Analysis of Competition

We all understand the basic idea of competition in business. Two or more organizations simultaneously attempt to secure the same resources. In marketing, we typically see this as a competition for customers and their money, though competition is certainly not limited to customers. As noted earlier in our discussion of competitive advantage, marketers compete for any kind of resource. However, in these notes, we will limit the discussion to competition for customers.

You should bear in mind a couple of related points to competition. First, you do not necessarily compete with firms who compete with you. That is, just because one company has identified me as a competitor does not mean I similarly designate that company. For quite some time, Taco Bell has encouraged customers to "think outside the bun" or to "live mas," both references to breaking away from the dominance of sandwiches in fast food. I'm certain that their aggressive campaign didn't go unnoticed by McDonalds. However, McDonalds never responded. This leads to the second point. Just because a firm has designated you as their competition does not mean that you have to respond. If McDonalds felt that Taco Bell's campaign was hurting their business, they would certainly respond in some way. However, sometimes the best response is to just keep doing what you're doing.

THE NATURE OF COMPETITION IN MARKETING

Offense versus Defense

For marketers, competition takes on two dimensions. One is defending current customers from rival firms. As noted above, many firms do not respond directly or immediately when rivals try to lure customers away, as was the case with McDonalds and Taco Bell. Other times, firms do respond. A good example came a couple of years ago when Microsoft launched the "I'm a PC" campaign to counter the famous series of commercials from Apple that portrayed Mac users as young, attractive, and hip while Windows users were shown as old, stuffy and bumbling.

Keeping current customers is particularly important because current customers pay the bills now. Moreover, current customers are typically far more profitable than getting new customers because serving current customers is far less expensive. Moreover, loyal current customers frequently make up a disproportionately large percentage of sales (remember the "iceberg principle"). Remember, loyal customers are like annuities. They provide reliable streams of income over time and often provide the financial base for future expansion. There is rarely a good excuse for losing a truly brand loyal customer and if threatened by competitors, they should be vigorously defended.

The second dimension of competition is more offensive in nature and involves attracting new customers to your brand. Logically, there are two types of new customers you can attract to your brand. One is customers who do not currently buy any of the brands in the category, or *new to the category customers*. An abundance of this type of customer most frequently occurs when product categories are new and products are in the introduction or growth stages of the product life cycle. Attracting these customers relies first on building *primary demand*, which is simply demand for the product category without regard to any specific brands that may compete in it. For example, 3D television is a relatively new technology that may be considered a new product category. At this point, most all people in the market for a new TV have not purchased a 3D TV. The goal of manufacturers is to convince customers to give up standard two dimension televisions and spring for 3D TVs. Of course, they want to present themselves as the 3D TV choice. However, when stimulating primary demand, the focus of marketing efforts is to draw people into the category.

The other type of new customer is a *new to the brand customer*. As competition in the category intensifies, it also usually means that many people have made at least one purchase in the category and have some experience with the product. For example, if 3D TV technology catches on, eventually everyone will have purchased at least one. Here competition for new customers shifts to stimulating *selective demand*, or demand for a specific brand within the category. The fundamental strategic question facing firms in this situation is, "Whose customers are we going to try to win to our brand?" The point being that most buyers will have some experience with one or more brands in the category. One consumer product category facing this situation intensely is the cell phones service category. With virtually everyone in the country owning a smart phone, service providers have just about run out of new to the category customers. Competition is shifting now to stealing each other's customers. That's why providers are offering such deep discounts on multiline data and phone service plans.

Benefits, Redux

Like many things related to marketing, taking a benefit-based perspective is generally useful. In earlier notes, we looked at product categories in terms of benefits. This discussion is no different. In fact, there is much overlap between defining the product category to which your business or product belongs and defining your business's competition. That's because, in all likelihood, the other businesses in your product category are competing for many of the same customers are you are.

However, a discussion of competition puts a slightly different spin on the notion of benefits. Let's begin by defining *competition*. Two products are said to compete with each other if they are viewed by customers as substitute means of obtaining the same benefits. To emphasize a point made earlier, products are best viewed as "benefit delivery systems" or as "bundles of benefits" and not so much as physical attributes. Of course, here customer perceptions rule the decision. It does not matter whether we think two brands are competition; if customers consider them both in a choice where only one is picked, then the brands compete. The more desired benefits they share, the more intensely they compete with each other. Exhibit 1 illustrates this idea.

