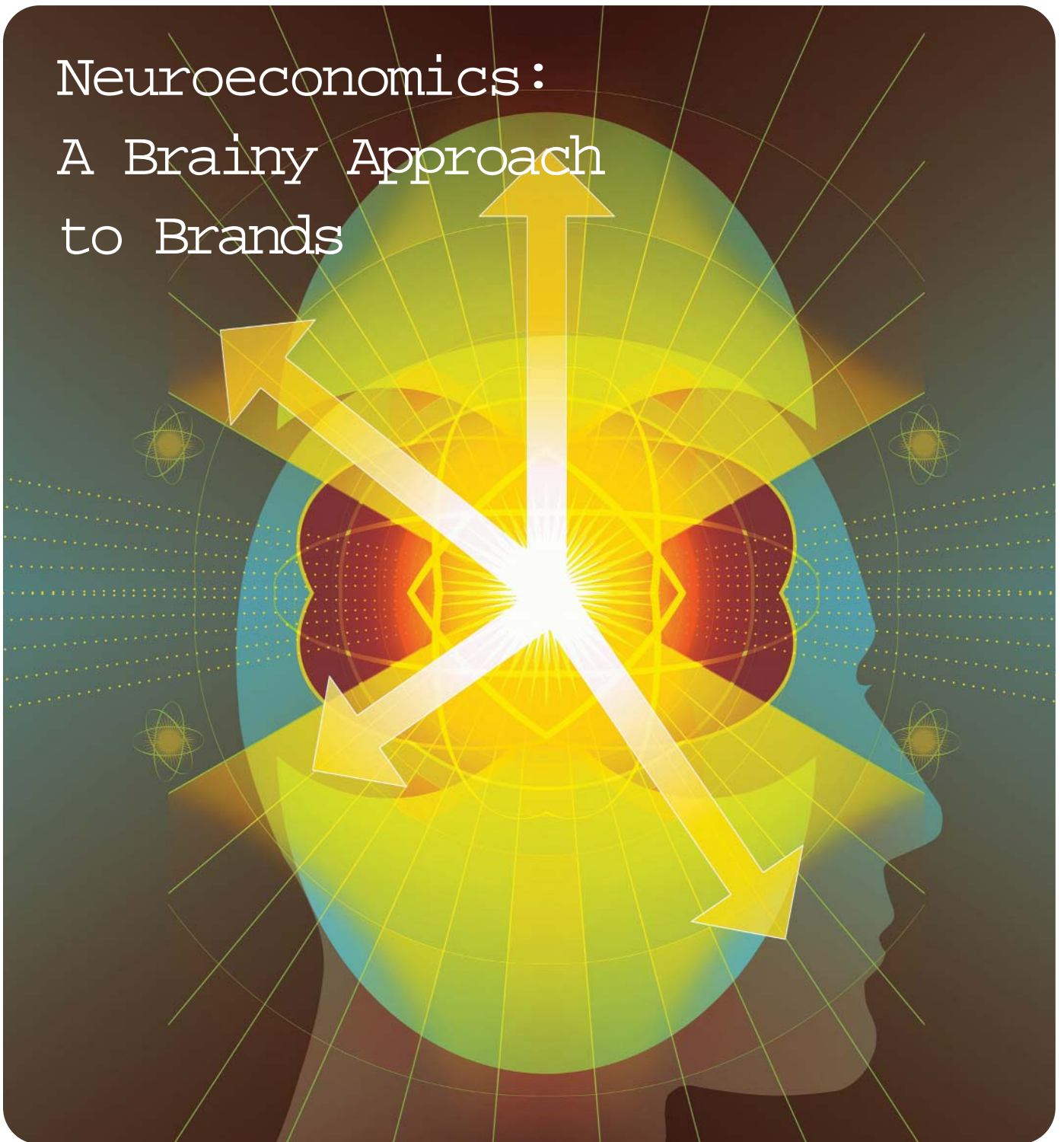


## Neuroeconomics: A Brainy Approach to Brands



**E**ver wish for a foolproof way to know what consumers were thinking before spending millions on a new product launch or ad campaign? Although you still can't see what consumers are thinking, now you can see *where* they're thinking. Which, as it turns out, is almost as good. And it's all thanks to a newly-emerging science called neuroeconomics.

Neuroeconomics deploys brain scans such as functional magnetic resonance imaging (fMRI) or positron emission topography (PET) to literally view neurological reaction to stimuli such as product photos or advertising messages. Unlike focus groups or other research methods, consumers can't fake it or tell you what you want to hear, because brain activity doesn't lie.

## Location, Location, Location

The marketing implications associated with “where” in the brain consumers respond brings a whole new meaning to top-of-mind awareness. Activate the right side of the brain, and while you may have a positive reaction to the product, the intuitive link that triggers a sale is missing.

But activate the top of the brain, and the consumer has already left rational deliberation behind, associated the product with their self-image and is primed to buy. Further, that product preference becomes embedded in memory (think repeat sales).

## The Name's The Thing

Remember the flurry of taste tests and challenges that characterized advertising in the early 1980s? While duplicating some classic tests in the lab, researchers discovered that blind tastings yielded one set of results and stimulated the right side of the brain, while brand-revealed tastings generated an entirely different set of results and stimulated the top of the brain. Conclusion? Brand attributes and associations demonstrated a marked ability to override taste-based preferences.

## The Search Goes On

While still in its infancy, neuroeconomics has gained a foothold in academia as well as the commercial realms. Scientists have deployed neuroeconomics to take readings of products as diverse as cars, bicycles, beverages, sports games and fashionistas.

Among the leading investigators:

- Dr. Paul Zak of Claremont Graduate University in California and founder of the Center for Neuroeconomics Studies
- Nobel Prize-winning economist Vernon Smith, Ph.D., of George Mason University in Virginia
- Ernst Fehr, Ph.D., at the University of Zurich in Switzerland
- Dr. Jonathan Cohen with the Center for the Study of the Brain, Mind and Behavior, Department of Psychology at Princeton University in New Jersey
- Dr. Read Montague, director of the Human NeuroImaging Lab, Baylor College of Medicine in Houston, Texas



- Clint Kilts, Ph.D., founder and scientific director of the BrightHouse Institute for Thought Sciences in Atlanta, Georgia

## In Us We Trust

Far from being the hyper-rational process touted by game theories such as the Nash Equilibrium, decision-making involves emotional responses and a small amount of trust. Zak *et al* even discovered the existence of a so-called “trust chemical,” the hormone oxytocin.

Princeton’s Jonathan Cohen and colleagues put the Ultimatum Game to the test and concluded “models of decision-making cannot afford to ignore emotion as a vital and dynamic component of our decisions and choices in the real world.”

## Marketing Implications

Purchase likelihood is directly linked with higher memory encoding, and neuroeconomics provides a mechanism for measuring that result. This represents a marketing breakthrough. Finally—demonstrable proof of the consumer impact of brands.

Professor James Bailey of George Washington University sees a day when “firms will be able to tell precisely if an advertising campaign or product redesign triggers the brain activity and neurochemical release associated with memory and action.” 