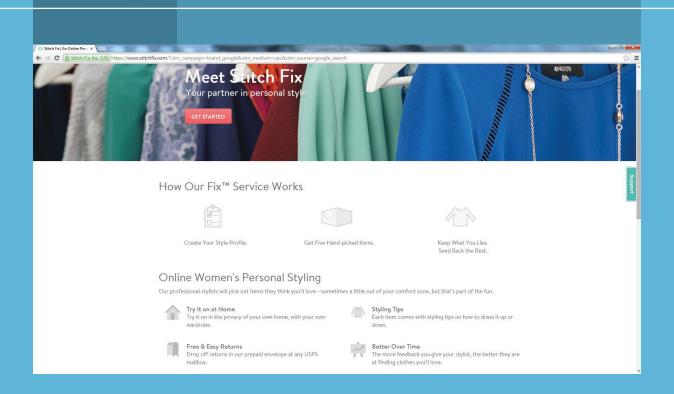
## chapter

# 16

# Alternative Evaluation and Selection



#### LEARNING OBJECTIVES

- L01 Discuss how actual consumer choice often differs from rational choice theory.
- Summarize the types of choice processes consumers engage in.
- L03 Explain evaluative criteria and their measurement.

- L04 Describe the role of evaluative criteria in consumer judgment and marketing strategy.
- L05 Summarize the five decision rules for attribute-based choice and their strategic relevance.

One goal of consumer decision making is to make the best decision possible and another goal is to have (the freedom of) many alternatives from which to choose. These two goals clash when the consumer has too many alternatives and feels overwhelmed. This is choice overload. It is more likely to occur when the choice is one with which the consumer lacks expertise and familiarity, one that is important to the consumer, and one that offers numerous alternatives each possessing numerous, varied, non-overlapping features. A consumer faced with the decision of choosing the best health insurance from the list of dozens of alternatives on the government health exchange is more likely to experience choice overload and describe the situation as a nightmare, while the consumer who is choosing an ice cream from 32 flavors is likely to describe the situation as a fun experience. In choice overload situations, consumers are likely to make poorer choices and feel greater dissatisfaction with their choice, for which they blame themselves.<sup>1</sup>

Faced with choice overload, consumers may exhibit choice paralysis, choosing to make no decision, which, of course, can hurt consumers and marketers alike. The "decision" to not choose has been shown to be equally likely in relatively trivial decisions such as choosing not to buy a jar of jam when presented

30 alternatives, as it is with more important decisions such as (not) enrolling in 40l(k) retirement plans. Fortunately, consumers can use heuristics to simplify decisions and thus avoid possible negative consequences of not choosing. These are rules of thumb or mental shortcuts, such as "buy the most popular brand" or "buy the lowest price," that consumers use to aid the decision process. Heuristics serve the practical purpose of helping consumers make "satisficing" choices that, while not "maximally best," are still good enough.

The proliferation of brands and line extensions both online and offline increases the likelihood of choice overload. Supermarkets, for example, carry something like 40,000 brands—15 types of Thomas' English Muffins, 27 versions of Crest toothpaste. However, instead of more, Costco, the giant warehouse retailer, has adopted a practice of carrying fewer selections. This practice may be as much a contributor to Costco's success as its discount pricing practice. Research shows that people buy more with limited offerings and are more satisfied with their choices.

Online retailers, facing no space barrier, may offer consumers so many alternatives that consumers suffer choice overload, a situation that may contribute to consumer abandonment of their merchandise-filled shopping carts.

E-tailers like Stitch Fix, Fancy, Quarterly, Birch Box, and Kiwi Crate are attempting to address the problem of choice overload by eliminating consumer choice altogether. Stitch Fix, a "personal stylist for women," begins the shopping process by having customers fill out a survey on their preferences. This helps the consumer think through what he or she wants. The data form the basis of an algorithm that generates recommendations for the customer. The shopper can also provide a link to her Pinterest, which provides more granular information that the shopper's personal stylist can use to hand-pick items. For the \$20 styling fee, the shopper receives

a five-item box or "fix" of clothing and accessories, each averaging \$65. Items the shopper doesn't want can be returned at no cost to the shopper.

Choice overload is a reality and yet most consumers like to feel like they have adequate options to choose from. The task for marketers is to hit the sweet spot and offer enough, but not so much that it triggers choice overload. To that end, marketing strategies include product assortment optimization—determining an appropriate number of alternatives, with meaningful differentiation—and strategies to ease the consumer decision-making process—structuring the decision process and lessening perceived risk.

As the opening examples suggest, consumers make decisions in a variety of ways, with a variety of overarching goals, and the decisions they make range from simple to complex. The decision stage after problem recognition and information search is alternative evaluation and selection. Alternative selection is also referred to as consumer choice and in reality consumers are often evaluating alternatives for choice even during the search process. Consumer evaluation and choice of alternatives is the focus of this chapter.

# CONSUMER CHOICE AND TYPES OF CHOICE PROCESS

L01

Marketers sometimes assume that the process underlying consumer choice follows *rational choice theory*. Rational choice theory implicitly or explicitly assumes a number of things about consumer choice that often are not true. These assumptions are discussed next.

 Assumption 1: Consumers seek one optimal solution to a problem and choose on that basis.

However, increasingly, marketers are coming to understand that these conditions don't always describe consumer choice. First, consumers don't always have the goal of finding the "optimal brand" for them. Instead, there are alternative metagoals, where a **metagoal** refers to *the general nature of the outcome being sought*. In addition to selecting the optimal alternative, metagoals include minimizing decision effort or maximizing the extent to which a decision is justifiable to others. Consider nominal decision making from Chapter 14. Consumers who are low in purchase involvement may engage in little or no external search because they can recall from memory a brand that is at least satisfactory. In this case, consumers will usually choose this brand with no further search or decision effort, even though it may not be the optimal brand for them. This is because, given low purchase involvement, other goals come into play such as minimizing search and decision effort.

Assumption 2: Consumers have the skill and motivation to find the optimal solution.
 However, marketers are increasingly aware that consumers often don't have the ability or the motivation to engage in the highly demanding task of finding the optimal solution. For example, consumers are subject to bounded rationality—a limited

capacity for processing information.<sup>3</sup> Moreover, as suggested in Chapter 14, most decisions do not generate enough purchase involvement to motivate consumers to seek the optimal solution through extended decision making. As the opening example suggests, many websites in the United States are attempting to help consumers deal with the information overload that accompanies too many choices.

In the United Kingdom, choice overload was the motivation behind a site called Just Buy This One, which recommends only one brand within a product category and price range with three reasons why it's the best choice. According to a company executive:

We knew that 25% of people are overwhelmed by the choice on price comparison sites and we decided to create something utterly simple and extremely useful. Online shopping used to be the simple solution, but it's gotten too crowded.<sup>4</sup>

• Assumption 3: The optimal solution does not change as a function of situational factors such as time pressure, task definition, or competitive context.

