

NEUROMARKETING – THE ART OF CAPTURING THE CONSUMER'S MIND AND EMOTIONS

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Abstract

This article analyzes the concept of neuromarketing, its role in marketing strategies, and methods of influencing consumer consciousness. It explores opportunities to enhance brand and advertising effectiveness through technologies developed on the basis of neurobiological research.

Keywords: Neuromarketing, brain, emotion, thought, psychology, consumer, product, purchase, colors.

Introduction

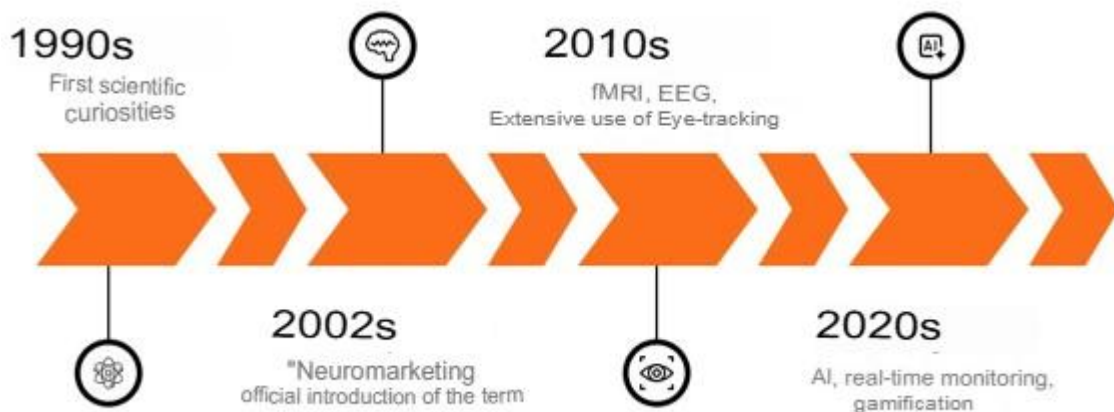
In nowadays, meaning of highly competitive market environment, attracting consumer attention and influencing their decision-making processes has become more important than ever. In such circumstances, traditional marketing methods may no longer yield the desired results. Consequently, one of the emerging directions in the field of marketing – **neuromarketing** - is gaining increasing attention among marketers and researchers. Moreover, in the context of market competition, there exists a notion among marketers that “neuromarketing helps consumers make the right decisions.” However, this is a misconception. In reality, neuromarketing is aimed at persuading consumers to purchase a particular product. In other words, it seeks to influence people through compelling offers, persuasive language, and the evocation of emotions. Can you imagine a consumer, who after making a purchase and returning home, realizes they have bought unnecessary items? Indeed, such situations are all too familiar - many of us have experienced them firsthand. In fact, this phenomenon contrasts sharply with how purchasing decisions were made in the past. In earlier times, consumers would typically hear about a product from someone they knew and only then visit a store. Over there, they would physically examine, try on, or measure the product before making a purchase decision. A consumer does not act randomly or without cause every action is closely tied to the subconscious. Modern science suggests that “before the brain makes a decision, it engages in feedback processes by recalling, comparing, and analyzing previously seen or known information, and only then arrives at a conclusion”.

Neuromarketing is a kind of marketing directed at the brain - to understand and influence consumer decisions through emotional responses, brain activity, and subconscious



mechanisms. In other words, it is a form of marketing specifically designed “for the human brain.”¹

Neuromarketing began to emerge in the 1990s due to increasing interest in studying brain activity and its integration with marketing. In 2002, this field was officially named “neuromarketing” by Professor Ale Smids. The historical development of neuromarketing is illustrated in the attached figure (Figure 1). This discipline originated from research aimed at understanding how the human brain functions, how it processes information, and how it arrives at decisions.



