SESSION 1.1: CHOOSY CONSUMERS AND THEIR PREFERENCES

ESTABLISHING THE STRUCTURE OF BRAND IMAGES FROM A FEATURE-BASED PERSPECTIVE ON MEMORY

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ABSTRACT

A feature-based perspective on memory is applied to brand image. Based on this perspective, two methods, differing in the number of cues provided, are constructed to establish the presence and relevance of image attributes. When applied to beer brands, results indicate that the structure of the memory representation of a brand is dependent of the method applied, and that the structure can differ between brands within one product category. Both findings have implications for the practice of brand image measurement.

INTRODUCTION

Determining the value of a brand, the brand equity, is an important topic in marketing and marketing research nowadays. Franzen (1998) collected about 20 definitions of brand equity and concludes that there is some consensus in the definition of the term. He distinguishes four main components in the definitions of brand equity, which fall into two broad categories: *Financial-economic brand equity*: (1) financial equity: the effects of purchase behavior on market position and financial consequences of a brand; (2) brand value: the financial value of a brand as an immaterial active owned by a company, which can be included in the balance account and which is expressed at a selling option of the owning company. *Consumer brand equity*: (1) psychological brand equity: the effect of brand image on purchase behavior.

The present research aims at consumer brand equity and especially at psychological brand equity. It concerns the way the brand is represented in and retrieved from the memory of a (potential) consumer. A brand image is often conceptualized as a collection of associations linked to the brand. These associations can be of different types like experiences, knowledge, feelings and/or attitudes. Positive brand associations contribute to the value of a brand by yielding a favorable brand attitude and (repetitive) purchase of the brand (see i.e. Franzen, 1998; Keller, 1997; Krishnan, 1996). In order to keep track of the consumer brand equity, managing a brand therefore involves (among other things) measuring and monitoring the brand's image: the advertiser needs to know how his brand is represented in consumer memory. This requires adequate market research. One of the difficulties for the advertiser in deciding how and by whom he should research his brand image, is that almost every market research agency holds its own definition of brand image, and develops a measurement instrument based on this definition. An enormous supply of research methods has resulted from this practice (Bouwman (1999) gathered information on measurement instruments from national and international research agencies, and found well over 70 different methods). By choosing and relying on a particular market research agency, the advertiser will find himself at the mercy of this agency's definition and approach to brand image. Defining brand image is closely related with the researchers' preference for qualitative or quantitative research. The numerous research methods that have been developed can roughly be classified along the qualitative - quantitative dimension (Bouwman, 1999). Qualitative measurements include amongst others face-to-face interviews and projective techniques. Assumed advantage of these techniques is that they are more appropriate to measure abstract, introspective brand knowledge like feelings or brand personality. Quantitative measures use amongst others standardized questionnaires and grids for attribute comparisons over brands, and are especially suitable for measuring more concrete knowledge on for instance product use.

Question is, which research method is appropriate? How can the advertiser (or his advising brand researchers) decide which method is best for his particular brand? To answer this question, we should know what the main building blocks of the memory representation of a brand are, what their nature is, what the relation between them is, and how their content can be measured ideally. Insight in the nature and structure of a brand representation could lead to suggestions for its measurement. For illustration, when a particular brand appears to be represented by mainly concrete knowledge, a quantitative research method would be more appropriate (i.e. less expensive) than a qualitative approach. However, if a brand is represented by rather symbolic brand meanings, a qualitative approach

would be more suitable. This study provides a framework for the establishment of the memory structure of a brand representation by applying a feature-based perspective on memory. Next to that, the present study concerns the differential effect of activation cues provided by research methods with respect to the establishment of this memory structure.

