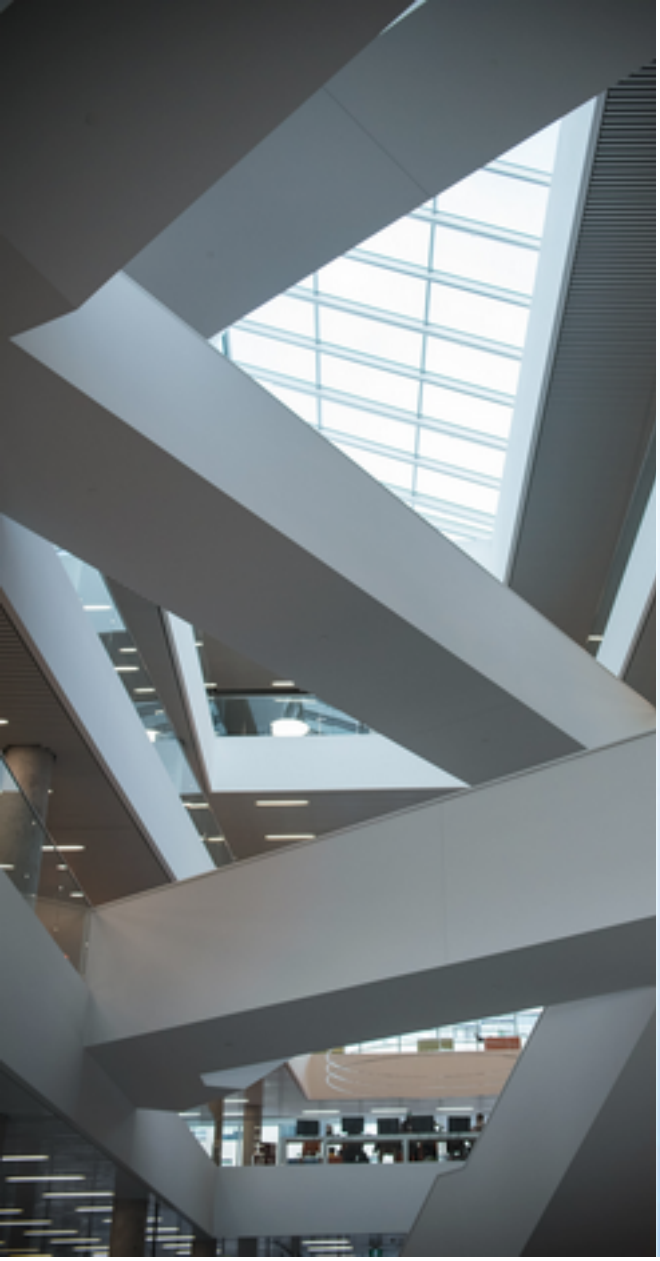
dobney.com

Exploring Conjoint Analysis

Saul Dobney



About me...

- Classic quant background
- Conjoint and trade-off specialist (20+ years)
- Insight software designer (Cxoice Insight Software)

- We're going hands on, so follow along at:
  - https://dobney.com/conjoint-explorer--k130

Purchaser's dilemma

In the real world...

- Lawnmowers
- https://www.amazon.co.uk/s?k=lawnmower

What do we choose from...?