However, marketers are increasingly aware that preferences can and do shift as a function of the situation (Chapter 13). For example, limited decision making is more likely when we are tired or hurried. In addition, when new brands are added to the competitive set, it can alter consumer choices, as we discuss later in the chapter.

Thus, as you read this chapter, it is important to keep in mind that consumer decisions (a) are often not rational in the sense of finding the optimal solution, (b) are not optimal due to the cognitive and time limits of consumers, and (c) are malleable in that they change based on the situation. In addition, it is important to keep in mind that consumer decisions are much more circular, emotional, and incomplete than our formal examination here might suggest.

#### Types of Consumer Choice Processes

Let's begin by examining the three general types of decision processes that consumers can engage in. You will notice that some are not even based on a comparison of brands and their features, which is often a major (and sometimes incorrect) assumption made by marketing managers. The three choice processes are affective choice, attitude-based choice, and attribute-based choice. While we describe them separately for simplicity, it is important to keep in mind that these are not mutually exclusive and combinations may be used in a single decision. First, let's look at three decision scenarios involving a digital camera:

Scenario 1 (Affective Choice). As a consumer shops at a local store, one camera catches her eye: she examines it, looking at the lines and overall look. She thinks the camera looks sleek, modern, and cool. She examines another camera but thinks it looks too serious and boring. After a few more minutes of contemplation about what a great impression she would make using the first camera to take pictures at parties and weddings, she decides to buy the first camera.

Scenario 2 (Attitude-Based Choice). The consumer remembers that her friend's Olympus Stylus worked well and looked "good"; her parents had a Kodak Easyshare that also worked well but was rather large and bulky; and her old Fujifilm FinePix had not performed as well as she had expected. At her local electronics store she sees that the Olympus and Kodak models are about the same price and decides to buy the Olympus Stylus.

Scenario 3 (Attribute-Based Choice). After consulting the Internet to determine what features she is most interested in, the consumer then goes to her local electronics store and compares the various brands on the features most important to her—namely,

L02

camera size, zoom, automatic features, and storage size. She mentally ranks each model on these attributes and her general impression of each model's quality. On the basis of these evaluations, she chooses the Olympus Stylus.

These three scenarios relate to different choice processes. The first scenario represents affective choice.<sup>5</sup> **Affective choice** tends to be more holistic in nature. The brand is not decomposed into distinct components, each of which is evaluated separately from the whole. The evaluation of such products is generally focused on the way they will make the user feel as they are used. The evaluation itself is often based exclusively or primarily on the immediate emotional response to the product or service.<sup>6</sup> Decisions based on affect use the "How do I feel about it" heuristic or decision rule.<sup>7</sup> Consumers imagine or picture using the product or service and evaluate the feeling that this use will produce.<sup>8</sup>

Consumer use of the affective choice process is affected by underlying purchase motives. Affective choice is most likely when the underlying motive is consummatory rather than instrumental. **Consummatory motives** *underlie behaviors that are intrinsically rewarding to the individual involved*. **Instrumental motives** *activate behaviors designed to achieve a second goal*. For example, the consumer in Scenario 1 is clearly motivated primarily by the emotional rewards involved in having and using a camera that makes her look trendy and fashionable (consummatory motive), whereas other consumers may be motivated by having a camera that takes high-quality pictures that can be enjoyed later (instrumental motive). Illustration 16–1 shows ads appealing to each of these motives. How do the Huntsman Springs and Oil of Olay ads differ in motive appeals?

Marketers continue to learn more about affect-based decisions. <sup>10</sup> It is clear that such decisions require different strategies than the more cognitive decisions generally considered in marketing. For those decisions that are likely to be affective in nature (largely triggered by consummatory motives), marketers should design products and services that will provide the appropriate emotional responses. <sup>11</sup> They also should help consumers visualize how they will feel during and after the consumption experience. <sup>12</sup> This is particularly important for new brands or products and services. Consumers who have experience with a product or brand have a basis for imagining the affective response it will produce. Those who do not may incorrectly predict the feelings the experience will produce. For example, individuals imagining a

#### **ILLUSTRATION 16-1**

The Huntsman
Springs ad on the
left appeals to a consummatory motive
by showing that the
product or consumption is rewarding in
and of itself. The Oil
of Olay ad on the
right appeals to an
instrumental motive
by showing that the
product is a means
to an end.





white-water rafting trip may conclude that it would produce feelings of terror rather than exhilaration. Illustration 16–2 shows an ad that helps consumers envision the positive experiences and accompanying feelings they would have if they owned the product.

The second scenario represents attitude-based choice. Attitude-based choice involves the use of general attitudes, summary impressions, intuitions, or heuristics; no attribute-by-attribute comparisons are made at the time of choice. <sup>13</sup> It is important to note that many decisions, even for important products, appear to be attitude-based. Recall from Chapters 14 and 15 that most individuals collect very little product information from external sources immediately before a purchase. They are most likely making attitude-based decisions.

Motivation, information availability, and situational factors interact to determine the

likelihood that attitude-based choices are made. As one would suspect, the lower the motivation to make an optimal decision, the more likely an attitude-based choice will be made. This relates to purchase involvement and nominal and limited decision making in Chapter 14, which are likely to be heavily skewed toward attitude-based choice. When information is difficult to find or access, or when consumers face time pressures, attitude-based choices are more likely. Notice how time pressures increase the perceived cost of search and make attitude-based choices from memory appear much more attractive.

The third scenario represents attribute-based choice. Attribute-based choice requires the knowledge of specific attributes at the time the choice is made, and it involves attribute-by-attribute comparisons across brands. This is a much more effortful and time-consuming process than the global comparisons made when affective and attitude-based choices are involved. It also tends to produce a more nearly optimal decision. Again, motivation, information availability, and situational factors interact to determine the likelihood that attitude-based choices are made.

Consumers with high purchase involvement or motivation are more likely to make attribute-based choices, which most resemble the extended decision-making approach we discussed in Chapter 14. More accessible brand and attribute information increases the likelihood that attribute-based choices are made. This can be used by marketers of brands that have important attribute-based advantages but that lack strong reputations or images in the target market. The approach would be to provide attribute-based comparisons in an easy-to-process format, such as a brand-by-attribute matrix. Such a matrix could be presented in ads, on packages, in point-of-purchase displays, on the brand's website, and so on. An appropriate comparison format and structure is critical to making the firm's brand the focal point of comparison. <sup>14</sup> This could be done by listing the brand first, perhaps in bold or colored type.

