

WHITE PAPER®

This unique, proprietary new product screening approach developed by MACRO Consulting, Inc., involves a specific data collection procedure as well as a unique analytic protocol.

## MACROModel®

### A Price Sensitivity and Volumetric Approach to New Product Concept Screening

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The MACROModel® is a unique approach to new product screening which offers several advantages over other methods:

- A large number of concepts (50 or more) can be screened at one time
- Price sensitivity can be calculated for every new product concept screened
- First year sales can be estimated for every product concept and over a range of prices
- Price/volume can be individually optimized for every product concept tested
- New product concepts can be screened and/or completely rank ordered on consumer appeal, market share, unit volume, gross dollar volume or gross profits
- All calculations can be done for any subset of the sample as well as the total sample

The approach involves a specific data collection procedure as well as a unique analytic protocol. The basic steps of the procedure are as follows:

*Note: Interviews will necessarily be personal or self-administered mail.*

- Have respondents sort a stack of new product concepts cards (all new product concepts, each at three price points) into two piles: would definitely buy and would not buy.

*Note: Stack would contain several existing products as reference.*

- Have them rank order the would buy pile on a continuum from most want to buy to least want to buy.

*Note: If the number of items to be sorted is too large for one sorting exercise, the task can be broken down into several smaller*

*exercises, with two or three items common across sorting tasks. After the data are collected for all respondents for the various sorting exercises, a bridging technique can be used to incorporate the data from the separate exercises into one rank ordering of all of the items used in the study.*

- Once the data are combined into one rank order data set for each respondent, the MACROModel© (a first choice share of preference model) can be constructed.
- Define subset of products to be modeled
- Read rank order value for all products in subset for 1 respondent
- Find product with highest rank order value
- Assume respondent would purchase product with highest rank order value when only products in defined subset were available. i.e., select it
- Read next respondent data and repeat until data set exhausted
- market share =  $x_i/n$  where  $x_i$  is the number of respondents who selected product  $i$  from subset and  $n$  is sample size
- Build product market share model for existing products
- Get unit sales data from secondary source
- Regress unit sales per product by market share
- Build market share model scenarios
- Vary price within each scenario

- Estimate unit sales for all new products in all models by inserting market share estimates into regression model
- Calculate dollar sales by multiplying units times price
- Fit and graph unit and dollar curves for each new product

*Note: All of the exogenous factors such as product awareness, inventory levels, and percent of distribution appear to be accounted for by calibrating new product unit sales against the existing products*

This is the only method that we are aware of to simultaneously screen new products, calculate price elasticities and estimate sales. In a dynamic marketplace it is essential to gather information and make decisions as quickly as possible. Getting the right product to market quickly is critical to success. This approach gathers more information more quickly and economically and allows for quicker, better informed new product decisions than current tools.

The MACROModel© has been used successfully with high tech products as well as packaged goods. It has been fielded successfully with U.S. consumers and also with several international populations.

