



Editor's note: Michael Lieberman is president of Multivariate Solutions, a New York research firm. He can be reached at 212-656-1711 or at michael@mvsolution.com.

You want a winner. Your company has just completed a study in which you sought to uncover the attribute or attributes among those you measured that best define your client's equity, usage drivers, or leading cause of switching to a competitor's brand. Your client needs to understand his market position, make strategic advertising decisions, or test the efficacy of a recent segmentation.

The challenge is to produce the

winner within the existing framework, without lengthening the questionnaire or raising costs.

Over the past few years, our company has been using with great success a simple yet sophisticated technique called key driver analysis. Key driver analysis utilizes linear regression, spread over given attributes or attitude statements and cut by key consumer groups, competitors, or varying markets. Key driver analysis gives a winner, or winners, and often tells a story that is valuable, easy to understand, and easier to present.

The basics

Key driver analysis measures the strength of descriptive attributes or performance ratings in relation to a

strategic characteristic. What is driving your brand in its market segment? What would make its market share rise? What makes your competitors' market share rise? Are they different? Why?

In regression analysis the strategic characteristic is called the dependent variable. The most unambiguous dependent variables are overall measures of a key aspect of your product's prestige. It could be overall performance, propensity to purchase the brand name, or probability (measured on a discrete scale) of switching carriers. The dependent variable is measured by an independent question from the ratings array, such as "would recommend to a friend," "overall satisfaction," "overall per-



formance rating,” or “purchase intent.” These probes are directly connected to product performance and to market share. They tell you when the customer might switch to or from your client’s brand. They produce the “winner.”

Product attributes form the independent variables that drive the analysis. They can be performance ratings (Using a 1-to-10 scale how would you rate the bathrooms in this restaurant?), statements of satisfaction (Using a 1-to-7 scale how happy are you with your boss?), or agreements (Use a scale to indicate your level of agreement with the statement “This Web site is fun and entertaining,” etc.). In cases where the respondent is asked to rate a long list of attributes over several brands, the respondent can simply check a “yes,” indicating that the brand possesses this attribute. The corresponding data is coded 1/0. This, too, yields a statistically viable solution. The scales are different in the given examples to illustrate that key driver analysis is flexible and fits into most surveys in which key criteria are measured.

The last step is to know your “cuts.” In which market segment would you like to produce separate drivers? What makes key driver analysis efficient is that one can uti-

lize the same attributes (which then are only asked once on the questionnaire). The cuts are filters of key consumer groups, such as age, demographic, socioeconomic, or other segmentations. In a study where the respondent is asked to rate competitors on the same attribute range, each competitor is a separate equation. Even these can be filtered to compare differing competitor drivers among, say, consumers aged 18-35 or consumers with gross annual income above \$50,000 in the Midwest.

Running the analysis

It is beyond the scope of this article to explain the theory of regression analysis in depth. However, below is the foundation on which the analysis is built.

Linear regression analysis uses ratings of independent variables and the corresponding ratings of the dependent variable to form a linear equation that predicts the dependent variable. The resulting equation yields beta scores, which are multiplied by the independent variables once the linear equation is formed. When one takes all the betas and multiplies them by their corresponding independent variables, it yields a predicted dependent variable that is similar to the overall rat-

ing the respondent gave in the actual survey.

The standardized beta scores are the statistic that sets the stage. They give the attribute strength of prediction regarding the dependent variable weighing all attributes. In other words, what moves the scores of your dependent variable up or down? Which attribute is key when people recommend your product or service to a friend?

After the regression has been run there are two steps to illuminate the results. The first is to rank the betas, setting the output with the attributes shown in order of importance as they relate to the dependent variable.

