Validating customer insights about how consumers think, feel, and respond to products and brands has always been a tricky business. Surveys and focus groups, the workhorses for generating customer insights in these areas, are fast, inexpensive, and offer tremendous value for marketers. For many marketers, however, acting on them can sometimes feel like a matter of faith. The canon, so to speak, goes something like this: consumers are assumed to be able and willing to tell marketers what they are looking for; in turn, marketers are assumed to be able to ask the right questions to consumers, then code, analyze, and interpret the data correctly, all before generating actionable insights.

For companies, the inability to impartially validate, prioritize, and select between customer insights can result in skepticism and confusion within companies ranks, often leading to difficult conversations between managers within marketing and those outside. In a recent study from McKinsey & Co., one CFO was said to have held the sentiment that, “Marketing has a vague status. We’re going to give a certain amount of dollars to those guys. They’re going to make ads and do whatever it is they do. And let’s hope it generates demand”.

But help may finally be on its way. A group of us at UC Berkeley’s Haas School of Business and Helen Wills Neuroscience Institute are leveraging advances in neuroscience to keep everyone honest by asking the brain of consumers directly. The central idea of our approach is that, rather than taking the participant’s response at face value, we can see whether what they say corresponds to what is going on in their brain. This approach is not new. In fact, it follows a long history of in psychology where researchers submit introspective insights to critical testing by matching them to their neural signatures.

Specifically, we used functional magnetic resonance imaging (fMRI) to test a classic conjecture in marketing that consumers anthropomorphize brands by attaching to brands a set of human-like characteristics. These characteristics, referred to as brand personality, are typically measured using a scale developed by Stanford GSB professor Jennifer Aaker. This brand personality scale has been highly influential in shaping how marketers think about how consumer relate to brands, and breaks down the set of human-like characteristics into a set of 5 factors, akin to the notion of Big 5 in human personality research.

But do people actually think of brands as “down-to-earth”, “exciting”, or “rugged” when there’s no market researcher around to ask them? We addressed this question by asking whether participants’ brain activities were consistent with their self-reported thoughts. First, participants were scanned while they passively viewed four dozen or so of the most iconic global brands, including Apple, Disney, Ikea, BMW, and Nestle. Following scanning, they rated the extent to which they thought each brand was associated with human-like characteristics, such as “sincere”, “exciting”, “competent”, etc. Critically, participants had no idea what questions we would be asking after the scan; nor were they presented with any explicit questions during the scan. This way, we can be confident their thoughts were not affected by our questions.

Next, using a set of data mining algorithms, we related participants’ patterns of brain activity to subsequent survey responses. That is, we assessed whether thoughts of “exciting” and “competent” crossed the mind of...
participants when they thought about Google, which scored high on these traits, and whether thoughts of “sincere” but not “sophisticated” occurred to participants for Campbell’s Soup, which scored high on the former and low on the latter.

Good news for marketers using the brand personality framework, we found that it has a good deal to offer in terms of uncovering how participants think about different brands. Specifically, we were able to use our neural data to confirm that, indeed when participants thought of Campbell’s Soup, traits like “sincerity” or “down to earth” were present in their brain activity, consistent with participant self-reports. In contrast, this would not have been possible if participants systematically thought about features that are unrelated to brand personality traits. We can see this by comparing the performance of the brand personality scale with other scales that had similar statistical properties but did not contain information about brands personality. The brand personality scale performed significantly better.

In certain areas, such as those involving pricing or e-commerce, validation studies are increasing feasible and valued. Amazon and Google, for example, routinely conduct A/B testing and experiment on a daily basis to check managers’ intuitions and hypotheses before executing changes on a large scale. They remain, however, challenging for managers who must deal with largely intangible qualities such as “engagement”, “fit”, or “loyalty”, among others. Like a physician solely reliant on a patient’s verbal reports, therefore, both resources and opportunities inevitable get squandered.

Our study therefore offers a new approach that can one day be used to overcome these long-standing challenges. Compared to past neuromarketing applications that focus on generating novel insights not feasible using alternative methods, we offer marketers the ability to validate, prioritize, and select between existing insights that are foundational to marketing strategy and innovation. Given the current environment where managers are continually inundated with data and putative insights from these data, the ability to validate actionable insights has never been greater.

References