NEUROMARKETING "TAKING THE WORLD BY STORM: A NEW TECHNIQUE TO CONQUER THE BRAIN OF PROSPECT"

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ABSTRACT: In the last decades, marketing and research have passed through the tremendous changes. Those changes could attribute to the way of consumerism, lifestyle and mostly to the progress and achievement of science itself. Marketing research has never been so concrete and precise since the consumer cannot always honestly and accurately respond to the questions asked. Therefore, neuroscience opens the door to the unknown world. Neuromarketing uses neuroscience also called brain research to reveal subconscious consumer decision-making processes. Neuromarketers study brain- and biometric responses, as well as behaviour, to understand and shape how consumers feel, think and act. It is a technique used to improve the effectiveness of marketing efforts by studying the psychology of a company's consumer base. The goal is to better understand the customers and how the marketing will have an effect on them by tracking their brain activity. The advancements in information processing, data capture and scientific theory have created the perfect storm to advance the fields of neuromarketing and consumer neuroscience beyond what was once thought impossible.

KEYWORDS: Neuroscience, Subconscious, Hippocampus, Branding, Advertising, Anchoring

1. INTRODUCTION

Neuromarketing is the process of applying neuroscience in marketing. It includes a bunch of tasks like direct use of brain imaging, scanning and mind mapping by using brain activity measurement technology to measure a subject's response to specific products, packaging, advertising and other marketing elements. In some cases, the brain responses measured by these common techniques may not be consciously perceived by the subject in actual; hence, this data may be revealing more than self-reporting on surveys, in focus groups, etc. Neuromarketing is a latest concept of marketing which uses medical technologies such as Functional Magnetic Resonance Imaging (fMRI) and Electroencephalography (EEG) to study the brain's responses in accordance to marketing stimuli. Researchers uses the FMRI to measure lateral changes in activity in parts of the brain and to learn why consumers make certain decisions, and what part of the brain is telling them to do the same. Neuromarketing is a marketing technique that utilises the application of neuroscience to attain a more accurate reading of consumer behaviour. The beauty of neuromarketing is its ability to combine both the outbound and inbound marketing strategies. From things like offering a prospect a warm beverage and seating them a soft chair during a sales conversation to using pictures in babies in advertising. These are the tactics our brain subconsciously responds to.

2. HOW IS A NEUROMARKETING CONCEPT DEVELOPED

Although the work heavily affects the part which is visible of advertising, neuromarketers focus primarily more on the "back end" work. They're less concerned with developing the right message or branding and they are more concern with studying the emotions and memories triggered by that message.

A neuromarketing campaign is basically more person-intensive. Whereas typical marketing which depicts broadly from a cross-sectional customers, through a variety of methods like focus groups, surveys, customer records, etc. Neuromarketing focuses intently on individual marketing. Toward this end, MRI and EEG machines are used especially to monitor participants brain activity before, during, and after exposure to different neuromarketing techniques. Other physiological sensors that monitor heart rate, breathing, and skin response may also be used as neuromarketing techniques.



Fig.1 Process of Neuromarketing

Neuromarketing depends on a process known as priming an electrochemical reaction which set off whenever a topic is introduced first time. Priming allows the brain to recall every single thing it knows about the particular topic. Its like when the conscious mind becomes aware of a stimulus, the subconscious mind has already begun the process and it respond all in the course of a single second. Neuromarketing is mostly concerned with that second when the response is formed very first time.

Once a consumer's brain is primed, the new stimuli is introduced the brain to compare this new information with what it already knows, and to form and express conscious opinions about the product itself. Then this information is compared to the information which is already compiled in the priming stage.

Once all the data has been collected, the marketing campaign then becomes "traditional" marketing campaign. Based on the neural and sensory data collected from responses, the marketing team further develops and adjust the campaign in order to create maximum engagement, and memory retention, with consumers.

3. PARTS OF THE "BRAIN" NEUROMARKETERS TARGET

Just a few parts of the brain neuromarketers desire to stimulate (or not):

- Nucleus accumbent : creates the expectation of pleasure
- Prefrontal cortex: controls higher thinking
- Hippocampus: assists with memory
- Insula: anticipates (and avoids) painful stimuli
- Mesial prefrontal cortex: registers disappointment when a hoped-for reward doesn't materialize

4. COST APPROXIMATION (AN INSIGHT)

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 subsidised) companies and organisations.