THEORY

In marketing literature the conceptualization of brand image is often based on the notion of associated concepts, in line with the associative network theory (Aaker, 1996; Farquhar and Herr, 1993; Franzen, 1996; Keller, 1993, 1997; Pojesz, 1989). Associative network theory (Anderson, 1983; Collins and Loftus, 1975) assumes that knowledge elements are represented as nodes in memory, which can be linked to each other, forming associations. Following this rather static conception of memory, research on the memory representation of a brand involves the mapping of (all) knowledge concepts and their associative links. In this paper, a feature-based perspective on the memory representation of concepts is applied to brand image and brand image measurement. The feature-based perspective stems from cognitive memory research on classification and categorization processes of stimuli, and is used here as an umbrella term including theories like prototype theory (Rosch, 1975; Rosch and Mervis, 1975), scheme representations (Schacter, 1991) and frame theory (Barsalou et al., 1993). In the feature-based perspective a concept is assumed to be represented in memory as a 'scheme', or a 'frame', consisting of a set of attributes. Attributes are the 'building blocks' of the concept representation. Each attribute is defined by a value. For instance, an attribute of the concept 'bird' is 'mobility'. Values on this attribute can be 'walks', 'swims' or 'flies'. Most attributes within a concept have a default value. This default value is the 'most common' value of the attribute for a particular concept. The combination of default values on attributes constitutes the 'prototypical' exemplar of the concept. For instance, a prototypical bird flies, lives in trees and sings. Also, relations between attributes are specified. In the bird case, there is a relation between the attribute 'mobility' and 'living environment' for living in trees is enabled by the ability to fly. The concept is a member of a higher order category: a bird is an animal. The higher order category determines the classification of the concept and serves as core of the memory representation. An important aspect of this memory approach is that all attributes are marked for relevance. Some attributes are more relevant to the concept than others. For instance, the attribute 'mobility' is a highly relevant attribute to birds, because the (default) value 'flies' discriminates a bird from other animals to a great extend. An exemplar of a concept (say the exemplar 'sparrow' of the concept 'bird') is represented in memory by an exemplar-specific set of attributes within a higher order category ('animal'), an exemplar-specific configuration of the attribute relevancies, and by unique values on these attributes.

The memory representation of a brand can also be described following the feature-based perspective on knowledge representation by stating that a brand is represented by a set of brand attributes within a higher order category. What differentiates one brand from another in memory is the classifying higher order category, and a brand-specific configuration of, and unique values on relevant attributes. Stated this, in brand research we should try to indicate these attributes and determine the category. With respect to the attributes, a number of authors (i.a. Aaker, 1996; Franzen, 1996; Kapferer, 1995; Keller, 1993, 1997; Restall and Gordon, 1994) have proposed a typology of brand image, and indicate different types of associations related to brands, which can be considered as attributes. The combination of these typologies (Timmerman, 1997) resulted in an inventory of brand representation attributes, an exhaustive list of 51 attributes. The 51 attributes can be categorized in two main product related attribute groups (product characteristics and product use), five main brand related attribute groups (brand characteristics, psychological/symbolic brand use, market, origin and advertisement) and three consumer related attribute groups (product attitude & purchase behavior, brand attitude & purchase behavior and personal reference). The nature of these attribute differs: some are rather concrete, reflecting plain knowledge. For instance, one knows the price of a product, the way of using a product, or the country of origin of a brand. Other attributes are more abstract, and have a more psychological or symbolic nature. Abstract attributes, like for example brand personality, are mainly derived from introspection: one can imagine a brand to have a kind of personality by attributing human personality characteristics to the brand. The inventory of brand representation attributes serves as the total set of possible building blocks of the brand representation. Assumed is that a subset will underlie a specific brand. With respect to the higher order category, assumed is that the categorization of brands in memory is based on product concepts (Franzen and Hoogerbrugge, 1996; Nedungadi, 1990; Timmerman, 1997). In most cases these will be product concepts like beer, cereals or diapers, but it can also be concepts like department stores, electricity companies, or travel agencies.

When researching the memory representation of a brand from a feature-based perspective, three stages can be distinguished. First establish what the higher order category of the representation is. Knowing under what kind of product category the brand is classified provides a first indication of which attributes might underlie its representation. For example, when the product category is a consumer good like cigarettes, a main attribute group like product characteristics (including attributes like taste and product appearance) will at forehand be more relevant to brands within that category than if the product category would be airline services. Second stage is to establish which attributes are 'present' in memory and what their nature is (concrete or abstract). The presence of attributes must be derived from the elicitation and interpretation of attribute values. At this point, the nature of the method of eliciting attribute values can be of great influence on the obtained results (Ottati, 1997). To illustrate, suppose a brand image is researched by applying a visually oriented method like collage making (e.g. Zaltman, 1997; Zaltman and Coulter, 1995). The resulting brand image then will most probably include psychological or symbolic attributes, because these are more likely to result from such a method than plain knowledge. But one can wonder if this result is an actual measure or mere a creation of these attributes. On the other hand, using for instance verbal instructions or standardized questionnaires yields the possibility that attributes of a more abstract nature are not recorded, because these are harder to verbalize and thus do not easily result from these methods. Next to the nature of the method, the use of cues for the elicitation of attribute values is also a relevant topic in applied market research. Using too many, or too explicit cues also yields a possibility that attribute values are created, instead of activated. On the other hand, too less cues yields the possibility that attribute values are not activated at all although they might be present in memory. Summarizing, with respect to the establishment of the presence of attributes, the nature and the number of cues incorporated in the measurement should be taken into account. Once we have established the presence of certain attributes in memory, the final stage is to search for their relative relevance. Especially for those attributes that have the highest relevance for the brand under study. An important aspect of the feature-based perspective is that the relative relevance of the attributes distinguishes exemplars within a category. If attributes are equally relevant, unique values will distinguish the one exemplar from another. Brands within a product category are thus distinguished by differing relevancies of attributes, and by differing unique values on attributes which are equally relevant to them.

