

How to measure brand emotion

Larry Percy and Flemming Hansen, Copenhagen Business School, and Rolf Randrup, TNS/Gallup, describe how to measure emotion associated with brands

ONE OF THE THINGS now known about memory is that when we are experiencing something, if it is fully processed, all of its component parts will be stored in various parts of our memory. One of the components of that experience that will be stored is any emotion that is associated with it, in the non-declarative emotional memory (part of the amygdala). When a memory is recalled, all of the component parts are reunited from the various areas of the brain, and that includes the emotional memory associated with the experience.

What this means is that our experiences with brands, as retained in memory, will include our emotional associations with the brand. In a very real, practical sense, if we can measure the emotions associated with a brand, this will enable managers to understand it better, position it better and, importantly, work towards optimising positive emotional associations in memory.

What is emotion?

We certainly all experience 'feelings' which we think of as emotions, and the two are certainly related in most cases. But the concept of emotions goes beyond this and is perhaps best understood within the context of something called 'affect programme theory'. This deals with a specific range of emotions that generally correspond to Damasio's (1, 2) idea of the six primary emotions: surprise, anger, fear, disgust, sadness and joy. These

primary emotions are a basic part of being human, and appear to be unrelated to culture. There is great similarity in the way in which they function, worldwide.

This is very important because it means that primary emotions are the same for everyone. While the basic emotions comprising the affect programme are fundamental to all humans, Damasio believes that secondary emotions (like embarrassment or guilt) are to some extent acquired, and triggered by things people have come to associate with that emotion through experience. Because of this, it makes sense to think about 'emotions' as the base neurological process, and emotional response as 'feelings' or how we experience and articulate our emotions.

Even though human emotions (especially primary emotions), through the feelings to which they give rise, have limited involvement in the actual cognitive processes controlling long-term action, they nonetheless will be strongly integrated into the cognitive processes leading to long-term planned action. In a very real sense, emotional responses 'frame' conscious cognitive processing. This is why if we understand the emotional associations with a brand in memory, advertising (or other marketing communication) that elicits emotional responses consistent with the brand should help reinforce positive brand attitudes as well as purchase intentions formed as a result of that advertising.

This works because feelings aroused

24-item emotion scales

Desire	Pretty	Doubt
Sexy	Expectant	Boring
Arousal	Pride	Sad
Stimulate	Success	Pain
Happy	Aggressive	Loneliness
Fine	Smart	Worry
Calm	Relief	Annoying
Fresh	Critical	Fear

by emotions are part of a cognitive process that actually leads to logical thinking, even though emotional memories are stored out-of-consciousness. Damasio has argued that our reasoning is significantly influenced by both conscious and unconscious signals from the neural networks associated with emotion. Everybody acquires emotional memories related to experiences with different things (for example, brands), and these emotions are unconscious and independent of any conscious memories or understandings we might have of those same things. So when we think about something, while we are conscious of what we 'know' about it, our thinking will also, through feelings, be informed by our conscious emotional memory.

Measuring emotion-brand associations

As shown, there are emotional memories associated with everything we experience, and this includes brands. If we can come up with a reliable and usable battery of scales to measure the emotions and related feelings associated with a brand, we will have a powerful tool for understanding brands and also how to position them to capitalise upon positive emotional associations in the brand's marketing communication.

Towards that end, an ambitious study was undertaken where we looked at 16 product categories, covering 64 brands. Each of the four quadrants of the Rossiter-Percy (3) grid was represented (see Table 1). In choosing the categories and brands, the leading brands in the

TABLE 1

Categories within the Rossiter-Percy grid included in the study

	Type of motivation (Net emotional response strength)	
	Informational (negative)	Transformational (positive)
Low involvement	Shampoo Painkillers Detergents Gasoline 3.36	Coffee Cereal Bread Cosmetics 6.14
High involvement	Cell phones Computers TV sets Banks 4.89	Perfume Cars Airlines Amusement parks 6.21

Larry Percy is a marketing communications consultant and a visiting professor. He has over 35 years' experience in strategic planning at major advertising agencies.

Flemming Hansen is research director of the Center for Marketing Communication at Copenhagen Business School.

Rolf Randrup is development director of TNS-Gallup in Denmark. He was director of the media and communications section of TNS-Gallup for more than 20 years.

category were included, along with one or two others (where available) with unique images. A random sample of consumers was pre-recruited by telephone and asked to participate in a study of feelings for brands and product categories. Subjects were randomly assigned to four groups, each representing four of the 16 categories, and mailed a self-administered questionnaire. Fieldwork was carried out by TNS/Gallup in Denmark. The response rate was 67%.

Emotion scales

In the psychology and consumer behaviour literature, and even in the marketing literature (4), there are numerous batteries of scales for 'measuring' feelings (sometimes labelled emotions). Initially we considered simply using an established set of scales, but we were concerned that when people talk about their feelings for things like ads or brands they may not mean exactly the same thing that one might infer from a particular scale. If you are talking about your feelings towards, say, an ad, are you really 'happy' or 'sad' or 'angry'? Perhaps either, but more than likely people probably just pick the feeling word that comes closest to describing their feelings.

