

Developing Cue Theory For Explaining Product Mental Image

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Abstract: Product mental image cues are important for consumers to perceive product quality and product value. However, little research has been done on constructing a theoretical framework of product mental image cue utilization in different situation. Based on cognitive psychology and compound cue retrieval memory theories. We examine the scope of the current cue theory in literature and analyze its shortcomings. Based on the literature review, we explore some possible research directions.

Keywords: Product mental image; Cue theory

Introduction

From a theoretical point of view, products can be conceived as an array of product and product-related cues (Kaul, Rao, 1995). Each cue provides a basis for developing various impressions of the product itself (e.g. Darwar & Parker, 1994; Jacoby, Olson & Haddock, 1971; Richardson, Dick & Jain, 1994; Zeithaml, 1988, cited by Acebron and Dopico, 2000). Therefore, cues are some attributes that can help consumers to develop various impressions of the product itself, or more professionally say-to develop certain product mental image in consumers/ mind. To more clearly delineate the cues used in product mental image analysis, we introduce the concept of product mental image cues, here defined as cues by which consumers judge or perceive product quality or value and form certain product mental image.

According to the previous study of product mental image, we know that very often, based on different scopes of product image cues, product mental image can be a reconstruction or “echo” or can be entirely novel (imagination) of product quality or product value. The above three situations represent that based on different kinds of image cues, consumers will perceive a product in different ways. Appropriate ample image cues will lead to consumers/ echo perception of a product. Limited image cues might result in consumers/ reconstruction perception of a prod-

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uct and inappropriate few image cues or no image cues might incur consumers/ entirely novel (imagination) perception of a product. Although it is clearly very important for markets to create a certain mental image by using the appropriate ample image cues, few researches refer to the appropriate types and scope of image cues, and furthermore, many marketers feel disappointed that the actual product mental image in consumers' mind is often far from what they expected. Therefore, it is necessary for researchers to study how to reduce or close the "gap" between actual product mental images in consumers' mind and the one that a firm wants to build.

In section 2 this paper will give a brief review on the present theoretical study related to the meaning of product mental image, the scope of product mental image cues and analyzes some existed relevant problems. Based on the problem analysis, this paper in the last will explore the possible future research directions on the new theory.

1.Literature Review

1.1 The meaning of the product mental image

What does the product mental image really mean? This question has not been in fact clearly answered for many years. Numerous researches have dealt with the study on the consumers' perception of product quality, which is usually referred to as perceived product quality, while few researches have involved in the study on perceived product value. But it is uncommon that almost no researches have paid an attention to the study on the combination of perceived product quality and perceived product value. Some researchers have explored the relationship between product information, product mental image (product knowledge) in terms of the theory of means-end chain, which provides theoretical enlightenment for us to have a deeper understanding the scope of product mental image.

The means-end chain theory has been proven to be very useful in understanding consumer perception of certain product quality or product value (Peter and Olson, 1987; Valette-Florence and Rapacchi, 1991; Aurifeille and Valette-Florence, 1995; Pieters et al., 1995, cited by Hofstede et al., 1998), The theory relates the product to the consumer by positing a hierarchical cognitive structure involving linkages between attributes of product, consequences of product uses, and values of consumers. Product information is retained in memory at several levels of abstraction (Cohen 1979; Myers and Shocker 1981; Olson and Reynolds 1983; Young and

Feigen 1975, cited by Zeithaml, 1988). The simplest level is a product attribute; the most complete level is the value or payoff of the product to the consumer (Zeithaml, 1988).

A lot of researchers (Young and Feigen 1975; Rokeach 1973; Howard, 1977; Mayors and Shocker 1981; Geistfeld, Sproles, and Badenhop, 1977; Cohen, 1979; Gutman and Reynolds, 1979; Olson and Reynolds 1983; cited by Zeithaml, 1988) proposed that perceived product quality is second order of means-end chain. Thus, the means-end chain leads to two levels of basic perception of a product; product quality level and product value level. Product mental image includes both perceived product quality and perceived product value. Product mental image is therefore product quality mental image and product value mental image. According to cognitive psychology and compound cue retrieval theories, some information cues can retrieve knowledge from consumer memory and then consumers use the retrieved memorial knowledge as criterion to judge or perceive a product as “goodness” or “badness”. Therefore product mental image is an integral component of product quality or value in consumer/s (Keller, 1993; Roth, 1995).

Conclusion

The above literature review shows that product mental image rationally can be inferred as one that refers to either perceived product quality or perceived product value. This conclusion, we assume, that will lead to a deeper understanding about how product mental image form in consumers’ mind and how and what consumers use to perceive a product.

