

NEURO MARKETING: A TRENDING TOOL FOR MARKETING

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“Neutrons don’t lie”

ABSTRACT

In this paper the possibility of applying neuroscience to marketing and consumer decision making is researched and the limit of knowing the human brain in marketing researches is questioned. Furthermore, this paper deals with the influence of sensory elements: colour, design, and also music, scent and taste on customer's perception and on his conscious or sub-conscious purchase decision. It also explores the influence of marketing instruments on the emotions of customers. The paper further describes particular techniques which can measure different kinds of activity. The most common techniques are electroencephalography, magnetoencephalography, functional magnetic resonance imaging, positron emission tomography and eye tracking. The aim of the article is to bring the attention and highlight its actuality and the importance of its understanding. Moreover, a framework of “moments that matter” in consumer decision-making process and factors that influence them was elaborated for a possibility to influence consumer behaviour in favour of company's offers. Furthermore, recommendations for marketers were suggested for deeper understanding the consumer behaviour and their buying strategies to empower marketing campaigns and be a success in the market.

INTRODUCTION

The combination of neuro and marketing implies the merging of two fields of study (neuroscience

and marketing). The term neuromarketing cannot be attributed to a particular individual as it started appearing somewhat organically around 2002. At the time, a few U.S. companies like Brighthouse and SalesBrain became the first to offer neuromarketing research and consulting services advocating the use of technology and knowledge coming from the field of cognitive neuroscience. Basically, neuromarketing is to marketing what neuropsychology is to psychology. While neuropsychology studies the relationship between the brain and human cognitive and psychological functions, neuromarketing promotes the value of looking at consumer behavior from a brain perspective.

Consumers are subconsciously defining what they want, how much they will pay, and maybe even what promotional activities appeal to them every day. The key to getting results with less is understanding this. Leveraging demographic and psychographic insights to influence customers' purchasing habits is nothing new to the event marketing game. But the rise of neuromarketing, a field of research that studies consumers' cognitive and sensory responses to marketing stimuli, is challenging the status quo. As the field continues to gain traction, traditional marketing methods are being replaced by a scientific approach to predicting why and when consumers will buy a product or service. Traditional marketing doesn't work because people don't know what they want.(fig.1)

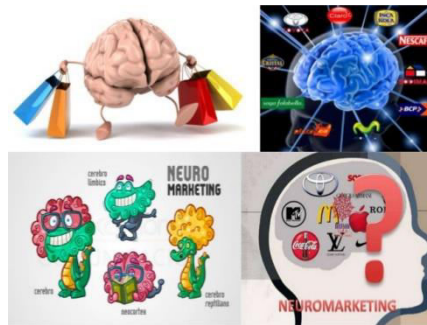
Figure1



NEUROMARKETING

Neuromarketing is an emerging field that connects the study of consumer behavior with neuroscience by applying medical techniques and insights from neuroscience into the field of marketing. The term “neuromarketing” refers to the usage of science to measure the impact of marketing on consumers, which means that the techniques of neuromarketing are based on scientific principles of the brain as shown in figure2.

Figure2



Sometimes neuroscientists join hands with marketers and show willing participants adverts while specialist equipment records brain signals, trying to discover which advert will work the best. When simplified it sounds pretty sinister, which is why brands and companies don't really like to talk about it, especially in front of the consumer.

Neuromarketing offers cutting edge methods for directly probing minds without requiring demanding cognitive or conscious participation.

This paper discusses the promise of the burgeoning field of neuromarketing and suggests it has the potential to significantly improve the effectiveness of both commercial and cause-related advertising messages around the world.

Neuromarketing has been defined in various ways, by many different sources. In order to get a good understanding of neuromarketing, it is important to take all these different views into account. Therefore the following description intertwines all perspectives into one general definition of what neuromarketing entails.

Imagine you are craving chocolate. You go to the supermarket and get confronted with a huge shelf of various choices to satisfy your craving. There are different flavors, shapes, sizes, package designs, and prices. Which chocolate bar will you choose? And on what is your decision based? Neuromarketing is the science that tries to unravel these decisions in order to react accordingly.

Through the use of neuromarketing, marketers and researchers are able to improve their understandings regarding consumer reactions and the intensity of these reactions. These new techniques provide answers related to those consumer-decisions and -actions that are unconscious, and not taken into account by other, more traditional, market research methodologies. However, neuromarketing does not substitute traditional market research; it is solely an addition to it with the goal to better understand consumer behavior based on brain activity.

