

Mind Over Market: Neuromarketing Strategies for Elevating Consumer Engagement

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Abstract

Neuromarketing, at the intersection of neuroscience and marketing strategy, has emerged as a powerful tool to decode the complexity in consumer decision-making. This abstract delves into the core theme of "Mind Over Market," exploring the strategies within neuromarketing that are reshaping how brands engage with consumers. In essence, "Mind Over Market" presents neuromarketing not merely as a set of tools but as a strategic approach that empowers businesses to elevate consumer engagement by tapping into the complex workings of the human mind. As technology advances, neuromarketing strategies are composed to play an increasingly vital role in shaping the future landscape of consumer-brand interactions.

It addresses the significance of neuromarketing tools like functional magnetic resonance imaging (fMRI) and electroencephalogram (EEG) in measuring brain activity with precision. Looking forward, the abstract anticipates the future of neuromarketing, by visualizing the integration of virtual reality (VR) as a prominent component. It discusses how VR, when combined with neuromarketing tools, can offer cost-effective alternatives for understanding consumer responses and enhancing engagement.

Keywords: Neuromarketing, virtual reality, functional magnetic resonance (fMRI), electroencephalogram (EEG)



Introduction

Understanding the complexities of consumer behavior is critical for organizations seeking to engage with their target audience in today's dynamic marketing landscape. Traditional marketing tactics frequently focus on demographic data and market research, but the emerging area of neuromarketing provides a deeper knowledge of consumer decision-making by digging into the neurological and psychological components of consumer decision-making.

Neuromarketing recognizes the importance of emotions in influencing consumer behavior. It involves the study of how sensory inputs activate distinct parts of the brain, allowing marketers to improve product or service presentation to optimum impact.

Customer physiological and neurological responses are recorded using techniques such as EEG (electroencephalography), fMRI (functional magnetic resonance imaging), and eye-tracking to provide objective data regarding customer reactions. However, in-person focus groups incorporating techniques such as EEG and fMRI are not commonly used in the field of neuromarketing. These methods are more commonly utilized in academic or clinical settings to study brain function and are less popular in regular marketing research.

Brands and neuromarketing firms focus on technologies that are accessible and appropriate for their purposes. These include techniques such as facial recognition, eye tracking, biometrics (measurement of physiological responses such as heart rate and skin conductance). These techniques can provide information about consumers emotional reactions, attention, and subconscious reactions to marketing stimuli.

The growing popularity of online marketing helped neuromarketers to design more effective internet marketing strategies by knowing how customers engage with online material. Neuromarketing principles are used to create marketing strategies that increase engagement and brand loyalty. Brands may create memorable experiences that go beyond the surface-level attraction of traditional advertising by appealing to consumers subconsciously. Marketers make informed judgments based on objective criteria by utilizing neuroscientific data. This data-driven strategy improves the precision of marketing initiatives, increasing their likelihood of success.

Review of Literature

(Sharad Agarwal, Tanusree Dutt, 2015) They stated that neuroscience has meaningfully informed marketing science, and the connection between these two areas has aided in the generation of deeper insights into customer behavior. As a result, a new branch of study known as neuromarketing or consumer neuroscience has emerged. They introduced readers to a new area of marketing literature and practice. It provides an overview of neuroscience applications in marketing and consumer behavior research. Following that, it addresses the role that neuromarketing and consumer neuroscience are predicted to play in defining future marketing tactics. It also exposes readers to key neuromarketing methodological concepts, as well as some advances in fundamental neuroscience that are anticipated to enhance this subject.

(Harit Kumar and Priyanka Singh 2015) Neuromarketing, which employs brain research in a managerial setting, has grown in prominence in both the academic and practical worlds. Neuromarketing, which caught advertisers' interest in early 2002, precisely shortens the path and process of exploring minds



and makes it significantly easier for advertising. The paper investigates the conceptual function of neuromarketing as a successful marketing technique in the new era of market research for today's advanced buyer. Our research focuses on the position and emergence of neuromarketing, as well as the methods involved in the current scenario, such as neuroimaging, EEG, FMRI, Eye Tracking.

