



Data analytics making fitter life insurers

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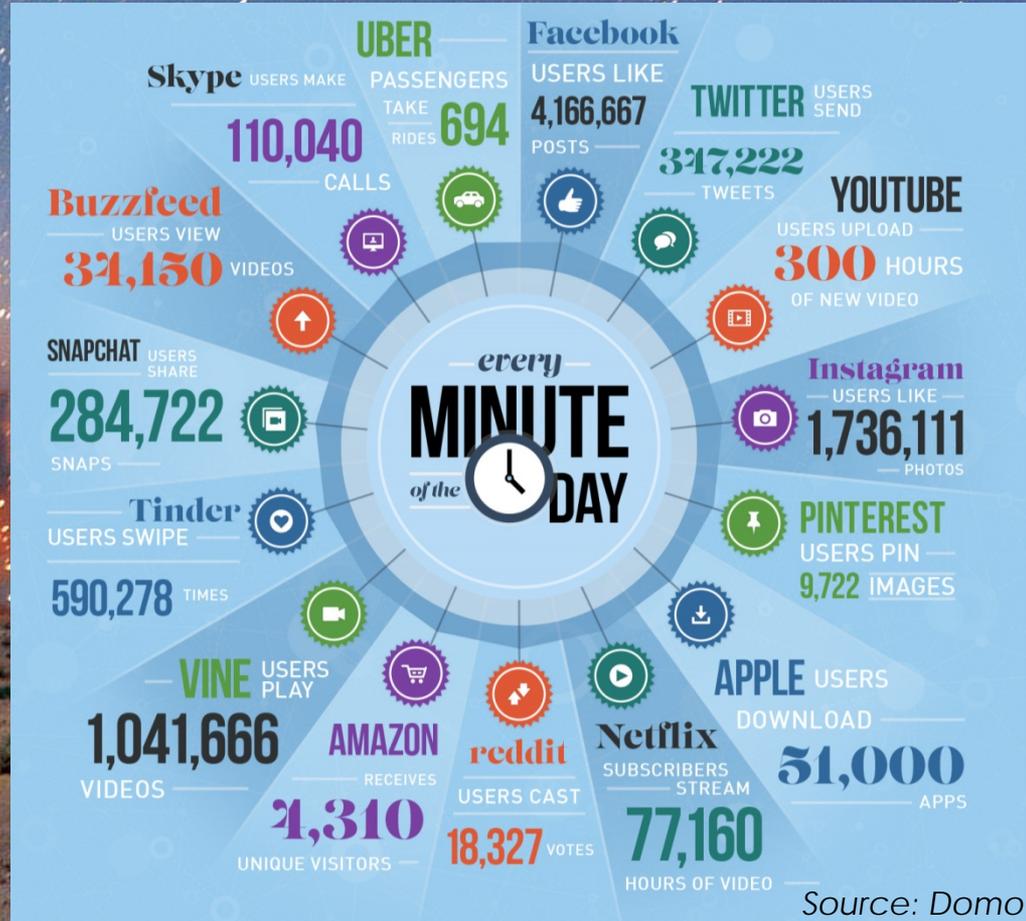


Agenda

- Embedding analytics in an organisation
- Modern analytics techniques
- Data analytics for life insurers
- Example use cases

Setting the context: data explosion

Insurers also collect their own data



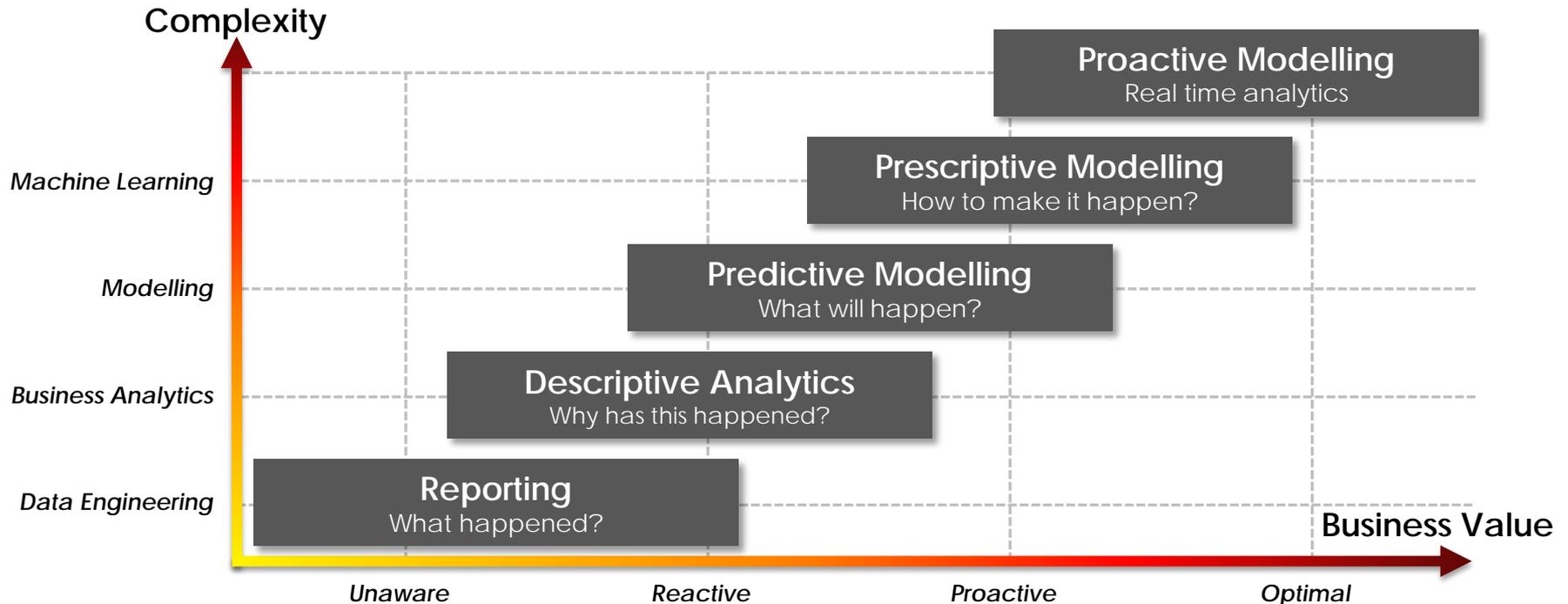
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EMBEDDING ANALYTICS



Analytics happens in stages



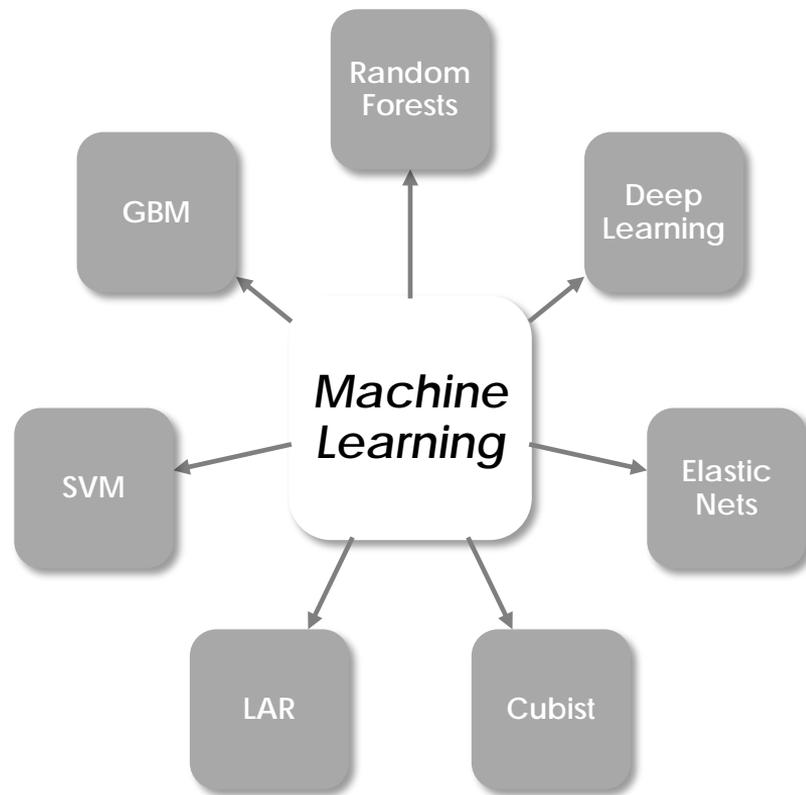


MODERN ANALYTICS TECHNIQUES



Modern analytical tools – machine learning

- **Many different methods**
 - Over the past 10 years machine learning algorithms have improved dramatically
 - Different methods available for different applications
- **No silver bullet**
 - One size does not fit all. Blind use is disastrous
 - Some level of customisation is often needed to get good results
 - Realistic expectations required
 - Machine learning is no longer seen as a black box. Different diagnostics required
 - Understanding data is imperative



Modern analytical tools – platforms

Current Practice

- Separate data warehouse and modelling software
- Ad-hoc extraction and transfer between systems



Current Best Practice

- Integrated local data and modelling pipeline
- Periodic data-refresh and quality monitoring



Future Practice

- Integrated cloud analytics and data framework
- Multi-user and platform attachment
- Daily data-refresh





DATA ANALYTICS AND LIFE INSURERS



Making fitter life insurers

Data analytics emerging in the life insurance:

- Risk segmentation
- Knowing your customer (marketing)
- Retention modelling

Hurdles:

- Cost
- Communicating value
- Data security and privacy
- Many avenues to explore
- Finding the right people



An increasing role in the future

Customer Acquisition

- Genome data
- Health activity tracking
- Location rating
- Technical cost modelling
- Targeted marketing and sales

Pricing and Underwriting

Retention

- Customer lifetime value
- "Next best offers"
- Customer engagement

Claims

- Streamline claims management
- Fraud detection

Get to know the individuals better rather than broad segments.

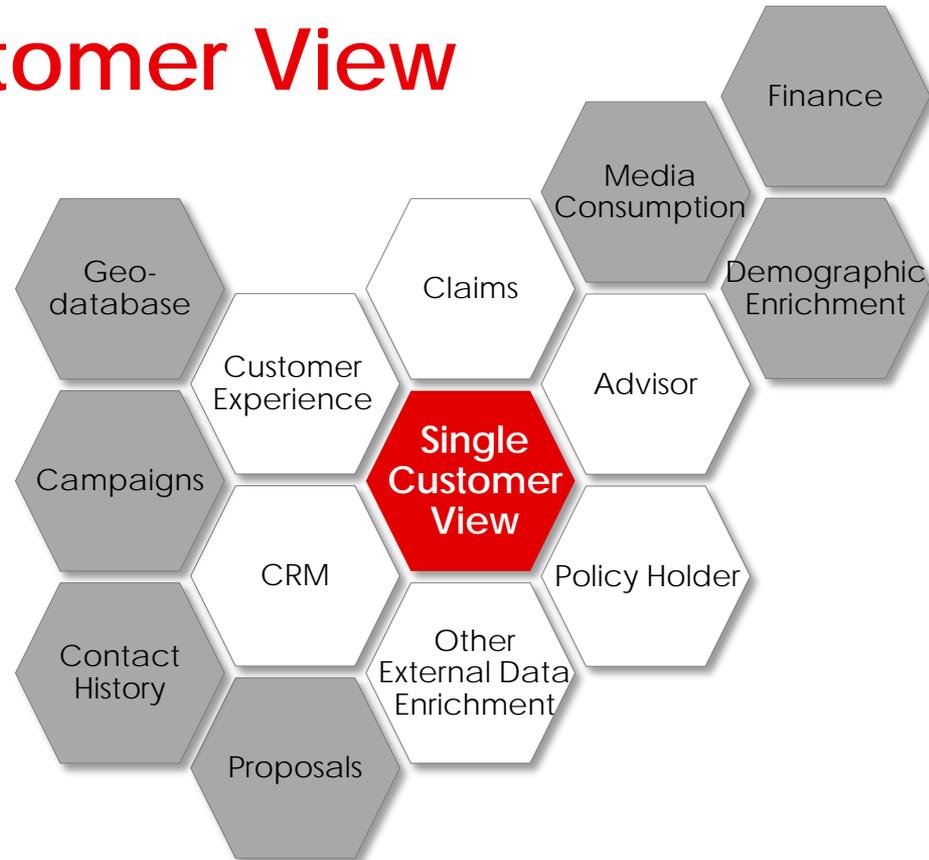


ANALYTICS USE CASES



Single Customer View

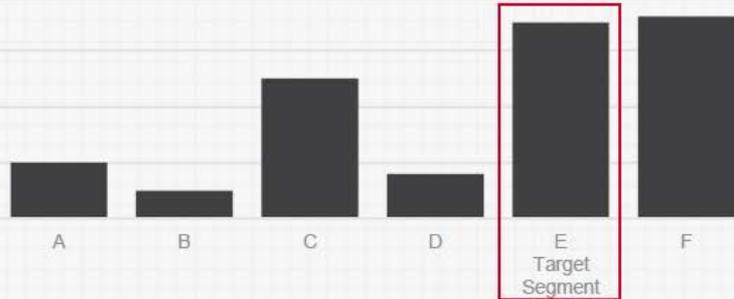
- An SCV is an aggregated, consistent and augmented holistic representation customers data
- Requires deduping across time, policies and products
- Customer centric database design built using monthly snapshots
 - Now allows for consistent up-to-date rapid analytics/modelling foundation
 - Critical for upsell/cross sell to know how much cover the customer actually has
 - Understand true drivers of lapse