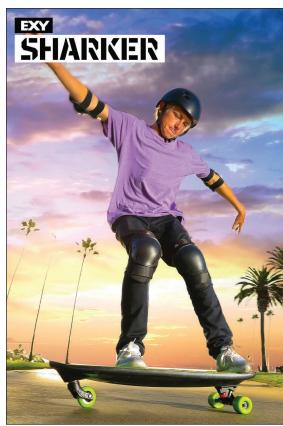
The ads in Illustration 16–3 show the differences between attribute-based and attitude-based choice strategies. The Viviscal ad on the left focuses on specific features of the brand and would be consistent with an attribute-based choice. The EXY Sharker Skateboard ad on the right focuses on the brand and an overall impression of the product and its users and would be consistent with an attitude-based choice.



#### **ILLUSTRATION 16-2**

This ad encourages an affect-based choice by encouraging consumers to imagine the pleasure they will derive from owning the product.





The Viviscal ad on the left encourages attribute-based choice with primacy given to its key product features. Ads such as this EXY Sharker Skateboard ad on the right assume or encourage attitude-based choice by focusing on brand, overall performance, and image rather than specific product features.

L03

It is important to note that these three processes are not always used in isolation. For example, affective or emotional criteria can be considered along with functional criteria. Sometimes consumers are more driven by emotions and end up choosing functionally inferior brands. Such trade-offs between hedonic and utilitarian attributes are important for marketers to consider in developing products and promotional campaigns. In addition, sometimes affective and attitude-based processes can be used by consumers to establish or narrow their consideration sets. This type of *phased* decision making is common, and understanding the role of affect and attitudes in the formation of the evoked set is critical for marketers.

Given the nature, complexity, and importance of attribute-based choice to both consumers and marketers, the focus of the remainder of the chapter is on issues related to attribute-based choice. Figure 16–1 provides an overview of the stages of the attribute-based choice process.

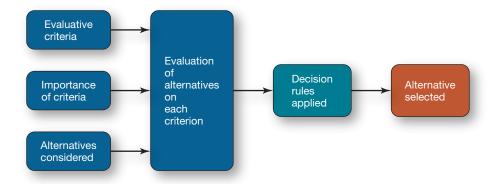
#### **EVALUATIVE CRITERIA**

Attribute-based choices rely heavily on a comparison of brands on one or more attributes. These attributes are called evaluative criteria because they are the dimensions on which the brands are evaluated. **Evaluative criteria** are *the various dimensions, features, or benefits a consumer looks for in response to a specific problem.* While functional attributes are common, evaluative criteria can also be emotions (the pleasure associated with eating chocolate cake) and the reactions of important reference group members (for socially

#### Alternative Evaluation and Selection for Attribute-Based Choice

**FIGURE** 





consumed products). Before purchasing a computer, you might be concerned with cost, speed, memory, operating system, display, and warranty. These would be your evaluative criteria. Someone else could approach the same purchase with an entirely different set of evaluative criteria.

Evaluative criteria are perceived and utilized by consumers in a number of ways including extremes (lower price or more miles per gallon is better), limits (it must not cost more than \$100; it must get more than 25 miles per gallon), or ranges (any price between \$85 and \$99 is acceptable). For new product categories, consumers must often first determine which levels of various criteria are desirable. For example, a consumer who buys a barbecue grill for the first time and has limited experience with grills may have to determine if he prefers gas to charcoal, domed or traditional shape, and so forth. After purchase and use, these preference levels become more firmly established and stable. <sup>17</sup>

# Nature of Evaluative Criteria

Evaluative criteria are typically associated with desired benefits. Thus, consumers want fluoride (evaluative criteria) in their toothpaste to reduce cavities (benefit). It is often more persuasive for marketers to communicate brand benefits rather than (or in addition to) evaluative criteria because it is the benefits that consumers specifically desire. The ad in Illustration 16–4 focuses primarily on product benefits rather than technical features.

Evaluative criteria can differ in type, number, and importance. The *type of evaluative criteria* a consumer uses in a decision varies from *tangible* cost and performance features to *intangible* factors such as style, taste, prestige, feelings generated, and brand image. <sup>18</sup> Illustration 16–5 shows how two similar products stress different types of evaluative criteria. The Blue Wilderness ad on the left



#### **ILLUSTRATION 16-4**

Consumers are generally interested in product features only in relation to the benefits those features provide. This ad emphasizes core benefits rather than the technical characteristics that generate those benefits.





The Blue Wilderness and Purina ads are for the same product category but assume differing evaluative processes by consumers.

stresses tangible attributes and technical performance. The Purina ad on the right focuses more on intangible attributes and feelings.

For fairly simple products such as toothpaste, soap, or facial tissue, consumers use relatively few evaluative criteria. On the other hand, the purchase of an automobile, smartphone, or house may involve numerous criteria. Individual characteristics such as product familiarity and age and situational characteristics such as time pressure also affect the number of evaluative criteria considered. For example, time pressure tends to reduce the number of attributes examined. <sup>20</sup>

The *importance* that consumers assign to each evaluative criterion is of great interest to marketers. Three consumers could use the same six evaluative criteria shown in the following table when considering a laptop computer. However, if the importance rank they assigned each criterion varied as shown, they would likely purchase different brands.

	Importance Rank for			
Criterion	Consumer A	Consumer B	Consumer C	
Price	1	6	3	
Processor	5	1	4	
Display quality	3	3	1	
Memory	6	2	5	
Weight	4	4	2	
After-sale support	2	5	6	

Consumer A is concerned primarily with cost and support services. Consumer B wants computing speed and power (as represented by processor and memory). Consumer C is concerned primarily with ease of use (as represented by display and weight). If each of these three consumers represented a larger group of consumers, we would have three distinct market segments based on the importance assigned to the same criteria.

Evaluative criteria and their importance affect which brands consumers select. They also influence if and when a problem will be recognized. For example, consumers who attach more importance to automobile styling relative to cost buy new cars *more frequently* 

than do those with the opposite importance rankings.<sup>21</sup> Thus, marketers want to understand which criteria consumers use to evaluate their brands so they can develop and communicate appropriate brand features to the target market. Also, marketers sometimes want to change the evaluative criteria that consumers utilize in ways that benefit their brands.<sup>22</sup> Thus measuring evaluative criteria is an important marketing activity.

#### Measurement of Evaluative Criteria

Before a marketing manager or a public policy decision maker can develop a sound strategy to affect consumer decisions, he or she must determine

- Which evaluative criteria are used by the consumer.
- How the consumer perceives the various alternatives on each criterion.
- The relative importance of each criterion.

Therefore, it is often difficult to determine which criteria consumers are using in a particular brand-choice decision, particularly if emotions or feelings are involved. This is even more of a problem when trying to determine the relative importance they attach to each evaluative criterion.

