

Consumer Goods

Marketers' Next Trick: Reading Buyers' Minds

▶ Advertisers use neuroscience to cut through messaging clutter

▶ The brain "is an already over-clocked and overloaded system"

Facebook this spring asked SalesBrain, a San Francisco company, to gauge how consumers responded to ads viewed on a smartphone vs. a TV screen. Neural researchers used various sensors to measure perspiration, heart rate, eye movement, and brain activity of 70 study participants. They came to the surprising conclusion that people get more out of information on a mobile phone than on a TV and that watching television forces their brains to work harder to combat distractions. "Our physical closeness to the mobile screen has shifted our perception of the size of the device," says Helen Crossley, the head of audience insights for Facebook IQ, the company's internal market research unit. "It is drawing us in to be more attentive and feel more positive about the content."

A host of new companies founded

or staffed by brain researchers has some advice for advertisers: Read your customers' minds. In a world of ever-shrinking attention spans, where consumers flit through social media sites and skip right past online ads, advertisers are turning to neuroscience to better understand how to steer buyers toward their products. "People are not governed by the rational side of their brains, so the majority of purchase decisions are made irrationally," says Itiel Dror, a Harvard-trained neuroscientist engaged by London consultants BrandOpus to test the redesign of a logo for Canada's McCain Foods. Dror asked 1,700 shoppers in seven countries to match phrases such as "family," "warmth," "mass-produced," and "factory" with McCain's old logo—the company name within a plain black box—and a new one depicting a sun setting over farmland. McCain is rolling out the new version in 160 countries.

These companies use methods such as eye tracking, brain scanners, and facial coding—cameras that analyze people's expressions and assess their mood second by second—to determine reactions to ads. The Neuromarketing Science & Business Association, started in 2012, has more than 1,000 members in 91 countries. The field helps advertisers create simple messages that "deliberately mix conscious recall with unconscious," says Dan Machen, director of innovation at HeyHuman, a neuroscience-focused ad agency in London. "We need to think of the recipient's brain as an already overclocked and overloaded system."

The industry's traditional powers are taking notice. Millward Brown, a research arm of ad giant WPP, says it started exploring neuroscience four years ago and that it now uses facial coding to test every TV spot it works on. In April, London ad agency Dentsu

Aegis purchased Forbes Consulting Group, a neuroscience company in Massachusetts. And ratings giant Nielsen in May bought Innerscope Research, a neuroscience firm in Boston that's helped companies such as Campbell Soup and Yahoo! study customers via biometric tests that monitor heart rates and skin conductivity. "There's no question we're seeing an uptick not only in business, but also in the diversity of clients and the number of those making bigger investments," says Dr. Carl Marci, a neuropsychiatrist with an M.D. from Harvard who co-founded Innerscope a decade ago.

For one Innerscope project last year at Time Warner's media lab, the company hooked participants up to facial trackers and eye scanners as they watched *Conan*, *Dallas*, *Men at Work*, and other TV shows. Innerscope used the devices to measure reactions to placement within the shows of brands such as Samsung, M&Ms, and Pop-Tarts. Scientists could then decipher when product placement was too obvious—characterized by participant frowns or snickers—or so subtle that it wasn't even noticed. "Biometrics allows us to eliminate any bias in response, and we get a real sense of engagement," says Howard Shimmel, chief research officer at Time Warner's Turner Broadcasting.

Neuro-Insight, a neuromarketing firm in London, last year helped Twitter assess reactions to content by fitting people with headsets to measure brain activity while online. The researchers found that when the subjects browsed their Twitter timelines, their brains were almost as active as when they were opening physical mail—and far more engaged than when they were reading websites or watching video. Another insight of potential value to advertisers: When scrolling quickly through a timeline, users didn't register brand icons unless they were simple and boldly colored, according to Heather Andrew, chief executive officer of Neuro-Insight. "Those things that people don't know how to put into words," she says, "we can measure."

—Kristen Schweizer

The bottom line Advertisers are using neuroscience research to better understand consumer reactions to products and brands.

Gray Matter

Advertisers are turning to neuroscience to gain a better understanding of what consumers want. Some techniques:

Eye Tracking

Special glasses and sensors can detect where the eyes are focused to measure which part of a Web page or ad is getting the most attention.

Facial Coding

Cameras and special software analyze facial expressions to gauge reactions to TV ads and other video content.

Biometrics

Changes in heart rate, breathing, and subtle movements can signal varying responses to promotions and brands.

Electroencephalogram (EEG)

Researchers strap electrodes to the scalp to measure brain waves and assess interest in creative concepts, ads, or packaging.

