

SYNOPTICALLY DECODING NEUROMARKETING: ENTERING INTO THE BRAIN OF THE CONSUMER

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ABSTRACT

This study will focus on neuromarketing as a business strategy and how it works. Through case-based examples, we discuss the concept of privacy intrusion in the context of neuromarketing — an area which needs immediate attention. With the neuromarketing bandwagon growing bigger every day, we review India's stand in this regard.

Key words: brand, business strategy, marketing, preference, privacy

Background to study

Market research conducted extensively and continuously in order to acquire knowledge about the elements of the market, concentrating on customers and competitors at large has always been a vital business function to capture larger customer base all over the world. A concept of market research that is rapidly grabbing the interest of the marketers is called 'Neuromarketing'. It is the amalgamation of neuroscience with marketing in order to gain useful insights into the consumer behaviour by analyzing their cognitive processes. It involves usage of neuroscience knowledge as well as tools for both marketing and market research. Hence, it can be either theoretical or applied depending on the purpose for which it is used. The former is known as 'Consumer Neuroscience' and the latter is called 'Neuro Research'. Neuromarketing assists the marketers to discern the thinking process, attitude, perception and buying decisions of the consumers thereby trying to win the consumer's heart in order to gain more and ensure survival. It aims to explore the unknown by entering into the consumers mind and unraveling those perceptions, attitude and motivations which even the consumers are not conscious about through an in-depth study of the human brain and other sensory devices (Gobe & Zyman, 2001).

This concept came into existence in the late 1990s when Gemma Calvert (from UK) and Gerald Zaltman (from USA) founded companies in the field of consumer neuroscience. Later, Dutch marketing professor Ale Smidts introduced the term neuromarketing in the year 2002. The first neuromarketing company, The Brighthouse Institute for Thought Science was also established in 2002 by Joey Reiman. It used the Functional Magnetic Resonance Imaging technique to conduct neuromarketing. The idea steadily gained popularity after Professor Read Montague conducted the famous 'Pepsi Challenge' on a group of people in the year 2003, where brain scanning using the Functional Magnetic Resonance Imaging (fMRI) technique revealed the branding affected how the consumers responded to a particular product (Morin, 2011).

The paper begins by assessing the concepts and procedures of neuromarketing through real life examples. This is followed by a case based discussion on a topic which warrants immediate attention, i.e. privacy intrusion in the context of neuromarketing. The next section reviews India's stand in this regard. The paper ends with a conclusion.

How does it work?

Priming lays the foundation for neuromarketing. Priming is an electrochemical process that makes the subconscious mind to start recollecting memories on a particular topic whenever that is introduced to a person. The subconscious mind starts responding even before the conscious mind processes the stimuli. This first response that is created in human mind is what is sought by a neuromarketer. Subsequently, whenever new information is introduced it is compared with the existing stimuli to apprehend the consumer behaviour on a specific focus group. Some of the techniques used in neuromarketing which overcomes the underlying biases on account of their subconscious preferences (Fortunato et al., 2014) are:

- Functional Magnetic Resonance Imaging (fMRI) is the most expensive technique and is required to be performed in a lab. It monitors blood flow in the brain resulting from a neural activity. An increase in activity in any particular area of the brain leads to an increased blood flow in that

area. It helps to understand how well the consumer is engaged in the exercise as well as their power to recall by drawing correlations between brain activity and the task performed.

- Electroencephalogram (EEG) studies the communication of electrical signals between brain cells. Electrodes are used to collect these signals and transmit them to a computer in order to analyze them. It is used primarily to get insights into the impact of a particular marketing stimulus.
- Eye Tracking detects either the eye gaze or the change in the size of the pupil. It is used in neuromarketing to study the attention, engagement and ability to recognize of the consumers for a stimulus relating particularly to packaging and advertisement. It is relatively less expensive.
- Biometrics is the study of the skin response, heart rate and breathing rate when exposed to a marketing stimulus. It assesses whether the stimuli is perceived in a positive way or negative way by the consumer.
- Facial Coding is applied to monitor consumer behaviour/preferences by analysing the facial expressions. It employs either FACS trained coders or computer algorithms to track and evaluate the facial expressions. It detects emotions like happiness, dislike, anger, surprise, etc.

There is a growing demand globally for experts in the field of neuromarketing owing to the surge in the number of companies opting for this new venture in order to remain competitive. This approach is primarily followed by large organizations as its acquisition involves huge amounts of investments. The technique is widely applied in fields like FMCG, automobiles, retail, media and advertising, finance etc. Some organizations that have opted for some kind of neuromarketing technique in order to assess their brand positioning, consumer reactions and areas of further improvement are Google, Microsoft, MediaVest, Facebook, Coca-Cola and Frito-Lay among others. This area of marketing is forecasted to grow at a CAGR of 15.6 per cent during 2020-2024, especially, in the markets like United States, Europe, China, Japan, South Korea, North America and India (Dutta & Mnadal, 2018).

