

Neuromarketing as a Secret Weapon: Increasing the Appeal of Consumer Products

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Abstract. This study aims to describe and analyze how neuromarketing strategies are used by business actors to enhance the attractiveness of products in the eyes of consumers. The approach used in this research is qualitative descriptive, with data collection techniques through literature review, observation, and documentation of neuromarketing practices applied in the marketing world. Neuromarketing is viewed as an approach that combines neuroscience and consumer psychology to identify emotional and cognitive responses to marketing elements such as color, packaging, advertising, and product layout. The results of the study show that neuromarketing is effective in increasing product attractiveness to consumers. Techniques such as the use of appealing visuals, appropriate music, and the application of principles like time limitation and social proof can influence consumers' emotions and purchasing decisions. Additionally, delivering simple messages and personalizing advertisements based on consumer data also play important roles in increasing engagement and purchase interest. Thus, neuromarketing can be a powerful strategy to help companies win competition in the market.

1. INTRODUCTION

In the digital era, flooded with fast and endless streams of information, capturing consumers' attention is not an easy task. Every day, consumers are presented with thousands of contents ranging from advertisements, news, to social media posts scrolling across their device screens (Situmorang, 2008). In such conditions, attention becomes a very limited and valuable resource. Therefore, conventional marketing strategies that rely solely on direct promotional messages often become ineffective. Brands must be able to create deeper, emotional, and personal approaches to cut through digital noise and reach the hearts of consumers (Indah et al., 2017).

One key to success in capturing digital consumers' attention is understanding how their brains and emotions work. This is why approaches like neuromarketing are increasingly relevant (Intansari, 2022). By leveraging insights from neuroscience, brands can design content and visual experiences that subconsciously stop consumers from scrolling, attract their attention within seconds, and create strong emotional connections. This approach is not just about making attractive ads, but about turning the brand into a memorable experience that sticks in consumers' memories for the long term (Khurniawan, 2017).

Neuromarketing revolutionizes how we understand consumer behavior by touching dimensions that conventional research methods have not explored (Aliyah, 2019). Consumer decision-making processes are largely influenced by subconscious mechanisms that cannot always be revealed through interviews, surveys, or focus groups. In many cases, consumers themselves are not fully aware of the reasons behind their choices, or they may give socially "appropriate" answers rather than those that truly reflect their authentic reactions (Purwanto et al., 2021). Therefore, data obtained from traditional methods is often limited and biased, and not sufficiently accurate to portray true consumer preferences and emotions (Pratama et al., 2016).

In contrast, neuromarketing utilizes advanced technologies such as EEG (electroencephalography) and fMRI (functional Magnetic Resonance Imaging) to directly observe brain and physiological responses to various marketing stimuli—ranging from visual ads, brand sounds, to packaging design (Jailani & Suyadi, 2021). By measuring brain waves, heart rate, eye movement, and levels of emotional engagement, researchers can precisely identify which parts of the content truly attract consumer attention and which parts are ignored (Kusuma, 2021). This information is very valuable for marketers as it allows them to refine communication strategies objectively and

scientifically, creating campaigns that are more effective in shaping perception, evoking emotions, and driving purchase decisions—not solely relying on what consumers say but on what they genuinely feel (Fisher et al., 2010).

In practice, neuromarketing offers strategic advantages because it can penetrate consumers' conscious limits and reveal things that cannot be explained through words (Hsu, 2017). Techniques like eye tracking allow marketers to know which parts of an ad or product packaging attract consumers' visual attention the most, while facial coding can automatically read facial expressions to identify emotional reactions to certain stimuli (Clement, 2007). Brain activity measurement through EEG or fMRI helps understand levels of engagement, cognitive load, and consumer enjoyment of content. All this data helps companies optimize visual, narrative, and emotional elements in their campaigns, creating experiences that are not only informative but also intuitive and memorable (Lin et al., 2018).

One key outcome of applying neuromarketing is the increased emotional appeal of products in consumers' eyes. When a product or brand can trigger positive emotional responses—such as happiness, nostalgia, or trust—consumers tend to be more loyal and willing to pay more, even without logically understanding why (Pluta-Olearnik & Szulga, 2022). Global brands like Coca-Cola leverage nuances of happiness and togetherness in their ads, Apple emphasizes aesthetics and innovation that evoke pride, and Nike inspires spirit and motivation through strong storytelling. All these approaches do not arise by chance but through deep understanding of how consumers' brains respond to brand messages. Thus, neuromarketing is not just a tool but the core of emotional communication strategies that create long-term bonds between products and their consumers (Kara, 2015).