To develop a set of scales for measuring the emotions associated with ads and brands, to be certain that we really understand what people want when they

TABLE 3

Emotional scores for shampoo brands

Brand	Positive emotion	Negative emotion	Net emotional response strength
Dove	4.981	1.604	3.377
Head & Shoulders	2.376	2.996	-0.620
Sanex	6.833	1.281	5.552

respond to a feeling scale, we conducted a pre-test using ads as stimuli. Four different ads representing the four quadrants of the Rossiter-Percy brand attitude strategy grid were exposed to a sample of graduate students at the Copenhagen Business School. Among others, questions were asked as to what emotions or feelings they were experiencing as they read the ad. Later they were asked to use a battery of feeling word scales culled from the literature. An analysis was conducted relating the expressions of emotion or feeling experienced to the responses checked from the battery of scales. This resulted in a set of 24 items (box, left).

Analysis

One of the goals of the analysis was to come up with a reduced set of scales that would be reliable and easily used in advertising and brand research. Towards that end, a factor analysis of the profiles for each brand and each category was conducted. After reviewing the various rotations, a decision was made to

concentrate on two-factor solutions that reflected in each case a strong positive-negative distinction. As an example, the original principal component analysis for Dove shampoo yielded a seven-factor solution, using the traditional cut-off of an eigenvalue of one. But the two-factor solution accounted for 41% of the total variance and clearly identified a positive vs negative set of emotional responses. By eliminating those items that did not load highly on either factor, a set of 14 scale items was selected and re-factored. By then looking at only the items with high loadings, we arrived at a battery of ten items (six positive and four negative) (Table 2). A similar procedure was conducted for each of the 16 categories and 64 brands.

Scores were then calculated for each subject based upon the intensity of felt emotion (for each 'checked' feeling statement subjects ranked how strongly they felt it applied on a six point scale) and the factor loadings, to produce a positive and negative score for each brand, category and quadrant from the Rossiter-Percy grid. Table 3 illustrates the scores for the brands in the Shampoo category, these scores make it possible to calculate a net emotional response strength (NERS) score by deducting the negative scores from the positive scores.

Insights from measuring emotion-brand associations

Looking at the emotional associations people have with brands, as we have suggested, can provide important insights into how people perceive brands. Looking again at the scores in Table 3, we see that people have strong positive emotional ▶

TABLE 2

Related component matrix for Dove shampoo

	Factor 1	Factor 2
Desire	0.585	0.004
Stimulating	0.737	0.019
Happy	0.900	0.004
Fine	0.680	0.032
Fresh, healthy	0.752	0.044
Pretty	0.822	0.011
Critical	0.004	0.753
Doubt	0.029	0.719
Worry	0.001	0.539
Annoying	0.014	0.898

Note: Explained variance 56%

associations with both Dove and Sanex. But in the case of Head & Shoulders, we find that both positive and negative emotions are associated with the brand in memory. Clearly, people's emotional experiences of Dove and Sanex are quite different from their experience of Head & Shoulders. (Of course, we are using the term 'experience' in its broadest sense, not to mean actual usage.) Looking at the emotional intensity scores for the shampoo category, we find that Sanex, and to a somewhat lesser degree Dove, reflect the feelings associated generally with the category.

The explanation for the atypical Head & Shoulders scores is found when we look at users vs non-users (see Table 4). Non-users associate negative feelings with the brand, but users have very positive emotional associations with the brand. Clearly, the non-users mix emotional responses to dandruff with those of the brand. On the other hand, both users and non-users of Dove and Sanex associate positive emotions with those brands. We shall not speculate upon these findings, but they do illustrate how useful measures of emotional associations with brands can be.

One final example will further illustrate this. Table 5 presents the emotional

TABLE 5

Emotional intensity scores for TV set brands

Users vs non-users			
Brand	Positive emotion	Negative emotion	Net emotional response strength
B&O	15.6	2.0	13.7
Philips	9.0	1.9	7.1
Panasonic	7.4	2.0	5.4
Grundig	7.0	2.2	4.8

intensity scores for the television set category. Those familiar with these brands will know that B&O has repositioned the brand in recent years to a more transformational brand attitude strategy, specifically encouraging a more emotional than reasoned reason for buying the brand. Its success is clearly illustrated in the significantly higher positive emotional associations with the brand.

Table 1 shows the average NERS scores for the product categories in each of the four quadrants. The lowest scores are found in the quadrants of problem solving products where consumer motivation is negative. The highest are found where the motivation is positive - pleasure, beauty, fun and so on. This proves that the thinking and structure of

consumer motivation behind the grid is correct and is supported by empirical evidence.

Summary

Emotions and feelings are a key part of human experiences, and will be associated with those experiences in memory. Our experiences with brands, whether in terms of actual use or simply an understanding of them, will have emotional associations linked to them in memory. By measuring the emotional associations with brands, managers will have another important tool for better understanding their brand and for developing advertising communication strategy. ■

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larrypercy@mindspring.com
fh.marktg@cbs.dk
rolf.randrup@tns-gallup.dk

TABLE 4

Emotional intensity scores for shampoo brands

Users vs non-users			
Brand	Positive emotion	Negative emotion	Net emotional response strength
Dove user	1.0	0.1	0.9
Dove non-user	1.1	0.3	0.8
Head & Shoulders user	3.0	0.3	2.7
Head & Shoulders non-user	0.2	0.7	-0.5
Sanex user	2.0	0.3	1.7
Sanex non-user	1.4	0.3	1.1