TECHNIQUES OF NEUROMARKETING

Electroencephalography

This technique was found in 1929. It is one of the best known and most widely used methods in neuromarketing research. Its principle is based on

the electrodes that are placed on the human skin. It can measure the current pulses in the activation of neurons. In the brain, there are the electromagnetic waves and they are spread. It means that the measurement of electroencephalography is sensitive to time resolution. The advantage of encephalography is affordability compared to other methods and its ease of use.

Magneto encephalography

It captures the magnetic field caused by the activity of neurons. Its resolution is very accurate because it can identify sources with an accuracy of a few millimeters. Time resolution is almost the same as it is in encephalography – change is recorded in a matter of milliseconds. The reason for the less percentage of usage is the financial cost of its acquisition and operation.

Functional magnetic resonance imaging

The above-mentioned methods measure the activity of neurons directly. However, functional magnetic resonance technique examines brain activity indirectly. It is a modern method which is used for functional imaging of the brain, respectively mapping brain response to the external or internal stimulus. This technique allows precise measurements in the specific part of the brain where some activities are happening. However, the functional magnetic resonance imaging has the certain delay. The disadvantage of this method is its cost.

Positron Emission Tomography

This is a method of nuclear medicine. It is one of the most expensive technique. In this method, the patient needs to use the radioactive substance. It measures the flow of the scheduled substance and the area where it is accumulating. This method is

used less in the research, and the usage for marketing research activity is not likely.

Eye tracking

This method records the movement of the human eyes. The essence of this method is to monitor the frequency and intensity of the view. It monitors where and what people are looking for longer and more frequently. It also records the enlargement of the pupils.

Where it is being used

Neuromarketing is not a new kind of marketing — it's a new way to study marketing, so it's part of the field of market research.

Here are some major areas where Neuromarketing is being used today:

1.Branding

Brands are ideas in the mind that draw strength from the connections they make. Neuromarketing provides powerful techniques for measuring brand associations.

2.Product design and innovation

Neuromarketing can measure consumer responses to product ideas and package designs that are largely automatic, emotional, and outside our conscious awareness.

3.Advertising effectiveness

Much advertising impacts us through nonconscious means, even though we don't think it does. Neuromarketing explains how.

4.Shopper decision making

Neuromarketing shows how store environments directly influence how shoppers decide and buy, and it's not a logical process.

5. Online experiences

The online world provides new challenges to our old brains. Brain science shows the many ways we can be subtly influenced as we go about our online activities.

6. Entertainment effectiveness

Entertainment creates experiences in people's minds that can influence attitudes, preferences, and actions. Neuromarketing shows what happens when entertainment transports us into an imaginary world.

7. Discover fresh viewpoints

Marketers and creatives thrive on fresh thinking and new viewpoints. Neuromarketing provides these as it has a very different perspective from traditional research; it can measure the lower level effects of designs (such as print ads) and videos (such as TV and web ads) in terms of people's attention, emotion and memory responses.

Whereas many designers and creatives are often focused on the higher-level meanings of what they are creating, Neuromarketing research can focus down on far more granular recommendations. These can include insights into how to design imagery to better capture attention, how to better edit an ad to make key information more memorable, and the exact elements of design that will drive emotional engagement in a product, service, ad or package.

8. Uncover emotional and non-conscious responses

On an average day, most of us go through a journey of different emotions. Some of these are fast and fleeting, others may linger but we barely notice them. Yet these feelings and emotions can be influencing our behaviour, such as what we

choose to buy. Neuromarketing methods can often help uncover the triggers to these emotional responses in a way that just asking questions can't.

9. Put measurements onto common scales

Even when it's possible for consumers to consciously describe or rate their emotional responses or how much attention they feel an ad evoked from them, there will be great variation between how they do this. If you collect answers from different people in one sample, there is little way of knowing whether some are unwittingly exaggerating or some are downplaying. Of course, some of this variation gets ironed-out by averaging data over a large sample, but it is still an unnatural exercise for people to rate their feelings on a scale; we aren't necessarily able to do this accurately. The problem is confounded by trying to compare results across cultures, where differences of expression mean there is even more variation.

