Understanding Customer Choice: Getting The Product Right

Road Warrior Group (RWG) Whitepaper By Andy Haines

Abstract: *Creating products that deliver real value to customers is difficult. Understanding how customers actually chose products in the market place is a proven approach to identifying value that has been used with great success in many industries. The Road Warrior Group's experience in applying this methodology to high-tech markets can to help you get the answers that you need to create winning products.*

Winning With New Products

Some years ago, in a VP marketing role, I was faced with a new product make or buy decision. In the process, I approached a start up which offered the product that we were interested in. The company had developed a prototype and cultivated a few customers as beta testers. When I spoke with them, their customers had been testing the product for about 9 months. I was stunned to hear them say that they had just discovered the key importance of a product feature that they had been ignoring. With modest effort, I already had uncovered the importance of the feature using a proven marketing research technique. In fact, I could even pinpoint how much value could be gained by various implementations of the feature. Fortunately, avoiding this kind of costly mistake is easy.

Successful new product introductions are critical to the survival of any technology company. Marketing and engineering teams developing new products face critical implementation choices. Tight schedules, limited resources and technical challenges require decisions about what to do and what not to do. Many questions need to be answered in order to succeed. Do customers value feature A over feature B? If so, how much more are they willing to pay? Will a feature be worth the engineering investment to achieve it? What is the right price point? What market share can the product be expected to win?

In most high tech companies getting answers to these questions involves direct customer feedback, discussions with knowledgeable sales or applications people and long discussion between the engineering and marketing teams. All of these avenues provide good data. In fact, these discussions are an essential part of good product planning. However, the output of this qualitative process is often confusing. Conflicting opinions make it difficult to judge exactly which items are really more important than others and what makes the best feature set.

Fortunately, getting answers to these questions can be straightforward given the right research methodology. There's a proven methodology for getting meaningful answers to these questions that has been widely used in consumer applications for thirty years. The method involves modeling customer product choice behavior in a way that makes it

clear how choices were made and how much influence each feature has over choice. With quantitative data at hand a hypothetical new product can be compared to an existing competitive product to understand how it will fare.

The Feature-Value Method
This approach that I call the Feature-Value Method (conjoint analysis in the marketing research literature), has been in use for thirty years in consumer applications and RWG has experience applying it in a variety of high-tech applications.   When customers evaluate products, they are forced to make a variety of tradeoffs. Rarely do they find a product with the right performance and correct feature set at the best price.   The "best" product for a customer is usually a compromise among price, performance, features and ease of use.   The usual marketing methods that ask customers about features in isolation misses this key point.   The problem of feature selection for new products is not; what would the customer want if he could have anything; but what will he choose if he has to make trade-offs.

The basic idea in the Feature-Value methodology is simple: ask customers to choose hypothetical new products from a set of possibilities just as they would if they were actually evaluating product choices in the market.   In practice, we can show customers sample product configurations with different feature sets at varying price points. Instead of asking customers to prioritize a list of features, we ask them to rate 9 to 16 hypothetical products. Each product consists of a product description with 4 to 6 features including price.   This requires that customers make the same kind of trade-offs that they would make while making actual product choices.

When the set of hypothetical products is correctly chosen, the relative value of each of the features can be calculated from the customer choices. This provides data about what happens if feature A is scaled back in favor of feature B or what happens to the product's attractiveness if the price is raised by 20%. With this information in hand, it's possible to compare the relative return among possible product choices and even see how a given product will fare in competition.

An example using credit cards will help illustrate the method. In this case, four features including price describe the credit cards. Based on customer ratings of a sample of these cards, we can graph the relative importance of features (Figure 1), show how the demand curve will vary with price (Figure 2) and forecast share of preference against a competitive card based on a market simulation using the survey data (Figure 3).

