

Faculty & Research

Note on Measuring Brand Awareness, Brand Image, Brand Equity and Brand Value

by

P. Chandon

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Pierre Chandon*
INSEAD

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* Pierre Chandon is Assistant Professor of Marketing at INSEAD, Boulevard de Constance, 77300 Fontainebleau, France. Tel: +33 (0)1 60 72 49 87, e-mail: pierre.chandon@insead.edu.

Note on Measuring Brand Awareness, Brand Image, Brand Equity and Brand Value

The purpose of this note is to provide an overview and references on the various methods that can be used to measure brand knowledge (brand awareness and brand image), brand equity and brand value. This note provides a short definition of each concept and illustrations of the most widely-used measurement techniques. Once you know what you want to measure, it is important to look at the original sources cited to understand how to properly use these techniques. Keller's (2003) excellent book also provides detailed information on each concept and its measurement.

1. Brand knowledge

Brand knowledge refers to brand awareness (whether, and when, consumers know the brand) and brand image (what are the associations that consumers have with the brand) (Keller 2001). The different dimensions of brand knowledge can be classified in a pyramid (adapted from Keller 2001), in which each lower-level element provides the foundations of the higher-level element. In other words, brand attachment stems from rational and emotional brand evaluations, which derive from functional and emotional brand associations, and which necessitate brand awareness.

4. INTENSE & ACTIVE BRAND LOYALTY ATTACHMENT Loyalty, sense of community, engagement 3. POSITIVE & ACCESSIBLE **BRAND RATIONAL EMOTIONAL EVALUATIONS EVALUATION EVALUATION** Brand value, Feelings, social credibility approval, self respect 2. STRONG, FAVORABLE & UNIOUE BRAND **FUNCTIONAL IMAGE EMOTIONAL IMAGE** ASSOCIATIONS **AND BENEFITS** AND BENEFITS Physique (design), quality, Who, when, how, where used reliability, service, price personality, history 1. DEEP & BROAD **BRAND** BRAND AWARENESS DEPTH AND BREADTH AWARENESS Depth (unaided recall, aided recall, or recognition) and breadth (when?)

FIGURE 1
The Brand Knowledge Pyramid

1.1. Brand awareness

Brand awareness measures the accessibility of the brand in memory. Brand awareness can be measured through brand recall or brand recognition. Brand recall reflects the ability of consumers to retrieve the brand from memory when given the product category, the needs fulfilled by the category, or some other type of probe as a cue. Brand recognition reflects the ability of consumers to confirm prior exposure to the brand.

Brand recall:

Measures:

- Please name all the brands of beverages/soft drinks/carbonated soft drinks you can think of.
- Please name all the brands of beverages you can think of that you would bring to an INSEAD party.

Possible results:

- 15 % of consumers think of Orangina when asked to provide the name of a soft drink (versus 30% for Coca-Cola).
- Orangina is in the top 3 brands of party beverages for 30 % of consumers (versus 70% for Coca-Cola).

It is important to measure not only the <u>depth</u> of recall (the percentage of people who know the brand) but also the <u>width</u> of recall (the cues that lead to brand recall). Therefore, it is important to ponder the choice of the cue that will be used in the recall question. A good start is to think about who, when, where and how the brand will be bought or used). Typical cues are:

- subcategories (beverages/soft drinks/colas/diet colas, etc).
- consumption occasions/goals (beverages that you would consider purchasing for a romantic date, etc).
- places (available in a supermarket, in a bar, etc).
- people (drink alone, in a group, etc).

Brand recognition

In a recognition task, consumers see a stimulus (e.g., an ad, a brand name) and must say whether they have seen it before (e.g., last night on television, in magazine X, etc.). It is important to make the task as realistic as possible by allowing only a realistic amount of time and by using realistic stimuli and context. If you want to use recognition as a measure of the performance of different marketing actions (say, different logos or ads), you should expose one group to one version of the target stimulus and another group to the other version of the target stimulus. However, to make the task more realistic, both groups should also be exposed to other stimuli (e.g., competitors' brands). In a second step, people see the "old" stimuli again, along with new ones and are asked to say if they have seen them before or not. To correct for people's tendency to guess (recognizing when uncertain), you can compute a recognition score called "d prime," as follows: d' = HR – FA where HR is the hit rate (the % of respondents who recognize the target stimulus) and FA is the false alarm rate (the percentage of respondents who incorrectly "recognize" a "new" stimulus, i.e., a stimulus not shown before).