**Determination of Which Evaluative Criteria Are Used** To determine which criteria are used by consumers in a specific product decision, the marketing researcher can use either direct or indirect methods of measurement.

*Direct* methods include asking consumers what criteria they use in a particular purchase or, in a focus group setting, noting what consumers say about products and their attributes. However, consumers sometimes will not or cannot verbalize their evaluative criteria for a product, particularly if emotions or feelings are involved. For example, Hanes Corporation suffered substantial losses (\$30 million) on its L'erin cosmetics line when, *in response to consumer interviews*, it positioned it as a functional rather than a romantic or emotional product. Eventually, the brand was successfully repositioned as glamorous and exotic, although consumers did not *express* these as desired attributes.<sup>23</sup>

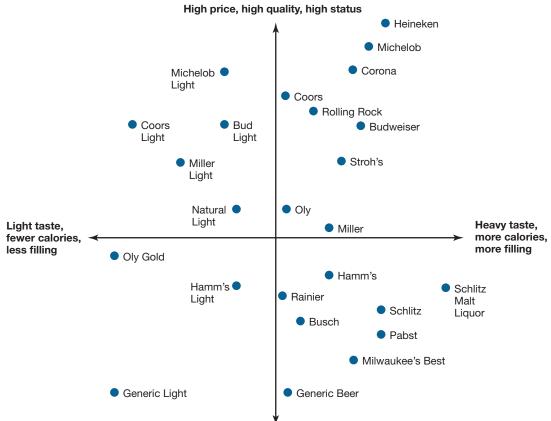
Thus, *indirect* measurement techniques such as **projective techniques** (Appendix A, Table A-1), which allow the respondent to indicate the criteria someone else might use, are often helpful. The "someone else" will likely be a *projection* of the respondent, of course—thus, the marketer can indirectly determine the evaluative criteria that would be used.

**Perceptual mapping** is another useful indirect technique for determining evaluative criteria. First, consumers judge the similarity of alternative brands. This generally involves having the consumer look at possible pairs of brands and indicate which pair is most similar, which is second most similar, and so forth until all pairs are ranked. These similarity judgments are processed via a computer to derive a perceptual map of the brands. No evaluative criteria are specified by the consumer. The consumer simply ranks the similarity between all pairs of alternatives, and a perceptual configuration is derived in which the consumer's still-unnamed evaluative criteria are the dimensions of the configuration.

For example, consider the perceptual map of beers shown in Figure 16–2. This configuration was derived from a consumer's evaluation of the relative similarity of these brands of beer. The horizontal axis is characterized by physical characteristics such as taste, calories, and fullness. The vertical axis is characterized by price, quality, and status. Naming each axis, and thus each evaluative criterion, is done using judgment. This procedure allows marketers to understand consumers' perceptions and the evaluative criteria they use to differentiate brands.



#### Perceptual Mapping of Beer Brand Perceptions



Low price, low quality, low status

**Determination of Consumers' Judgments of Brand Performance on Specific Evaluative Criteria** A variety of methods are available for measuring consumers' judgments of brand performance on specific attributes. These include *rank ordering scales*, *semantic differential scales*, and *Likert scales* (see Appendix A and Appendix Table A-3). The semantic differential scale is probably the most widely used technique.

None of these techniques are very effective at measuring emotional responses to products or brands. Projective techniques can provide some insights. SAM, the graphical approach designed to tap more directly into the pleasure–arousal–dominance dimensions of emotions (see Chapter 11), is also a useful option.

**Determination of the Relative Importance of Evaluative Criteria** The importance assigned to evaluative criteria can be measured either by direct or by indirect methods. No matter which technique is used, the usage situation should be specified because attribute importance often changes with the situation. The *constant sum scale* is the most common method of direct measurement (see Chapter 11).

The most popular indirect measurement approach is **conjoint analysis.** In conjoint analysis, the consumer is presented with a set of products or product descriptions in which the evaluative criteria vary. For example, the consumer may be presented with the description of 24 different laptop computers that vary on four criteria. Two might be as follows:

Intel Core Duo 2.4 GHz
Energy Star compliant (yes)
5.1 pounds
\$1,250

Intel Core Duo 2.0 GHz
Energy Star compliant (no)
4 pounds
\$850

The consumer ranks all 24 such descriptions in terms of his or her preference for those combinations of features. Using these preference ranks, sophisticated computer programs derive the relative importance consumers assign to each level of each attribute tested (see Appendix A and Appendix Figure A-1 for details).

Conjoint analysis was used by Sunbeam in reformulating its food processor line for various segments. Sunbeam tested 12 different attributes: price, motor power, number of blades, bowl shape, and so forth. Various segments emerged *based on the relative importance of these attributes*. In order of importance, the key attributes for two segments were as follows. These results helped Sunbeam develop models specifically for each of these segments and that better met their needs on important evaluative criteria.

Cheap/Large Segment	Multispeed/Multiuse Segment
\$49.99 price	\$99.99 price
4-quart bowl	2-quart bowl
Two speeds	Seven speeds
Seven blades	Functions as blender and mixer
Heavy-duty motor	Cylindrical bowl
Cylindrical bowl	Pouring spout

# INDIVIDUAL JUDGMENT AND EVALUATIVE CRITERIA

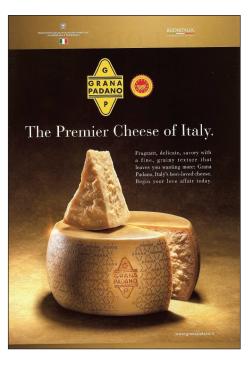
If you were buying a laptop computer, you would probably make direct comparisons across brands on features such as price, weight, and display clarity. These comparative judgments might not be completely accurate. For example, the display that is the easiest to read in a five-minute trial might not be the easiest to read over a two-hour work session. For other attributes, such as quality, you might not be able to make direct comparisons. Instead, you might rely on brand name or price to indicate quality. In addition, consumer perceptions of the importance of product features are influenced by various external factors. The accuracy of direct judgments, the use of one attribute to indicate performance on another (surrogate indicator), and variations in attribute importance are critical issues for marketers.

#### **Accuracy of Individual Judgments**

The average consumer is not adequately trained to judge the performance of competing brands on complex evaluative criteria such as quality or durability. For more straightforward criteria, however, most consumers can and do make such judgments. Prices generally can be judged and compared directly. However, even this can be complex. Is a six-pack of 12-ounce cans of Coca-Cola selling for \$2.49 a better buy than two liters priced at \$1.59 each? Consumer groups have pushed for unit pricing (pricing by common measurements such as cost per ounce) to make such comparisons simpler. The federal truth-in-lending law was passed to facilitate direct price comparisons among alternative lenders.

