

# Marketing 8112

## Perceptual Maps and Product Positioning

### Why Perceptual Mapping?

Most products and services have many physical and intangible attributes with varied consequences for a would-be purchaser. An automobile is not merely "an automobile." Rather, for a consumer, it is a bundle of objective and subjective characteristics (size, color, ease of handling, roominess, comfort, price, and so on) and consequences (such as feelings of pride, power, or prestige). The marketer's task is the difficult one of deciding how many attributes to build into the product, how much quality to include in each attribute, and how to put the attributes together to gain a competitive advantage. Fortunately, due largely to implicit coping strategies employed by consumers in everyday decision making, only a few product attributes are important in any actual choice process. Indeed, two or three key attributes are often sufficient to predict consumer choices. As products become more complex and consumers become more sophisticated, however, marketers must build more attributes into the product. Note, too, that key attributes vary by market segment and therefore the marketing effort must change accordingly.

The conjunction of key product attributes and consumer perceptions (or beliefs) can be fruitfully represented in a perceptual map. Figure 1 presents one consumer's perception of beers for sale in northern California. Perceptual maps can also be prepared for groups of consumers and market segments. The dots show the perceived positions of different beers (disregard the circles for the moment). The two most common methodologies used to produce perceptual maps are multidimensional scaling and factor analysis.

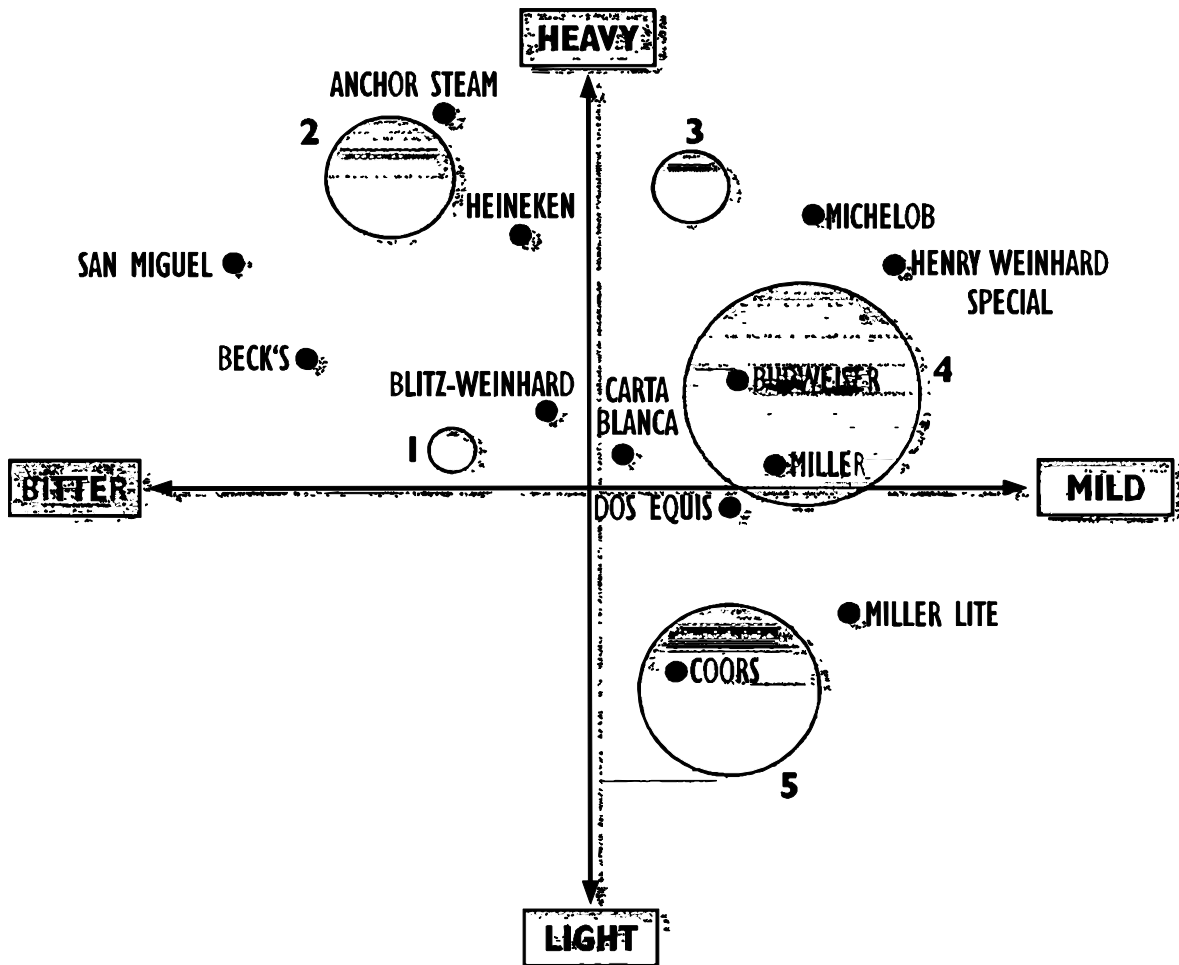
Notice first in Figure 1 that this consumer uses two attributes to describe beers: heavy or light and bitter or mild. Some people employ more attributes and different ones (for instance, gaseousness and calorie content), but the two in the figure are quite common across the population. Notice further that the brands cover much of the map. This indicates that the consumer believes that brands differ on the two dimensions to a considerable degree. San Miguel is perceived as a rather heavy, bitter beer, for example, whereas Miller Lite is seen as a very mild, moderately light beer.