The circles in Exhibit 1 represent sets of customer desired benefits. On the left side of the exhibit, the two circles only share a small amount of space, representing the idea that only a small number of

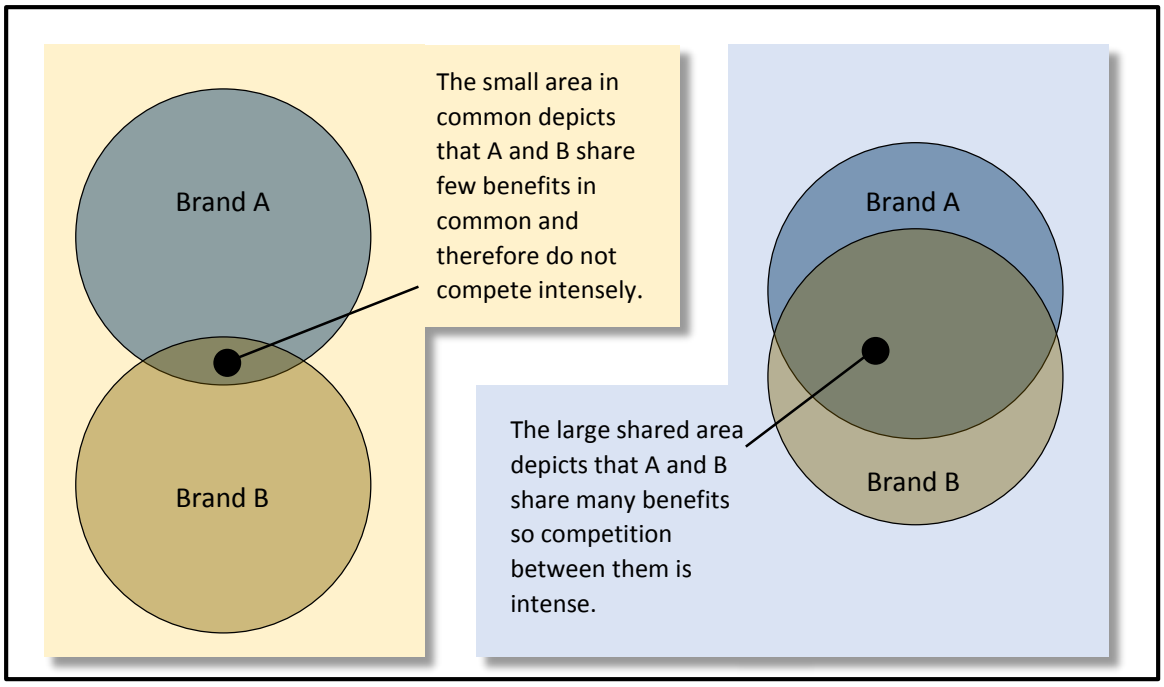

Exhibit 1. Illustration of Shared Benefits and Competitive Intensity

benefits are shared between the two brands. This suggests that the two brands do not compete with each other to any great extent. That said, either brand might consider the other a viable competitor if both of two circumstances hold true: if the number of customers who desire the particular shared benefits is large enough to be profitable and if the shared benefits are important enough to the customers to be the deciding factor in making a purchase. The right hand side of the exhibit shows two brands that provide a very similar set of benefits and would in all likelihood be natural and intense competitors. Of course, this presumes that customers have access to both brands, which, in the case of local or regional products, may not necessarily be the case.

Levels of Competition

The relationships illustrated in Exhibit 1 help explain the idea of competitive "levels," which takes the information in Exhibit 1 and begins to frame it more strategically. Look at Exhibit 2 on the following page. This exhibit shows three competitive levels with the most intense represented by the center of the circle. (Students from my 450 class will recognize this as the "Competitive Arena. The ideas here will differ some from that material in that the labels given to the levels are not the same.) The first and most intense competitive level is called *product form competition*. The level is so named because products that compete this closely and intensely are generally highly similar in terms of their physical or service attributes. Think of closely competitive brands such as Lexus and Infiniti automobiles, Supercuts and Great Clips in hairstyling, or Levis and Lee in blue jeans. In these cases, differences between brands are often based on image or psychological benefits and less to do with sensory or resource benefits.

The second level of competition is referred to as generic competition. Here products have some significant physical or service similarities, but also some significant differences suggesting that the brands share many but not all major benefits. Returning to our fast food example, Taco Bell and the various hamburger fast food chains are examples of generic competition. The basic benefits of inexpensive food served quickly are shared but the menus differ significantly. Competition at this level emphasizes important differences between brands but frequently appeals to the same groups of customers.

Finally, there is budget competition, which is the least direct and the least intense. Budget competition is so named because product or brand selection frequently comes from the same part of consumer budgets. Here competing products may have few observable similarities but at an abstract level, meet some overarching shared benefit. For example, when deciding on entertainment for a weekend evening, someone may consider a movie or a trip to the bowling alley. Or someone seeking to give a memorable gift may decide between an expensive wall hanging and a luxury cruise. Brands competing at a generic level may not represent regular or intense sources of competition, but they do offer potential opportunities. The bowling alley owner may advertise encouraging people considering a movie to think about bowling instead. The art gallery can similarly advertise encouraging customers to make similar tradeoffs.

