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Developing a Method of Collecting Purchase Probability Data in Telephone Interviews

A thesis presented in partial fulfilment of the requirements for the degree of Masters Of Business Studies in Marketing at Massey University

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Abstract

Purchase predictions is an important issue for both commercial and academic researchers. The Juster Scale is an eleven point purchase probability scale designed to collect purchase probability data in face-to-face interviews. The Verbal Purchase Probability scale is a variation of the Juster Scale designed specifically for use in telephone interviews.

The main focus of this study was to investigate ways in which the accuracy of predictions obtained using the Verbal Purchase Probability scale. This was achieved by testing two procedures designed to improve predictions: using respondent recall of previous purchase behaviour prior as a guide to making predictions; and a double question procedure where respondents were first asked to make purchase predictions for a longer time period (eight weeks), then for the time period of interest (four weeks). It was found that the technique using respondent recall as a guide was not effective at improving predictions, asking the prediction questions over the two time periods was.

Other findings included; that purchase level predictions could not be made with any less data than, the probability of purchasing any products, the number of product most likely to be bought and the probability of purchasing exactly that number without a significant reduction in the accuracy of the prediction. It was found that using respondent recall to test the accuracy of predictions resulted in significantly understated error. Accurate recall at the time of making a prediction lead to more accurate purchase level predictions being made, but not purchase rate predictions. “Non-users” had significantly larger errors in their purchase level predictions than “users”, this lead to a new method of estimating purchase levels by assuming non-users have a zero purchase probability and thus the predicted purchase level is equal to the purchase level of users.
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