L04

Marketers sometimes use price, warranty, brand, or country of origin as surrogate indicators of quality. The ad for Grana Padano Cheese uses country of origin as an indicator of quality.



The ability of an individual to distinguish between similar stimuli is called **sensory discrimination** (see Chapter 8). This could involve such variables as the sound of stereo systems, the taste of food products, or the clarity of display screens. The minimum amount that one brand can differ from another, with the difference still being noticed, is referred to as the *just noticeable* difference (j.n.d.). As we saw in Chapter 8, this ability is not well developed in most consumers. In general, research indicates that individuals typically do not notice relatively small differences between brands or changes in brand attributes. In addition, the complexity of many products and services as well as the fact that some aspects of performance can be judged only after extensive use makes accurate brand comparisons difficult.24

The inability of consumers to accurately evaluate many products can result in inap-

propriate purchases (buying a lower-quality product at a higher price than necessary).<sup>25</sup> This is a major concern of regulatory agencies and consumer groups as well as for marketers of high-value brands.

#### **Use of Surrogate Indicators**

Consumers frequently use an observable attribute of a product to indicate the performance of the product on a less observable attribute.<sup>26</sup> For example, a consumer might infer that because a product has a relatively high price, it must also be of high quality. *An attribute used to stand for or indicate another attribute* is known as a **surrogate indicator.** As discussed in Chapter 8, consumers often use such factors as price, advertising intensity, warranties, brand, and country of origin as surrogate indicators of quality—what we termed quality signals. Illustration 16–6 shows an ad for Grana Padano Cheese. This ad is attempting to take advantage of a surrogate indicator of quality.

In general, surrogate indicators operate more strongly when consumers lack the expertise to make informed judgments on their own, when consumer motivation or interest in the decision is low, and when other quality-related information is lacking. Unfortunately, the relationship between surrogate indicators and functional measures of quality is often modest at best.<sup>27</sup> Obviously, when consumers rely on surrogates that have little relationship to actual quality, they are likely to make suboptimal decisions.

Surrogate indicators are based on consumers' beliefs that two features such as price level and quality level generally go together. Consumers also form beliefs that certain variables do not go together—such as *lightweight* and *strong; rich taste* and *low calories;* and *high fiber* and *high protein.* Marketers attempting to promote the presence of two or more variables that many consumers believe to be mutually exclusive have a high risk of failure unless very convincing messages are used. Thus, it is important for marketers to fully understand consumers' beliefs about the feasible relationships of attributes related to their products.

# The Relative Importance and Influence of Evaluative Criteria

The importance of evaluative criteria varies among individuals and also within the same individual over time. That is, although consumers often have a general sense of how important various criteria are, this can be influenced by a number of factors. These include the following:

- *Usage situation*. The situation in which a product or service is used (Chapter 13) can have important influences on the criteria used to make a choice. For example, speed of service and convenient location may be very important in selecting a restaurant over a lunch break but relatively unimportant when selecting a restaurant for a special occasion.<sup>29</sup>
- Competitive context. Generally speaking, the lower the variance across competing brands on a given evaluative criterion, the less influence it is likely to have in the decision process. For example, you might think that the weight of a notebook computer is important. However, if all the brands you are considering weigh between 4 and 5 pounds, this attribute may suddenly become less of a factor in your decision.
- Advertising effects. Advertising can affect the importance of evaluative criteria in a number of ways. For example, an ad that increases attention and elaborative processing of an attribute can increase its perceived importance and/or influence in the decision.<sup>31</sup> As we saw in Chapters 8 and 9, contrast, prominence, and imagery are just a few of the tactics that can be used to enhance attention and elaboration.

# Evaluative Criteria, Individual Judgments, and Marketing Strategy

Obviously, marketers must understand the evaluative criteria consumers use relative to their products and develop products that excel on those features. All aspects of the marketing communications mix must then communicate this excellence.

Marketers must also recognize and react to the ability of individuals to judge evaluative criteria, as well as to their tendency to use surrogate indicators. For example, most new consumer products are initially tested against competitors in blind tests. A **blind test** is one in which the consumer is not aware of the product's brand name. Such tests enable the marketer to evaluate the functional characteristics of the product and to determine if an advantage over a particular competitor has been obtained without the contaminating, or halo, effects of the brand name or the firm's reputation. Can you see any drawbacks to only using blind tests in evaluating the market potential of products?

Marketers also make direct use of surrogate indicators. Hyundai's 10-year, 100,000-mile warranty was a milestone in the industry when introduced over a decade ago. The goal was to overcome low-quality perceptions related to another surrogate—namely country of origin. That is, consumers in the United States were unsure of the quality of Korean-made automobiles at the time, and the warranty was designed to overcome this.

For image products such as fine wines, imported beers, and so forth, higher prices tend to signal higher quality. Therefore, although, for most products, higher prices lead to lower quantity demanded, for such image-based products, higher prices generally drive higher demand due to the quality that is inferred based on the higher price.

Brand names are also a strong surrogate for quality. Elmer's glue emphasized the well-established reputation of its brand in promoting its new super glue: ads for Elmer's

Wonder Bond said, "Stick with a name you can trust." Firms with a limited reputation can sometimes form *brand alliances* with a reputable firm and gain from the quality associated with the known brand. Thus, a new brand of ice cream that used a branded ingredient such as M&Ms would gain from M&Ms' quality image.<sup>32</sup> Country-of-origin themes such as "Made in America," "Italian Styling," or "German Engineering" are also common.

Marketers must also understand the factors that influence consumer perceptions of the importance of evaluative criteria. Understanding that attributes may be important but wield little influence on decisions because of similarity across competitors is a critical insight. It speaks to the need for marketers to examine critical *points of differentiation* on which the brand can be positioned. Advertising themes that emphasize specific usage occasions for which the brand is particularly appropriate can be effective, as can strategies such as imagery that draw attention to attributes on which the firm's brand excels.

# DECISION RULES FOR ATTRIBUTE-BASED CHOICES

L05

As we describe some of the choice rules consumers use to select among alternatives, remember that these rules are representations of imprecise and often nonconscious or low-effort mental processes. The following example is a good representation of a consumer using a complex choice rule (compensatory with one attribute weighted heavily):

I really liked the Ford [minivan] a lot, but it had the back tailgate that lifted up instead of the doors that opened. I suspect that if that had been available we might have gone with the Ford instead because it was real close between the Ford and the GM. The lift gate in the back was the main difference, and we went with the General Motors because we liked the doors opening the way they did. I loved the way the Ford was designed on the inside. I loved the way it drove. I loved the way it felt and everything, but you are there manipulating all these kids and groceries and things and you have got to lift this thing, and it was very awkward. It was hard to lift, and if you are holding something you have got to steer all the kids back, or whack them in the head. So that was a big thing. You know it was a lot cheaper than the GM. It was between \$1,000 and \$2,000 less than General Motors, and because money was a factor, we did go ahead and actually at one point talk money with a [Ford] dealer. But we couldn't get the price difference down to where I was willing to deal with that tailgate is what it comes down to.<sup>33</sup>

Despite the fact that the choice rules we describe are not precise representations of consumer decisions, they do enhance our understanding of how consumers make decisions and provide guidance for marketing strategy.

