

## Spotlight Flashback: Why Buy? Researchers Seek An Answer

September 10, 2007

By Jim Edwards

Despite marketers' best efforts, a 'buy button' doesn't exist. So what advertising does prompt us to spend?

NEW YORK -- Rachel Weingarten likes shopping for shoes. Many women do. But this 30-something pr executive from Brooklyn, N.Y., does damage on a scale greater than most. She has no idea how many pairs she owns; she can only measure them by the number of trunks and suitcases—organized by color and season—stashed in her closets and under her bed. She once bought a pair of \$200 stilettos, sight unseen, based on a description from a friend in Italy. Upon their delivery she pronounced them "horrifying" and never wore them again, a fate that befalls "99.9%" of her collection. "I think it's very safe to say that I don't need any shoes," she deadpans.

When Weingarten recently attempted to bring yet another pair into her possession, she allowed Brandweek to observe. We wanted to conduct an experiment to see if she could identify the exact moment at which she made her decision.

Why? The answer seems so simple: You like something, you buy it. For companies with billions of dollars on the line, however, the buying decision is the most crucial part of their enterprise. If they can't understand it, they are out of business.

The issue has come to a head in recent years as the quality of manufactured goods has improved and the differences between them diminished. Nike may have made a superior running shoe in 1973, but the quality of its shoes today is basically the same as its rivals. The main difference is how consumers choose between the brands, a choice based largely on the buyer's feelings rather than the product's physical attributes.

Yet no one really knows how the human brain makes that choice. Marketers don't even know whether the buying mechanism is actually a "decision." It might be an unconscious reaction rather than a rational deliberation.

In the last few years, a cottage industry of psychologists has sprung up to clear this fog. Advertisers like Chrysler, Canon and Hewlett-Packard have pushed consumers' heads into magnetic-resonance imaging machines, taken positron-emission tomography scans of their skulls, wired their scalps to electro-encephalogram monitors, hooked up their palms to lie-detectors and put them in therapy.

Their work has triggered hope of finding a "buy button" in the brain, complete with headlines knocking advertisers who would aim to manipulate vulnerable plebs. "There's a Sucker Born in Every Medial Prefrontal Cortex," The New York Times scoffed in October 2003.

In reality, much of the research is hype. The buying decision is a complex process that cannot be reduced to a "button." The truth is—and researchers admit this when pressed—psychologists have made only tiny steps toward explaining how the processes work. A full understanding of the subject is decades away.

Some of those steps, however, have been made by Colin Camerer, a professor at

Caltech in Pasadena, Calif., whose research may contain some value for marketers. His lab technicians used an MRI machine to identify the area of the brain that reacts to images of "cool" (Beyoncé, for instance) and "uncool" (a boring office chair). It turns out to be Brodmann area 10 of the prefrontal cortex, FYI.

Camerer's studies demonstrate that the concept of "cool" isn't arbitrarily determined but rather a meaningful stimulus that produces a measurable response in a dedicated area of the brain. This is important for brands that rely more on fashionable credibility than on, say, price. It also confirms that consumers may choose based on their emotions, not on utilitarian requirements. Exactly how marketers could capitalize on this knowledge, however, is not immediately clear.

Camerer admits that his studies provide only a limited view of what consumers think before they buy, which is why marketers should approach the field of psychological research with caution. In addition to being logistically inconvenient, "Brain scanning is expensive and kind of extreme," he said. "This field is extremely new [and] there's not much real data to talk about. It's mostly kind of speculating."

Anecdotal reports of buying behavior may prove just as enlightening. Take our shoeaholic, Weingarten. In our experiment, she agreed to keep a running commentary of her thoughts and feelings as she shopped.

Her brain, it quickly became clear, was a mystery even to herself. At first, concrete thoughts passed through her mind, such as: "If I see a cool pair of cowboy boots, I will get them." But during the course of two hours, she gave a list of at least two dozen other concepts that would be factors in her decision, from the obvious, like comfort ("I'm walking on sidewalks all day long") to more esoteric concerns such as the temperature of the air conditioning and—put this in your marketing plan—whether the store is "trying too hard."

Weingarten also developed strained rationalizations for her prospective purchases. For instance, she dislikes buying boots in summer because she can't wear them until fall, leaving her unable to "justify" the "waste." She attributes this to survivor guilt; her parents survived the Nazi concentration camps.

