

NEUROMARKETING – NEW SCIENCE OF CONSUMER BEHAVIOR

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ABSTRACT:

It's easy for businesses to keep track of what we buy, but harder to figure out why. While we are all making around 500 conscious and unconscious decisions a day, a marketer remains busy with that one important question: “how am I going to seduce consumers into buying my product?” The solution may lie in the new marketing revolution of neuroscience, in which different methods can determine consumer experiences without actively asking questions. There is a large gap between conscious and unconscious behavior, people act differently than they say and remember. 95% of our choices are made unconsciously, and thus: if you as a marketer want to predict and influence buying-behavior, you need to first understand how the brain works. Each year, over 400 billion dollars is invested in advertising campaigns. Yet, conventional methods for testing and predicting the effectiveness of those investments have generally failed because they depend on consumers’ willingness and competency to describe how they feel when they are exposed to an advertisement. Neuromarketing offers cutting edge methods for directly probing minds without requiring demanding cognitive or conscious participation. This is where neuromarketing comes in.

Keywords: Neuromarketing, Advertising. Marketing research. Consumer behavior, FMRI, EEG, Neuroscience

INTRODUCTION:

The term neuromarketing refers to the use of modern brain science to measure the impact of marketing and advertising on consumers. Neuromarketing techniques are based on scientific principles about how humans really think and decide, which involves brain processes that our conscious minds aren't aware of. Neuromarketing studies which emotions are relevant in human decision making and uses this knowledge to improve marketing's effectiveness. The knowledge

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applied in product design, enhancing promotions and advertising, pricing, store design and the improving the consumer experience in a whole.

Neuromarketing is the formal study of the brain's responses to advertising and branding, and the adjustment of those messages based on feedback to elicit even better responses. Researchers use technologies such as functional magnetic resonance imaging (fMRI) and electroencephalography (EEG) to measure specific types of brain activity in response to advertising messages. With this information, companies learn why consumers make the decisions they do, and what parts of the brain are motivating them to do so.

Neuromarketing engages the use of Magnetic Resonance Imaging (MRI), electroencephalography (EEG), biometrics, facial coding, eye tracking and other technologies to investigate and learn how consumers respond and feel when presented with products and/or related stimuli. The concept of neuromarketing investigates the non-conscious processing of information in consumers brains. Human decision-making is both a conscious and non-conscious process in the brain Human brains process over 90% of information non-consciously, below controlled awareness; this information has a large influence in the decision-making process

Conventional Market Research Vs Neuromarketing

Conventional market research, such as focus groups or surveys, are typically used to understand behaviour and decision-making. However these research methods do not reach the non-conscious thinking of consumers. This results in an incompatibility between market research findings and the actual behaviour exhibited by the target market at the point of purchase. Neuromarketing rather focuses on the MRI and EEG scans which produce brain electrical activity as well as blood flow. Market researchers use this information to determine if products or advertisements stimulate responses in the brain linked with positive emotions

A greater understanding of human cognition and behaviour has led to the integration of biological and social sciences. Combining marketing, psychology and neuroscience, the concept of neuromarketing has established valuable theoretical insights. Consumer behaviour can now be investigated at both an individuals conscious choices and underlying brain activity levels. Neuromarketing displays a true representation of reality, superior to any traditional methods of

research as it explores non-conscious information that would otherwise be unobtainable. The neural processes obtained provide a more accurate prediction of population-level data in comparison to self-reported data.

Neuro marketing process

Collecting information on how the target market would respond to the future product is the first step involved for organizations producing a new product. Traditional methods of this research include focus groups or sizeable surveys used to evaluate features of the proposed product. This method of research fails to gain a deep understanding of the consumer's non-conscious thoughts and emotions.

Neuroscience has played an important role in improving behavioural predictions and advancing the understanding of consumers. It also allows insight into neural differences seen in individuals when no behavioural differences are observed. For example, one customer may retrieve many memories when making a choice whereas another customer may not retrieve any memories. This insight allows marketers to understand the consumer's brain activity and cognitive processes at a non-conscious level. They can then advertise the product so that it communicates and meet the needs of potential consumers with difference predictions of choice.

In response to marketing and advertising there are only three highly established methods of measuring brain activity. These include electroencephalography (EEG), magnetoencephalography (MEG) and functional magnetic resonance imaging (fMRI). It is important that all three methods are non-invasive as this ensures they can safely be used for market research purposes. Once appropriate information is attained regarding the proposed products, the brand manager may revise of the original product design in response to the market research. The original prototype may be modified from feedback to attract and appeal to target consumer's conscious and non-conscious thoughts. It is essential to understand consumers' true wants and underlying thoughts. This results in effective marketing and advertising communications, ultimately leading to increase in successful sales.

Who Employs Neuromarketing?

Neuromarketing isn't cheap. In fact, an fMRI machine can cost as much as \$5 million (and twice that to set up). Additionally, a single ad sample group of 20 people can cost in excess of \$10,000. By necessity then, true neuromarketing is primarily used by large (or at least heavily subsidized) companies and organizations. Some recent examples:

- Google and MediaVest partnered with biometrics researcher NeuroFocus (minority-owned by the Nielsen Company) to gauge how users responded to their InVideo advertisements (the semi-transparent overlay ads on YouTube). Forty participants' sensory responses were scored along such criteria as attention, emotional engagement, and effectiveness.
- Microsoft uses EEG data to better understand its users' interactions with its personal and laptop computers, including feelings of "surprise, satisfaction, and frustration."
- Frito-Lay studied the female brain in order to learn how to better position its advertising. The company discovered that it needed to avoid talking about "guilt"—even "guilt-free"—and instead focus on making "healthy" associations in its advertising.
- The Weather Channel (TWC) was another company that partnered with NeuroFocus, as it prepared to relaunch its When Weather Changed History series. Using EEGs as well as eye-tracking technology and GSR (galvanic skin response), TWC was able to refine its commercials, and programming, for maximum impact.