Suppose you have six laptop computers in your evoked set and you have assessed them based on six evaluative criteria: price, weight, processor, battery life, after-sale support, and display quality. Further, suppose that each brand excels on one attribute but falls short on one or more of the remaining attributes, as shown in Table 16–1.

Which brand would you select? The answer would depend on the decision rule you utilize. Consumers commonly use five decision rules: conjunctive, disjunctive, elimination-by-aspects, lexicographic, and compensatory. More than one rule may be used in any given decision. The most common instance of this is using a relatively simple rule to reduce the number of alternatives considered and then to apply a more complex rule to choose among the remaining options. An example would be eliminating from consideration all those apartments that are too far from campus or that rent for more than \$700 per month (conjunctive decision rule). The choice from among the remaining apartments might involve carefully trading off among features such as convenience of location, price,

#### Performance Levels on the Evaluative Criteria for Six Laptop Computers





			Consumer Pe			
Evaluative Criteria	Acer	HP	Compaq	Dell	Lenovo	Toshiba
Price	5	3	3	4	2	1
Weight	3	4	5	4	3	4
Processor	5	5	5	2	5	5
Battery-life	1	3	1	3	1	5
After-sale support	3	3	4	3	5	3
Display quality	3	3	3	5	3	3

 $<sup>*1 = \</sup>text{Very poor}$ ; 5 = Very good.

presence of a pool, and size of rooms (compensatory rule). Note that some online shopping services such as Price Grabber complete the first phase in this process by filtering out all brands that don't meet the consumer's criteria.

The first four rules we will describe are *noncompensatory* rules. This means that a high level of one attribute cannot offset a low level of another. In the apartment example, the consumer would not consider an apartment that was right next to campus if it costs more than \$700 per month. An excellent location could not compensate for an inappropriate price. In contrast, the last rule we will describe is a *compensatory* rule in which consumers average across attribute levels. This allows a high level of one value to offset a low value of another.

Finally, note that the conjunctive and disjunctive decision rules may produce a set of acceptable alternatives, whereas the remaining rules generally produce a single "best" alternative.

#### **Conjunctive Decision Rule**

The **conjunctive decision rule** establishes minimum required performance standards for each evaluative criterion and selects the first or all brands that meet or exceed these minimum standards. Thus, in making the decision on the computer, you would say, "I'll consider all (or I'll buy the first) brands that are acceptable on the attributes I think are important." For example, assume that the following represent your minimum standards:

Price	3
Weight	4
Processor	3
Battery life	1
After-sale support	2
Display quality	3

Any brand of computer falling below any of these minimum standards (cutoff points) would be eliminated from further consideration. Referring to Table 16–1, we can see that four computers are eliminated—Lenovo, Acer, Dell, and Toshiba. These are the computers that failed to meet all the minimum standards. Under these circumstances, the two remaining brands may be equally satisfying. Or you might use another decision rule to select a single brand from these two alternatives.

This ad tries to assure consumers that its brand has every feature they might need. This is consistent with consumers using a conjunctive decision rule.



Because individuals have limited ability to process information, the conjunctive rule is frequently used to reduce the size of the information processing task to some manageable level. This is often done in the purchase of such products as homes, computers, and bicycles; in the rental of apartments; or in the selection of vacation options. A conjunctive rule is used to eliminate alternatives that are out of a consumer's price range, are outside the location preferred, or do not offer other desired features. After eliminating those alternatives not providing these features, the consumer may use another decision rule to make a brand choice among those remaining alternatives that satisfy these minimum standards.

The conjunctive decision rule is commonly used in many low-involvement purchases as well. In such a purchase, the consumer generally evaluates a set of brands one at a time and selects the first brand that meets all the minimum requirements.

If the conjunctive decision rule is used by a target market, it is critical to meet or surpass the consumers' minimum requirement on each criterion. For low-involvement purchases, consumers often purchase the first brand that does so. For such products, extensive distribution and dominant shelf space are important. It is also necessary to understand how consumers "break ties" if the first satisfactory option is not chosen. The ad in Illustration 16–7 tries to assure consumers that its brand has every feature they might need.

#### **Disjunctive Decision Rule**

The **disjunctive decision rule** *establishes a minimum level of performance for each important attribute* (often a fairly high level, which sets the performance standard very high and makes it hard for a brand to attain). All brands that meet or exceed the performance level for *any* key

attribute are considered acceptable. Using this rule, you would say, "I'll consider all (or buy the first) brands that perform really well on any attribute I consider important." Assume that you are using a disjunctive decision rule and the attribute cutoff points shown below:

5
5
Not critical
Not critical
Not critical
5

You would find Acer (price), Compaq (weight), and Dell (display quality) to warrant further consideration (see Table 16–1). As with the conjunctive decision rule, you might purchase the first brand you find acceptable, use another decision rule to choose among the three, or add additional criteria to your list.

When the disjunctive decision rule is used by a target market, it is critical to meet or surpass the consumers' requirements on at least one of the key criteria. This should be emphasized in advertising messages and on the product package. Because consumers often purchase the first brand that meets or exceeds one of the requirements, extensive distribution and dominant shelf space are important. Again, it is also necessary to understand how consumers break ties if the first satisfactory option is not chosen. Illustration 16–8 stresses one important attribute and would be appropriate for consumers who placed a high importance on this attribute and used a disjunctive decision rule.

#### Elimination-by-Aspects Decision Rule

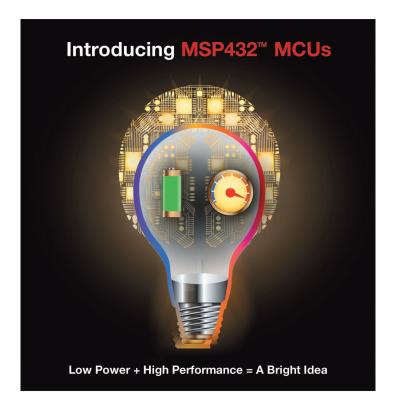
The **elimination-by-aspects decision rule** requires the consumer to rank the evaluative criteria in terms of their importance and to establish a cutoff point for each criterion. All brands are first considered on the most important criterion. Those that do not meet or exceed the cutoff point are dropped (eliminated) from further consideration. If more than one brand remains in the set after this first elimination phase, the process is repeated on those brands for the second most important criterion. This continues until only one brand remains. Thus, the consumer's logic is, "I want to buy the brand that has a high level of an important attribute that other brands do not have."