In sum, understanding competition begins with understanding the role of benefits in customer purchases, because that's what customers buy. Products are a means to an end. The majority of a marketing manager's time will likely be spent developing and implementing strategies targeted toward product form and occasionally generic competition. However, a useful way of growing business is to occasionally consider new competitive initiatives targeted at budget competition. Doing so successfully begins with understanding the benefits the competing brands share.

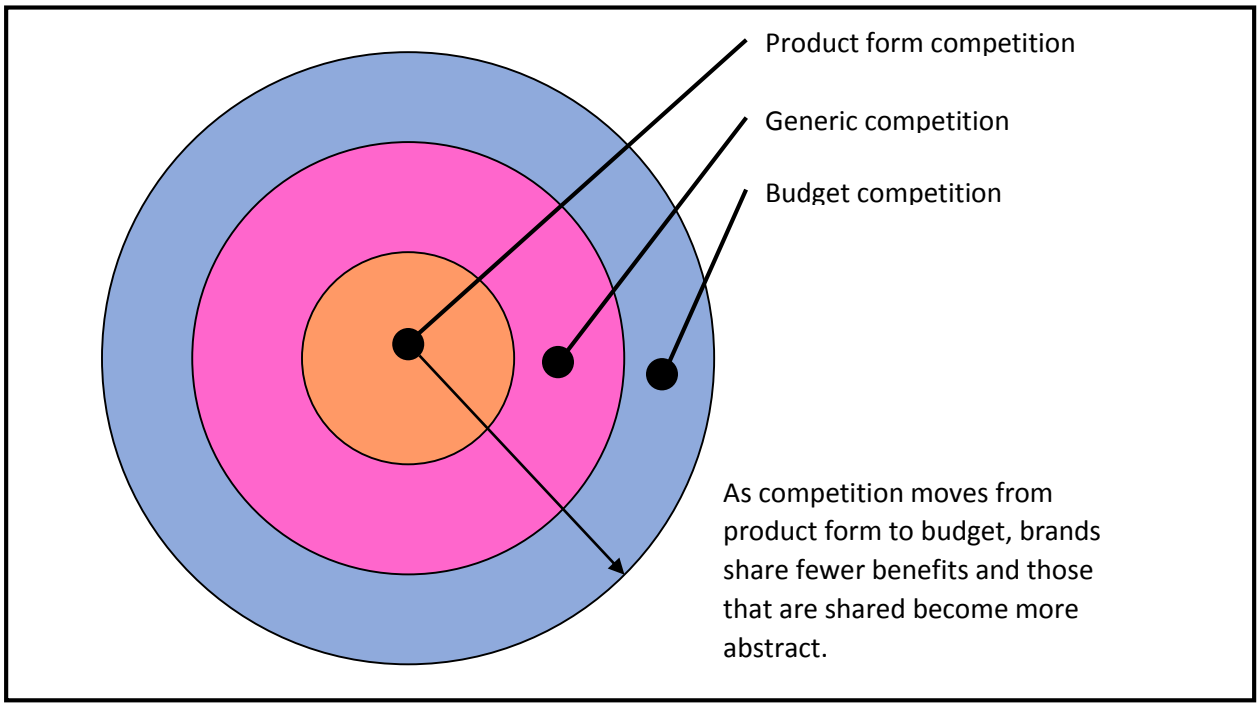

Exhibit 2. Levels of Competition

IDENTIFYING AND ANALYZING YOUR COMPETITION

To this point in your reading, the question may have occurred to you, "How does identifying our competition affect what we do as marketers?" The answer is, it can affect virtually every strategic decision a marketing manager makes. Remember, part of succeeding in the marketplace is standing out from the crowd in ways that are relevant to your customers. That means competitive products need to be perceived as different. The question is, different from who? When a marketer positions a brand, that position is always relative to competitors. Communicating differences between your brand and other brands suggests you know who those other brands are. Picking the brand or brands that will serve as the bases of your comparisons is a critical and not always intuitive decision.

Thinking of competition in terms of benefits provides a frame of mind for defining who your competition is and whose customers you wish to pursue. However, to really get a grasp on this important decision, the intuitive should be supplemented with the analytical. That is, like all things managerial, good decisions should be informed decisions. In this section, we look at several analytical tools that help provide an empirical basis – even an informal one – to the important decisions about allocating resources to competitive efforts and highlighting the differences between your brand and the brand or brands that are the bases of the comparison.

Judgmental Methods

Judgmental methods of information gathering will come up a couple of times this semester. We discuss them now as a basis for identifying key competitors and we will discuss them again when we talk about sales forecasting. *Judgmental methods* are really a very simple idea: ask people who ought to know to render a judgment about something of importance. The advantages of judgmental methods center on speed and cost; they're cheap and quick. The disadvantages usually pertain to whether those you ask really have the information you want or whether you have access to good people to ask.