(Figure 1) stages of development of the field of Neuromarketing

The goal of neuromarketing is to conduct more effective marketing activities by understanding the conscious and subconscious processes of consumers. Professor Gerald Zaltman, who has widely promoted the practical application of neuromarketing, also addresses conscious and subconscious decision-making in his book. It is emphasized in the book that "at least 95% of human decisions are made at the subconscious level, and only the remaining 5% can be reached through conscious deliberation".² The data provided by neuromarketing is several times more comprehensive than that obtained through traditional marketing methods. Researchers have demonstrated that the ratio of decision-making at the conscious and subconscious levels is nearly equal between traditional marketing research and neuromarketing studies (see Figure 2). The brain is considered one of the least understood and most complex organs of the human body. Its primary function is to regulate vital resources and to protect and safeguard the entire organism. The brain consists of over 10 billion cells known as neurons, which transmit thousands of electrical impulses per second. This capability allows it to retain information about colors, shapes, images, and locations within mere seconds, as well as to see, hear, and react.

¹ Damasio, A. R. (1994). *Descartes' Error: Emotion, Reason, and the Human Brain*. Putnam Publishing.

² Jerald Zaltman. *How Customers Think: Essential Insights into the Mind of the Market*, 50-bet. Harvard Business School Press nashriyoti. 2003

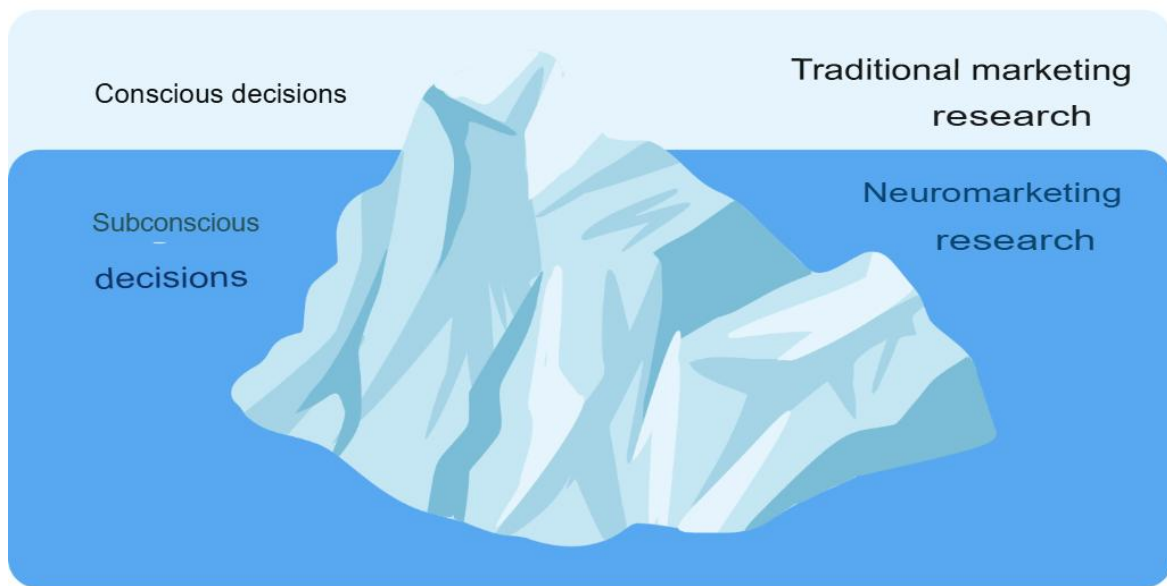


Figure 2. The Ratio of Conscious and Subconscious Decisions, and the Data Provided by Traditional Marketing Research and Neuromarketing Research.

As marketing specialist Roger Duli emphasizes, "When brands identify the pain-free decision-making points in the brain, consumers are intuitively drawn toward those brands". This insight underscores the significance of understanding the neurological processes that influence consumer behavior and decision-making in marketing strategies.³ Philip Kotler's 4P model, when combined with neuromarketing methods, aids in optimizing marketing principles. Neuromarketing utilizes research in these four areas (Product, Price, Place, Promotion) to enhance effectiveness. In the Product aspect, research can be employed to design and present product features in a way that is appealing to consumers. For instance, the Coca-Cola bottle and its red label evoke positive feelings in individuals, reminding them of the joy of sharing meals with family. This emotional connection can significantly influence consumer preferences and purchasing decisions, demonstrating the power of neuromarketing in shaping product perception. In the Price component, neuromarketing is beneficial in presenting the price of a product or service in a manner that is more easily accepted by the consumer's mind. Examples of this approach include pricing that ends in 99 or initially displaying a higher price followed by a discounted price. In the Place element of the marketing mix, research determines how the placement of products can prompt consumers to make quicker purchasing decisions. For instance, positioning popular products at eye level or utilizing sensory influences such as music, colors, and scents can significantly enhance consumer engagement and drive sales. These strategies illustrate the effectiveness of neuromarketing in optimizing product placement to influence consumer behavior.