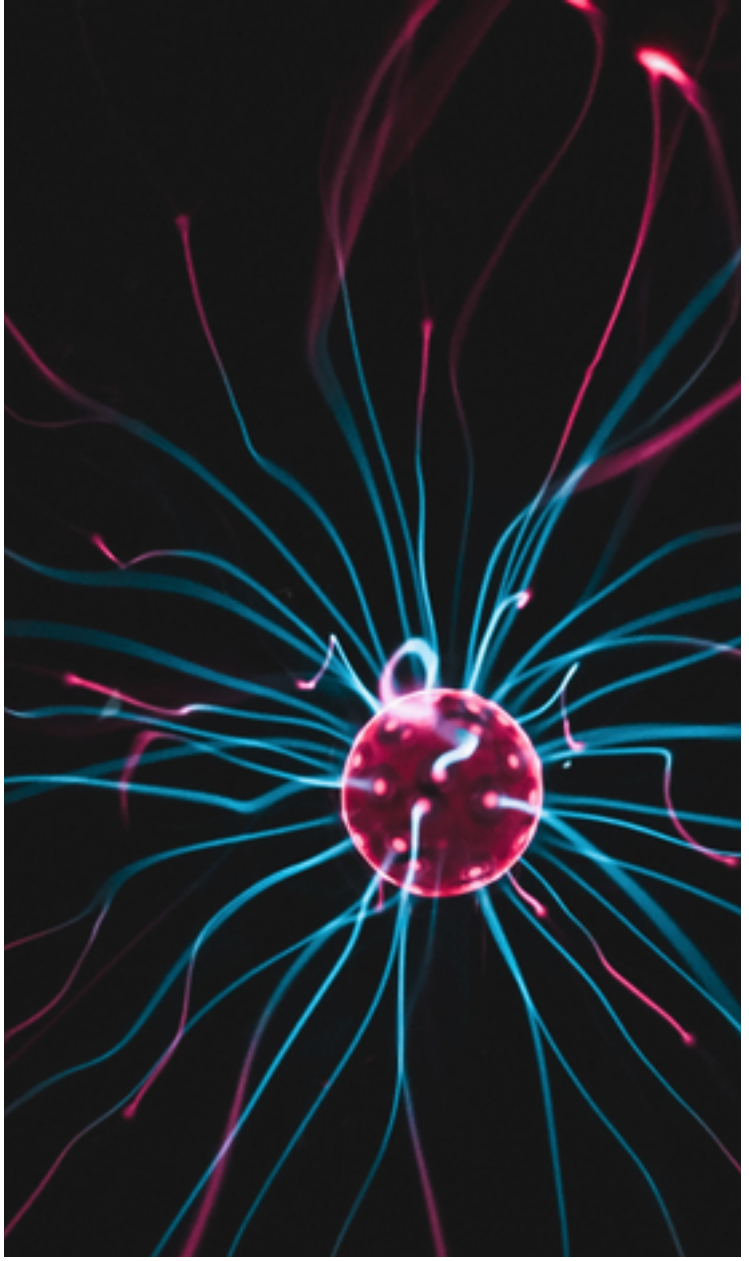
- Different features and performance
- Known as attributes and levels in conjoint analysis
  - Attributes are things like colour, price, brand, size
  - Levels of 'colour' might be red, green, blue
- What's the right balance of features (and price)?

How do we research these choices?

- Could just look at what sells
- Test lists of features on importance or value
- Give features ratings eg Kano - must have, nice to have
- Sort or rank features (MaxDiff)
- Test experimental combinations to see what is preferred ... conjoint analysis

How does conjoint analysis work?

- Dissect products into attributes and levels
- Generate test products (product profiles)
- Ask for preferences between products (choice tasks)
- Analyse to calculate what drives value (utility scores or part worths)
- Then build models of how features drive preference...
- ...and how this balances against price



What are the wrinkles?

- Defining attributes and levels is harder than it looks
- Standard conjoint is limited to c6-7 attributes
- Relies on a statistical experimental design
- Participants do multiple 'choice tasks' (8-12 is common)
- Analysis is 'whole sample' and imputed back (Hierarchical Bayes analysis)
- Should strive for realism for realistic models


Let's play...
some examples...

Process

- Identify attributes and levels
- Edit and prune the attributes and descriptions
- Generate a statistical design (off-the-shelf sofware)
- Ask choices in a web-survey (8-12 per person typically)
- Extract data and match choices to what was shown
- Run analysis - usually HB
- Check for segmentation possibilities
- Create the preference model
- Interrogate the preference model to forecast demand

Useful to know...

- Conjoint is heavily used for pricing research and economic studies
- Qual is often the first stage to identify attributes
- Choices work well to seed discussions in B2B depth interviews
- Some researchers reject conjoint analysis, often due to poor experiences
- Estimating reality so more realistic is better

- Any questions...?

email: saul.dobney@dobney.com