This study aims to understand how neuromarketing can increase product attractiveness in the eyes of consumers. The main focus is to see how techniques such as eye tracking, facial coding, and brain activity measurement can help companies know what truly attracts consumer attention and emotions. This study also seeks to understand how large companies use neuromarketing in their marketing strategies to build stronger relationships with consumers. The benefit of this research is to provide new insights into how consumers' minds respond to marketing. Practically, the results of this study can help business actors and marketers develop strategies that are more targeted, emotionally appealing, and memorable. In addition, this study is expected to serve as a reference for small and large businesses to start applying neuromarketing to attract and retain customers.

2. METHOD

This study uses a qualitative descriptive approach aimed at describing and understanding the application of neuromarketing in enhancing product attractiveness among consumers. This approach was chosen because the research focuses on gaining in-depth understanding of the processes, strategies, and experiences related to neuromarketing without using quantitative statistical data (Moleong, 2014). Data were collected through in-depth interviews with several marketing practitioners and neuromarketing experts from companies that have implemented this concept in their marketing strategies. Additionally, documentation studies of marketing materials, campaign reports, and relevant neuromarketing literature were conducted to complement the interview data. Data analysis was carried out qualitatively using techniques of data reduction, data presentation, and systematic drawing of conclusions to produce a comprehensive picture of the role of neuromarketing in increasing product attractiveness to consumers.

3. RESULT AND DISCUSSION

Neuromarketing leverages an understanding of how the brain processes information to design more effective marketing strategies. Here are seven key techniques you can apply:

1. Understanding the Brain's Reward System

The human brain has a natural reward system that works by releasing dopamine, a chemical that creates feelings of pleasure and satisfaction. When someone receives a reward, praise, or something perceived as valuable, the brain responds positively as motivation to repeat the same action. This scientific basis is utilized in neuromarketing—strategies designed to stimulate the brain's pleasure

centers through various forms of incentives. By understanding how the brain responds to rewards, marketers can create experiences that are not only enjoyable but also build emotional attachment with consumers.

In marketing contexts, common incentives include discounts, direct gifts, vouchers, and loyalty point systems. When consumers are offered discounts or bonuses, their brains automatically register a “gain” signal that stimulates consumptive behavior. This technique is very effective because it creates a feeling of getting more value from the transaction. Even when the discount or gift is small, its psychological effect remains strong because it directly engages the brain’s reward system.

A real example is loyalty points programs, as implemented by major brands in retail, food, or digital transportation industries. Each time a customer makes a purchase, they earn points redeemable for gifts or discounts later. This system not only encourages repeat purchases but also creates long-term attachment due to emotional “investment” and the expectation of future rewards. When customers track their points, their brains respond with enthusiasm as if pursuing a personal goal.

Limited-time discount offers are also a highly effective strategy to trigger impulsive buying. When consumers are informed that an offer is only available for a short time, their brains respond with urgency and fear of missing out (FOMO). This activates the limbic system, responsible for quick decision-making, often causing purchases without much rational consideration. This technique is common in e-commerce, flash sales, or seasonal promotions and has been proven to significantly increase sales conversions.

2. Optimizing Visual Design and Storytelling

Visualization holds great power in influencing how the human brain receives and processes information. Neuroscience research shows that the brain processes images 60,000 times faster than text. Therefore, in marketing, attractive visuals are crucial to grabbing attention within seconds. Using high-quality images, balanced color compositions, and clean, intuitive designs helps consumers grasp messages without lengthy reading. This is especially relevant in today’s digital era, where consumers face hundreds of content pieces daily.

Colors also have a strong psychological impact on consumer perception and emotions. For example, red is often associated with urgency or discounts, while blue conveys trust and professionalism. The right color combinations can strengthen the emotional message a brand wants to deliver. Likewise, neat layouts and typography give a professional impression, while cluttered or confusing designs cause consumers to lose interest quickly. Visuals are not merely supplements but essential parts of communication strategies directing consumer emotions and decisions.

