Exploring Consumer Decision Making Processes in the Energy Retail Market

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Background in consumer choice research

Aiming to apply decision making theory in order to contribute to understanding of decision making processes in energy retail market

Ultimately aiming to support the successful integration of i-STUTE outputs to market
Targeted areas for exploration:

1) Avoiding choice overload with i-STUTE outputs

2) Exploring decision making processes in original purchase decisions in heating and cooling

3) Exploring psychological barriers to behaviour change, and identifying how these can be overcome in i-STUTE
1) Avoiding choice overload with i-STUTE outputs

- Background in consumer choice research

- Excess Choice Effect (ECE)

- Too much choice can lead to decreased satisfaction, and decreased motivation to try products

The paradox of choice: Too many good options?
1) Avoiding choice overload with i-STUTE outputs

- Linking choice and counterfactual theory [1]

![Diagram of mediation analysis]

**Figure 1.** Mediation analysis showing the role of counterfactuals in mediating the effect of choice set size on stated satisfaction for participants under low but not high load.

Note. The upper half (solid arrows) = mediation model under low load. The lower half (dashed arrows) = mediation model under high load. Figures are standardised beta weights. Ns = not significant, † = p<.10, *= p<.05, **= p<.01, ***= p<.001.

1) Avoiding choice overload with i-STUTE outputs

- What are the implications of this for i-STUTE?

- Aiming to explore choice overload with i-STUTE outputs

- Experiments designed to explore optimal level of technical information required to encourage decision making, and avoid choice overload

- Ultimately increasing likelihood of uptake, and likelihood of increased satisfaction with product
2) Exploring decision making processes in original purchase decisions in heating and cooling

- Recent body of research conducted at University of Bath, with Shell UK – combining choice and environmental literatures, with aim of encouraging pro-environmental behaviour change.

- Previous survey research showed people state they take environmental issues into account (DfT, 2011) [2]

- Detailed interviews to assess car buyer motivations [3]

- Ultimately aiming to inform efforts to increase sales of low carbon vehicles in UK


2) Exploring decision making processes in original purchase decisions in heating and cooling

Results:

Figure 2. Pie chart showing the frequency of different types of response generated across the interview sessions (collapsed).

Figure 3. Bar chart displaying average time of first appearance (% into interview) by % frequency of response across interview sessions (collapsed).
2) Exploring decision making processes in original purchase decisions in heating and cooling

Evidence from eye-tracking [4]

Figure 4. Fixation data displayed in group heat-map

2) Exploring decision making processes in original purchase decisions in heating and cooling

- What are the implications of this for i-STUTE?

- Aiming to conduct a series of qualitative and quantitative studies to explore discrepancies in research methodologies in domain of energy choice:

  1) Are people more likely to state they take environmental issues into account in surveys?

  2) What can qualitative research tell us about implicit motivations of energy users?
3) Exploring psychological barriers to behaviour change, and identifying how these can be overcome in i-STUTE

- Synthesising existing knowledge into one comprehensive review package

- Developing a body of experimental work that will explore ways in which these barriers can be overcome
3) Exploring psychological barriers to behaviour change, and identifying how these can be overcome in i-STUTE

- People like to do what others do... Can we use social feedback to inform and guide purchase decisions?

- People are biased towards inaction...
  How can we structure the choice environment in order to encourage active choice?
3) Exploring psychological barriers to behaviour change, and identifying how these can be overcome in i-STUTE

- Attention is limited and too much choice can overwhelm... What is the best way to present new technologies in order to create a manageable choice environment?
Summary:

Aiming to explore what Psychological decision making research can tell us about consumer choice in the energy retail market, and how this can be used to:

a) Avoid choice overload with i-STUTE outputs
b) Establish influential factors in original purchasing decisions
c) Overcome Psychological barriers to behaviour change and support the successful integration of new technologies into the market place
Thanks for listening

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