Available online at www.sciencedirect.com
SciVerse ScienceDirect
Journal of Consumer Psychology 22 (2012) 143 – 153
Journal of CONSUMER PSYCHOLOGY

New scanner data for brand marketers: How neuroscience can help better understand differences in brand preferences

Vinod Venkatraman [a,*], John A. Clithero [b], Gavan J. Fitzsimons [c], Scott A. Huettel [d]

[a] *Department of Marketing, Fox School of Business, Temple University, Philadelphia, PA 19122, USA*
[b] *Division of the Humanities and Social Sciences, California Institute of Technology, Pasadena, CA, USA*
[c] *Department of Marketing, Fuqua School of Business, Duke University, Durham, NC, USA*
[d] *Department of Psychology and Neuroscience, Duke University, Durham, NC, USA*

Received 17 November 2011; received in revised form 24 November 2011; accepted 28 November 2011
Available online 24 December 2011

Abstract

A core goal for marketers is effective segmentation: partitioning a brand's or product's consumer base into distinct and meaningful groups with differing needs. Traditional segmentation data include factors like geographic location, demographics, and shopping history. Yet, research into the cognitive and affective processes underlying consumption decisions shows that these variables can improve the matching of consumers with products beyond traditional demographic and benefit approaches. We propose, using managing a brand as an example, that neuroscience provides a novel way to establish mappings between cognitive processes and traditional marketing data. An improved understanding of the neural mechanisms of decision making will enhance the ability of marketers to effectively market their products. Just as neuroscience can model potential influences on the decision process—including pricing, choice strategy, context, experience, and memory—it can also provide new insights into individual differences in consumption behavior and brand preferences. We outline such a research agenda for incorporating neuroscience data into future attempts to match consumers to brands.
© 2011 Society for Consumer Psychology. Published by Elsevier Inc. All rights reserved.

Keywords: Brands; Choice; fMRI; Marketing; Neuromarketing; Neuroscience

Introduction

How do companies determine which consumers are the “right” buyers for their products? And, how do they target those consumers through their marketing programs? Consumers' preferences for products or brands arise from the combination of many different factors. Some factors come from features of the product itself (e.g., price, durability), while others are attributes of consumers themselves (e.g., goals, attitudes, discretionary income). Marketing researchers—and the brands they support—acquire information about consumer preferences to identify how individuals will differ in their choices. In differentiated markets, companies are incentivized to identify sets of consumers (“market segments”) who share characteristics and hence have similar preferences—, ones that might differ from those of other consumers. Such an approach allows the brand managers to focus their marketing efforts (e.g., product development, communication and branding efforts) to particular segments, thus becoming more efficient in their allocation of resources.

Identifying the appropriate segmentation criteria presents challenges to marketing researchers and brand managers. Consider the example of New Coke, which was introduced in 1985 after the market share of Coca Cola had dropped significantly to stiff competition from the sweeter tasting Pepsi (Schindler, 1992). New Coke was introduced after comprehensive market research involving focus groups, field tests and surveys. Although the focus groups uncovered some negative responses to the change, those responses were attributed to peer pressure

---

* Corresponding author. Fax: +1 215 204 6237.
E-mail address: vinod.venkatraman@temple.edu (V. Venkatraman).

1057-7408/$ -see front matter © 2011 Society for Consumer Psychology. Published by Elsevier Inc. All rights reserved.
doi:10.1016/j.jcps.2011.11.008

and the executives moved forward with the launch of the new formula. Yet, within three months, they were forced to reintroduce their original formulation as Classic Coke after public outrage emerged, particularly among the most loyal Coke drinkers. Termed as a major marketing research failure, the responses and tests had failed to capture the emotional intensity of the negative responses among a particular customer segment (i.e., the most loyal Coca Cola drinkers) that had felt alienated by the switch.

Traditional market segmentation groups potential consumers based on demographic variables: geography (e.g. country, population density, climate), demographics (e.g., age, sex, gender, socioeconomic status), purchasing history (e.g., store scanner data), and even responses to marketing activities (e.g., commercials or focus groups) (Keller, 2008). Current approaches to segmentation also often include measures of consumers' *attitudes*, based on variables like anticipated benefits, brand loyalty, usage frequency, and others (Churchill & Iacobucci, 2005; Greenberg & McDonald, 1989; Yankelovich & Meer, 2006). What largely remains absent, however, is reliable information about potential individual differences in the decision-making process itself, as could be obtained from measures of cognitive or emotional processes. While a *cognitive segmentation* approach could hold substantial promise, it faces a key obstacle: the difficulty of understanding the thought processes, both conscious and nonconscious, that consumers apply when making decisions.

