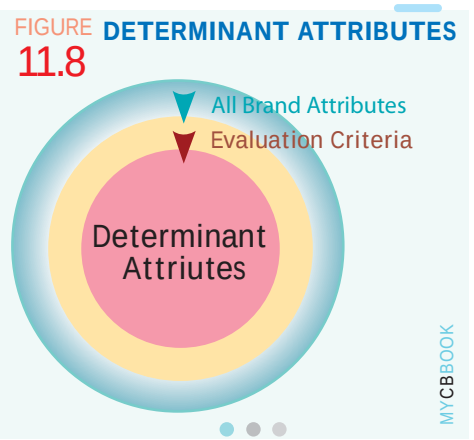
set of criteria in mind; later, we add more (or drop some of the features in the initial set) as we gather information.

FIGURE 11.8 DETERMINANT ATTRIBUTES



Determinant Attributes

Thus, evaluation criteria comprise a subset of product attributes. We apply evaluation criteria to appraise alternatives. Often some of these evaluation criteria fail to distinguish among alternatives, because the alternatives under consideration are equal or on par. The evaluative criteria on which the alternatives differ from one another become determinant evaluative criteria, more formally known as **determinant attributes**. (See Figure 11.8.)

Marketers should constantly monitor competing brands and consumers' evaluative criteria so as to understand which brand features have become *determinant attributes* for their product categories.

DECISION MODELS: COMPENSATORY AND NONCOMPENSATORY

Beauty Contests and Brand Battles

First, let's talk about models of a different kind. You might be familiar with beauty contests. Beauty contestants are first scored in different categories: talent, looks, outlook (attitude toward self and world view—remember, contestants are often asked a question or two about some big issue in life), etc. Then the judges add up all the scores. Sitting in the audience, you might wish that they gave more weight to talent; your friend, who is also watching the show, might wish that they based their final choice exclusively on looks. These are all *judgment models*; your judgment model is different from that of the event organizers, and, in turn, your friend's judgment model is different from yours. Very simply, **judgment models** are procedures and rules for taking into account various qualities of an alternative. Their utility? Very simply, again—they guide our choice decisions.

Just so we can talk about these judgment models (also called *decision rules* or *choice rules*), consumer researchers have given them more specific, technical names. They have divided them into two broad categories: compensatory and noncompensatory.[8] Let's learn about them—so that next time, as we watch the Miss Universe contest, we can actually apply them! And of course, we can apply them to the battle of brands as well.

THE COMPENSATORY MODEL

More of these if less of those

COMPEN-SATORY

In the **compensatory model**, the consumer arrives at a choice by considering all of the attributes of a product or service (or benefits from a product or service) and by mentally trading off the alternative's perceived weaknesses on one or more attributes with its perceived strengths on other attributes. A consumer may go about making this calculation in two ways. First, he or she might simply add the number of positive attributes, subtract the number of negative attributes each alternative has, and then choose the one that has the most positive and fewest negative attributes.

Whereas we sometimes do make decisions based on a simple numerical count of the pluses and the minuses, often we do not consider each plus or minus as equally significant. Some features are clearly more important than others, and every minus may not cancel a plus on some other feature. Therefore, we use a truer version of the compensatory model. This, the second, more systematic approach, is to weigh every product attribute in terms of its relative importance. Let us say that we want to make a choice between wireless service

providers Verizon, AT&T, and Sprint. To keep the example simple, let us say there are just three evaluation criteria that we will use: reliability (calls not dropped, calls dialed correctly), voice quality, and customer service. Suppose we could rate each of the three services on these three criteria on a 0 to 10 rating scale (where 0 means very poor and 10 means excellent). Suppose we could also assign an importance rating by dividing 10 points among the three attributes: 5, 3, and 2—reliability is most important to us, so we assign it 5 out of 10 points; customer service is next most important, and we assign it a 3; and to voice quality we assign a 2 (the importance scores add up to 10). Table 11.3 shows one consumer's ratings (note that these are one consumer's hypothetical ratings and do not reflect the actual quality of these three services). Now, all we do is multiply the quality levels with importance weights and add them up for each company. The highest score is 70, for Verizon (see Table 11.3), so using this judgment model, we would choose Verizon.

TABLE 11.3 APPLYING COMPENSATORY MODEL TO THE CHOICE OF A WIRELESS SERVICE

	Importance	Verizon	Sprint	AT&T
. Reliability	5	8	7	5
. Customer-Service	3	6	4	8
. Voice quality	2	6	7	4

Total weighted score for: Verizon = 8x5 + 6x3 + 6x2 = 70
Sprint = 7x5 + 4x3 + 7x2 = 61
AT&T = 5x5 + 8x3 + 4x2 = 57
Therefore, this specific consumer will choose Verizon.

