Neuromarketing: Inside the Mind of the Consumer

Marketers strive to understand how customers think, feel, and respond to a company’s offerings. This requires meaningful insights into customers’ underlying thoughts, feelings, and behaviors. Recent developments in brain-based research have the potential to directly measure the possibility for marketers to study the mind and find actionable insights into the ability and willingness of customers to answer these questions. The situation becomes even trickier when marketers attempt to study more nebulous (but strategically important) questions such as brand image and customer loyalty.

Approach

Prof. Hsu starts with a survey of basic knowledge of human neuroscience and brain-based methods relevant to marketing. It has been well established that different mental processes are supported by different brain circuitries. Of particular relevance for marketers are the circuits for attention, emotion, memory, and valuation.

These problems, along with some well-known marketing failures likely arising from them, have created considerable skepticism in the current practice and a growing desire for alternative approaches. Recent developments in brain-based approaches (neuromarketing) have offered to fill this gap by providing marketers with an overall framework and practical guidance on applying these methods to real-world problems.

Neural activities within or related to such circuits in healthy humans can now be measured using a variety of non-invasive methods. From a practical standpoint, it is perhaps the most helpful to organize these methods by their spatial and temporal resolution. Magneto-encephalography (MEG) and electrophysiological methods (EEG) have excellent temporal resolution (on the order of milliseconds relative to periodic temporal resolution). In contrast, functional magnetic resonance imaging (fMRI) has superior spatial resolution (on the order of millimeters relative to periodic temporal resolution). In commercial applications, EEG is currently the most popular due to its low cost.

A comprehensive list of neuromarketing companies, and their product offerings is compiled and presented in the article. Using the aforementioned methods combined with other behavioral measures such as facial coding and eye-tracking, these companies primarily focus on using brain activity to inform marketing communications.

Results

Prof. Hsu argues that the ad is “emotionally engaging.” This issue is even more pronounced for abstract concepts such as “loyalty,” “love,” and “attachment.” Rather than dismissing neuromarketing just because of these limitations, Prof. Hsu argues that it has many other ways to help address marketing problems.

Conclusions

To conclude, Prof. Hsu offers a belated framework for using brain-based approaches in marketing. Brain-based measures can help marketers to ask questions that were not previously feasible. They can improve the precision and temporal resolution to traditional measures, and also offer an invaluable tool of testing and validation of customer insights generated from focus groups, surveys, or ethnography. Critically, brain-based approaches should be viewed as a complement to traditional measures, rather than a substitute. Adding neuroscience to their toolkit, marketers are poised to deliver customer insights that are fundamental in long-term strategy formulation.

REFERENCE


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Figure 1

Figure 2

Table 1: The five personality features categorized by the popular brand personality framework: when participants thought of different brands, one can identify brain activity patterns corresponding to the associated human-like traits proposed by the brand personality framework (e.g., “sophistication” for Campbell’s Soup and “companion” for Rolex).

Table 2: A study using fMRI (Barnett and Cerf, 2015), which showed that the synchrony of brain activities from multiple regions increased when participants thought of different brands.

Table 3: A study using fMRI (Chen et al., 2015) provided strong support for the popular brand personality framework: when participants thought of different brands, one can identify brain activity patterns corresponding to the associated human-like traits proposed by the brand personality framework (e.g., “sophistication” for Campbell’s Soup and “companion” for Rolex).

Table 4: A study using EEG (Barnett and Cerf, 2015), which showed that the synchrony of brain activities from multiple regions increased when participants thought of different brands.