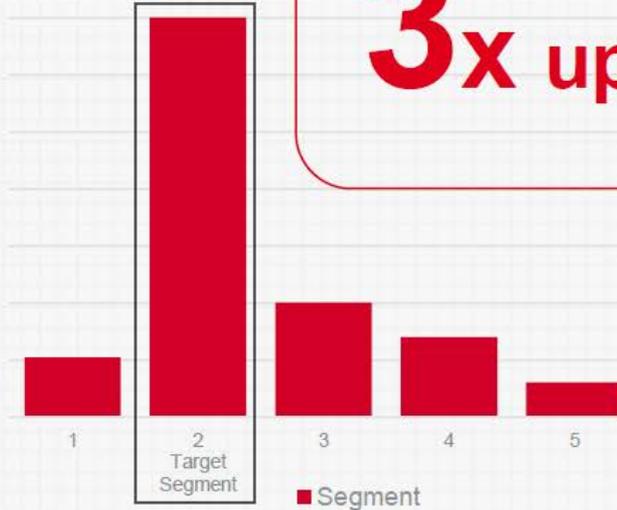
Demographic and psychographic insights

2x uplift



■ Demographic Segmentation

3x uplift

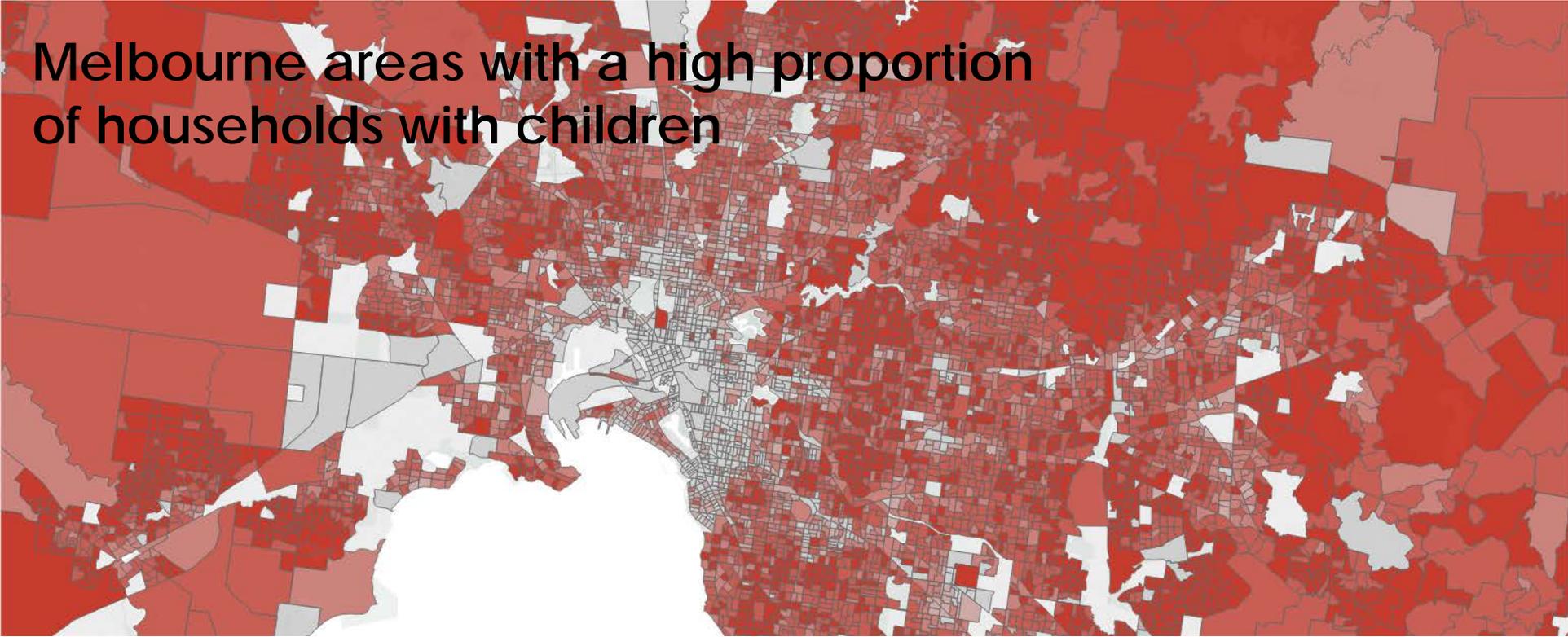


■ Segment



Where is your next policyholder?

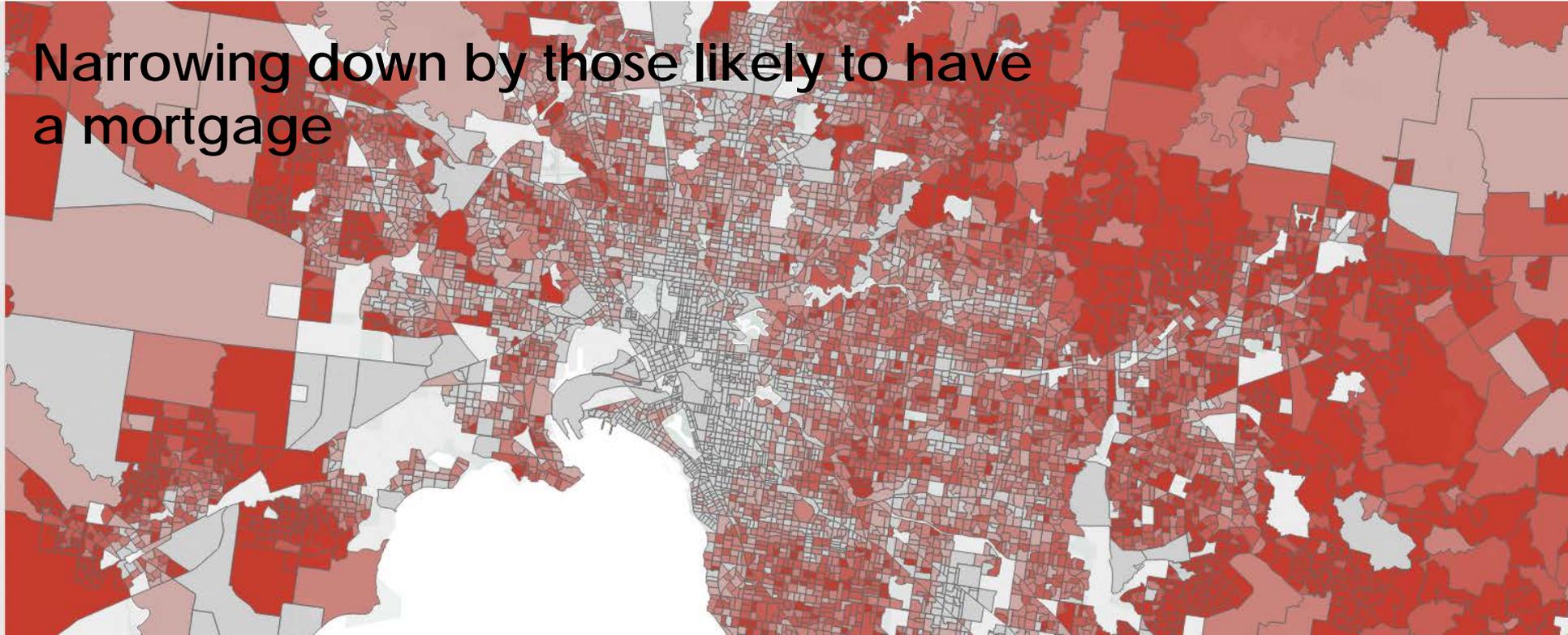
Melbourne areas with a high proportion of households with children