10. Measure fleeting reactions that people can't remember

When studying experiences that evolve over time, such as watching a TV ad, neuro measures can capture responses moment-by-moment in real time. Not only does this give valuable diagnostic information on how to better edit an ad, but it would be very hard if not impossible to gain through traditional question-based methods. Mainly this is because:

11. Ask people to think about how they feel about something can change the feeling

Just as certain chemical reactions happen and change a cell only when a light is shone on it, shining our conscious awareness on a feeling can change the feeling. When you begin asking

people to express how they feel about something they begin to examine, revise and rationalise their feelings, so you are no longer getting the original pure reaction.

12. Measure priming effects

Whenever we look at something, whether it be a poster, logo, or package, it activates a range of associated ideas in our minds. Neuroscientists call this effect priming. Some of these ideas – which neuro techniques can measure – relate to the feelings and concepts that an ad or brand logo may trigger in us. Some of them activate goals in us, often without our conscious awareness. For example, your desire to treat yourself to something expensive may have been triggered earlier in the day by seeing a poster for a luxury brand.

13. Can be scaled-up

Whilst an experienced and talented market researcher can often get around some of these challenges through careful questioning and reading between the lines of what people say, there are only so many people they can question. Who's Using Neuromarketing.

Several companies representing a wide range of product offerings and industries are already taking advantage of Neuromarketing's interdisciplinary and comprehensive approach.

Here are four top brand names that have relied on Neuromarketing to conduct market research, run focus groups and designing marketing campaigns:

1. PEPSICO

Women were the focus for the Baked Lays product, and their biometric responses helped

create the idea for single-serve packaging and corresponding ad campaign.

2. EBAY

Using a strategy based in tests measuring brain activity and emotional responses, Neuromarketing industry leader NeuroFocus helped Ebay with its brand identity makeover .

3. DaimlerDAIMLER

The bellwether automaker is known for quality inside and out, from cutting-edge engineering to its sleek, modern aesthetics. The industry giant made the decision to redesign its headlights to more closely resemble human largely based on Neuromarketing research. For example, fMRI results indicated an emotional reaction strongly tied to the reward center with regard to the more humanoid design. Daimler employed fMRI research to inform a campaign featuring car headlights to suggest human faces which tied to the reward center of the brain.

4.MICROSOFT

Microsoft is now mining EEG data to understand users' interactions with computers including their feelings of "surprise, satisfaction and frustration."

5.FRITO-LAY

Frito-Lay has been studying female brains to learn how to better appeal to women. Findings showed the company should avoid pitches related to "guilt" and guilt-free and play up "healthy" associations.

6.GOOGLE

Google made some waves when it partnered with MediaVest on a "biometrics" study to measure the effectiveness of YouTube overlays versus pre-rolls. Result: Overlays were much more

effective with subjects. According to neuromarketing research, creative marketing, and B2B solutions, buyers prefer educating themselves about various potential vendors by visiting their websites. But effective web content that would convince these potential buyers can be difficult to understand. So some companies have used eye tracking and EEG measures to analyse the brain's response to the various content, aesthetics and web design combinations.

7.MICROSOFT- IBM

An example of using this creative marketing data is Microsoft, a company that uses eye tracking techniques to learn client tendencies to further engage them, for instance Carrefour can use the technology to improve product displays. Another well-known example is IBM Watson, a system that interprets data to expose patterns. It is trained to sense and predict customer preferences, thus providing important insights as to what customers tend to value.

8.APPLE

You probably know at least one Apple fanatic who just can't stop talking about how amazing Steve Jobs (still) and how fantastic the new iPhone is going to be years in advance of its release. And part of that is because Apple has really done their work into designing products that make their customers' brains release all sorts of nice neurotransmitters when they test them out. That might mean the delight when you touch a tablet and it does exactly what you're hoping it will, or the way the smooth curves of your new iPhone fit into your hand.

9.VOLVA

The reason that car is so aesthetic, with each line a perfect curve, perfect shape, the perfect interior,

perfect EVERYTHING, is because they knew what you liked before even you! Volvo does countless experiments before launching a new design of a family of cars, just to see how users relate to different aspects emotionally as well as logically. It's the perfect 'bridging-the-gap' in communication on a subconscious level.

CONCLUSION

Neuromarketing strategies will gradually supplement traditional research techniques. Companies will increasingly turn to neuromarketing to better understand how consumers feel about their products. Startup entrepreneurs, product managers, brand managers may be concentrate on neuromarketing technique to gauge consumers preference towards their brands. If neuromarketing is worth its salt, it has to help entrepreneurs, marketers to solve the consumer problems better than other types of research.

Neuromarketing will help us make the transition towards understanding the truth and lies about why we buy.

“Neutrons don't lie”

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