(Atul Kumar, Amol Gawande, Vinaydeep Brar 2020) neuro-marketing is the new revolutionary idea in marketing research. India, as a rapidly rising economy with a significant consumer presence and purchasing power, is a fertile ground for the philosophy of neuro-marketing. This review intends to look more into this concept of neuro-sensory marketing and its state of potential and problems in the Indian market. This research has expanded on the applications of neuro-marketing in telecom, medical tourism, and retail marketing, all of which have effectively used neuro-marketing concepts to increase sales. However, this type of marketing raises ethical problems about the consumer's privacy and confidentiality. They spoke with five marketing gurus, and they all believe that neuromarketing has a lot of potential in India.

(Shreeyam Chaudhary 2023) There has been a shift in customers' purchasing decisions to purchase a specific type of product. Also, there is an urgent need to shift this thinking and create something that can be utilized to study customer behavior while making purchasing decisions for a specific product. This can be accomplished by employing the term Neuro marketing. This study paper discusses how neuromarketing can serve as the future marketing system in India. Neuromarketing is a new multidisciplinary field that combines psychology, neurology, and economics. The purpose of neuromarketing is to investigate how advertising and marketing practices affect the brain physiologically. It entails the application of scientific procedures such as FMRI (functional magnetic resonance imaging) and EEG (electroencephalography).

(Ogechi Adeola, Olaniyi Evans, Jude Ndubuisi Edeh & Isaiah Adisa 2022)

New technologies are influencing marketing research and business decisions. Artificial intelligence (AI), virtual reality (VR), and neuropsychological technologies, in particular, are transforming the way we collect, store, and analyze marketing data. Strategic and proactive attitudes are necessary for maximizing the benefits of these technologies, which have consequences for marketing communications by facilitating an in-depth understanding of consumer experience. To that end, this section examines existing literature on AI, VR, and neuromarketing in order to provide direction on how future marketing decisions will be made using these new technology-based tools. AI will aid in wide marketing applications such as customer profiling and targeting for effective decision-making. VR can improve a customer's purchase journey, giving marketers plenty of opportunity to use cutting-edge technology.

Objectives

To identify the various techniques used in neuromarketing.

To identify the numerous neuromarketing strategies.

To recognize the growing significance of neuromarketing in the future.

Research Methodology

Secondary sources: Google scholar database, articles, academic papers, publications.

Articles reviewed: 2015- 2023 (10 articles)



Objective.1: To identify the various techniques used in Neuromarketing.

Neuroimaging Techniques

Functional magnetic resonance imaging (fMRI) is a noninvasive brain imaging technique that evaluates brain activity based on changes in blood oxygenation. fMRI is a method for recording metabolic activity in the brain. During the experiment, it acts as a scanner in which a study participant lies. It can assess memory encoding, sensory perception, emotional valence, cravings, trust, brand loyalty, brand choice, and brand recall. fMRI is used in sensory testing, product selection, testing new campaigns, products, and commercials, assessing needs, package design and pricing, celebrity endorsement, product positioning, and video content identification. The benefits of fMRI include excellent spatial resolution (3 mm), evaluation of most brain regions, including deeper ones, the technology being non-invasive (Ekonomika preduzeca 2021).

Electroencephalography (EEG) is an abbreviation for an electrical reproduction of brain activity. Although EEG is a very old technology, it is still regarded an appropriate means to monitor changes in the electrical field in specific brain areas. Electroencephalography is a brain scanning procedure that records the electrical activity produced by the brain on the scalp. Electrodes applied to the scalp detect minute changes in electrical activity (Shreeyam Chaudhary 2023). The computer displays the electrical activity of the brain as waves on the screen or on paper. The EEG data collected is analyzed using software developed in-house.