MY CB BOOK

This model is called *compensatory* because a shortfall on one attribute may be compensated for by a good rating on another attribute. In the above hypothetical example, Verizon is actually not as good on customer service as is AT&T, and not as good on voice quality as is Sprint (all these being hypothetical statements, of course), but these shortcomings are more than compensated for by its superiority on reliability, which is of the highest importance to our hypothetical consumer.

CB FYI

H2O GOES DIVINE

A brand of bottled water called *H2Om* has an inspirational word written on the bottle, such as *Love*. When you drink the water, think of *love* and intend it. To actualize the effects of your intentions, the water, while in storage, is "charged" with sound and music created with specific intentions. *Om* is a holy Hindu word, and H2Om comes in seven choices of "intention words": Love, Prosperity, Gratitude, Perfect Health, Will Power, Joy, and, Peace.

When choosing your bottle of water, now add "divinity" to your decision criteria!

(See www.H2Om.com)

MYCBBOOK Powered OM by

NONCOMPENSATORY MODELS

No substitutions, please

While sometimes we want it all (so we consider all the features or qualities and accordingly use the compensatory model), sometimes we just want one feature or maybe two. Or we want a few features to a certain degree, but we don't necessarily want them all. If there were one particular feature that we wanted, and if an alternative didn't have that feature, then it will be out, no matter what other features it had—those other features won't compensate. We call these judgment procedures *non-compensatory models*, and we will discuss four of them: conjunctive, disjunctive, lexicographic, and elimination by aspects.[9] To help us remember these, let's also give each of them a phrase:

1. Conjunctive model	**"Must have at least this much of these."**
2. Disjunctive model	**"Okay I am flexible; must have either this or that."**
3. Lexicographic model	**"I will take the best on the most."**
4. Elimination by aspects	**"At least this much on the most."**

NON-COMPEN-SATORY

1. The Conjunctive Model In the **conjunctive model**, the consumer uses certain minimum cutoffs on all salient attributes. Each alternative is then examined on each attribute, and any alternative that meets the minimum cut-offs on all attributes can potentially be chosen. If an alternative failed to reach the cut-off, even on one attribute, it would be dropped from further consideration. If all alternatives failed to reach the cut-off levels, then the consumer would revise his or her minimum cut-off levels or use another decision model. On the other hand, if more than one alternative met all the minimum cut-off levels, the consumer would likely resort to another decision model to eliminate further alternatives until only one survived the process. We will illustrate this for the three wireless companies shortly, but first let us define the other three models as well.

2. The Disjunctive Model The **disjunctive model** entails trade-offs between aspects of choice alternatives. Here, the consumer is willing to trade off one feature for another.

NONCOMPENSATORY

For example, a home buyer might say that the house should have either five bedrooms or, if it has only four bedrooms, then it must have a finished basement. Although these trade-offs are also made in the compensatory model, there are important differences. First, the disjunctive model considers the sheer presence or absence of attributes, rather than the degree or amount in which these attributes are present. Second, in the compensatory model, the attributes traded off need not serve the same purpose, whereas in the disjunctive model, they tend to do so (e.g., a finished basement and an extra bedroom both imply more living space).

3. The Lexicographic Model In the **lexicographic model**, the consumer rank-orders product attributes in terms of importance. The consumer examines all alternatives first on the most important criterion and identifies the alternative that ranks the highest on that criterion. If more than one alternative remained in the choice set, the consumer would consider the second most important criterion, examine the remaining alternatives with respect to that criterion, and select the best. The process would continue until only one alternative remained.

4. Elimination by Aspect The **elimination by aspect** (EBA) model is similar to the lexicographic model, but with one important difference. The consumer rates the attributes in order of importance and, in addition, defines the minimum required values. He or she then examines all alternatives first on the most important attribute, admitting for further consideration only those contenders that satisfy the minimum cut-off level on this most important attribute. If more than one alternative met this requirement, then the consumer would go to the next step, appraising the remaining alternatives on the second most important attribute, and retaining only those that met the minimum cut-off level on this attribute, and so on.[10]

Judgment Day—Models in Action

Now let's apply these models to a choice among the three wireless service companies.

For the conjunctive model, let us assume that we require all attributes to be at least average (a value of 5). Then, Sprint fails on customer service and AT&T is rejected on voice quality; only Verizon meets the cut-off minimum of 5 on all attributes. So Verizon is chosen ("Must have at least these"). To apply the disjunctive model, suppose we are willing to compromise and would accept a brand with either good voice quality or good customer service (good being defined as 7), and reliability doesn't matter to us. Now, then, Verizon is rejected, but both Sprint and AT&T are acceptable. (Our choice is not yet made, since we must now choose between the two, but we may do it now by looking at reliability, which is better for Sprint, or by some other criterion.)