Consider the rank order and cutoff points shown below. What would you choose using the elimination-by-aspects rule?

	Rank	Cutoff Point
Price	1	3
Weight	2	4
Display quality	3	4
Processor	4	3
After-sale support	5	3
Battery life	6	3
,		

Price would eliminate Lenovo and Toshiba (see Table 16–1). Of those remaining, Compaq, HP, and Dell meet or exceed the weight hurdle (Acer is eliminated). Notice that Toshiba also meets the minimum weight requirement but would not be considered because it had been eliminated in the initial consideration of price. Only Dell meets or exceeds the third requirement, display quality.

The disjunctive decision rule selects products that meet or exceed high standards on any important attribute.



Using the elimination-by-aspects rule, you end up with a choice that has all the desired features of all the other alternatives, plus one more.

For a target market using the elimination-by-aspects rule, it is critical to meet or surpass the consumers' requirements on one more (in order) of the criteria used than the competition. This competitive superiority should be emphasized in advertising messages and on the product package. Firms can also attempt to alter the relative importance that consumers assign to the evaluative criteria. The ad in Illustration 16–9 is consistent with this rule. It indicates that the brand has desirable features other competitors do not have.

#### Lexicographic Decision Rule

The **lexicographic decision rule** requires the consumer to rank the criteria in order of importance. The consumer then selects the brand that performs best on the most important attribute. If two or more brands tie on this attribute, they are evaluated on the second most important attribute. This continues through the attributes until one brand outperforms the others. The consumer's thinking is something like this: "I want to get the brand that does best on the attribute of most importance to me. If there is a tie, I'll break it by choosing the one that does best on my second most important criterion."

The lexicographic decision rule is similar to the elimination-by-aspects rule. The difference is that the lexicographic rule seeks maximum performance at each stage, whereas the elimination-by-aspects seeks satisfactory performance at each stage. Thus, using the lexicographic rule and the data from the elimination-by-aspects example above would result in the selection of Acer because it has the best performance on the most important attribute.







Elimination-byaspects choices seek a brand that has a high level of an attribute that other brands do not have.

Had Acer been rated a 4 on price, it would be tied with Dell. Then, Dell would be chosen based on its superior weight rating.

ShopBluePlans.com

When this rule is being used by a target market, the firm should try to be superior to the competition on *the* key attribute. This competitive superiority should be emphasized in advertising. It is essential that the product at least equal the performance of all other competitors on the most important criterion. Outstanding performance on lesser criteria will not matter if a competitor is superior on the most important attribute. If a competitive advantage is not possible on the most important feature, attention should be shifted to the second most important (assuming equal performance on the most important one). If it is not possible to meet or beat the competition on the key attribute, the firm must attempt to make another attribute more important.

The Tostitos ad shown in Illustration 16–10 emphasizes one key feature, presumably the most important to its target market. To the extent that its customers use a lexicographic rule, this ad should be effective in driving choice of this brand.

#### **Compensatory Decision Rule**

The four previous rules are *noncompensatory* decision rules because very good performance on one evaluative criterion cannot compensate for poor performance on another evaluative criterion. On occasion, consumers may wish to average out some very good features with some less attractive features of a product in determining overall brand preference. That appears to be the case with the new minipackage craze being used by companies such as Frito-Lay, Nabisco, and Keebler. Some consumers have complained that the prices are high on a per-serving basis. Frito-Lay and others are counting on the fact that the

Consumers using a lexicographic decision rule select the brand or service that performs best on their most important attribute. The Tostitos ad emphasizes it is made with real cheese.



convenience and calorie-control elements of their new 100-calorie packets will offset price in the minds of their target consumer. That is, they assume the target market will use a compensatory decision rule for this product. It appears this is the case, as explained by one customer who balked at the notion of buying in bulk and then measuring out 100-calorie servings into baggies:

If you want to mess with those baggies, that's fine. But for those of us in the real world, we'll take the 100 cal packs. Sure, we might pay a few more pennies per ounce, but we also can't sneak any extra in while refilling.<sup>35</sup>

The **compensatory decision rule** states that *the brand that rates highest on the sum of the consumer's judgments of the relevant evaluative criteria will be chosen.* This can be illustrated as

$$R_b = \sum_{i=1}^n W_i B_{ib}$$

where

 $R_b$  = overall rating of brand b

 $W_i$  = importance or weight attached to evaluative criterion i

 $B_{ib}$  = evaluation of brand b on evaluative criterion i

n = number of evaluative criteria considered relevant

This is the same as the multiattribute attitude model described in Chapter 11. If you used the relative importance scores shown below, which brand would you choose using the compensatory rule?

	Importance Score
Price	30
Weight	25
Processor	10
Battery life	05
After-sale support	10
Display quality	20
Total	100

Using this rule, you would choose Dell because it has the highest preference (see Table 16–1). The calculations for Dell are as follows:

$$R_{\text{Dell}} = 30(4) + 25(4) + 10(2) + 5(3) + 10(3) + 20(5)$$
  
= 120 + 100 + 20 + 15 + 30 + 100  
= 385

Products and services targeting consumers likely to use a compensatory rule can offset low performance on some features with relatively high performance on others. However, it is important to have a performance level at or near the competition's on the more important features because they receive more weight in the decision than do other attributes. Recall the description of the minivan purchase from the beginning of this section. This customer preferred most of the features of the Ford but bought the GM because Ford was very weak on one key attribute. However, the consumer did express a willingness to change the decision had the price differential been greater. Thus, for compensatory decisions, the total mix of the relevant attributes must be considered to be superior to those of the competition.

The compensatory rule tends to be the most time-consuming and mentally taxing. Also, consumers often find it difficult to consider more than a few attributes at a time in the trade-off process. In addition, as competitors enter the market, they can change the attractiveness of existing alternatives. This situational effect is discussed in Consumer Insight 16–1.

#### **Summary of Decision Rules**

As shown below, each decision rule yields a somewhat different choice. Therefore, marketers must understand which decision rules are being used by target consumers in order to position a product within this decision framework.

<b>Brand Choice</b>	
HP, Compaq	
Dell, Compaq, Acer	
Dell	
Acer	
Dell	



#### **Situational Influences on Consumer Choice**

Rational choice theory suggests that consumer choices and preferences should be independent of the context. As a simple example, it is assumed that consumers will evaluate a \$5 discount the same way regardless of context. However, this is not the case. Consumers tend to perceive the value of the \$5 discount as higher when it is on a product originally priced at \$10 and lower on a product originally priced at \$100. The reason goes back to Chapter 8 and relative preferences. Consumers appear to evaluate the \$5 savings in the context of or relative to the original price of the product.