The following questions could be asked:

- Do you remember having seen this brand?
- Complete the following words: NI E, K DA.

1.2 Brand Image

Brand image is defined as consumer perceptions of a brand as reflected by the brand associations held in consumers' memory. To measure brand image, one can either use and adapt an existing list of brand associations (e.g., Aaker's brand personality list described later) or start from scratch by eliciting brand associations and by then measuring the strength of these associations. The outcome of this exercise is usually a short list of the positive and negative associations consumers have with the brand, ranked by their strength. For comparison purposes, it is useful to report the average strength of each association with the brand and the strength of the association with competing brands and to do this for each target segments (e.g., brand users and users of competing brands). For example, you can list the five positive and negative associations INSEAD MBAs and LBS MBAs have of the INSEAD and LBS brands and report the four scores for each association.

Brand personality list

Jennifer Aaker (1997) developed a set of adjectives that can be used to describe the personality of a brand, much like the personality of an individual (see Keller 2003, chapter 9 p. 448). She distinguishes five facets of brand personality: Sincerity, excitement, competence, sophistication and ruggedness. Two or more adjectives measure each facet. The method consists of asking subjects to what extent each adjective describes the brand.

- Sincerity (down to earth, honest, wholesome, cheerful).
- Excitement (daring, spirited, imaginative, up-to-date).
- Competence (reliable, intelligent, successful).
- Sophistication (upper class, charming).
- *Ruggedness* (outdoorsy, tough).

Example:

Overall, I think that Nike is down to earth
Disagree 1 2 3 4 5 6 7 Agree

In theory, Aaker's five dimensions of brand personality can characterize all US brands (for an extension to Japanese and Spanish brands, see Aaker, Benet-Martínez, and Garolera 2001). However, you may feel that these dimensions are not relevant to your brand and want to measure other associations, or you may want to use consumers' own words to describe one association with the brand. The following set of techniques show you how to do this.

Projective techniques

Unstructured, indirect forms of questioning encourage respondents to project their underlying motivations, beliefs, attitudes, or feelings regarding the issues of concern (for more details, see Malhotra 1996). Consumers usually see an incomplete stimulus (e.g., a sentence) and are asked to complete it. Alternatively, they see an ambiguous stimulus and are asked to make sense of it. There are three types of projective techniques:

Association techniques: Consumers see a stimulus and are asked to respond with the first thing that comes to his or her mind. To elicit multiple attributes, you can use the methods at varying levels of abstraction, starting from the brand down to the attribute.

Start with the brand:

- When you think of Nike, what comes to mind? What does Nike mean to you?

Continue with product attributes:

- What does the air pocket evoke for you?

User:

- Who is the typical user of Nike? (ask for demographics and lifestyle)

Usage imagery:

- When would you use Nike? (ask for occasions and moods)

Brand personality:

- If Nike were a person, what would its personality be like?

Feelings and experiences:

- If I say Nike, what kind of feelings does it evoke?
- 1. *Construction techniques*: This requires the respondents to construct a response in the form of a story, dialogue, or description in a less structured form than completion techniques.
 - Picture response techniques: Respondents are asked to tell stories of the pictures shown.
 - Cartoon tests (or bubble drawings): The respondents are asked to indicate what one cartoon character might say in response to the comments of another character.
- 2. *Expressive techniques*: Respondents see a verbal or visual situation and are asked to relate the feelings and attitudes of other people to the situation.
 - Role playing: Respondents are asked to play the role or to assume the behavior of someone else.
 - Third-person techniques: Respondents are presented with a verbal or visual situation and are asked to relate the beliefs and attitudes of a third person rather than directly expressing personal beliefs and attitudes. This person can be entirely hypothetical (e.g., "Imagine that a Martian visits a Nike store, what would he tell his friends when he goes back home?").

Laddering Method

Laddering methods are a useful way to elicit the higher-order benefits and values offered by the brand beyond immediate product, user, or usage-related attributes (for more, see Reynolds and Gutman 1988). It works by asking consumers to explain why the first elicited associations (e.g., a product attribute) are important for them (thus eliciting the benefits) and then why these benefits are important (thus eliciting terminal values).

Zaltman Metaphor Elicitation Techniques: ZMET

Given that over 80% of all human communication is nonverbal, this technique uses qualitative methods (e.g., a personal interview) to elicit the metaphors, constructs, and mental models that drive customers' thinking and behavior (see Zaltman and Higie 1993 and Figure 9-12 p. 470 in Keller 2003 for an example of consensus map).