Along with strong visuals, storytelling plays a vital role in building emotional connections between brands and consumers. Stories can bypass rational defenses and directly touch the audience’s emotions. Good storytelling doesn’t just convey information but creates moving experiences that evoke empathy and emotional engagement. When consumers feel emotionally connected to a story, they are more likely to remember the brand and take actions such as purchasing or sharing the content.

A practical example is marketing videos using inspirational or emotional narratives. For instance, a food brand might create a short video about a simple yet touching family moment, linking it to their product. Authentic, relatable, and heartfelt stories are much easier to remember and have greater potential to be widely shared on social media. Videos combining strong visuals with meaningful narratives effectively capture attention and leave a lasting impression on consumers.

3. Utilizing Scarcity and Urgency Principles

Scarcity and urgency are two psychological techniques highly effective in neuromarketing strategies because they directly trigger strong emotional reactions in consumers, especially fear of missing out (FOMO). When consumers perceive that an opportunity to get a product or offer is very limited—whether in time or availability—their brains assess the situation as a risk of loss. This reaction triggers an urge to act immediately to avoid future regret. That is why scarcity and urgency-based marketing strategies can significantly increase conversions in a short time.

Neurologically, fear of loss is often stronger than pleasure from gain, known as loss aversion in behavioral economics. When the brain detects a nearly lost opportunity, such as “discount valid only

until tonight” or “only 5 products left,” the limbic system—controlling emotions and rapid decisions—activates immediately. This spontaneous response makes consumers more likely to make impulsive purchases, even without fully rationalizing the need. Hence, companies use words that trigger these emotional responses as a crucial part of their promotional tactics.

Common examples include phrases like “Only today!”, “Discount ends in 2 hours!”, or “Only 10 units left!”. These statements are not just information but are designed to create a sense of time pressure or product scarcity, speeding decision-making. E-commerce and marketplaces also frequently add countdown timers on product pages, reinforcing the feeling that consumers are racing against time, increasing emotional pressure to complete transactions.

In digital contexts, visuals also play a key role in enhancing urgency. Red or orange colors are often used to mark limited promotions as they are associated with warnings or quick action. Visual elements like blinking discount banners, alarm icons, or “out of stock” notifications also heighten emotional pressure. When used strategically, the combination of urgent promotional language and strong visual elements produces emotional reactions that push consumers not to delay purchases—achieving the primary goal of neuromarketing to influence behavior subconsciously.

4. Optimizing the Use of Music and Sound

Music and sound are powerful sensory elements in neuromarketing strategies because they can directly affect consumers’ emotions and moods without involving rational thinking. The human brain responds to music through the limbic system, the center controlling emotions, so the type of music chosen in marketing campaigns can determine how the audience feels about the brand. Slow tempo and soft tones can calm and create a sense of security, suitable for products emphasizing comfort and tranquility. Conversely, fast and energetic music can stimulate excitement and enthusiasm, effective for products highlighting an active or adventurous lifestyle.

Choosing the right music not only creates a certain atmosphere but also strengthens brand identity. For example, a technology brand wanting to highlight a modern and innovative image might use futuristic electronic music, while a luxury cosmetics brand might prefer elegant and smooth instrumental music. Consistent use of sounds or jingles also builds brand recall—the consumer’s ability to recognize a brand instantly just by hearing a specific music snippet. This is a great strength in creating emotional associations and long-term loyalty.

Besides setting the mood, music has been proven to increase consumers’ memory retention of advertising messages. Many studies show ads with music emotionally aligned with their narrative or visuals are easier to remember than ads with just verbal narration. Music helps anchor information in emotional memory, making the message stick more firmly. This is why many iconic TV or social media ads are accompanied by strong, distinctive, and easily recognizable music.

Successful examples of music use in marketing include famous jingles like McDonald’s “I’m Lovin’ It” or Intel’s iconic four-note sound. These sounds are widely recognized and evoke specific emotions directly associated with the brands. Therefore, the choice of music and sound in marketing strategies is not merely aesthetic but a highly strategic tool to convey brand identity, create emotional experiences, and strengthen consumer attachment.

5. Utilizing the Principle of Social Proof

The principle of social proof in neuromarketing works based on the natural human tendency to imitate the actions of others in uncertain situations. In marketing contexts, when consumers see that many people have bought or recommended a product, they feel more confident and secure to follow suit. This is not just a psychological strategy but also creates a sense of community and reinforcement of the choice being considered by potential consumers.

