

Modelling Individual and Managerial Choice

The doors we open and close each day decide the lives we live.

Flora Whittemore

Almost everything in society involves choices. Some choices are mundane and trivial—what to wear today, what type of coffee to buy, whether you cross the street against the light or wait 20 seconds for it to change. Other choices are immediately or eventually consequential—which car or house to purchase, where to invest, whom to marry. On the surface these choices look different but are, in their very essence, substantially identical. They all involve some degree of “optimisation” and a substantial amount of “trade off” between the alternatives.

Since 1999, the Centre for Corporate Change, with funding from the Australian Research Council, the Smart Internet CRC, the CRC for Sustainable Tourism, and numerous commercial organisations, has been developing and refining practical scientific methodologies and commercial software that allow us to decompose, understand and predict individual choice in complex environments.

This work has led to the spinoff of two commercial entities: The Future Choice Initiative, which develops models for advanced future technologies using specialised software, and Brandalytics[®], which conducts brand equity measurement as a function of consumer choice. A PowerPoint presentation given at the AGSM about these initiatives is attached.

The hallmark of our work to date is the ability to integrate information, learning and environmental context into our experimental methods. This allows us to study a wide range of unique problems. For example, a simple application would be the investigation of the impact of different advertising campaigns, where the advertising campaign represents different information environments. A more complex problem would be estimating the demand for advanced home networking control products (e.g., where items in the home are voice activated or learn and respond to differ people in different circumstances) where the consumer would need to understand a complex product that does not exist and build up confidence in adopting it. These approaches can go further and aid in the design of “optimal products” for specific segments of customers.

We have applied our approaches to a host of different scientific and practical problems including:

- Peoples’ willingness to trade off social causes (how do I decide what I care about most?)
- Peoples’ use of discretionary family income (how do items compete in the family budget?)
- Peoples’ bargaining with employers over wage contracts (which components of labour contracts really lead people to switch employers?)
- RuralChoice: Developing segmentation models for rural communities (ruralchoice.com.au)
- Estimating the demand for cultural products (e.g., with what do museums compete?)
- How do CEOs make foreign investment decisions (it’s not all about NPV)
- Developing optimal supply chain configurations based on downstream trade-offs

One of our more interesting recent projects was the investigation of the latent demand for space tourism. A copy of a report outlining some basic results is attached.

This work is expanding continuously and being applied in projects across the globe. If you would like more information about this work or want to be involved with it, please contact Pauline Olive at (02) 9931 9502 or ccc@agsm.edu.au