Teaching Ants to Drive: An agent-based model of the UK automobile market

This session will describe an agent-based model that is being built of the UK automobile market, for a large German car maker, in cooperation with a major advertising agency. The model seeks to explore non-traditional marketing methods (such as viral marketing campaigns), and the creation of indirect influences on market behaviour. The model explicitly represents the different stages of life for consumers, and how these influence brand choices. It looks at word of mouth dynamics, and the interactions between car importers, dealers, media channels, and different segments of consumers.

The author comes from a background of system dynamics modeling at MIT and at two major consulting firms, and came to agent-based simulation out of frustration with the limitations of other approaches in dealing with the facts that individuals change over time and interactions are increasingly important. The presentation will share perspectives on the unique value of agent-based simulation versus other approaches for understanding how consumer markets behave, and the advantages and challenges of using this approach with clients in the business world. There are also technical perspectives to demonstrate: the model and underlying software are written in Lisp, and run over the web, allowing team members to collaborate.

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