Non-Neuroimaging Techniques

Facial coding- Based on the activity of the facial muscles, facial coding is a system that identifies and measures micro facial emotions using a video camera (Harit Kumar, Priyanka Singh Dec-2015). Facial coding is a neuromarketing technology that does not track brain activity. Unconscious reactions, 43 facial muscles, 23 action units, and six basic emotions (sadness, happiness, fear, wrath, surprise, and disgust) can all be quantified via facial coding, it can be used to test movie trailers, new products, test and design commercials, identify critical times in advertisements, and so on (Amine Bentahar 2023). The benefits of face coding include real-time data, non-invasiveness, and the spontaneity of facial expressions.

Eye tracking is a non-brain activity method that measures visual search, fixation location, eye movement patterns, spatial resolution, excitement, and pupil dilation by using infrared cameras to detect a subject's gaze (Shreeyam Chaudhary-2023). It is employed in brand memory, perception, advertising, design, usability, and new campaign development. Portability, low intrusiveness, and the ability to measure consumer attention patterns are the advantages. The disadvantages include a lack of flexibility, inaccurate outcomes, and expensive equipment (Harit Kumar, Priyanka Singh Dec- 2015).

Objective 2: To identify the Neuromarketing strategies.

Using eye gaze technique

Advertisers have used eye-tracking technology to boost sales for baby products by showing close-ups of adorable baby faces. However, researchers discovered that customers are more focused on the baby's face when the infant looks at it, detracting from the ad content. To improve performance, advertisers can change the content and layout of their ads, using tools like Hotjar to measure viewer's gaze. This allows advertisers to identify which content is performing better and adjust their strategies accordingly (Nahid Sharif 2023).



Using colors that suit your brand identity -

Neuromarketing involves using the right color combination for a brand to influence customers' brains and visualize design, evoking various emotions. Coca-Cola's success in using red as their major brand color demonstrates the power of neuromarketing strategies (Nahid Sharif 2023). By creating brand awareness, effectively utilizing product marketing, making customers feel good, increasing click-through rates, and building brand authority, Coca-Cola effectively utilized color to create a robust customer base.

Utilizing emotional marketing -

Telling fantastic stories that people can readily relate to can help you emotionally connect with your audience and make them care about your brand. Because emotional stories trigger our brain to release the Oxytocin hormone, which causes us to be emotional, sad, or happy, at the same time (Nahid Sharif 2023).

Objective 3: Growing importance of Neuromarketing

The incorporation of **artificial intelligence** (AI) and machine learning algorithms is another rising trend in neuromarketing. Marketers may examine enormous volumes of data from neuroimaging studies and other sources using AI to identify hidden patterns and connections that might inform their marketing tactics (Ming Hsu 2017).

For example, AI can assist marketers in identifying certain brain activity patterns that signal high engagement or emotional arousal, allowing them to refine marketing messaging and build more engaging and persuasive campaigns.

Neuromarketing is also evolving in the context of the digital revolution, with the increasing use of **virtual reality** (VR) and augmented reality (AR) technologies (Ming Hsu 2017). These immersive technologies enable marketers to create highly engaging and interactive experiences that can influence consumers' perceptions, attitudes, and behaviors.

For example, using VR or AR, marketers can simulate real-world shopping environments, test product prototypes, or create personalized virtual experiences that trigger emotional responses and influence purchase decisions (Ogechi Adeola, Olaniyi Evans, Jude Ndubuisi Edeh & Isaiah Adisa 2022).

Conclusion

Neuromarketing will be like a crystal ball. They'll be able to forecast what you'll buy before you ever realize it!

Neuromarketing is an intriguing new marketing frontier. Neuromarketing provides new knowledge that may drive successful campaigns in the future by diving into the inner workings of human brains and understanding them for efficient marketing techniques. Companies that adopt neuromarketing today can position themselves as market leaders by leveraging neuroscience's capacity for customer-oriented campaigns that result in highly efficient and customer-centric solutions.



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