One common judgmental method is the *salesforce composite*. Here, you collect opinions from salespeople, who presumably know what goes on regarding product purchases. The effectiveness of the salesforce composite depends on a number of factors. One is whether the salesforce really knows the set of options customers use to make purchase decisions. In business-to-business settings, this is often the case. In retail settings, it may not be as true. If using a salesforce composite, managers should also make sure the salesforce is large enough to provide good breadth of opinion. Even with informal research such as this, extremely small samples should be viewed with caution.

Rather than go to the salesforce, managers can go to other managers using what's sometimes referred to as *executive juries*. Marketing managers inside an organization may already know what many other managers in the organization think. However, suppose that an advertising agency or marketing consultant from outside the organization wants to know who the organization considers to be its key competitors. Asking a breadth of executives may provide the needed information. The danger with this approach is that executives, particularly those outside the marketing function, may not have especially accurate opinions. They may go by what they hear from others or base their opinions on what they knew to be true a few years ago.

Behavioral Methods: The Substitution Index

With the advent of scanner data, one way of empirically evaluating consumer perceptions is to look at their behaviors, as recorded by scanner checkout systems. The substitution index uses scanner data to empirically measure the frequency with which one product is substituted for another product by a given consumer. The index gives a quantifiable means of ranking the brands that are most frequently interchanged with each other. The higher the substitution index, the more frequently one brand is substituted for another. The substitution index works in consumer settings; its applicability to many business-to-business settings is very limited. For retailers and manufacturers of consumer products, however, the substitution index can provide useful data, based on actual behaviors, on the brands customers believe compete with each other.

The data requirements for calculating the substitution index are pretty straightforward. Obviously, the retailer or retailers collecting the data must have scanner systems. Additionally, because data must be collected on multiple occasions, the system must have a way of identifying individual customers. This is one reason why grocery store loyalty programs are especially valuable to researchers; they permit the recording of purchase data that are identifiable by customer name.

The starting point for calculating the substitution index is to decide on a group of brands that may potentially compete. Remember, the goal here is to identify the brands with whom your brand competes most closely. Consider almost any grocery product from cake mix to barbeque sauce. There are usually several product form competitors, and possibly a few generic competitors. These can be selected by intuition. With the pool of brands selected, data on purchases can be extracted from the scanner system.

The equation below shows the calculation of the substitution index, which is represented by the variable F_{ik} , which means the substitution index of brand k for brand i.

$$F_{i,k} = \frac{n_{ik} \times n_{..}}{n_{i.} \times n_{.k}}$$

where: n_{ik} = the number of people who switch from brand i on the first shopping occasion to brand k on the second shopping occasion,

$n_{..}$ = the total number of consumers who bought either brand i or brand k,

$n_{j.}$ = the number of consumers who bought i on the first shopping occasion, irrespective of what they bought on the second shopping occasion, and

$n_{.k}$ = the number of consumers who bought k on the second shopping occasion irrespective of what they bought on the first shopping occasion.

The subscripts read pretty easily. The two positions in the subscripts represent the first or second shopping occasion. The rest ought to be pretty self-explanatory.

As an example, consider the data in Exhibit 3.

Customer	i on 1st	h on 2nd	k on 2nd	Switch i to h	Switch i to k
1	x				
2	x		x		x
3			x		
4	x		x		x
5	x				
6	x	x		x	
7			x		
8		x			
9	x				
10	x		x		x
11			x		
12	x	x		x	
13		x			
14	x		x		x
15			x		
16	x		x		x
17	x	x		x	
18	x				
19			x		
20	x		x		x
$n_{..} = 20$	$n_{i.} = 13$	$n_{.h} = 5$	$n_{.k} = 11$	$n_{ih} = 3$	$n_{ik} = 6$

i to h substitution index

$$F_{ih} = \frac{3 \times 20}{13 \times 5} = \frac{60}{65} = 0.92$$

i to k substitution index

$$F_{ik} = \frac{6 \times 20}{13 \times 11} = \frac{120}{143} = 0.84$$

Exhibit 3. Substitution Index Calculations

Exhibit 3 gives the substitution index calculations for three brands (h, i, k) and two substitutions using twenty consumers. Data for thousands of such consumers would be available from scanner data. These hypothetical calculations are for substitutions from i to h and i to k. The calculations themselves are very simple as is the interpretation. A substitution index of 1.0 would indicate perfect substitutability while an index of 0 would indicate non substitutability. The i to h index is higher than the i to k index, suggesting that, although h has lower overall sales, consumers see h as a better substitute for i than they see k. In this example, both substitution indexes are pretty high, but these numbers were chosen to illustrate the point that even infrequently chosen brands may be seen as better substitutes by the consumers who buy them.