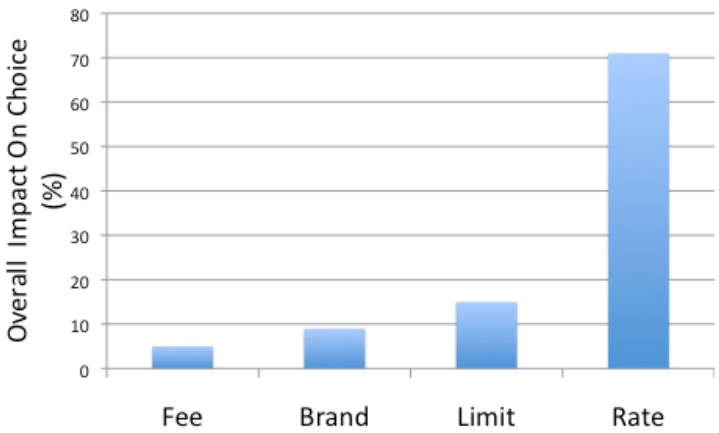Figure 1. Interest rate is the most important feature.

Figure 2. The demand curve is non-linear. A $100 fee and $40 fee is perceived similarly.
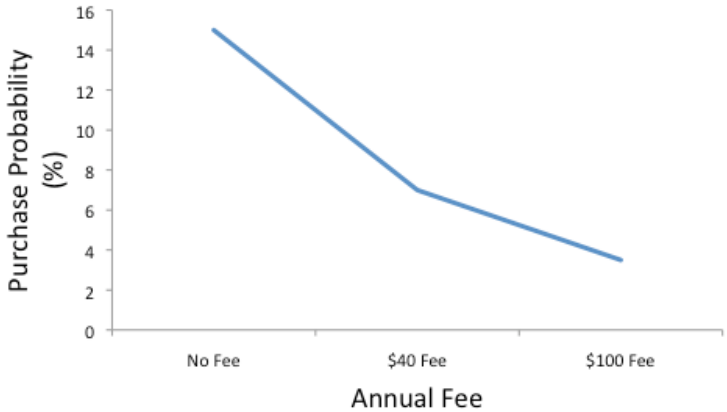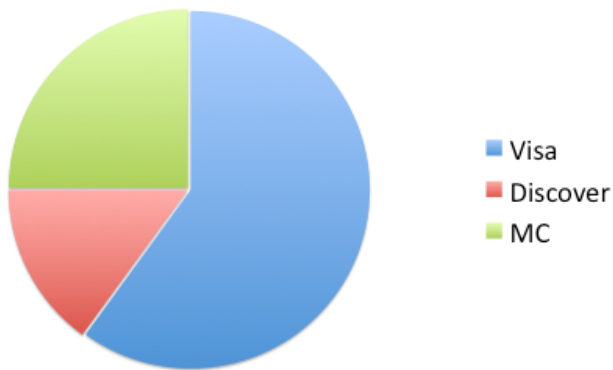

Figure 3. A Visa card with features as shown could achieve ~70% market share against the Discover and MC cards.

Finally, estimated share can be used with price and total market size to forecast sales. The judged sales forecast can then be used with development and manufacturing cost estimates to generate an ROI analysis.

Applying The Method

Applying this method is easier than you think. The key step is to understand the set of features that should be in the model. The best way to do this is to start with the usual set of customer and sales discussions. This leads to a qualitative understanding of the market and what features should be in the model.   Not everything needs to go into the model. You can ignore secondary features that every product must have. Focus instead on critical features, those that have a high development or manufacturing cost and those that require an either/or trade-off in development. Collecting the data can be done with as few as 20 customers by focusing on key customers who drive demand or can be done with Internet surveys for products that have a very broad customer base. Typically, the whole process can be done in about eight to ten weeks.

Summary

Product development decisions are critical to company success. The Feature-Value Method provides an effective way to find out what customers really value and how much they are willing to pay.   In wide spread use in consumer research for thirty years, this approach has been used on nearly everything from credit cards to ulcer drugs.   The Road Warrior Group has applied the method to product development semiconductors and EDA including:

- FPGA feature set
- DSP design environment features
- RTL source level debugger features
- Brand impact on email response rates

Contact the Road Warrior Group to help you make sounder product decisions, improve your competitiveness, market share and ROI on new products.

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