Where is your next policyholder? (2)

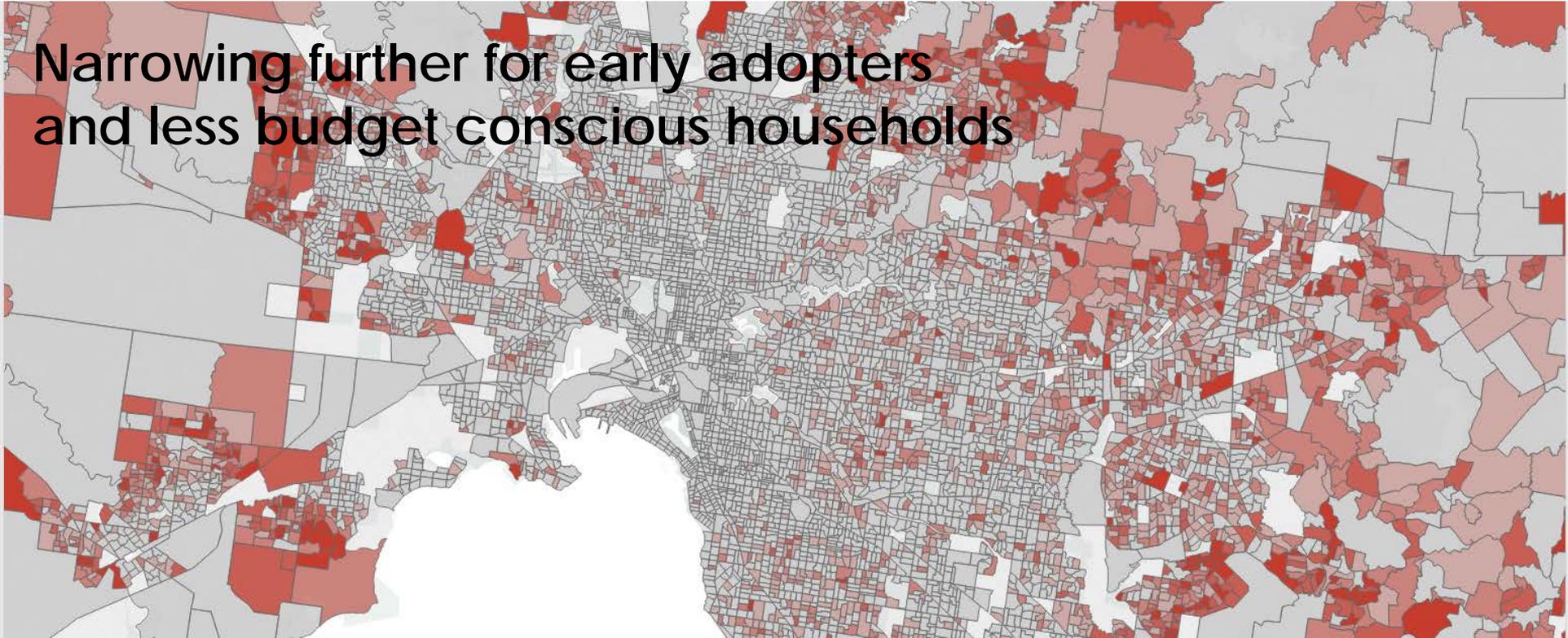
Narrowing down by those likely to have a mortgage