Procedure:

- 1. Recruit a group of 20 or so individuals to participate in a research study that requires them to take photographs and/or collect pictures that indicate what the brand means to them.
- 2. Perform a one-to-one interview as a guided conversation using the following steps: storytelling, missed images, sorting task, construct elicitation, the most representative picture, opposite images, sensory images, mental map, summary image, vignette.
- 3. Identify key themes or constructs, code the data, and assemble a consensus map involving the most important constructs.

1.3 Evaluating the strength of each association

Strength

To simplify, one can assume that all associations are equally important. However, this assumption may not hold, especially if you used a small sample of non-representative consumers in the elicitation phase. In general, researchers use the first data collection to assemble a list of associations and then conduct a second study, administered on a larger sample of representative customers, to assess the strength of each association, i.e., the extent to which the brand is associated with each element (see Keller 2003, Chapter 9). To do that, simply ask consumers to rate whether they agree that each brand is associated with each element (e.g., "INSEAD is international" 1 completely disagree to 7 completely agree). If you cannot collect data on a second sample of consumers, you can use the data from the first data collection and measure the strength of each association by computing the percentage of respondents who elicited it or by computing the average rank order of the association (strongest associations are elicited first).

Favorability

The favorability of most associations is straightforward. However, some associations may be ambiguous (e.g., is associating a brand with country X positive or negative?). In these cases, you may want to measure the favorability of each association and then report positive and negative associations separately.

In general, I think that "softness" is								
Good	1	2	3	4	5	6	7	Bad
Pleasant	1	2	3	4	5	6	7	Unpleasant

2. Brand Equity

2.1 Definition

Brand equity is defined as the differential effect that brand awareness and brand associations have on consumer response to the marketing of that brand. The marketing includes advertising, distribution, pricing and promotion as well as new products and brand extensions (for a review of concepts and methods, see Keller (2003) Chapter 10 and Agarwal and Rao 1996).

2.2 Methods

Self-reports

Overall brand evaluation (also known as attitude toward the brand):

What do you think	k of?							
Unappealing	1	2	3	4	5	6	7	Appealing
Low quality	1	2	3	4	5	6	7	High quality
Unpleasant	1	2	3	4	5	6	7	Pleasant

Purchase intentions: Likelihood of buying the brand or likelihood of switching from the brand to another brand.

	I will certai		in the ne	ext thre	e month					
	Disagree							7	Agree	
Purch	nase behavior:									
	I am extrem	ely loya	al to							
	Disagree			3	4	5	6	7	Agree	
	I buy									
	At every purchase occasion, from time to time,									
	(circle most	approp	oriate ai	nswer)						
Custo	mer satisfacti	on:								
	I am fully so	atisfied	with							

Disagree 1 2 3 4 5 6 7

Experiments

Blind testing:

Have two groups of consumers make choice decisions, one group with the branded product and the other group with the unbranded product. Alternatively, you may brand the target product with its actual brand or with a competitor's brand and compare the results.

Agree

Dollarmetric

- Brand X is priced at .
- How much extra would you be willing to pay to obtain brand *Y*?

Conjoint analysis

Conjoint analysis is a widely-used technique that measures the value of each product attribute (e.g., technical attribute, warranty, price level, the brand, etc) from people's overall choices or evaluation. The positive aspect of conjoint analysis (also called trade-off analysis) is that consumers are not asked to directly evaluate the importance of each attribute but rather to make choices between bundles of attributes (e.g., products), which is something that they are used to doing. Measurement brand equity is not the primary use of conjoint analysis, which is

most often used to test and forecast the market share of new products. For a complete description, see Keller (2003) chapter 9 and Dolan (1990).

Hedonic regression

The purpose of hedonic regressions is to explain the price of a product on the basis of its attributes. To run a hedonic regression, you need actual prices of all or most of the products in a given product category plus knowledge of their attributes (e.g. for bikes, number of speeds, size, weight, material, etc). You can also use "objective" measures of quality from Consumer Reports (e.g., for microwave ovens, speed, reliability, convenience, etc). After running the regression, you obtain estimates of the value of each attribute. You can then compute a predicted price for each brand. The difference between the predicted and the actual price is called the price premium of the brand and is a measure of brand equity. For instance, the same product (same attributes) sold under two different brand names will have a different price premium depending on the equity of each of the two brands.