To catch the interest of a customer and retain the attention, you have to constantly appeal to the emotions. When you trigger the emotions of a consumer positively, your brand right away becomes memorable, and you are likely to win their loyalty. Predicting a product's success from a brain scan sounds impressively futuristic, but it also seems just a "touch" sinister when your privacy is intruded and you are clueless about it. The discussion follows.

Case Discussions: With a focus on privacy intrusion

In a research study, by Emily Falk at the University of Pennsylvania and her colleagues titled *Social Cognitive and Affective Neuroscience*, how neural data can be extracted to predict the success of an antismoking email campaign. The emails varied according to the image — either shocking (e.g., a smoker with a hole burned in their throat) or neutral (e.g., a smiling man) — that was paired with the same language: "Stop Smoking. Start Living.". The team partnering with New York State Smokers' Quit Line sent emails to 4,00,000 citizens. But, the subjects were not aware that they were being monitored. Their choice about clicking on the website to quit smoking meant how much they wanted to quit — you unknowingly expose what is going on in your brain to the outside world. In another study by Maarten Boksem at Erasmus University and Ale Smidts at the Rotterdam School of Management showed movie trailers for films to 29 participants which they had not seen before, and then asked them to rate each of the movies as per their preference and how much they would pay for full-length DVDs. The researchers recorded their responses and correlated it with the box-office success of the movie. Interestingly, the responses of how much the respondents wanted to pay for the DVDs of the movie and the success rate of the movie in the box-office was very highly correlated. The point is, though it did not happen, but some DVD company could have carried out this simple survey among random customers. Then, could have used that response data to come up with a strategy of selling these DVDs. The motive behind using these brilliant case studies is to throw light on how marketing geniuses extract personal information from one's brain reactions to reap out benefits for their own (Thompson et al., 2015). After looking at these case studies, are you sure that you have not lost control over the neural data in your brain? The answer to the question that whether our privacy is being eaten up with the advent of neuromarketing, is definitely "yes".

Therefore, the potential threats to privacy represented by neuromarketers who hold brain information are in no way different from any other kind of threat to private information. Thus, there is no question of imagining that issues of brain privacy are *sui generis* but the methods of extracting data are definitely *sui generis*. Synchronizing research ethics with neuroethics, paying particular attention to United Nations Convention on the Rights of the Child (UNCRC) compendiums and regulations (i.e. not consider children below 18 years of age as subjects) in the face of mounting innovation is the way forward. Basically, it is the moral perspicacity with regard to accepted policies and regulations in the field that should prevail. But, the million dollar question is do these

neuromarketers always exercise “ethical neurocaution” while appreciating the exciting discoveries using neurotechnologies?

The Indian Scenario

India, the second most populated country in the world has one of the most diverse population compositions too. It has a mix of people coming from different cultures, religions, societies, languages, educational qualifications and economic backgrounds having diverse preferences, tastes, attitude and expectations. This vast heterogeneity in the consumer base poses a challenge for the marketer when determining the marketing stimuli.

The concept of neuromarketing is still at a nascent stage in India as the demographic structure makes the cost per respondent very high. Also, the high investment involved is another major challenge behind the acceptance and popularity of this technique among the Indian marketers. Rural markets is one area where it can be successfully applied in India as the consumers here lay more stress on colours, visuals and packaging. In such areas the less expensive techniques of Eyetracking and Biometrics can be used to understand the consumer attitude and preferences (Dutta & Mandal, 2018). The caveat is that, the neuromarketing tools which are applicable have to be modified and adapted in the Indian context to cater to the heterogeneity across the rich and the poor. An Indian company that has successfully applied neuromarketing to conduct market research is the Tata Group. Brands like Tata Sky, Zest Cars and Tetley Green Tea have reaped the benefits of neuromarketing. The company could drastically reduce its advertisement costs for these brands by ascertaining the optimum length and content of the advertisements based on the consumer's reaction and attention.

India with a huge population of more than 130 billion people is likely to emerge as the biggest consumer market in the world overtaking China in the near future and she has already among the top five growing markets in the world that have adopted neuromarketing driven market research. It is taking its shape in India via consulting firms like Nielsen Consumer Neuroscience Research Centre (India), Terragni Consulting and Xanadu Indian marketers and companies are engaging these firms to make their products attractive and stand out through appropriate packaging. One of the largest market research firms in the world the US based Nielsen Corporation set up its first neuroscience lab in India at Mumbai in the year 2014. It is one of the fastest growing markets for the company worldwide. A startup company Neuronme based in Delhi engages in text analysis through the process of machine learning in understanding consumer sentiments. Another Indian company that provides such services is the brand Affect Lab owned by a tech startup Entropik. It is market research platform focusing on consumer behaviour by using techniques like EEG.

CONCLUSION

By engaging all of the available sensory branding channels, companies can stimulate multiple senses at once, helping their customers to “experience” their identity more profoundly and memorably. As more corporations appear, competing for the attention of certain customers can be challenging to make the right impression - hence the motive for strengthening neuromarketing as an emerging business strategy.

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