

Product Differentiation and Positioning

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One of Jack Welch's comments was that it was often better to avoid competition than to play to win. Being a monopoly is one way. Another is to position your product to avoid head-on competition.

Products as Bundles of Characteristics

Many goods can be viewed as bundles of characteristics. This isn't a Nokia 1234, it's a cell phone that weighs 5 oz, has a 4-hour battery life, and enough memory to store 99 numbers. Similarly, cars are bundles of size, gas mileage, performance, and so on. Personal computers consist of memory, speed, and monitor size and sharpness. This "characteristics approach" sometimes misses the composite features of (say) a bottle of wine or perfume, but it's a good way to start thinking about products, including those that do not yet exist.

A more formal means to gauging the value of various product attributes in the competitive market is a characteristics map. Some may have studied perceptual map analysis in marketing classes; this is very similar. By plotting products on a graph, with X and Y representing two key attributes (ie, price and reliability), we can see where different competitors have strengths and weaknesses with respect to the competition. We can further use this to decide how to best position our product given what we know about consumer demand for important attributes.

Strategic Positioning Games

Now that we have a way of describing products, we can think about choices over their composition. Should we make the cell phone smaller? Longer battery life? Cheaper? Do these choices conflict?

Positioning games illustrate two opposing forces. The first is to position yourself where the greatest demand is. This is appealing for obvious reasons. The problem is that your competitors may do the same, so you face greater competition. Accordingly, the second force is to position yourself where there is least competition. How you trade off these two forces typically dictates how you position your product. In practice, there's often another issue: you don't know where the market is. Here good information and luck are useful in equal parts.

A pure positioning game. The idea is to illustrate the first force, which drives competitors to produce the same product. The setup is a little artificial, but it makes the

point in a relatively simple (simplistic?) way. Suppose we are positioning a product with one characteristic, whose values range from zero to one. Consumers have preferences over this characteristic, with some consumers preferring 0.2, others 0.9, and still others 0.573. Overall, consumers are evenly (“uniformly”) distributed over the interval between zero and one. Finally, consumers prefer the product that is closest to their preferences.

Let us say that two firms are deciding which products to offer. Price is fixed (this is critical, but will be changed shortly). In this case, consumers will buy the product that is closest to their preferences. If your preference is 0.7, then you would prefer 0.9 to 0.4. Given that different consumers will have different valuations for certain characteristics, and will be distributed along an interval of attribute choices, where will a single firm produce? You might guess that it will choose 0.5, since this makes consumers as close as possible. How about a second firm? It will also locate at 0.5, either just before or just after the other. That way it will get all the customers on its side of the line, and the other firm will get all the customers on the other.

In short, it makes sense to locate as close to the demand as possible. In fact, we see this a lot: lots of choice, but very little variety. The problem with this outcome is that price competition (if we bring it back in) is more severe. Hence we turn to:

Product Differentiation

When prices can vary, too, firms face a tradeoff between locating where the demand and competition are, and differentiating to blunt the competition. How this works out depends on the nature of the market demand.

Some issues. First, there are two basic types of product differentiating strategies. The first corresponds to the case when different consumers have differing valuations for the relevant attributes. In other words, Customer A may like breakfast cereal with nuts and dates, but not care about sugared cereal (or perhaps avoid it). Customer B finds chocolate-flavored cereal very desirable at the expense of all other types of cereal. In such a market, where consumers value products differently based on their varied attributes, we say that horizontal product differentiation is possible. (For a visual reminder, think of how horizontally long the breakfast cereal aisle is at the supermarket.) The second type of differentiation is vertical differentiation. When vertical product differentiation is present, for a given price all customers will value one product over another (ie, a Mercedes vs. a Yugo). Nevertheless, some consumers will be willing to spend less on it than others, so there’s room for more than one.

A final word: Branding and advertising are important tools of product differentiation. Branding can convey an instant and powerful message to the consumer about a product’s quality and acceptance by others. (A “signal”?) Consider why people purchase Comet bleach at a higher price instead of cheap, private label bleach given that they are identical compounds. Related to branding, advertising also seeks to position goods in desirable ways to consumers in the marketplace. We can see examples of this every time we turn

on the television (ie, “the only toothpaste with sparkle,” “the only news channel that gives you weather updates every 10 minutes”, and “our airline now has more legroom”). While advertising is costly, it helps firms to differentiate among each other by calling attention to demanded attributes, thus building inelasticity and avoiding the “Bertrand trap” of competition on price alone.

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