Although these numbers suggest that brand h is a better substitute (and therefore a closer competitor) for brand i than brand k is, they should not be examined in strict isolation. Scanner data and other information available to managers can also take into account price changes, advertising, and potential stockouts. That said, for whatever reason consumers face a choice between two brands, knowing which is substituted more frequently as a proportion of total brand sales gives an empirical and behaviorally based indication of how consumers see brands relative to one another. A reasonable interpretation of the information would be the degree to which brands compete for consumer purchases.

Perceptual Methods: Perceptual Distance Mapping

Sometimes behavioral data do not tell a complete story about consumer views on competition. Sometimes it's best to simply ask them how they feel about brands. This is the basic idea behind perceptual methods. Consumers tell us directly how they view the competitive arena. However, as we learned from our study of marketing research, there are good and bad ways of asking consumers about their perceptions. To get good information, we should follow the guidelines of good market research, which of course costs money.

One very popular and fairly sophisticated perceptual method is called *perceptual mapping*, which uses statistical estimation techniques to graph consumer perceptions of the marketplace. Perceptual mapping is actually a group of techniques that can accomplish somewhat different goals. We're going to discuss one type of perceptual mapping that's useful for identifying competition here. Later this semester we'll look at another application of perceptual mapping that is useful for helping see how customers position the attributes of competing brands in their minds. Because it's important that you not confuse the two, we will refer to this approach to perceptual mapping as *perceptual distance mapping*.

Keeping in mind our goal of identifying competition as consumers do, what perceptual distance mapping does is to calculate the psychological "distances" brands have from each other in consumers' minds and then create a two dimensional map to visually represent these distances. Perceptual distance mapping relies on a statistical procedure called multidimensional scaling, which estimates correlational similarities and differences between multiple values and then tries to plot those values on a graph while mathematically minimizing something called the "stress coefficient," which is essentially statistical error. When the similarity and difference values that produce the minimum stress coefficient are calculated, the values can be plotted.

The data requirements for distance perceptual mapping can be pretty steep and may require a very cooperative and potentially well incentivized sample. What can make distance perceptual mapping tedious for research participants is the need to make pairwise comparisons between numerous brands, and, depending on the type of analysis, potentially on many attributes. The more brands, the more comparisons. For a simple distance perceptual map, consider popular brands of beer. Suppose the brewer of Stroh's wanted to see overall how similar this brand was perceived relative to eleven other popular brands. To collect the data, a sample of beer drinkers in the appropriate target market or markets would need to be recruited and then make comparisons between all possible pairwise combinations of brands. You remember from algebra that the formula for number of possible combinations is simply

$$C_{nr} = \frac{n!}{r!\,(n-r)!}$$

where n is size of the set of brands to be compared and r is the number being compared. The calculation yields 66 possible pairwise combinations.

How similar or different to Stroh's would you rate the following brands:	**Very Dissimilar**	**Very Similar**
Budweiser	1 2 3 4 5 6 7	
Miller Light	1 2 3 4 5 6 7	
Michelob	1 2 3 4 5 6 7	
(remaining brands to be rated)		

Exhibit 4. Sample Similarity Rating Questionnaire Items

Exhibit 4 shows how data could be collected for overall similarity between Stroh's and the other brands. Fortunately, the questioning is pretty straightforward. The exhibit shows only three brands compared to Stroh's. Similarity ratings should be collected for Stroh's against all other eleven brands in the analysis. Then each other brand in the set would also be rated against all other brands. Imagine how tedious this could become. How would you know how similar or dissimilar Stroh's is to Meister Brau, Coors Light, Beck's, Heineken, and so on, and then how similar each of the remaining brands are to each other. If each brand was not just being compared for overall similarity but also on individual attributes, then each attribute would require 66 additional questionnaire items. Note also that the brands in the study are all beers – product form competition to each other. The list of brands could be expanded to include flavored beers, microbrew beers, or even more generic competition such as nonbeer bottled alcoholic beverages. With brand added, the number of comparisons grows quickly.

Once the data are collected, they are used in the multidimensional scaling procedure. In the calculations, the ratings are treated as psychological "distances" between brands. The multidimensional scaling algorithm scales these distances against a function to minimize error, or stress. The result of the calculations is a two-dimensional map based on the scaled coordinates of each brand. Data from the beer example were used to calculate the coordinate points for the twelve brands. They are plotted in Exhibit 5 on the following page.

The perceptual map in Exhibit 5 represents the best mathematical solution for the perceived distances between brands. Note that the axes are not labeled. With some types of perceptual mapping that we will discuss later, labeling axes is an important part of interpreting the results. With distance perceptual mapping, what we really want to see is how brands cluster together because it indicates the degree to which the brands really compete with each other. In theory, brands that are closer together compete more intensely with each other. The information can be used to strategize about competitive threats and opportunities.