RESEARCH

Two methods are developed to establish the structure of brand image representation in consumer memory, a free list method and a card method. In both methods verbal cues (in form of written words) are presented to activate attribute values. With respect to the number of cues the minimal and the maximal are chosen: in the free list method, respondents are only presented with one cue: the brand name. The free list method intends to obtain values on attributes by asking the respondent to list all occurring thoughts. Responses on this method are ranked on order and frequency of appearance to obtain an implicit measure of the relevancy of the attributes. By using only one cue, the least aid is given to the respondent for activating attribute values, and thus the thread of creating attribute values due to the method is low. A drawback is that some attribute values might not or only partly be responded, because they are not activated by this one cue. In the card method, respondents get a maximum number of cues, reflecting all possible attributes. Respondent is asked to list occurring thoughts. By providing a lot of cues, the respondent is actively lead through a range of attributes, and probably activates a lot of possible existing attribute values. An explicit measure of the relevance of the attributes is obtained by asking respondents afterwards to select and rank cards which they consider to be representative for the image they hold of the brand.

The two methods have been applied to two beer brands. To summarize in short, the results of the free list method show a tendency to report mainly concrete attributes for both brands. Assuming that the frequency and order of spontaneously occurring thoughts are valid measures, these beer brand representations would each be comprised of concrete attributes like advertisement, organization, packing of beer, social use environment and competition. Based on these findings, one could suggest that applying a quantitative method for the comparison of the brands on concrete attributes would be appropriate. However, looking at the results from the card method, a difference in the structures of the representation of the brands appears. When respondents are asked to select cards that represent the image they hold of the brand, one beer brand still seems to possess high relevance for concrete attributes like average user, brand personality, brand ideology and uniqueness. Based on this result, one could no longer suggest comparing both brands by applying either a quantitative method or a qualitative method, since each brand will be biased with respect to the other brand by the applied method.

DISCUSSION

A psychological foundation for research on (the structure of) the representation of brands in memory is provided by applying a feature-based perspective. This perspective has its merits in that it provides an analytic framework in which research can be conducted. Instead of presenting a brand image by mere mapping associated concepts (a common practice in market research), research within the proposed perspective focuses primarily on the fundaments of the memory representation by conceptualizing brand associations as attribute values. Based on these values the presence of underlying attributes is derived and their relevance for the brand representation can be established. The feature-based perspective provides criteria for comparison of research methods. Obtained results so far indicate an impact of the measurement method on the structure of a brand representation: each of the two applied methods provided a different image of the same brand, indicating that brand image is not a stable property in itself, but method-dependent. Next to that, the feature-based perspective provides criteria for appropriate brand comparisons. Results obtained by the card method indicate that there can be a difference between the structures of the memory representation of brands, which are often assumed to be comparable because they belong to the same product category. This implies that with the application of standardized measurement instruments (for example methods based on personality scales) for the comparison of brands, one should acknowledge that some brands might be biased over others when the measurement method appeals to attributes that are specifically relevant to them, and less or not at all relevant to others.

Brand image research should therefore start from scratch by a first establishment of the most relevant attributes for the brand under study, followed by an investigation of the values on these attributes. Comparative brand image research should also start by establishing the most relevant attributes for each brand. The comparison should be based on attributes, which are uniquely relevant to each brand, followed by a comparison of unique values on equally relevant attributes. Whether the research purpose is comparative or not, one should always acknowledge the (shortcoming or creating) effect of the nature of, and number of cues incorporated in the research method on the activation of consumer knowledge.

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