### What Can We Learn From Perceptual Maps?

First, they indicate the most important attributes in consumer decision making. These attributes then can become the focal points in product design and advertising decisions. Second, perceptual maps show where a firm's own brand and competing brands score in the minds of consumers on each salient attribute. Management thus obtains an indication of where it is strong or weak and who its primary rivals are. Third, perceptual maps suggest possible opportunities in the market. In Figure 1, for example, we see that no beer is perceived by this particular consumer to be both bitter and light. This suggests a potential entry point for a new product or an alternative strategy for a beer on the border of the bitter-light quadrant (e.g., Beck's). Of course, whether this unfilled niche is really a viable market will depend on (1) the firm's ability to produce and market a light, bitter beer (and/or to convincingly advertise it as such), and, of first importance, (2) the number of people who would prefer such a beer and would be willing to try it.

This brings us to the related and important concept of *product (or brand) positioning*. The goal here is to use perceptual maps to suggest the best competitive tactics to pursue in market

**PERCEPTUAL MAP OF THE BEER MARKET IN NORTHERN CALIFORNIA ACCORDING TO ONE BEER DRINKER, WITH CENTROIDS OF CONSUMER PREFERENCES**



selection, product design (or redesign), and communication, pricing, and distribution decisions. Study of a product's position relative to that of its competitors on a perceptual map serves as a starting point for exploring competitive moves and their implications.

To take an example, let us assume the perspective of Carta Blanca. Figure 1 presents estimates of the sizes of consumer groups preferring various combinations of heavy-light and bitter-mild attributes in a beer. The circles represent centroids of consumer preferences; the size of the circle indicates the number of people (or share of the market) preferring the respective combinations of heavy-light and bitter-mild beer attributes. For purposes of discussion, we will assume that the perceptions of everyone surveyed can be represented as shown. We will further assume that Carta Blanca is losing market share and feels a need to respond accordingly.

Carta Blanca has three options. First, it can compete with Blitz-Weinhard and go after preference group 1. To do this, it might use advertising to stress that its product is neither too heavy nor too light, too bitter nor too mild, and rather, it is "the best balanced beer." Comparative ads with Blitz-Weinhard might be considered as well. In addition, a reformulation of the brewing process or ingredients might be called for to make Carta Blanca somewhat more bitter. Consumer research would show if this is necessary. Whether pursuit of preference group 1 is viable depends on the number of people in this group, their current brand preferences, the cost of going after these people, and the attractiveness of the remaining two preference group options.

Carta Blanca's second option is to take on Budweiser and Miller, who "own" preference group 4, the largest market segment. This probably is not viable, given that Carta Blanca is an imported beer that appeals to small numbers of beer drinkers, whereas Budweiser and Miller are domestic products with well-entrenched popular images. Budweiser and Miller also have cost advantages and greater marketing resources.

Carta Blanca's third option would be to go after preference group 5. This large segment desires a mild, light beer and currently has only three competitors. Here, Carta Blanca must consider the costs of changing its image, the costs of reformulating its product, and the size and receptivity of the preference group.

Whatever option is chosen, it is important to consider also the likely responses of competitors. For example, Blitz-Weinhard would be likely to counter any threat by Carta Blanca. It could do this by cutting its price (not difficult because it has a distribution advantage), by advertising, or by doing both. A long-shot option for Carta Blanca might be to create a new market and pursue a slightly bitter, slightly light position in the hope of changing people's taste preferences or winning new adherents in the empty quadrant.