³ Dooley, R. (2011). *Brainfluence: 100 Ways to Persuade and Convince Consumers with Neuromarketing*. Wiley

The final element is Promotion, where neuromarketing aids in making the process faster and more effective by leveraging insights about the human brain and subconscious. An example of this is the way the Netflix platform tailors its approach to each customer based on their search history. This personalized marketing strategy enhances user engagement and satisfaction, demonstrating the power of neuromarketing in optimizing promotional efforts (see Figure 3). By understanding how consumers think and feel, brands can create targeted promotions that resonate more deeply, ultimately leading to increased conversion rates and customer loyalty.

APPROACH TO THE 4P MODEL BY NEUROMARKETING		
Element	Traditional marketing	Neuromarketing
Product	Based on design and quality production	Visual experience to emotion adaptation
Price	Competition and status suitable pricing	Psychologically pleasant pricing
Place	Correct the product placement	By observation choosing an effective place
Promotion	Promotion, advertising and banner	Emotional triggers, brain activity analysis

Figure 3. Neuromarketing approach to the marketing mix model

The process of decision-making is crucial for the marketing system, which is why marketers are conducting research in this area. This indicates that it is time to establish relationships with the public not through words, but through emotions. A customer's desires are reflected in their eyes, writings, emotions, and even in their likes. Our needs, demands, wants, and pain points regarding a product arise from specific requirements of the brain. In marketing, if strategies are not developed with this understanding in mind, it becomes challenging to sell a product or service. Recognizing the emotional and subconscious factors that drive consumer behavior is essential for creating effective marketing strategies that resonate with potential customers and ultimately lead to successful sales. Selling a product to customers may seem like an easy task. However, the journey to getting them to choose your product requires significant effort. Every customer seeks a product, service, or solution that can address their problems, alleviate their pain points, assist them in challenging situations, simplify their tasks, and bring distant goals closer. For instance, one might wonder, "Is the content of a psychologist also a product?" The answer is yes; the content is indeed a product because it provides solutions to human pain points. The psychologist's insights and advice can instill confidence in individuals, leading them to return repeatedly to the psychologist's content. In marketing, the sales strategy of Rolex watches is built on a similar principle. Rolex promotes its watches through successful individuals, which fosters a sense of confidence among consumers. This strategy allows Rolex to sell its watches at prices that are 10 to 30 times higher than their production costs. When

customers see individuals wearing Rolex watches, they naturally aspire to be like those stars, creating a desire that drives them to purchase the product. This illustrates how emotional connections and aspirational marketing can significantly influence consumer behavior and purchasing decisions. Certainly, shopping is a pleasurable process for consumers, and it is a habit that develops in individuals from childhood. Research has shown that shopping can help alleviate stress, anxiety, and feelings of depression. Additionally, it is essential to consistently remind customers of your presence and strive to stay at the forefront of their minds. According to scientists, customers tend to remember and observe brands for various reasons over several cycles. This process typically takes about 21 to 45 days. If you can maintain your presence in the customer's focus during this period, they are likely to become loyal to your brand.