The data used for Exhibit 5 seem to show several competitive groups within the product category. Budweiser, Miller, and Coors are perceive as relatively close together. Stroh's seems loosely grouped with Old Milwaukee and Meister Brau. Beck's and Heineken are perceived in relatively similar terms. Unexpectedly, Michelob seems relatively close to Miller Light and Coors Light, though the visual effect may be emphasized by the axes. Old Milwaukee Light is perceived dissimilarly to the other brands in the group.

Recall that the example was given from the perspective of Stroh's. What could a Stroh's marketing manager learn from this distance perceptual map? The map seems to show Stroh's in a weak position.

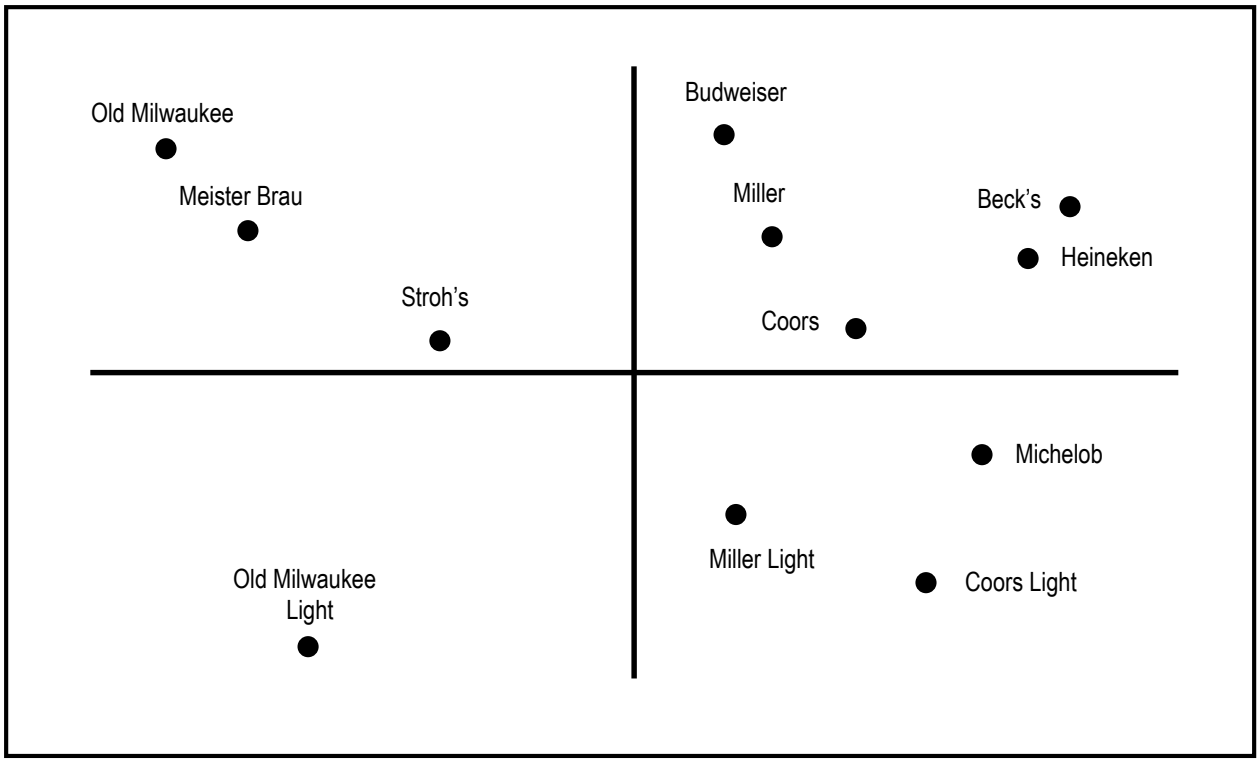

Exhibit 5. Distance Perceptual Map from Beer Data

Its location on the map seems to show indecision on the part of research participants as to how to perceive Stroh's relative to other brands. Its location places it near but in two clearer groups, Old Milwaukee and Meister Brau, and Budweiser, Miller, and Coors. For Stroh's marketers, this suggests that the brand can try to move more solidly toward either group. Neither option is attractive. If Old Milwaukee and Meister Brau are considered to be more economy or discount beers, Stroh's could use price to position itself with them and perhaps seek to become a dominant force in that group. However, managers are often hesitant to reposition their brands down market. If so, Stroh's other option is to try to compete against the more mainstream brands, Coors, Miller, and Budweiser. Chances are these major brands are very well resourced, which would make Stroh's vulnerable to attack from them.

As an aside, the data used to create the distance perceptual map are real. However, if you follow the brewing industry, you probably realize that these data are pretty old. For all intents and purposes, Meister Brau no longer exists. The brand was purchased by Miller. Meister Brau had a light beer recipe, which Miller later rebranded as Miller Light. The Meister Brau label was phased out. Stroh's was purchased by Pabst Brewing and is one of many small labels that company markets. Even Budweiser could not survive the beer wars unscathed. It was purchased by the European brewing giant InBev.