Recent neuroscience research provides a potential new tool to address the challenge of understanding consumer decision making. Neuroscience has generated significant advances in identifying the neural mechanisms underlying decision-making processes, commonly grouped under the term *neuroeconomics* (Clithero, Tankersley, & Huettel, 2008; Sanfey, Loewenstein, McClure, & Cohen, 2006). In parallel, marketing research has indicated that consumer behavior can be predicted by determining the likely decision processes consumers will employ in a given context (Simonson, Carmon, Dhar, Drolet, & Nowlis, 2001; Weber & Johnson, 2009), such as how consumers will respond to various brands in a snack aisle as they walk through. These independent successes suggest that models that integrate cognitive processes, traditional marketing data, and various measures of benefit would improve market research and segmentation (Ariely & Berns, 2010; Kenning & Plassmann, 2008; Plassmann, Ramsøy, & Milosavljevic, in press). For instance, there exist functional magnetic resonance imaging (fMRI) studies that elucidate neural markers for preferences for food items, both experienced and in monetary value (Knutson, Rick, Wimmer, Prelec, & Loewenstein, 2007; O'Doherty, Buchanan, Seymour, & Dolan, 2006), as well as how those processes can potentially be affected by context (De Martino, Kumaran, Seymour, & Dolan, 2006; Hare, Camerer, & Rangel, 2009; Venkatraman, Huettel, Chuah, Payne, & Chee, 2011). An understanding of the neural mechanisms underlying consumer decisions could both increase understanding of the cognitive processes that lead to individual variability in consumer behavior, and would create new approaches for marketing researchers to segment their target markets.

Our goal is to provide a conceptual framework for bridging research in neuroscience and marketing, particularly in the realm of brand evaluation. Brands, their images and their logos are pervasive in the everyday environment. Recent estimates suggest the typical United States consumer is exposed to several thousand brands each day (Story, 2007). Firms spend millions of dollars to understand how specific brand exposures and associations will motivate different segments of their consumer base (Brasel & Gips, 2011; Hang & Auty, 2011). Yet, little is known about the processes underlying consumers' evaluation of brands. We first introduce some key findings from neuroscience research on decision mechanisms, with a focus on processes related to consumer choice. Next, we consider the perspective of a brand manager (e.g., a manager faced with a task analogous to the development of New Coke) and how she might employ measures of choice and process into her brand-evaluation method. Though we use brand evaluation as a prototypic example, we believe that the concepts introduced in this paper extend to many other realms of marketing research and consumer behavior. We conclude with a discussion for how marketing research might employ new types of "scanner" data, obtained from neuroscience.

Consumer neuroscience: what we know

In this section, we review three critical areas where neuroscience has made significant contributions to our understanding of behavioral phenomena relevant for consumer behavior and marketing. First, to evaluate a brand (or to buy a product), consumers must determine whether or not the product and the price are to their liking (*preference measures*). Second, consumer preferences are susceptible to context and hence it is important to understand how perturbations to cognitive and neural processes will affect choice (*context dependencies*). Third, like all things, preferences will vary across consumers (*individual differences*). We discuss each of these in greater detail below.

Preference measures

Although "market segmentation" can imply a desire to identify which individuals prefer which brands, identifying individual willingness-to-pay is also crucial. In different choice environments and with different pricing schemes, fMRI studies have identified brain regions such as orbitofrontal cortex (OFC) and ventromedial prefrontal cortex (VMPFC) that consistently encode various measures of individual subjective value, including willingness-to-pay (Chib, Rangel, Shimojo, & O'Doherty, 2009; Montague, King-Casas, & Cohen, 2006; Plassmann, O'Doherty, & Rangel, 2007) and relative value (FitzGerald, Seymour, & Dolan, 2009). If neuroscience is able to identify brain activity that corresponds to preference measures, this demonstrates an ability to identify precise computations taking place in the brain. In other words, the existence of value signals in the human brain argues for a cognitive process of subjective valuation, and that mechanism can be studied in the context of pricing or another costs associated with consumption. Similarly, fMRI studies have also looked at product purchases at given prices (Knutson et al., 2007) or the social influences on preferences

دریافت فوری ← متن کامل مقاله

ISIArticles
مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات