

# Establishing customer preferences: The potential of choice modelling

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# Outline

- Customer engagement requirements
- Revealed Vs stated preference techniques
- A brief description of choice modelling
- Biases
- Practical considerations
- New frontiers
- Conclusion



# Customer engagement requirements

- WIRO requirements

- ESC expectations



## ...and so?

- To what extent can discrete choice experiments be used to engage customers and gather information about their values and preferences?



# Stated Vs revealed preferences

- Revealed preference- 'real world' data
- Stated preference- hypothetical market.



# Choice modelling

- Assumes that goods or services can be described in terms of their **attributes** or characteristics and the **levels** that these take.
- The focus is on the value placed on the attributes, and of marginal changes within these, rather than on the product as a whole.



**Number of times water is unavailable to your home:**

**Length of time that water is unavailable to your home each time that it goes off:**

**Time of day that water is unavailable to your home each time that it goes off:**

**Prior notification that water will be unavailable to your home:**

**Response to phone inquiries in the event of water becoming unavailable to your home:**

**Total Water & Sewerage bill for the year:**

## PACKAGE A

1 time per year

8 hours

Over the weekend

1 day

You get straight through to a PERSON - you are not put on hold and there is no machine directing you to press buttons

**\$800**

## PACKAGE B

2 times per year

5 hours

Mon-Fri sometime after 8am

2 days

You get straight through to a PERSON - you are not put on hold and there is no machine directing you to press buttons

**\$850**

*YOUR DECISION: If these were the only 2 options available to you, which option would you choose: Package A or Package B ?*



# Choice modelling

- Models estimated allow for the calculation of:
  - Mean WTP
  - Part worth utilities





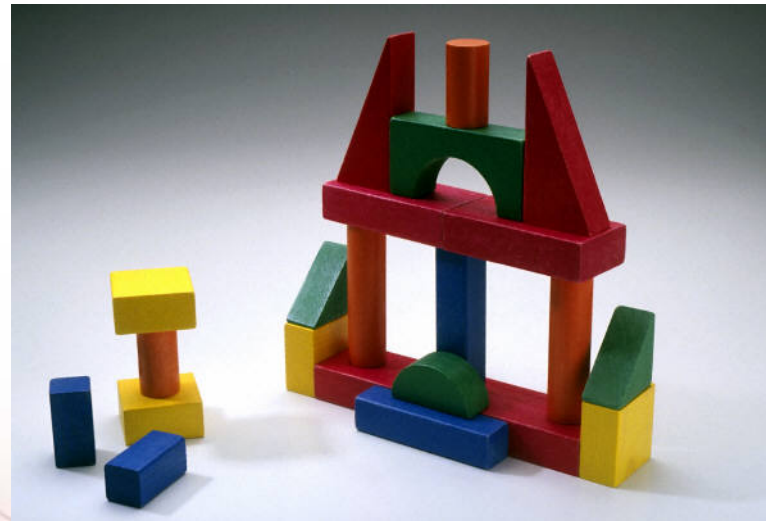
# Designing a choice experiment

- Appropriate design is crucial
- Very little can be salvaged from a failed choice experiment!



# Central Design Objectives

- Identification;
- Precision;
- Cognitive complexity, and
- Market realism.



# Design

- Using of an iterative process involving focus sessions, interviews and survey pre-testing (see, for example, Lockwood & Carberry 1998).
- The researcher must identify those attributes which are:
  - significant,
  - important, and
  - controllable.



# Criticisms of stated preference techniques

- Potential poor correlation between intent and behaviour. (Ajzen and Peterson 1988 p. 58)
- WTP does not equal actual payment.
- WTP does not equal WTA



# Practical considerations

- CM is both time consuming and costly
- Art form or technical skill-importance of the iterative process
- Economic psychology of decision making
- Mean WTP may obscure variation in consumer preferences
- CM is only as good as those who use it!



# New frontiers

- Computer aided personal survey instruments
- Internet-based surveys
- Efficient design- reduces sample size and cost.



# In sum

- Choice modelling has potential
- Value not just in the models themselves but also in the qualitative phase
- Care needed in interpretation