In a similar way, consumers are affected by the competitive context in which they make choices, or what we referred to in Chapter 13 as the purchase situation. There are numerous context effects on consumer choice. Here we discuss the compromise effect.<sup>36</sup> We begin with Choice Set 1 (left graph), in which there are two apartments (A and B) evaluated on two attributes (distance from campus in miles and quality on a 1–100 scale where 100 is the best). As the graph on the left shows, option A is farther from campus (a negative) but of higher quality (a positive), whereas option B is nearer to campus (a positive) but of lower quality (a negative). Choosing between these apartments involves a *compensatory choice process* in

which distance and quality must be traded off against each other. As configured here, the apartments split the market equally. That is, 50 percent of the students chose option A (presumably weighting quality more heavily) and 50 percent chose option B (presumably weighting distance more heavily).

Now consider Choice Set 2 (right graph). In this context, there is a third apartment that consumers are aware of but that is not currently available. It is closer than A or B in terms of distance (a positive) but poorer than A or B in terms of quality (a negative). Rational choice theory assumes that if an option such as C is included, consumers should still prefer the brands the same way as they did previously. Particularly because option C is not even available, rational choice theory would suggest that options A and B would hold steady at 50 percent of the market each. However, this is not what happens. Instead, adding option C, even though not available for rent, increases B's share up to 66 percent!

This is called the compromise effect because adding option C made option B the compromise solution. It is a compromise between the two extremes of A (farthest away, best quality) and C (nearest, worst quality). Consumers prefer compromise options and find them easy to justify (a metagoal). The compromise effect seems

Research clearly indicates that people do use these decision rules.<sup>37</sup> Low-involvement purchases generally involve relatively simple decision rules (conjunctive, disjunctive, elimination-by-aspects, or lexicographic) because consumers will attempt to minimize the mental cost of such decisions.<sup>38</sup> High-involvement decisions and purchases involving considerable perceived risk tend to increase evaluation efforts and often may involve not only more complex rules (compensatory) but stages of decision making, with different attributes being evaluated using different rules at each stage.<sup>39</sup> Of course, individual, product, and situational characteristics also influence the type of decision rule used.<sup>40</sup>

A marketing manager must first determine which rule or combination of rules the target consumers will most likely use in a particular purchase situation and then develop the appropriate marketing strategy.

# Choice Context 1 Quality Apartment A (50% Choice) Apartment B (50% Choice)

Distance (lower is better)



strongest when the compromise brand is the more familiar brand in the set.

The compromise effect has important implications for marketers. Real estate agents who want to sell a particular property might first show their clients an unavailable property that makes their available property seem like the compromise option to increase the chances their client will purchase it. For retailers, because consumers often search and evaluate alternatives online and then go to a physical store to purchase the selected brand, an "online only" option (option C) could be created

to make their in-store options seem like compromise options to increase their choice share.

#### **Critical Thinking Questions**

- 1. Why does the compromise effect contradict rational choice theory?
- 2. Beyond being easy to justify, can you think of other reasons why consumers prefer compromise options?
- Do you see any ethical issues related to strategies designed to position brands as compromise alternatives? Explain.



#### **SUMMARY**

# LO1: Discuss how actual consumer choice often differs from rational choice theory

Rational choice theory assumes that (1) consumers seek one optimal solution to a problem and choose on that basis, (2) consumers have the skill and motivation to find the optimal solution, and (3) the optimal choice does not change as a function of the situation. However, all of these assumptions have been shown to be incorrect for at least some consumer decisions.

Reasons include that consumers have alternative *meta-goals*, consumers are subject to *bounded rationality*, and situations actually influence consumer perceptions of the optimal choice.

# LO2: Summarize the types of choice processes consumers engage in

Affective choice tends to be more holistic in nature. The brand is not decomposed into distinct components,

each of which is evaluated separately from the whole. Decisions based on affect use the "How do I feel about it" heuristic or decision rule and tend to occur in reponse to *consummatory motives*.

Attitude-based choice involves the use of general attitudes, summary impressions, intuitions, or heuristics; no attribute-by-attribute comparisons are made at the time of choice. Lower purchase involvement, scarce information, and certain situational factors such as time pressure increase the likelihood of attitude-based choice.

Attribute-based choice requires the knowledge of specific attributes at the time the choice is made, and it involves attribute-by-attribute comparisons across brands. This is a much more effortful and time-consuming process than the global comparisons made when affective and attitude-based choices are involved. It also tends to produce a more nearly optimal decision. Higher purchase involvement, easily accessible brand-attribute information, and situational factors such as lower time pressure increase the likelihood of attribute-based choice.

## LO3: Explain evaluative criteria and their measurement

Evaluative criteria are the various features or benefits a consumer looks for in response to a specific problem. They are the performance levels or characteristics consumers use to compare different brands in view of their particular consumption problem.

The measurement of (1) which evaluative criteria are used by the consumer, (2) how the consumer perceives the various alternatives on each criterion, and (3) the relative importance of each criterion is a critical first step in utilizing evaluative criteria to develop marketing strategy. The measurement task is not easy, although a number of techniques are available including perceptual mapping, the constant-sum scale, and conjoint analysis.

## LO4: Describe the role of evaluative criteria in consumer judgment and marketing strategy

The ability of an individual to distinguish between similar stimuli is called sensory discrimination. Some evaluative criteria such as price, size, and color can be judged easily and accurately by consumers. Other criteria, such as quality, durability, and health benefits, are much more difficult to judge. In general, research indicates that individuals typically do not notice relatively small differences between brands or changes in brand attributes. In addition, the complexity of many products and services and the fact that some aspects of performance can be judged only after extensive use make accurate brand comparisons difficult. In such cases, consumers often use price, brand name, or some other variable as a surrogate indicator of quality. Marketers can use surrogate cues as a means to affect consumer choice in situations where consumers find it difficult to make accurate assessments of alternatives. Marketers can also attempt to influence the relative importance of attributes in such a way as to favor their brands through advertising as well as position in regards to specific usage occasions.

# LO5: Summarize the five decision rules for attribute-based choice and their strategic relevance

When consumers judge alternative brands on several evaluative criteria, they must have some method to select one brand from the various choices. Decision rules serve this function. A decision rule specifies how a consumer compares two or more brands. Five commonly used decision rules are *disjunctive*, *conjunctive*, *lexicographic*, *elimination-by-aspects*, and *compensatory*. The decision rules work best with functional products and cognitive decisions. Marketing managers must be aware of the decision rule(s) used by the target market because different decision rules require different marketing strategies.

#### **KEY TERMS**

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Attitude-based choice 555
Attribute-based choice 555
Blind tests 563
Bounded rationality 552
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Conjoint analysis 560

Conjunctive decision rule 565
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