Its considerable cost aside, neuromarketing still has a range of skeptics and detractors. Concerns include accusations of "brainwashing", questions as to how much brain behavior actually affects consumer behavior, and the inability (so far) to employ neuromarketing techniques in the business-to-business arena.

Still, as its high-profile users attest, neuromarketing has already captured the market's imagination. As researchers conduct more studies in the field, further refinements—and possibly legislation in responses to the aforementioned "brainwashing" allegations—will no doubt further enhance and define neuromarketing strategies in the future.

Effectiveness of Neuromarketing-

Neuromarketing is a flexible method to determine customer preferences and brand loyalty, because it can apply to nearly anyone who has developed an opinion about a product or company. No matter what form it takes, marketing focuses on creating positive and memorable impact in the minds of customers. Neuromarketing measures those impacts, but anyone can take the basic discoveries and adjust their product or service to reflect subconscious consumer needs.

Sensory devices that create or evoke memories, for example, can be easily employed—the aroma of fresh bread, recollections of past stories (either a published work or a shared experience), evocative language, a song that gets stuck in your head and won't come out -- ultimately, these are all effective (if crude) examples of neuromarketing that can be used by nearly any business of any size.

Application of Neuro marketing -

Segmentation and positioning

Marketers use segmentation and positioning to divide the market and choose the segments they will use to position themselves to strategically target their message. Using neuroscience, marketers have now been able to target and tailor their offerings to better-fit buyers expectations. More precise market segments can be devised by using neuroscience to cater to specific brain functions. For example, using the neurological differences between genders can alter the target market, and more precisely devise a segment. Research has shown that structural differences between the male and female brain has strong influence on their respective decisions as consumers. Females have a more concentrated packing power, which means they are able to concentrate on more than one task at a time (multi-tasking), and also have a 'bigger picture' view of the world. Males are more concentrated on minute details, and logical thinking. In short, women are more 'empathisers' and men more 'systemisers' and this can be applied to segmentation as a marketer may want to target a more emotional approach product to women, as it has been proven that women recall emotional matter 15-20% times better in the long run than males do. Another example of where neural research can serve as a tool for marketers is when targeting the youth segment. Young people represent a high share of buyers in many industries

including the electronics market and fashion industry. Due to the development of brain maturation, adolescents are subject to strong emotional reaction, although can have difficulty identifying the emotional expression of others). Marketers can use this neural information to target adolescents with shorter, attention grabbing messages, and ones that can influence their emotional expressions clearly. Teenagers rely on more 'gut feeling' and don't fully think through consequences, so are mainly consumers of products based on excitement and impulse. Due to this behavioural quality, segmenting the market to target adolescent's can be beneficial to marketers that advertise with an emotional, quick response approach.

Store Design

If every in-store decision was taken rationally, your weekly groceries would take up to eight hours. The success of retailers depends on how consumers experience their stores and services, how easy they can navigate and how products, price and promotions are presented (and perceived). Shopper marketing can be enriched by real time measurements of participants' emotions in a lab or in-store situation. Retailers can also apply the scientific principles of neuromarketing in their retail environments.

Professional Services

The (professional) service industry depends largely on human interactions. How (B2B) consumer experience the quality of these services is basically an emotional process. This explains why the best offer for the best price does not always win the quote. Neuromarketing brings in some heuristics on how to act for a better quality. Or for a better perceived quality, because most of the time the decision is taken before the service is delivered.

Advertising

Research has proven that in advertisements, people, faces, and close-ups of facial expressions are of high importance when wanting to be successful in neuromarketing. A person in an ad can either look you directly in your eyes, or guide your eyes toward some other element in the ad. Both compositions of eyes are powerful when it comes to neuromarketing. There is a direct emotional power in direct eye contact due to the personal connection that is being made at that

moment, however the person in the ad is trying to sell a product and thus in some cases their eyes have to guide us towards the product/brand being advertised.

Branding:

The process of creating a unique name and image for a product or service in the mind of consumers, with the goal of establishing a significant and differentiated position in the market. This position is supposed to both attract and retain loyal customers. Neuromarketing provides meaningful techniques for measuring the brand associations

Entertainment effectiveness:

Entertainment creates a bond and experiences in our minds that influence our attitudes, preferences, and actions. Neuromarketing illustrates what happens when entertainment transfers us into an imaginary world

Consultancy:

Neuromarketing consultants use their knowledge from consumer neuroscience and apply it in consultancy jobs in the different areas of marketing. Neuromarketing in 'Business to Business' it is rather unusual to state that purchase decisions in B2B environments are (at least partly) emotional. But these purchase decisions are made by the same brains as consumer decision making and it is unlikely that the principles for consumer decision making suddenly disappear once entering the office. Although there is currently not so much research around on this topic, it is expected that neuromarketing in B2B will grow in this area too.

Neuromarketing Hacks

1. Appeal to your audience's emotions
2. Incorporate images of faces Use colors to elicit emotion
3. Focus on relieving pain points
4. Capitalize on the law of reciprocity
5. Use scarcity as leverage

Conclusion:

While the technology involved in neuromarketing is highly sophisticated, the premise is simple: Consumers can lie; statistics don't. Even if consumers aren't lying, they very often may not properly articulate what they're thinking. It's estimated that 95 percent of all thought occurs in our subconscious minds—which traditional research methods can't measure.

Neuromarketing is here to stay. And it will evolve, like humans and even brands do. Consumers like you may never see the difference in the messages that are refined or produced as a result of gaining a better understanding of our buying decision process.

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