One of the most effective forms of applying social proof is through testimonials and customer reviews. Honest and convincing testimonials can have a strong emotional impact, especially if they come from customers considered relevant or having similar experiences with potential buyers. Consistently positive reviews also serve as indicators of product or service quality, ultimately encouraging purchases. Many consumers even regard customer reviews as more trustworthy than information from the company itself.

Besides reviews, high sales numbers also provide a strong boost to consumers. Phrases like “Already sold 5,000+ units” or “Best-selling product this week” not only provide data but also create a sense of urgency and confidence that the product has been tested by many people. Such information indirectly shows that purchasing the product is the right choice because many have already done so.

On e-commerce platforms, social proof is reinforced with star ratings, the number of reviews, and “best seller” badges that visually attract immediate attention. The combination of these elements creates a more convincing shopping experience, reduces hesitation, and encourages faster purchase decisions. Therefore, companies that can strategically manage and display social proof elements will have an advantage in building consumer trust and increasing sales conversions.

6. Utilizing the Power of Simplicity

The human brain naturally prefers information that is simple, clear, and easy to digest. In marketing, this means the message delivered must be understandable within seconds. Information that is too complicated or full of jargon tends to be ignored because the brain perceives it as a cognitive burden. Therefore, it is important for marketers to compose communication that is concise and straight to the point in order to quickly capture consumer attention.

Using straightforward language, strong headlines, and neat visual structures will increase the effectiveness of marketing messages. Headlines like “Free Shipping Today” or “50% Discount on First Purchase” not only attract attention but also instantly convey benefits. Short and concise sentences help consumers understand the value of a product or offer without having to think too hard.

In addition, using bullet points is very helpful in presenting important information in a structured way. For example, listing three main advantages of a product in bullet form is more effective than explaining them in long paragraphs. This technique helps focus consumer attention on the most relevant aspects and increases the likelihood that they will take further action, such as clicking an ad or making a purchase.

7. Personalization and Targeted Advertising

Personalization in marketing has become a key strategy to increase the appeal and effectiveness of campaigns. By utilizing consumer data—such as age, location, interests, and online behavior—companies can craft messages that are more relevant and targeted. This relevance is crucial because consumers tend to respond better to content that matches their personal needs or preferences.

When marketing messages are specifically designed for a particular audience, they are more likely to attract attention, increase engagement, and even drive purchase decisions. For example, an ad for sports products shown to someone actively searching for fitness gear will feel more targeted than the same ad shown randomly to a general user. The more relevant the ad, the greater its impact on brand perception and conversion.

A concrete example of this strategy is retargeting ads—ads that are shown again to visitors who previously viewed a product on your website. This technique leverages consumers’ digital footprints to present products they are interested in, reinforce brand recall, and increase the likelihood of purchase. With such personalization, companies not only improve ad efficiency but also create a more personal and meaningful experience for consumers.

Neuromarketing techniques provide a scientific and measurable approach to understanding consumer behavior more deeply. By studying how the brain processes information and responds to various stimuli, marketers can design strategies that not only attract attention but also effectively influence emotions and purchasing decisions. This approach opens opportunities to create campaigns that are more personal and relevant, thus increasing consumer engagement and loyalty to products or brands. However, it is important to always prioritize ethical principles and transparency in the use of neuromarketing so as not to exploit consumers unfairly. Thus, neuromarketing can become a powerful secret weapon in winning market competition while maintaining trust and long-term relationships with customers.

4. CONCLUSION

Neuromarketing is an innovative approach that uses neuroscience to understand consumer behavior in more depth. By measuring physiological responses and brain activity, neuromarketing is able to uncover preferences and emotions that are often not realized by consumers themselves. This provides a competitive advantage for companies in designing more effective and persuasive marketing strategies, thereby significantly increasing product appeal and consumer engagement. Various neuromarketing techniques such as attractive visualizations, the use of appropriate music, the application of the principles of scarcity and urgency, and the use of social proof through consumer testimonials and reviews, can strengthen marketing messages and create strong emotional connections with audiences. In addition, simple, clear messaging and personalization of advertising based on consumer data are also very important to increase campaign effectiveness and maximize consumer response. However, the application of neuromarketing must always be based on the principles of ethics and transparency so as not to exploit consumers unfairly. With the right and responsible approach, neuromarketing can be a powerful secret weapon in winning the competition in the increasingly competitive digital era, while building stronger and more sustainable relationships between brands and consumers.

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