That someone might draw a connection between a quest for cowboy boots and the Holocaust would not surprise most psychologists. Why should marketers care?

Chicago agency Brandtrust may have the answer. The firm conducts psychological consumer research on the presumption that buying decisions are made on an unconscious level, and that consumers don't generally give very reliable answers if you simply ask them, "Why did you buy this?" The truth lies buried somewhere in their emotions, according to Brandtrust CEO Daryl Travis.

In his method, consumers are interviewed in 90-minute, one-on-one sessions, in which they are first asked to close their eyes, relax and visualize themselves in a comfortable, safe place. Once the consumer is lulled, a detailed interrogation begins as the researcher attempts to unlock his or her feelings about the client's business. The experiment resembles a therapy session, lacking only a couch.

"It's an old psychoanalytic technique," Travis notes.

Canon, the company best known for making cameras, has gone a step further. Last

July, its corporate imaging systems unit began attaching wires to some of its customers (volunteers, obviously) to monitor them as they read Canon's promotional literature. The sensors detected heart rate, pulse and skin temperature, while a team of behavior experts analyzed their facial tics and body language.

The company found that, in spite of the polite things customers said about Canon's materials, the sensors indicated they were sometimes frustrated by them. Copy was too long or irrelevant, for example, and customers disliked some photos and colors. The results helped Canon's manager of customer loyalty, David Hughes, reshape a quarterly newsletter that is sent to about 500,000 customers in its \$3 billion office equipment business.

On its face, the project validated the importance of such research. The interviews discovered that consumers say one thing but often feel another.

Did it require turning customers into lab rats to find that out? After all, Hughes still had to pull the contact pads off and ask them what they were thinking. Nor has he abandoned his traditional research methods. Isn't this really about asking better questions, and not about unveiling the brain's hidden life?

"I was really skeptical," said Hughes. "But when you see it for yourself with your own customers and data and campaigns, you believe it. And from a budget standpoint it isn't really all that expensive."

Brandtrust's Travis concurs. "Most of our clients appreciate the 'why' of what they're already getting from their conventional research."

That "why," according to Travis, is a tricky subject. When Weingarten surveys a rack of shoes, in Brandtrust's explanation, "a complex alchemy" is set in play where observable parameters like price, color, smell and lighting mix with buried memories, childhood joys and pubescent traumas. Maybe your mother told you a long time ago, "You look good in dark colors," Travis said. "So you subconsciously reject yellow and pink, no matter how fashionable you are."

Thus, Travis believes, Weingarten's buying decision will be more like a psychological herding of cats than the flick of a light switch.

While sticking electrodes to customers may seem extreme, other clients—such as Hewlett-Packard—have gone even further.

This past March, H-P wired up some consumers to an EEG machine to see how they reacted to photos of people smiling. The company found there was a demonstrable difference in brain activity in people witnessing smiles, particularly those of children. The work, conducted in England, was inspired in part by consumers who had contacted HP wanting to know how to "smile better" in photographs. "Even if their smile is genuine, some people look like they're faking it," said Alex Wood, HP's project manager at agency Porter Novelli. "It's quite a problem."

Ultimately, HP launched a print campaign with the theme of "Smile." The effort was based around a successful attempt to break a record for the largest collection of photographs of people smiling (36,262, for the record), not the psychological testing. Wood, too, admits that the research has its limitations. HP is not pretesting models' smiles for its ad campaigns, for instance, and HP has no plans to do more of it, he

said.

Other marketers are also vigorously exploring the field. In 2002, DaimlerChrysler did an MRI study of men's reactions to auto designs. They found that guys' brains were activated most by sports cars. (Chrysler did not respond to a request for comment.)

In Atlanta, research firm Brighthouse gained attention by using the results of an MRI to re-examine the Pepsi Challenge taste test. That study, published last year under the stentorian title "Neural Correlates of Behavioral Preference for Culturally Familiar Drinks," showed that in a blind test consumers can't tell the difference between Coke and Pepsi. It also revealed that Coke fans show greater activity in the hippocampus when they know they're drinking Coke than Pepsi fans do when they are consuming Pepsi. The difference, the study speculated, was that Coke's superior history of branding creates a greater mental reaction in the Coke people.

Arguably, the common thread between these projects is that while the results they got were interesting, they were also limited and, for the most part, not surprising. A quick conversation in the local pub could have confirmed the main result.