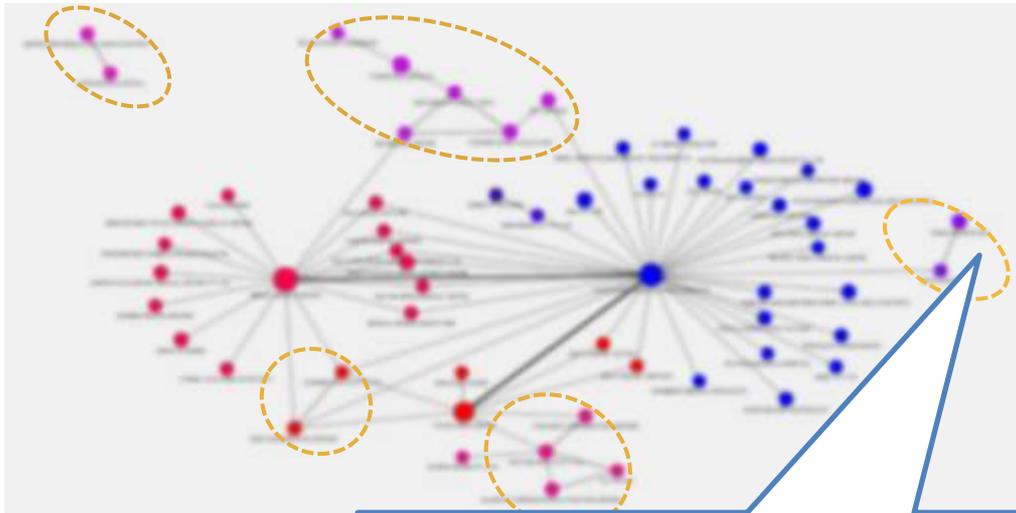
Where is your next policyholder? (3)

Narrowing further for early adopters
and less budget conscious households

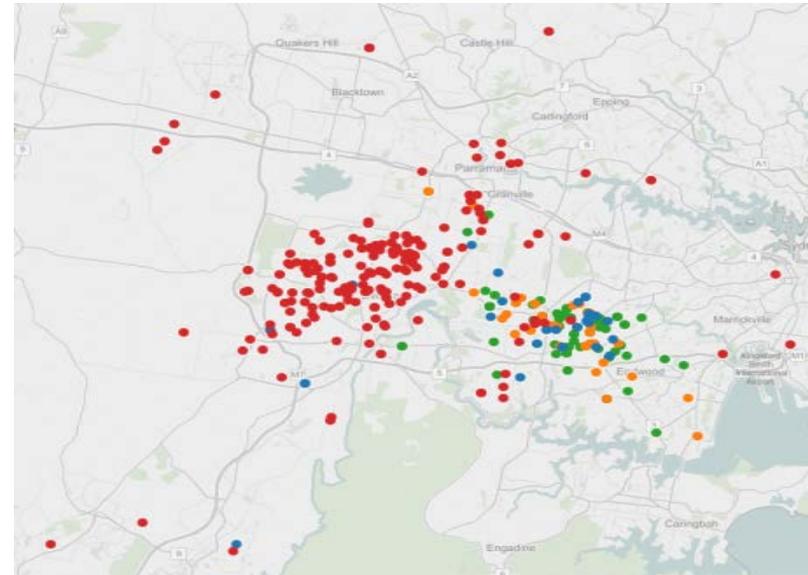




Network analysis for Fraud Detection



Identified suspicious providers and mapped where the claims are located





CONCLUDING IDEAS



Final thoughts

Disruption is
(usually)
incremental

Insights are
the value not
analytics

The future of
data analytics
is evolving

Start with
defining
business goals



Hearing the music through the noise



Questions?