5. HOW HAVE BRANDS USED NEUROMARKETING

- Google and MediaVest with NeuroFocus to measure how users responded to their InVideo advertisements (the semi-transparent overlay ads on YouTube). Sensory responses of Forty participants were recorded along with the criteria such as emotional engagement, attention and effectiveness.
- Microsoft uses EEG data to precisely understand its users interactions with the personal and laptop computers of Microsoft, including feelings like "surprise, satisfaction, and frustration."
- Frito-Lay studied the female brain in order to learn how to better position it's advertising. The company discovered that they shouldn't talk about "guilt" even "guilt-free" and instead focus on making "healthy" associations in it's



advertising with positiveness.

Fig.2 PepsiCo sales boosted by pricier 'guilt-free' premium snacks (Poppables)

The Weather Channel (TWC) also partnered with NeuroFocus, as they prepared to relaunch their When Weather Changed History series. Using multiple technologies like EEGs, Eye-tracking technology and GSR (galvanic skin response), TWC was able to filter its commercials, advertisements, and programming, for maximum impact on audience.

Its considerable very costly but neuromarketing still has a range of skeptics and detractors. Their are concerns include like accusations of "brainwashing", questions as to how much brain behaviour actually affects consumer behaviour, and the inability (so far) to employ neuromarketing techniques in the business-to-business arena with uncertainty.

6. NEUROMARKETING PRINCIPLES

- Don't use "we" or talk about the corporation: Focus should be on the customers pain point, not what organisation wants.
- Get to the point: the message is competing with about 10,000 other messages sent to the brain daily, so it should be pedantic

- Be visual: telling about a product is not enough; showing it is necessary. And if you can't show an image or create a mental image for your customers you could be very far from your goal
- Keep it concrete: Ads should be with facial expressions, which help decode people's hidden intentions
- Close strong: Generally most of the people pays most attention at the beginning and end of an advertisement. This will help ensure the memory storage
- Use emotion: Surprise, laughter, fear, and anger they all cause disruption and thus, trigger memory effectively

7. HOW YOU CAN USE NEUROMARKETING TODAY

Neuromarketing is not actually a new type of marketing, it's a new way to study marketing, so it is the part of field market research. There are six main areas where neuromarketing is use these days:

- **Branding:** Brands are the ideas in the mind that draw strength from the connections they make with their creativity and approach. Neuromarketing provides powerful techniques to measure the effectiveness of brand associations.
- Product design and innovation: Neuromarketing can also measure consumer responses to product ideas, package designs and interest that are largely naturally generated, emotional, and outside the normal conscious awareness.
- Advertising effectiveness: advertising impacts us through non-conscious means, even though we don't think it does. Neuromarketing explains exactly how by mind mapping.
- **Shopper decision making:** Neuromarketing shows how store environments directly influence shoppers decision and buying behaviour, even it's not a logical process.
- Online experiences: The world of internet provides new challenges to our old brains. Brain science shows many ways we can be subtly influenced as we go about our online activities these days.
- Entertainment effectiveness: Entertainment creates experiences in people's minds that can influence their attitudes, preferences, and actions. Neuromarketing shows what happens when entertainment transports us into an imaginary world, what we feel, how be react.

8. HOW NEUROMARKETING HAS CHANGED MARKETING

The footprint that neuromarketing has left on the field of marketing as a whole is undeniable. As many success stories have sprouted from the strategic use of neuromarketing, more and more companies are starting to see the benefits of using neuromarketing techniques. But there are those that are more skeptical.

This criticism is not new. Since the early years of neuromarketing, people feared corporate power and control of consumers without their consent. Of course, having a look inside consumers' brain to see how marketers can make you buy until you're broke seems quite scary. And while it's true that neuromarketing could potentially cause unwanted and unethical influence on consumers, it actually influences consumers in a way no different from regular marketing.



Fig.3 Conquering the prospects with Neuromarketing

Many forms of traditional advertising and marketing have been used with the purpose of bypassing rational decision processes and hitting the 'buying buttons' of the brain. Mostly, they are certainly meant to be just as persuasive as neuromarketing techniques. While neuromarketing does make this process more accurate and reliable, it does not transform consumers into mindless zombies buying everything they come across.

9. SIX POWERFUL EXAMPLES OF NEUROMARKETING IN ACTION

Neuromarketing is taking the world by storm and has been utilised by almost every major company and university in some way or form. Despite such a widespread influence on the marketing world, many people do not know exactly what neuromarketing is, or how it can be used effectively.