Yet that has not quelled marketers' interest in the area. On the contrary, Brighthouse strategist Justine Meaux says she gets about one phone call per week from potential clients asking her if she can stick some heads into her machine and locate that notorious "buy button."

"I try to explain why there is no quick fix, and there is no 'buy button,' and about half the time I'm successful," she says. "Companies are just convinced there's a 'buy button.'"

Most of Meaux's work is about trying to figure out the difference between what consumers actually think and what they later rationalize to please the nice lady with the clipboard. "The general understanding is that a lot of how we make decisions is very intuitive in nature," she said. "People often have a hard time articulating what determines their preferences."

The notion that consumers don't know their own thoughts is an appealing one because, at a basic level, it is true. Weingarten's shopping expedition, for instance, started as a quest for cowboy boots but within minutes morphed into a dragnet for anything "cute."

Besides, there is an obvious explanation for why consumers have such difficulty describing their thoughts: At any waking moment, the brain is taking in vast volumes of information. It is not possible to process all of it at once.

This truism has a particular appeal for marketers. If consumers don't know why they do things, but psychologists are able to reveal that mystery, then marketers can use that to better manipulate consumers. To believe the opposite—that consumers know what they're doing—is disheartening for marketers, because it means they will always be able to identify (or ignore) marketing for what it is.

Is there any evidence for this notion of an "unconscious" consumer?

In fact, there is. A group of academic researchers at the University of Iowa have developed a cult following among market researchers because of an experiment they

conducted in the mid-1990s. The study elegantly demonstrated that people make decisions without being able to explain why they make them.

In it, subjects were asked to select colored cards—red or black—from four decks. On each turn, players either win or lose money, depending on the card. Two decks reward the players with \$100 wins, and two with \$50 wins. As in all psychology experiments, however, the game is rigged. Players who continue to select from the \$100 deck carry a risk: One turn may add \$100, the next take it away. The \$50 decks are safer, consistently rewarding players who stick with them. To complicate matters more, the players are wired to measure their stress responses.

As the game progresses, the players are asked if they can figure out what is going on. Initially, players report they can't tell the difference between the decks. But their stress responses tell a different story: they sweat as they reach for the risky decks. Players begin avoiding those decks and sticking with the safer payouts.

Strangely, even as this happens, the players report they do not understand how to pursue a winning strategy. Only after about 50 cards have been turned can the players begin to describe how they think the game works.

The authors of the experiment hypothesized that the stress reaction somehow informed the players on a "nonconscious" level into making good choices. There is a gap, the experimenters declared, between the point where people make decisions and the point at which they consciously rationalize them. That gap is a key element for those seeking the answer to the question of how we buy.

The experiment is hailed by psychological market researchers as a validation of their efforts. Consumers might be like card players, the argument goes, except instead of picking cards they're trying on shoes. They are hoping to be rewarded—perhaps with comfortable cowboy boots—but sometimes they are punished with unwearable Italian stilettos. Different experiment, same result.

"Your preferences in the market world are really a byproduct of emotional representations of experiences you've had with that product. So your decisions are really biased," said Antoine Bechara, the associate professor of neurology who designed the experiment.

The gamblers and shoe shoppers both have difficulty explaining their strategies. And if consumers don't know why they make choices, then simply asking them is a waste of time—hence the need to dig around in their unspoken thoughts.

There's a slight problem with the theory, however: It might be wrong.

In April 2005, Tiago Maia, a Portuguese grad student at Carnegie Mellon University published a study suggesting the Bechara group's conclusions were a result of the lousy questions they asked, not an unconscious mechanism in the brain that is secretly good at cards.

If you ask the players questions that preclude answers like "I don't know," then it turns out the players have a pretty good idea of which decks are dangerous and which are safe, even early in the game. The reason they appear so clueless is because they haven't confirmed their hunches. "You can never really conclude that people don't know an answer just because they don't volunteer it," Maia said.

(Bechara defends his work, and notes that even when Maia's subjects reported the "correct" moves they often picked the wrong ones anyway, thus proving his point.)

Maia's skepticism was presaged a year earlier by the journal *Nature Neuroscience*, which took to task marketing agencies who dangle MRI scanners in front of wealthy clients. In an editorial titled "Brain Scam?" the journal's editors wrote, "If companies pour out large sums based on unrefereed claims . . . they will have only themselves to blame if the investment does not pay off."

