

Transforming the traditional Business Intelligence operating model by inserting the role of data scientist

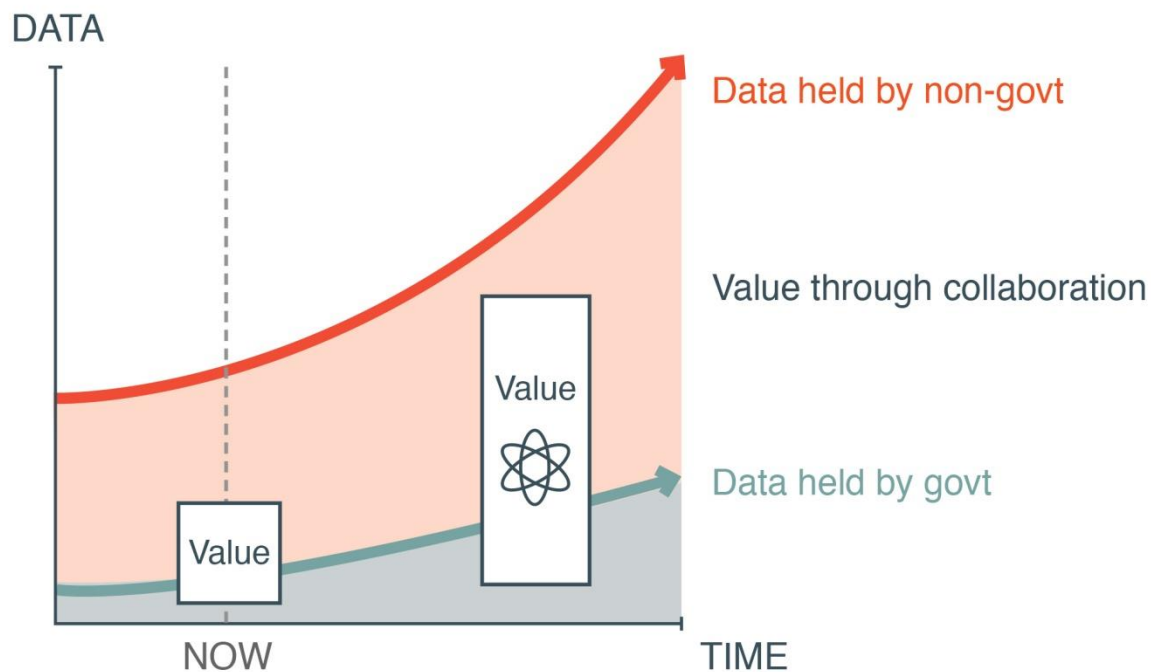
*Presentation to the NZ Analytics Forum seminar:
Analytics in Government*

1 September 2015
Gavin Knight, Chief Data Scientist



Data exponential growth (courtesy Data Futures Forum)

It's not just a government challenge or a government opportunity

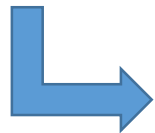


Police and Data Science

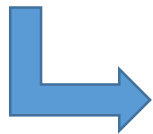
Business Intelligence Statement of direction:

- Proactively embrace Big Data and Open Data
- Business insights
- Investigative insights
- Value to the economy and society
- Support government strategy