Next, applying the lexicographic model, we will simply look at all three services, and, because reliability is most important to us (according to the table above), we will first judge them all on reliability and choose the one with the highest value on this—meaning that we would choose Verizon ("the best on the most"). Suppose that Sprint had also rated 8 on reliability; in that case, we will be left with both Sprint and Verizon, and in the second step we will use customer service as the next criterion, and we will ultimately choose Verizon (since it rates 6 on customer service versus Sprint's 4).

Finally, to apply EBA, let us keep the same importance ratings, and, in addition, suppose we wanted these attributes to be at least 6. Note that we don't want all the attributes to be 6, but, if we bother to look at an attribute at all, then it should be 6 or better. Now, AT&T is eliminated in the first step itself (it has less than 6 on reliability). In the second step, we evaluate the remaining two brands on customer service and select Verizon. (Incidentally, suppose Verizon had rated a 5 on voice quality; it wouldn't matter because our choice had already been made.)

JUDGMENT MODELS IN ACTION

We. Realize. Stopping. All. The. Time. Can. Be. Frustrating. —Headline from an ad by AirTran Airlines

DISCUSSION Q. Which judgment model does this ad assume the consumer is using? Or, will it be effective no matter which model is used?

Note: The ad appeared in Business Week, June 12, 2006, p. 93. No resemblance to the original ad is implied; the intent here is to depict the manner of headline presentation.

Are these models sensible?

At first thought these models might look unreal. It is hard to accept that any consumer actually uses any of these models. Let us assure you, consumers do use these models all the time, and so do you. Two clarifications are in order. First, the models are not rules that the consumer "knows" he or she is applying. Rather, the consumer just goes about selecting and rejecting alternatives in some ways, but those ways represent the patterns of these models. Consumers don't have to know them by these names; we consumer researchers have to, so that, when we study consumers' decision processes, we can classify what proportion of our target market uses which models.

Second, consumers don't really assign numbers or do the calculations. Instead, they rate and rank and weigh and select and reject alternatives "qualitatively." They use qualitative labels such as "good," "poor," etc., rather than using numbers. We as researchers assign numbers so that we are able to analyze, using the computer, a large sample of consumers' responses. Thus, in practice, consumers use these patterns in a qualitative and therefore somewhat imprecise manner.

The headline reads, "One of Our Manufacturing Facilities"
(Copy reads: Lactaid milk is made fresh on the farm with all the refreshing, delicious taste you love and the nutrition you need. But it is lactose free, so it is easy on your stomach. Lactaid® Real Milk from Real Cows.

For consumers whose most important criterion is that the milk be natural and real, this ad communicates that it is. Helping consumers with their "lexicographic" strategy.

Now let us see how real consumers do in fact use these models. Remember the beauty contest mentioned earlier. If we wanted to value all three criteria—looks, talent, and outlook (not necessarily equally)—then we would be using a compensatory model. If all three criteria were important to us, and if we felt that the beauty contestant should at least be, say, average on each, then we would be using a conjunctive model. If we thought that a contestant should be either very good on looks or very good on talent, then we would be using a disjunctive model. And if talent were all we cared about, and if we would declare the contestant with the most talent as the winner, then we would be using the lexicographic model. If, out of all contestants, two contestants were equally outstanding on talent, then we might go for looks—whichever of the two had the better looks would take the prize (this would still be a lexicographic model).

Finally, we would be using elimination by aspect (EBA) if we eliminated contestants based on whoever did not get a minimum score on talent (if talent was most important to us), and then the remaining contestants would be evaluated on the next test, outlook. Here, more would be eliminated for not making a minimum score on outlook, and so on. That is elimination by aspect. So, believe it or not, we do use these models—as does every other consumer. All of the time!

In practice, consumers use these patterns in a qualitative and therefore somewhat imprecise manner.

DECISION HEURISTICS

The decision models discussed above—both compensatory and noncompensatory—entail consideration of product information, i.e., its individual and specific features and benefits. Basing choice decisions on the consideration of such product information assumes that (1) product feature information is available, (2) the consumer has the requisite cognitive style, and (3) the consumer possesses the knowledge base to appraise those features. When these three conditions are met, the consumer makes his/her decision in what is called a *systematic decision approach*. When one or more of these conditions are not met, then the consumer employs what are called *heuristics*.

Systematic decision approach proceeds in an organized pattern, directed at answering specific questions. The questions pertain to problem solving: What features do various product alternatives have, and what are the relative merits and demerits of various brands or alternatives? Consumers carry these questions in their minds, and

Source: MYCBBook. www.MyCBBook.com