This highlights the importance of effective marketing strategies that keep your brand relevant and engaging, ensuring that customers think of you when they are ready to make a purchase. By creating memorable experiences and maintaining consistent communication, you can foster long-term relationships with your customers. Indeed, the shopping process can sometimes cause pain for consumers if the desired product is not found, whether due to size, color, or other factors. However, marketers have successfully ingrained the idea in consumers' minds that "shopping is enjoyable". No matter how much one argues against it, it is challenging to prove that shopping is unpleasant. Most neuromarketers are biologists who have spent years studying and observing human physiology, psychology, and metabolic processes. If this knowledge were not crucial, there would be no need for neuromarketers. Initially, they were simply referred to as marketers, but their expertise in understanding human thoughts and emotions has led to a specialization that connects them to the science of human behavior. This specialization has proven effective, resulting in an increasing demand for neuromarketers. Four primary neurochemical substances are responsible for human emotions: dopamine, endorphins, oxytocin, and serotonin. Dopamine is often associated with pleasure and reward, motivating individuals to seek out enjoyable experiences, including shopping. Endorphins are natural pain relievers that can create feelings of euphoria, often released during enjoyable activities.

Oxytocin is linked to social bonding and trust, which can enhance the shopping experience when consumers feel connected to a brand or community.

Serotonin contributes to feelings of well-being and happiness, influencing overall mood and satisfaction during the shopping process. Understanding these neurochemicals allows marketers to create strategies that evoke positive emotions, making the shopping experience more enjoyable and encouraging consumer loyalty. Let's take a closer look at these neurochemicals and their roles:

Dopamine: Often referred to as the "reward hormone," dopamine plays a crucial role in guiding our energy and actions. When the brain engages in a particular activity, it anticipates a reward, and dopamine is the substance that "seeks" that reward. When a person experiences happiness, dopamine is released, leading to a profound sense of joy. This mechanism is essential in motivating individuals to pursue activities that bring them pleasure, including shopping.

Endorphins: These are natural pain relievers that temporarily reduce sensitivity to pain. The release of endorphins often occurs in response to physical exertion, and they can also be triggered by laughter or even tears. This neurochemical contributes to feelings of euphoria



and well-being, making it an important factor in enhancing the overall shopping experience. Oxytocin: Known as the "bonding hormone", oxytocin facilitates the establishment of relationships and communication within society. When we engage in conversations with like-minded individuals or collaborate within groups, oxytocin is released, making us feel secure and calm. This hormone is also produced during interactions with close friends and familiar individuals, fostering trust and connection. Serotonin: While not explicitly mentioned in your text, serotonin is another key neurochemical that contributes to feelings of well-being and happiness. It plays a significant role in regulating mood, and higher levels of serotonin are associated with improved emotional states. Understanding these neurochemicals allows marketers to create strategies that evoke positive emotions, making the shopping experience more enjoyable and encouraging consumer loyalty. By leveraging the effects of dopamine, endorphins, oxytocin, and serotonin, brands can enhance customer engagement and satisfaction, ultimately driving sales and fostering long-term relationships. The respect, acknowledgment, and warm relationships from those around us lead to the production of serotonin. This neurochemical can create a foundation for our professional growth and the pursuit of positive outcomes. Customers often experience fluctuations in their moods, and neuromarketers take advantage of these changes to tailor their strategies effectively. Additionally, consumers do not always differentiate between what they want and what they need. There is a rule in the human mind: "If I want it, then I need it". As a result, customers strive to fulfill their desires as quickly as possible. This understanding of consumer psychology is crucial for marketers. By creating an environment that fosters positive emotions and reinforces the connection between desire and need, brands can effectively influence purchasing decisions. For instance, marketing strategies that highlight social validation, such as testimonials or endorsements, can enhance the perception of a product's value, making it more appealing to consumers.