New Strategy Group structure

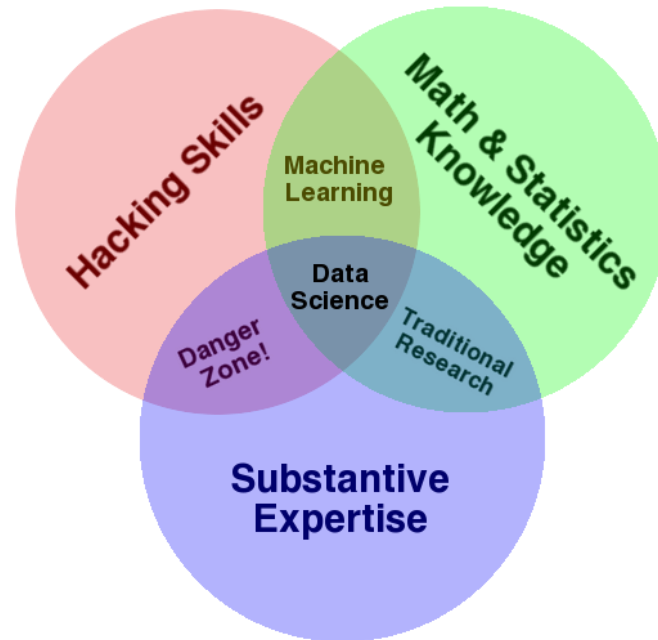


New function within Strategy Group

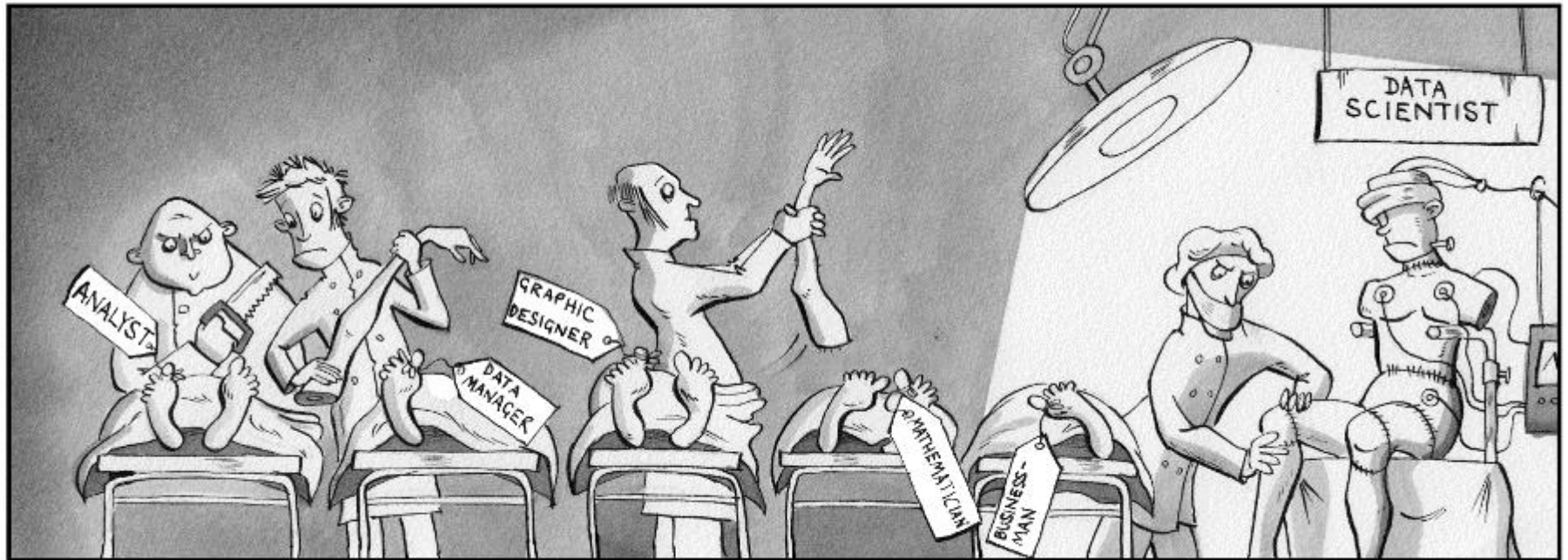


Data Scientists

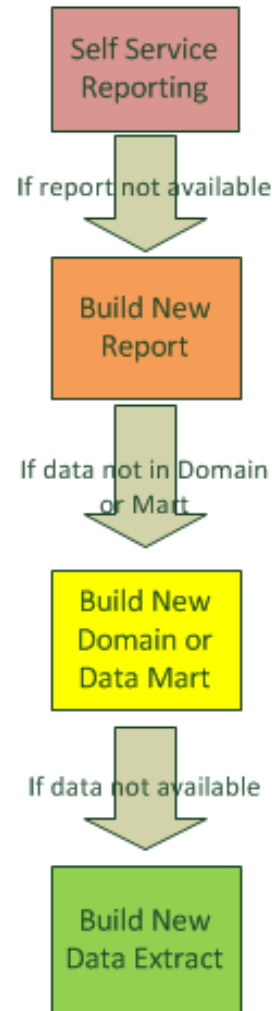
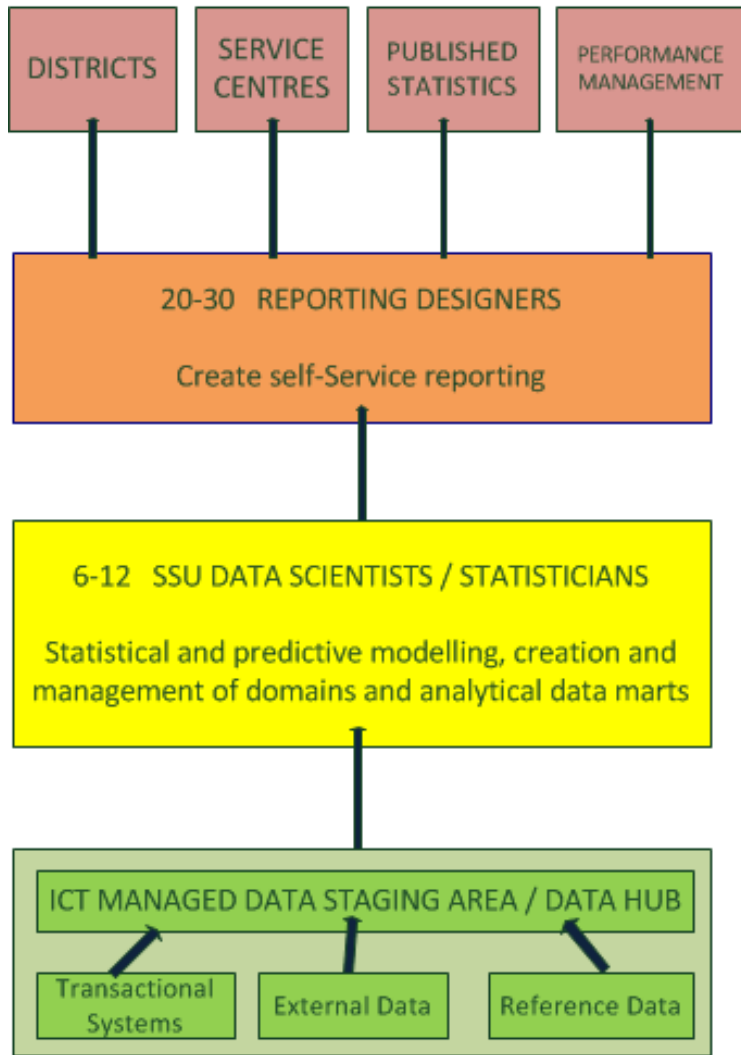
What is a data scientist?



The truth about data scientists



1000+ End Users of Reporting



Business model

Agile Governance

What is different in our BI

ETL

Statistical Development Cycle vs SDLC

Iterate design based on content of data

Integrate data based on probability

- Geospatial matching
- Sampling conflicted scenarios

Impute missing records

Eliminate duplicates

Integrate unstructured data

Create 'safe' data domains

Stable counting rules

Mutual exclusivity – exhaustiveness

Statistical balance – consistency of recording practices

Consider the whole flow of admin data

Input to recording standards and from end system designs

- Improve reliability – Eliminate bias

Lower cost – faster development cycle – better quality data

Questions ?