9.1. The Importance of Eye Gaze

It is old news that the ad include people are more effective than those do not have. In particular, images and videos that include babies tend to attract longer and more focused attention from potential customers specifically mothers.

Example: Advertisers have long attempted to boost sales for baby products using close ups of adorable baby faces with the help of eye tracking technology they have identified that this alone is not enough.

9.2. Using Effective Packaging

We all know the feeling of being inclined to particularly striking or attractive packaging. Advertisers know that it is not always what's inside that only counts, but neuroimaging has managed to take this to a whole new level like in Indian context "Jo Dikhta Hai Wo Bikta Hai".

Example: Brands such as Campbell's and Frito-Lay have used neuroimaging to reimagine their packaging.

9.3. Colour is Key

When selecting colours, it should be in mind that you may be influencing how potential customers feel! Colours can evoke a wide range of emotions, happy, boring and enthusiastic, with studies consistently showing a connection between

certain colours with certain emotions. Utilising a colour effectively can be a powerful marketing tool to conquer the



mind of prospect.

Fig.4 Coca Cola's uses ubiquitously the colour "Red"

Example: One of the most infamous examples is Coca Cola's ubiquitous use of the colour red

9.4. Anchoring

The first very piece of information customer receives is highly important. It can be the basis for any subsequent decision making and set the tone for their purchasing behaviour which is vital for the organisation. Neuroscientists have discovered a snag in the workings of the mind, and how it reaches to decision making.

Example: Advertisers often take advantage of this when comparing bundle packages or deals against each other. In this way, we may often find ourselves signing up to contracts or a year-long commitment.

9.5. The Need for Speed

Neuromarketing is useful for detecting trends of customers. Whilst companies often seek to portray a sense of safety and security, self belongingness, speed and efficiency and these may be what customers are after.

Example: PayPal discovered this by conducting a study which found that the promise of convenience activated the brain more than security. They used this information to convert more shoppers to their online payment service by emphasising their speedy payment system.

9.6. Reward and Punishment

Even video game designers has started to use psychological principles in the product design process, specifically using reward and punishment in order to make engaging game players, and to keep people playing them. By increasing the reward presented by the game, the action may also increase the levels of dopamine (a neurotransmitter) within the brain and stimulate the player to ply more and buy the perks. This neurotransmitter is associated with pleasure and positive associations and mental satisfaction, which can increase the attachment to keep playing and association with the com-



pany.

Fig.5 PUBG has reward and purchase option in order to make game players engage

Example: Game designers are now even hiring psychologists to help with game design, building psychological principles directly into the game mechanics.

10. ADVANTAGES OF NEUROMARKETING

- Neuromarketing focuses on the subconscious mind, which is a lot less bias than the conscious mind, neuromarketing enjoys over traditional customer insight acquisition methods.
- The subconscious mind processes information faster than the conscious mind, so appealing to consumers based on neuroscience principals, it offers the ability for marketers to achieve better results.
- Neuromarketing provides an outlook that quantifies traditional marketing approaches. It gives concrete information to how humans process information, rather than the psychological perspective that marketing originally developed from.
- Brands can use neuromarketing at the time of deciding new brand guidelines, packaging, prototyping and their overall messaging strategy in advertising. Neuromarketing marketers can get more out of their marketing efforts effective, as it will be tailored according to the emotions of the audience it is received by them.

11. LIMITATIONS OF NEUROMARKETING

- The operating costs is "very high" especially if fMRI is use to monitor the brain activity of consumers.
- Just like any other research method, neuromarketing requires very specialised equipment and can quickly eat up monetary resources.
- In comparison with any other technology, the prices for purchasing, leasing and operating these ultra smart technologies will eventually very expensive thus making neuromarketing an unaccessible strategy.
- In addition to the high costs, the difficulties in finding the "right personnel" to carry out these studies as another major limitation. It is imperative that the staff assigned to this initiative actually possess a deep understanding of psychology and the human brain as well as marketing as a discipline is uncertain.

