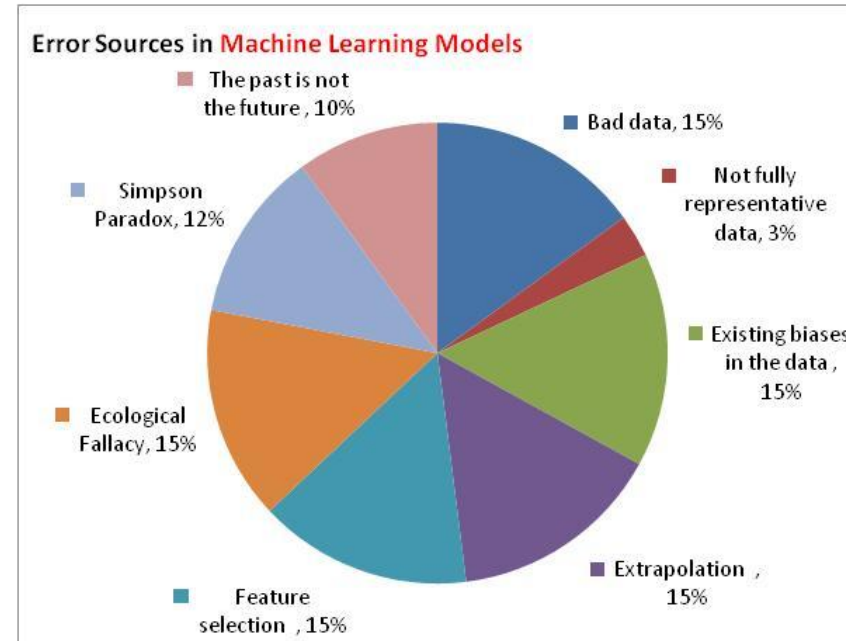
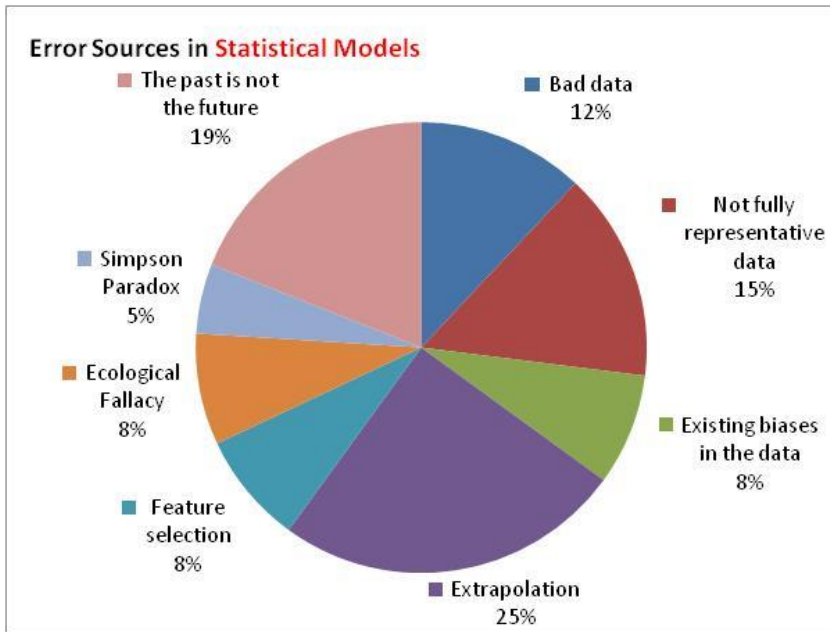
Machine Learning Applied to Big Data





Model Error – Exists in every model

All Models are wrong but some of them are useful





Customer View

- Can Legislation catch up
- Brand & Trust
 - Ethical Culture
 - Transparency
 - Principles
- Insurance Specific Issues
 - Moral Hazard
 - Post Injury/loss behaviour
 - Value & delight in risk reducing behaviour