For example, Randall, Ulrich and Reibstein (1998) used the following regression to explain the prices of mountain bikes:

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Ln(price) = 5.21 + 0.08 \ln(chromoly steel frame material) + 0.22 \ln(butted chromoly steel frame material), + ... etc.
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Here the manufacturer's suggested retail price is used. The attributes (chromoly steel frame material) are binary (0/1) variables. Because of the double-log form, the coefficients can be interpreted as elasticities of prices with respect to attributes. For example, the use of chromoly steel frame material results in an 8% increase in the price of the bike.

Expert's opinions

Interbrand's evaluation of brand equity use seven criteria to assess the <u>volatility</u> of the earnings attributable to the brand (Interbrand 2002).

-	Market	(10%)	Type, size, volatility, dynamics and barriers to entry.					
-	Stability	(15%)	Longevity, coherence, consistency, identity risks of the					
			brand. Leadership (25%) Market share,					
	awareness, po	sitioning, comp	petitor					
			profile.					
-	Trend	(10%)	L-T market share performance, sensibility of brand					
			plans, competitive actions.					
-	Support	(10%)	Consistency of message, spend above vs. below line,					
			brand franchise.					
-	Geography	(25%)	Geographical spread, international positioning, prestige,					
			ambition.					
-	Protection	(5%)	Trademark registration, litigation, disputes.					

3. Brand value

3.1 Definition

Brand value is the financial value of the brand. The ability to value and put a price tag on a brand's value may be useful for a number of reasons: Mergers and acquisition, brand licensing, fund raising, brand management decisions. Why do we need to include brand value on the balance sheet?

- 1. The value of liquidity in case of a forced sale.
- 2. The book value for company accounts.
- 3. The value needed in order to encourage brands to lend the company money.
- 4. The value of losses or damage to the worth of the brand.
- 5. The value in order to estimate the price of license.
- 6. The value for management control which depends on the behavior encouraged in managers.
- 7. The value for the partial sale of assets.
- 8. The value in case of a takeover or of a merger and acquisition.

3.2 Methods

There are two main valuation approaches (for more information, see Ailawadi, Lehmann, and Neslin 2002; Simon and Sullivan 1993).

- 1. Cost approach: Brand equity is the amount of money that would be required to reproduce or replace the brand (including all costs for R&D, test marketing, advertising, etc).
- 2. *Market approach*: Brand equity is the present cash flow value derived from the brand's future earnings.

For example, Interbrand's (2002) method boils down to: (1) Identifying the brand's future earnings, and (2) capitalizing the earnings by applying a multiple (in fact, a discount rate which depends on the brand's equity). In their method, brand earnings are calculated by subtracting a number of quantities from brand sales: (1) costs of brand sales, (2) marketing costs, (3) variable and fixed overheads, (4) remuneration of capital charge, and (5) taxation.

4. Recommendations for a brand audit report

There are numerous ways of measuring consumers' perceptions and responses to brands. The key is to use multiple techniques because each has its own value. I recommend to always measure brand awareness, to use at least two methods to elicit brand associations (e.g., free elicitation and laddering technique, or free elicitation and brand personality), and at least two other methods to measure brand equity (e.g., dollarmetric method and perceived quality). Similarly, it is advisable to use a cost approach and a market approach to measure brand value. Finally, most of the measurement methods described here do not have an absolute meaning and some are only ratio scales (e.g., they do not have a "true" zero). To be meaningful, the results

of these methods must be used in comparison with a benchmark. For example, knowing that 50% of the target consumers know you brand is useless, unless you know what the typical awareness score is in the category. One should therefore measure the dimension studied for the target brand but also for its direct competitors.

A typical brand audit report should include the following information.

- 1. A one-page executive summary on the findings of your audit with recommendations on how to improve the dimensions studied.
- 2. An brief explanation of the problem facing the brand and of how the audit will help.
- 3. A description of the measurement instrument and procedure. For instance, if you choose to conduct a survey, include a copy of the questionnaire, say how many people were surveyed, how the sample was chosen. If you are using qualitative methods, include a copy of the interview guidelines (e.g., stimuli used, questions asked, etc). If you are using quantitative analyses, provide full statistical outputs. In all cases, include some information on the target sample and on the actual sample used.
- 4. Results and discussion of these results.
- 5. A discussion of the value of these techniques for managing a brand and of their ease of implementation. What difficulties did you encounter? What do these difficulties tell you about the usefulness of the method used?

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