## A Marketing Research Tool for Positioning

Marketers have developed an analytic procedure for measuring and plotting consumers' reactions to important attributes and benefits of a set of competing products: *perceptual mapping*. Conceptually, a perceptual map is a multidimensional image of the perceived similarities and differences among products and brands. The number of dimensions reflects the number of important customer attributes. Perceptual maps may be derived from data on consumer perceptions of similarities between brands using a statistical procedure called multidimensional scaling.

Plotting a perceptual map allows marketers to visually illustrate the following attributes and benefits:

- ◆ Attributes that are most important in consumer decision making. These attributes form the axes (and the axis anchors) of the perceptual map. Note that it is possible (although unlikely) that consumers use only one dimension to evaluate products, and to have a single axis perceptual "map."
- ◆ Product strengths and weaknesses relative to competing products along important attributes. This is revealed by the positions of the marketer's brand and competing brands along the axes.

- ◆ Market opportunities. These are revealed by empty spaces in the perceptual map, which need to be examined together with the preferred combinations of attributes that each segment reveals. Consumers will likely select brands that are closest to their preferred combination or ideal point. Thus, overlaying a map of consumers' perceptions of the existing market with their ideal points will reveal potential for new brands and opportunities for repositioning existing brands.
- ◆ Market evolution. Tracking customer perceptions over time, and comparing perceptual maps developed at each point in time, can reveal how the market is changing. First, ideal points may shift as new offerings enter the market and as markets mature. For example, as product and process quality programs diffused through industry, consumers' ideal points are likely to have shifted to reflect higher quality expectations, as well as to reflect closer positions of competing offerings along the quality dimension. Second, the most important attributes may change as a result of environmental changes and the creative positioning of new entrants. Prior to the 1970s, fuel efficiency was not likely to emerge as a dominant automobile attribute in the United States. After the fuel crisis of 1973, and with Japanese competitors' fuel-efficient offerings, fuel efficiency became an important attribute. Thus, perceptual maps may be used to document where the market has been in the past, currently is, and where customers think it is going in the future.

Managers may use perceptual maps at a variety of levels, such as for brand, product, and corporate positioning. Perceptual maps of brands may be used to assess opportunities for new brands, as well as for repositioning existing brands. Product perceptual maps may be used to examine the competition between generic substitutes such as all beverages, and may help identify new, unexpected ways in which customer needs may be met. Corporate perceptual maps could provide useful information on how to position a company in relation to its competitors, an area that is growing in importance as organizations realize that building corporate image is necessary for long-term success.

Perceptual maps generally work in conjunction with market segmentation information. When researchers develop perceptual maps for each segment, managers can develop a fine-grained description of the market and competition in each segment. Further, perceptual maps may combine with consumer attitudinal and preference data to explore how well each brand meets consumer preferences. Alternatively, perceptual mapping may be the input for segmentation. Once maps are drawn, market researchers may use clustering procedures to group similar brands, products, or companies.

Customer perceptual maps can also validate managers' own market maps. Managers' conceptions of how their products are differentiated in the marketplace may not accurately reflect consumers' perceptions. Comparing perceptual maps derived from managerial and customer data would highlight areas in which the marketing program needs to change. In fact, even though positioning is critical to the success of many products and brands, results of research from national cross sections of buyers in various product categories suggest that few customers can accurately associate brands with their intended positioning. Unaided awareness of positioning--in which

customers are asked what each of the five leading brands in a category represent--ranges from 8 percent (overall) to 12 percent (for advertising-intensive categories such as automobiles and beer, and in categories with few dominant brands). Aided awareness--in which customers are asked to associate particular slogans and positioning strategies with brand--is only 16 percent. Average, fully prompted, recall--in which customers are asked whether they recall brand X stating position/slogan Y-- for most categories is less than 30 percent.

Several reasons may limit firms' success in creating a unique position in the customers' minds:

- ◆ The company did not carefully define its target segment.
- ◆ The company did not develop a clear positioning strategy in conjunction with its advertising agency.
- ◆ Marketing communications, including product, packaging, advertising, promotion, pricing, and distribution did not clearly articulate or communicate its positioning strategy.
- ◆ The media selected were improper, and did not reach or impact the target market.

Creating a unique positioning is a challenging but necessary step for marketers because the positioning strategy guides decisions about all aspects of the marketing program.

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This handout is adapted from *Marketing Management* by Richard P. Bagozzi, Jose Antonio Rosa, Kirti Sawhney Celly and Francisco Coronel, Upper Saddle River, NJ: Prentice Hall, 1998.