Price and Competition

Brands compete on many levels, benefits, attributes, and marketing mix elements. None are as important as price. While being the lowest price brand is not always an advantage, price is a critical input into customer evaluations of value delivered by brands. Price is important to just about every

purchase for just about every customer for the vast majority of things they buy. Therefore, we should spend a little time thinking about competition and price. Richard D'Aveni, a strategic management professor at Dartmouth College developed a tool for defining and analyzing competition based on the definition of value we introduced earlier, where value is essentially the ratio of benefits received to cost. We will refer to his analytical tool as "price position maps," but be careful not to confuse them with perceptual distance maps.

D'Aveni's basic idea is to graph the degree to which various competitive brands deliver some primary desired benefit or functionality against price, as illustrated in Exhibit 6. D'Aveni points out that with some product categories, different models of the same brands will occupy several different price points, with different models having different features or levels of functionality. The result is a loose grouping of brands and models into small clusters.

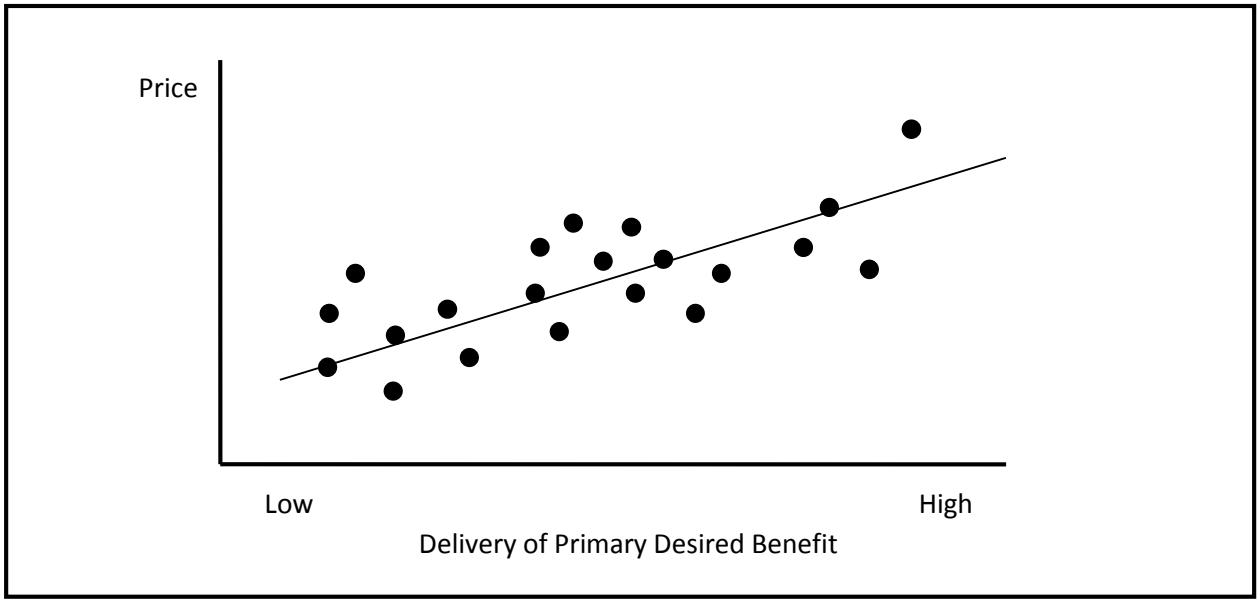

Exhibit 6. Hypothetical Price Position Map

For example, consider cell phones. There are many brands of cell phones and most brands make several different models to cover different price points. Additionally, older models remain available for sale for some time even after the newer replacement model is introduced. Each model variation offers differences in features, speed, memory, display, and so forth. Similar examples can be found in literally dozens of product categories.

The price position map helps marketers assess their product line and pricing strategies in two ways. First, it offers a framework for evaluating the perceived functionality or benefit delivery of different brands and models. Second, it provides a statistical and visual tool for evaluating whether functionality groups with price in the same way for competitive brands. Exhibits 7A and 7B on the following page illustrate how the price position map can work visually to aid marketing managers in identifying