12. THE FUTURE OF NEUROMARKETING

It has been identified five predictions for neuromarketing in the future time frame. It can be summarised as the following

- More studies will be done: numbers of case studies and research will grow in next period. It will help to understand better, analyse or compare the obtained information and relevant data. It will offer the place for deeper studies of human minds.
- More collaboration: different kinds of research platforms will be used to provide sufficient comparison and effective collaboration. Therefore, the researchers feel confident to share their outcome.
- Greater frequency of testing: the profit from the effectiveness of time-saving and usage will bring the higher volume of trial. These tests will be set up on the monthly or bi-weekly basis.
- Better company benchmarking: According to the previous prediction, the better benchmarking will be implemented. It brings the possibility to predict buying behavior.
- More case studies and real-life examples: as it was said previously, more case studies and real-life examples will be provided in the future. It brings better understanding and overview in neuromarketing.

Critical to the success of neuromarketing is the necessary generation of empiricist-driven links between bio-measures and behaviours. As these links become clearer, our understanding of unconscious emotional arousal and valence will be able to predict behavioural outcomes more precisely and reliably than ever before.



Fig.6 Behavioural outcomes and expectation of prospects brain

13. CONCLUSION

Neuromarketing techniques are specifically based on scientific principles like how humans really think, decide and behave, which involves a set of processes in brain that our conscious minds aren't aware of. When these new techniques combined with sound experimental designs and procedures, it provide an insights into consumer decisions and actions that are completely invisible to traditional market research methodologies. It is about unconsciousness of ours. It is a modern not-well expanded and well explored field. Concerning this type of research, there are plenty of discussions about the ethic principles and accuracy of neuromarketing usage. Many professionals talk about the increasing dangers and abuse from its usage. Neuromarketing research provides us with a unique and accurate feedback from the customer about the effectiveness and efficiency of the marketing communication. Neuromarketing will tell the marketer what the consumer reacts to, whether it was the colour of the packaging, the sound the box makes when shaken, or the idea that they will have something their co-consumers do not. Although, it is a field which is evolving and growing we can expect a prosperous future once the ethics will be taken into the consideration. Nonetheless, it has made people realise there are certain ethical aspects that should be considered. Issues with the ethical aspect of neuromarketing should be just as much applied to conventional forms of marketing. The question what makes marketing ethical should get as much attention as what makes it effective.

14. REFERENCES

- 1. Kotler, P., Burton, S., Deans, K., Brown, L., & Armstrong, G. (2013). Marketing (9th ed., pp. 171). Australia: Pearson.
- 2. An Introduction to Consumer Neuroscience & Neuromarketing, Coursera, https://www.coursera.org/learn/neuromarketing
- 3. Kelly, M. (2002). The Science of Shopping Commercial Alert. Commercial Alert. Retrieved 30 March 2016, from http://www.commercialalert.org/news/archive/2002/12/the-science-of-shopping
- 4. Morin, C (2011). "Neuromarketing: The New Science of Consumer Behavior". Soc. 48 (2): 131-135. doi:10.1007/s12115-010-9408-1.
- 5. Unconscious Branding: How Neuroscience Can Empower (and Inspire) Marketing, 2012, Douglas Van Praet
- 6. Shiv, B.; Yoon, C. (2012). "Integrating neurophysiological and psychological approaches: Towards an advancement of brand insights". Journal of Consumer Psychology.
- 7. Brainfluence: 100 Ways to Persuade and Convince Customers with Neuromarketing, 2011, Roger Dooley
- 8. Dooley, Roger. "Nielsen Doubles Down On Neuro". Forbes. Retrieved 2018-04-27.
- 9. Neuromarketing By Roger Dooley, https://www.neurosciencemarketing.com/blog/articles/what-is-neuromarketing.html
- 10. Neuromarketing Science and Business Association, n.d.
- 11. Genco, S.J., Pohlmann, A.P. and Steidl, P., Neuromarketing For Dummies, John Wiley & Sons, 2013
- 12. Powerful Examples of Neuromarketing in Action, By: Bryn Farnsworth, March 7th, 2017, https://imotions.com/blog/neuromarketing-examples/
- De Clerck, 2011 "Tapping into how consumers react with Neuromarketing | Artifact's Blog". Artifact's Blog. 13. 2017-07-20. Retrieved 2018-04-27.
- "Neuromarketing: Scan your brain, set your price. 60second Recap®". 60second Recap®. 2013-10-11. Re-14. trieved 2018-04-27.
- Dragolea, L. (2011). "NEUROMARKETING BETWEEN INFLUENCE AND MANIPULATION". POLISH 15. JOURNAL OF MANAGEMENT STUDIES