1.2 The scope of product mental image cues

From literature study, numerous researches have been devoted to studying the relationship between product cues or product-related cues and consumers/ perception of product quality. A considerable evidences show that certain product and product-related cues are important signals for consumers to perceive product quality when making purchase decisions (e.g. Allison & Uhl, 1964; Makens, 1965; McConnell, 1968; Stafford & Enis, 1969; Valenzi & Andrews, 1971, cited by Peterson and Jolibert, 1976). Yet we fell uncommon that little research has been devoted to the conceptualization of the systematical framework of product cues used in judging product mental image. Cue theories on consumer perception analysis usually make scant mention of the mental image cue utilization. Even striking, the present product cue theory studies have touched upon many aspects of cue application on analyzing perceived product quality, but they usually seldom set foot in the study of

the theoretical basis of product cues, the scope and classification of image cues and the mechanism of cues in consumer information processing.

The question needed to solve for us is how to define the scope of the concept of mental image cue. There is one inherent assumption on the existent cue theory used in analyzing consumer perception of product quality: cues that consumers use to perceive product are either product-itself cues (e.g. appearance, durability) or product-related cues (e.g. brand name, product price). Few researches have ever demonstrated the validity of the scope of image cues if they are only limited to product-itself and product-related. Some evidences show that some non-product-related cues, such as deal frequency (Kriwshna, 1991), stock return (Aaker and Jacobson, 1994), pioneering advantage (Carpenter and Nakamoto, 1994), etc., can also play important role in consumer's perception of product quality or value in some situations. Some researchers (Peterson & Jolibert, 1976) point out that in addition to product-related cues, there is another class of factors, consumer characteristics, which can potentially influence quality evaluations. For example, degree of product familiarity or usage, or even psychological characteristics, may affect quality evaluations. Graeff (1995) stated that consumers also form personal interpretation by using situational or contextual information that go beyond the advertised product information. He emphasized that this is the basic idea behind means-end chain theory. According to the memory association theory (Krishnan, 1996; Steenkamp, 1998) and the arousal potential theory (Steenkamp, 1996), there exists a network of concepts in consumers' mind. Consumers associate one idea with another. When short-term memory calls for certain information to be drawn from long-term memory, the network organization comes into play. Once one idea is activated, all the other ideas that are connected with it become more available to be activated. Thus, information cues used for perception of one object possibly not only come from the object itself, but also from the environment around the object.

Those new findings draw a new research issue on how to comprehend the concept of product mental image cues. It is one of the basic important questions for us to answer in order to have a further study image cue utilization in judging consumers' perception of a product.

Conclusion

Based on the above literature study, it is rather theoretically logical for us to conclude that the product mental image cues that consumers use to perceive product quality or value include not only product-itself cues and product-related cues but non-product-related cues. This conclusion will be helpful for us to develop our new

theory of product mental image cues.

2. Future Research

The forgoing literature studies show that it is clearly important to develop a new classification theory of product cues to explain consumers' perception of a product. We assume that a new classification of product mental image cues in terms of consumer characteristics and stimulus characteristics will be very helpful for researchers to build a systematic framework of cue utilization in different situation. In the following research, we will explore the new classification of product mental images based on the theory of Olson's theory on the intrinsic/extrinsic dichotomy of attribute cues and The Elaboration Likelihood Model, Which have a sound theoretical background of consumer characteristics and stimulus characteristics.

Another problem is about how to construct framework of cue utilization in different situation (e.g. business market and consumer market, high-involvement and low-involvement behaviors, etc.). The previous researches usually focus on two kinds of research questions: The first kinds of researches usually centered on how certain known specific product cues influence consumers' perception of certain specific product quality or value. The second kind of researches usually concentrated on what kinds of unknown specific cues consumers use to perceive certain specific product quality or value of certain specific product. However, few researches involve in exploring the mental image cue utilization on how consumers perceive general types of product by using different cues and what certain cues consumers use when they judge different types of products. Some researchers (cf. Jacoby, Olson, & Haddock, 1971; Olson, 1972, cited by Szybillo and Jacoby, 1974) argue that one judgment usually of considerable importance to the consumer is the product's quality, and more than a score of published studies have examined the efforts of specific cues on the judgment of perceived quality. Little thought, however, has been given to developing a conceptual framework for expressing how and when specific cues or types of cues operate to form the composite quality judgment (Szybillo and Jacoby, 1974).

From section 2 of this paper, we know that very often, product mental image can be a reconstruction or "echo" or can be entirely novel (imagination) of product characteristics. For each sensory, functional or social product mental image, whether they belong to reconstruction, "echo" or entirely novel, we assume that, depends on what kinds of image cues that a firm offers to consumers to perceive. It

is crucial to portray the product mental image as expected for a firm's success in a fierce competitive market. We will in the near future study that what appropriate cues a firm should use in certain situations so that more "echo" product image will be created in consumers' mind.

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