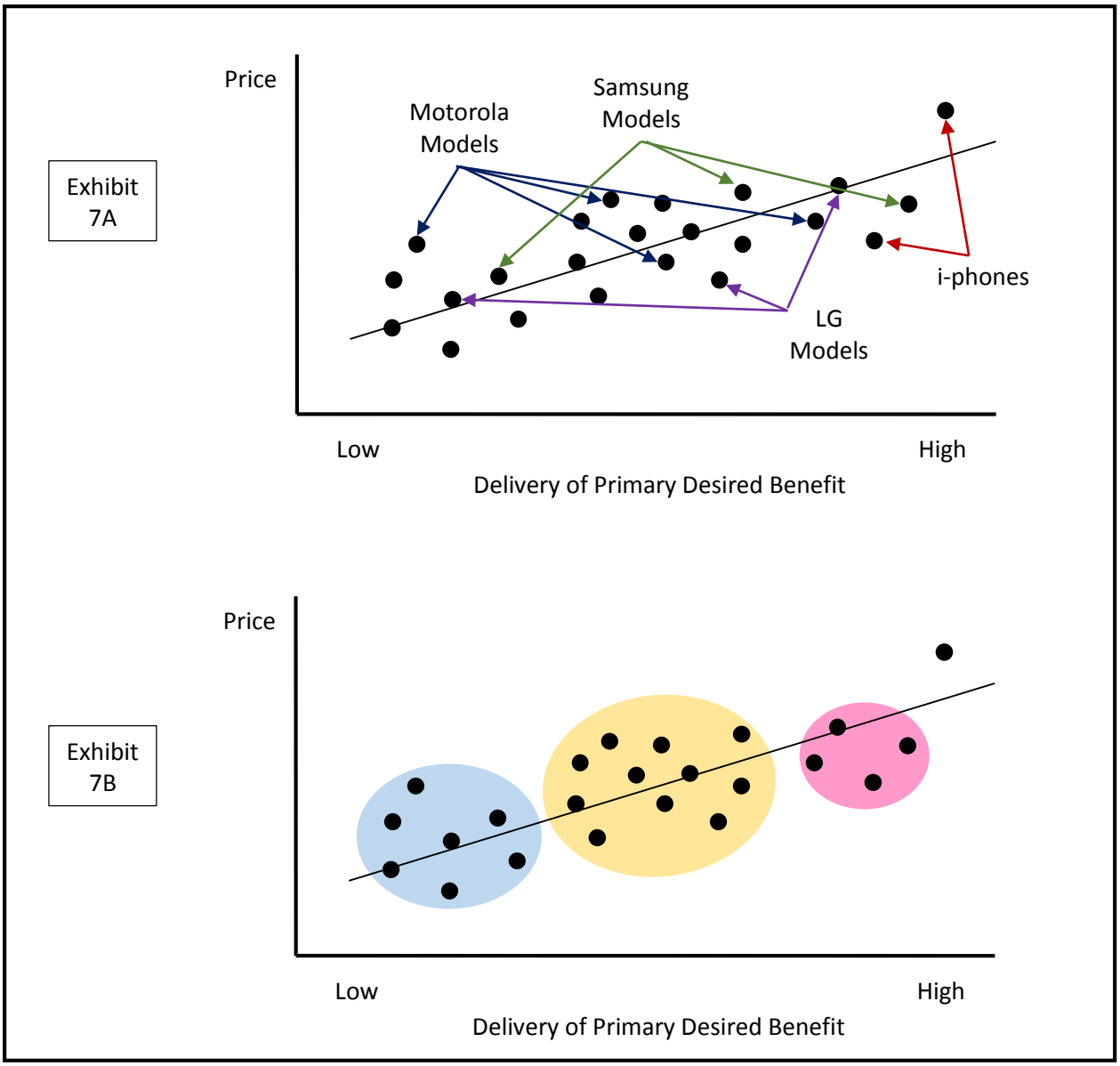

Exhibit 7. Price Position Map Details

key competition or seeing whether they market models in particular price points, or determining how brands and models compare with respect to perceived value by customers.

The data in Exhibit 7 are hypothetical and illustrate a price position map for different cell phone models. The map in 7A shows a few selected different brands that offer cell phone models at different price points. The line, whose calculation is explained in a moment, gives an indication of whether models fall above or below the average price for a given level of perceived benefit or functionality. With respect to Exhibit 7B, D'Aveni suggests that competitive brands and models offered by those brands should group empirically according to price point. The diagram in 7B may exaggerate the gaps in functionality relative to what you would find with real data. However, it illustrates the point that cell phone models may cluster together to form "economy," standard," and "premium" groups.

A critical issue with price position maps is the operationalization of the key benefit delivery variable. There are two approaches to figuring this. The first, easiest, and probably less effective is for marketers to pick a product attribute that they believe is most responsible for key benefit delivery and then compare brands and models by price. In the case of cell phones, the marketer may select phone processor speed as the key attribute and then plot models by price. To the extent that products are really "bundles of benefits" as we've said before, this approach is simplistic. It also is prone to error if the marketer selects an attribute that is not similarly valued by customers.

The second approach, which is an improvement over the first, is to collect survey data from customers about the key benefits they seek from a product and how their chosen brand rates on that benefit. The marketer can select many attributes or benefits, ask consumers to report how their phones deliver on each of those benefits, and then plot the responses against price. Alternatively, marketers can ask consumers about some overall level of functionality or satisfaction with their phones and then plot those responses against price. While marketers must go to the time and expense to collect data from consumers, the resulting perceptions generally provide stronger customer insights.

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