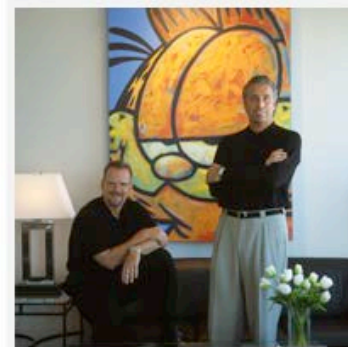


What Can CMOs Learn From Neuroscience?

At the center of every CMO challenge is an effort to try and figure out how to generate *growth*. Driving growth requires understanding the consumer and what impacts their *behavior*. Whether it is extracting insight from ‘Big Data’ or leveraging technology to micro-target, all effort comes back to the singular goal of optimizing your audience’s engagement or attraction to your brand in the search of incremental, profitable growth.

Recently, there has been a growing interest in the field of neuroscience as leading scholars and market research firms are striving to understand consumer physiological brain responses in an attempt to go directly to the source of what is happening – the brain. This information is being used to enhance positioning, product design, communications, and overall marketing strategy.

To better understand the current state of the field of neuroscience – and why this matters to CMOs – I interviewed John Carr, Chairman / CEO, Stephen M. Blaising, Vice Chairman / CMO, and Heather Rupp, Director of Neuroscience and Psychology (and a neuroscientist). These three individuals are the principals behind [Brain Surgery Worldwide, Inc.](#), an “emotion based behavior insight” firm that specializes in understanding how audiences make decisions. They have worked on over 200 brands and in 29 countries. The following are excerpts from these interviews.



John Carr and Stephen M. Blaising, founders of Brain Surgery Worldwide, Inc.

What is neuroscience?

At a basic level, neuroscience is centered on understanding brain activity and how it relates to behavior. There are significant, recent technological advancements that enable us to measure and understand brain responses. Some of these measures include tracking blood flow in the brain (fMRI) or analyzing brain electrical activity from the scalp (EEG). These measurements have confirmed something that all CMOs need to embrace and that is the role of *emotion* in the decision process.

How is neuroscience impacting the field of marketing?

Marketers are constantly trying to change beliefs, behavior, and decisions. To do this requires as much insight as possible into how consumers make decisions and more specifically, how consumers react to marketing stimuli. As a result, neuroscience provides unique insight into how consumers actually make decisions that can enable marketers to be more effective. In the past, we have had to rely on what consumers say about how they make decisions without much understanding of how they got there. Neuroscience allows us to understand what is going on inside the 'black box' of decision-making to better understand the components and processes that go into a decision, all driven by the emotion and reason connection.

As an example, most companies, including ad agencies, still suggest there are emotional ads and rational ads, and that consumers tend to react either emotionally or rationally. However, neuroscientists know that consumers don't react this way. Instead, neuroscience has proven that decisions are the result of an interdependency between emotions and reasons. The brain reacts first from an emotional perspective and then accesses rational thinking. To understand behavior, you have to measure both emotion and reason at the *same* time and leave behind the notion that emotions are separate from reason in motivating behavior. We all process information the same way and that is emotion first, reason second.

Think of it in this way you have files in your brain of rational thoughts. When a person is exposed to a stimulus, the emotion fires first and then highlights a rational file that makes sense. So, consumer decision making isn't either rational or emotional. In fact, it is both.

As an example, many in the media don't understand how two facts regarding the recent presidential election could co-exist: 1) most voters believed the country was going in the wrong direction and that Romney would be better at turning around the economy, and 2) most voters voted for Obama. Once you understand how powerful emotions are – and how they drive reason – it is possible to understand how these two facts actually can co-exist.

This understanding is very important to CMOs as they attempt to craft positioning statements, brand identities, and communication. It requires a more nuanced understanding of the consumer and suggests a more integrated approach to ensure marketers maximize the impact on both beliefs and behaviors.

What recent research do you think is significant in terms of impacting our understanding of consumer behavior? How will this research change how marketers behave / market?

The field of Neuroeconomics literally came into existence in the last 15 years as researchers began to try to explain the often 'irrational' behavior observed in people making economic decisions. Economists were baffled why consumers did not make 'smart' choices, but instead chose outcomes that were more immediately gratifying in the short term. Neuroscientists, however, knew very well that emotions bias a person's reason during decision-making and that seemingly 'irrational' choices could often be attributed to emotional influences.

Supporting this, an fMRI Neuroeconomics study demonstrated the predictive influence of emotion in the brain on purchase behavior (Knutson et al., 2007). Scientists measured brain activity in 26 men and women while they had the opportunity to purchase products online. For products that were ultimately purchased, researchers saw higher brain activity in a brain region related to emotion and reward, demonstrating the critical role of emotion in purchase decisions.

What advances are on the horizon that will shape / alter the field of marketing?

At some point, there will be two significant advancements. One will be the way in which researchers can collect data. For example, neuroscience will begin moving into mobile applications, where researchers can track, via apps, responses in situations rather than in the lab. Right now, most of the research is being done at universities because it takes expensive equipment. Being able to track responses from a distance can significantly increase the amount of research that can be done.

The second advance that is coming is the ability to convert real-time responses into appropriate messaging. For example, consider [Google Glasses](#) which at some point in the future may be able to transform the behavior of the wearer into targeted messaging. While this sounds like it is from the movie *Minority Report*, it isn't impossible to think about a day when consumers may be able to 'turn off' images that displease them or vice versa.

What advice would you give CMOs to be able to get up to speed and leverage neuroscience research to help them achieve better business results?

Currently, the best place to go is the university environment. Most large research-centered schools like [Indiana](#) University and other Big Ten schools have a brain sciences / psychology center that have full labs that run experiments on college students. Additionally, universities are the most unbiased and so they are great partners to choose when doing research.

Also while neuroscience has revealed how our brains process information, the majority of the devices out today don't reveal "why" the behavior exists, create some bias through participant inhibition, and don't offer real-world predictive data. So while there are different methods for measuring brain activity the marketing world should be careful to not get too caught up in the fanfare around devices but rather should focus on the real finding from neuroscience being the emotion reason connection in decision making.

For those interested in reading up on the topic, there are a few books that are really terrific to get a baseline understanding: Jonah Lehrer's *How we Decide* –or Charles Duhigg's *The Power of Habit*.

From these interviews, it is apparent that neuroscience findings present marketers with a great opportunity to take advantage of cutting edge research regarding how consumer decision making leads to behavior. It's also evident that cutting edge marketers will be at the forefront of using neuroscience in the same way that these marketers are experimenting with social media, digital, and other new technologies.