Whether buying decisions are rational or not, Weingarten's recent shoe mission provided plenty of evidence that shopping—for shoes or anything else—remains an amorphous psychological process.

Arriving at Varda, a mid-range, modernistic SoHo store with icy air-conditioning, Weingarten announced, "I can tell you right now it's not going to happen."

An equally quick decision was made at Chanel, where a sales assistant joked, "What do you mean 'not buy any shoes?' When do you ever decide you're not going to buy shoes?"

Then Weingarten discovered the trendy Nancy Nancy boutique. The shop displays only one or two pairs of shoes in its eye-level window, and Weingarten expressed approval. "I feel like it has personality or a sense of humor." Inside, she discovered a pair of pink ballerina flats with a decorative double strap over the toes: \$109.

With very little warning, Weingarten was at her buying decision, the magical moment whose explanation eludes both science and business.

This is what it looked like: She held up the shoe, said, "Um," and then fell silent for a moment. "I might get these," she said, looking around for a sales assistant. "Let me see if they have them in my size."

It was a bit of an anticlimax.

Weingarten later described it as like being in a trance. "I had a moment of calm. The moment of calm then goes into impatience: Go downstairs really quickly and get something in my size!"

But the sales assistant returned with bad news: The shoes were out of stock. Weingarten muttered that she might have bought two pairs, in different colors, if they'd had them.

"I'm not quite sure that I want shoe marketers peering into my brain just yet," Weingarten concluded. "I'd rather that they pay more attention to things like inventory control first."

### Victory Dance for the Vain: A Reporter Goes 'Under'

Everyone knows the limits of research tools such as focus groups: People say one thing, but mean another. In a quest for the truth, Boston research firm Olson Zaltman Associates uses a lengthy interrogation ("the Zaltman Metaphor Elicitation

Technique") to reveal how consumers feel—not just how they say they feel—about brands.

Founder Gerald Zaltman agreed to put this reporter through the process. Typically, test subjects are invited to an intense, 90-minute session in which they are asked to make up stories and describe their feelings about a client's category—smoking, diamonds, banking, what have you. Our experiment was devoted to "marketing and advertising," an assignment that might be requested by, say, the Association of National Advertisers.

The assignment: Bring along eight images that represent my feelings about advertising and marketing.

One was an ad for Samsung, which shows a pretty couple taking a photo of themselves with a cameraphone. It's supposed to be set in a nightclub, but no one is drinking or smoking, which, I told the researcher, made me think about how advertising infantilizes modern culture. The protagonists in the ad are so vain they don't need an audience because they have brought their own onlookers with them in the form of the cell-cam, I commented. This triggered a long discussion about my belief that we have lost from our culture things like style, sophistication, intelligence, class and modesty.

We move on to a satirical painting in the style of a children's book illustration. It shows six little girls shooting each other with rifles. One lies dead on the ground. I picked this unusual image because it hinted at a larger story buried behind it. Advertising rarely requires viewers to divine a narrative to understand them, I said.

Then I was asked to create a digital collage from the individual images and to make up a story about the finished product. I struggled for several minutes before I was able to get started, but then everything fell weirdly into place . . . I depicted Mickey Mouse (from a postcard) crucified in the Samsung nightclub while naked revelers (from a risqué olive oil promotion) danced around him.

The story, which spilled out of me in a disconcerting rush, was that the party was the victory celebration of the vain and the shallow, who had won a war against intelligence, history and culture. The little girls, near the bottom of the picture, represented the lost battle.

The conversation tended to wander off on tangents, which I now understand to be intentional. The images simply get the ball rolling. In the end, it was obvious that Zaltman's researcher had gotten a lot more information out of me than I realized was in there. "The discussions are often very emotional," Zaltman said. "People often comment that they're surprised at how much feeling they had around a seemingly innocent product."

The value of the exercise is not in learning that at some deep-seated level I regard advertising as shallow and immature. (Another person in the same exercise might complain that advertising is too complicated and high-falutin'.) Rather, Zaltman said, the client simply needs to know that consumers have strong feelings about the concept of "depth" when it comes to advertising, and that the client might want to address that in future work.

"Most people aren't privy to their own thoughts. Most thinking occurs at an

unconscious level," Zaltman said. Which is why, he claims, his method elicits more out of 15 conversations with consumers than a traditional survey of 1,500 would ever produce.

--J.E