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Encouraging individuals to choose more environmentally friendly products - the role of big data
My background

- BSc Psychology (2011-2014)

- MSc Business Analytics and Decision Sciences (2014-2015)

- PhD “Changing the behaviours, habits and practice around the use of household surface cleaning products to reduce associated environmental and health problems.” (2015+)
Traditional Social Science Research Methods
Limitations of Social Science Methods

- Social desirability bias
- Demand characteristics
- Behavioural intentions as a proxy
- Self-reported behaviour
- Attitude-Behaviour gap
- Problems with context
The Role of Big Data

Sales Data:

- Monitor sales of green products against conventional products
- Track the success of interventions
- Validate survey results
- Assess influencing factors on sales
Limitations of Big Data

- Scope of research is limited by the type and format of data you have access to

- Correlation doesn’t equal causation

- Doesn’t allow for a detailed understanding of consumer product choice
A Combination Approach

- Use the strengths of each approach to overcome the limitations of another

- Using social science methods at first and then validating the results with big data
My Project

- Encouraging consumers to choose more environmentally friendly cleaning products

- Using data from major supermarket retailers to track the success of behaviour change interventions

- In the process of working out what type of interventions are likely to be most successful
What factors influence whether a consumer chooses a green product or not?
• Demographics
• Environmental/other values
• Price
• Brand loyalty
• Information
• Context of purchase
• Perceptions of green products
What do people think of environmentally friendly cleaning products?
What can be done to encourage consumers to purchase more environmentally friendly cleaning products?
My Project

Are green cleaning products worse than conventional cleaning products, or do people just perceive them to be worse?

- Currently running a study to assess this.
  - Half of participants will be presented with products in original packaging, half in plain bottles where they will not know which product is which.
  - Participants will have to clean the same stains, and then rate the products on a number of attributes
  - Ratings assessed across each condition
My project and Big Data

- Using traditional social science methods to investigate the factors that influence consumer buying behaviour, and designing interventions based on these

- Using sales data from stores to assess whether the interventions are successful in the context of a supermarket.
Questions?