The next step is to highlight those betas that are statistically significant. In a nutshell, within each regression equation there is a basic assumption (called a null hypothesis) that the beta scores are equal to zero. In other words, they don’t matter. One column in the regression output is the P-value. Basically, the P-value is the chance that the null hypothesis is wrong. For example, for an attribute there is a P-value of .03. The interpretation is as follows. Subtract the P-value from 1 (1 - .03 = .97). This means there is a 97 percent chance that the null hypothesis is wrong, or that the beta is not zero. The lower the P-value, the stronger

the attribute. For key driver analysis, I usually draw the line at 90 percent, meaning that I want to be 90 percent sure the attribute beta means something.

Output and interpretation

In the final output stage, we provide clients Excel spreadsheets — one for each key driver analysis — that clearly show the winners (they are ranked) and the important others (highlighted, significant attributes). It is common, also, for us to summarize the important attributes with accompanying beta scores within a report format, or as a PowerPoint file with the attributes shown in a horizontal bar chart indicating the relative strengths of their scores.

There are a few central themes when evaluating the final output. The first is to understand the number, or what the beta really means. Sometimes the “winning” beta is, say, .2. That is a rather small number for a winner. The second attribute, also significant, has a .1.

Still, the results are telling. The betas are to be interpreted as relative scores. For example, if “tastes good” is the top attribute with a score of .2, and “looks good” is second, significant, with a score of .1, the correct interpretation is that “tastes good” is twice as good a predictor as “looks good.”

The direct interpretation is as follows. According to our model, if the scores of “tastes good” rise, say 1 (from an average of 8.2 to 9.2 on a 10-point scale), we can expect the overall rating to rise .2.

Promotion in four distinct markets

As an example, let’s look at a fictitious client, a consulting and business services firm that has performed the same survey in four of its 16 international markets. What it seeks to learn is how to promote its services according to the needs of its clients. Key driver analysis is chosen to illustrate the different brand equities among distinct yet

Market	Key Drivers
United States	Offering sound advice Having responsive customer service Having low fees and competitive packages
Japan	Treating you like a valued customer Having a strong reputation
Germany	Having responsive customer service Having a strong reputation
Brazil	Having low fees and competitive packages Having a wide variety of different kinds of product Treating you like a valued customer

important markets. The methodology is as described above. (Findings are shown in the charts on the facing page.) The imaginary respondents were asked to rate their importance preferences with regard to this company’s services. Later in the survey they were asked to rate their overall satisfaction with the company. Those measures together form the basis for our key driver analysis.

there are three attributes that drive the United States market. The analysis shows that American consumers of our simulated company’s services give equal credence to advice and customer service. They are strong attributes. A rise of one point in each results in a .25 rise in overall satisfaction. Half an indicator is “low fees and competitive services.” Our company sells quality in the U.S., and not at bargain-basement prices. Still, the analysis shows, there is competition. The remaining attributes are not significant and are not commented on in the final analysis.

In Japan, respect is paramount. “Treating you like a valued customer” is more than three times stronger than the only other key driver. Reputation is also important to Japanese customers.

In Germany, reputation and customer service are the two key drivers.

The Brazilian market is markedly dissimilar from the three others. In Brazil, competition for this company’s service falls along more traditional supply/demand lines. Price competitiveness and a wide range of

products will move performance higher. In addition, customer service shows up on the radar.

The chart above summarizes the four example markets and the key drivers within each.

The client is supposedly planning to use the research findings in its upcoming advertising and public relations campaign. In the United States I would recommend that it position the company as sharp and fast, giving value and good service for the money.

In advertisements in the Japanese market, the firm might want to portray its executives showing reverence to clients. In addition, tout the firm’s reputation for unblemished service and responsiveness.

In Germany, customer service and reputation are keys.

In Brazil, design a campaign that compares the company’s wide range of services and prices to competitors in other local markets. Show the company treating the client as a valued customer.

Delivers a winner

The power and efficiency of the key driver analysis allow companies to capitalize on the existing drivers of their brands and to maximize brand equity. In the changing research market, when clients are searching for more information as well as cost effectiveness, key driver analysis delivers a winner in a way that the client can comprehend and utilize without delay. [9]