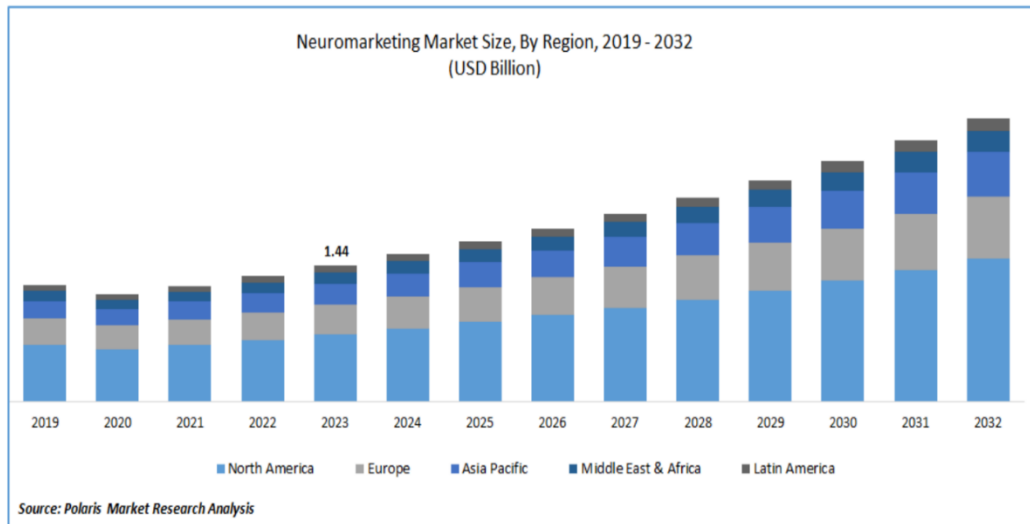
By leveraging the emotional responses associated with serotonin and other neurochemicals, marketers can create compelling narratives and experiences that resonate with customers, ultimately driving sales and fostering brand loyalty.

Many large companies around the world have begun to utilize methods for studying brain activity. Currently, the neuromarketing market has reached a developmental stage where the Polaris Market Research organization has estimated its value at \$1.44 billion in 2023. The global neuromarketing market has been steadily growing for several years, and researchers predict an annual growth rate of 8.5% in the coming years. Furthermore, this process is expected to accelerate even more over the next decade.

This growth reflects the increasing recognition of the importance of understanding consumer behavior at a neurological level. As companies continue to invest in neuromarketing strategies, they are likely to gain a competitive edge by effectively tapping into the emotional and psychological drivers of consumer decision-making. The insights gained from neuromarketing research can lead to more targeted marketing campaigns, improved product development, and enhanced customer experiences, ultimately driving sales and brand loyalty.



The anticipated growth in the neuromarketing sector underscores the significance of integrating neuroscience with marketing practices, paving the way for innovative approaches to engaging consumers.⁴



To provide a clear overview of the growth trends in the neuromarketing market from 2019 to 2032, we can summarize the expected growth indicators as follows:⁵ In an effort to convey to the customer that the desired item is indeed a "hard-to-find" product, marketers often emphasize the origin of the ordered goods and repeatedly mention which company produces them. Sometimes, they create the impression that a particular product is available in limited quantities or small batches, making it seem more exclusive.

Additionally, when customers purchase two or more items, the bonuses and discounts on certain products are not offered without reason. The primary goal behind these strategies is to attract customers to the store by any means necessary.

By creating a sense of urgency or exclusivity, marketers can enhance the perceived value of the products, encouraging consumers to make a purchase. This tactic plays on the psychological principle of scarcity, where limited availability can increase demand. Furthermore, offering bonuses or discounts can incentivize customers to buy more, ultimately driving sales and increasing overall customer satisfaction.

These strategies highlight the importance of understanding consumer behavior and leveraging psychological triggers to influence purchasing decisions effectively. By employing such tactics, businesses can create a compelling shopping experience that encourages repeat visits and fosters brand loyalty. There is indeed a "secret" behind organizing special games for customers. During these games, customers may unknowingly develop a need to purchase a particular product. According to statistical data, people often make purchases during times when they have excess time on their hands. For example, this can occur while waiting at

⁴ Polaris Market Research. Neuromarketing Market Share, Size, Trends, Industry Analysis Report

<https://www.polarismarketresearch.com/industry-analysis/neuromarketing-market>

⁵ Polaris Market Research. By Test Technique Type (Semantic Priming, Affective Priming, and Implicit Association Test (IAT)); By Technology; By End-Use; By Region; Segment Forecast, 2024 - 2032

airports, bus stations, and similar situations. These games are designed to engage customers in a fun and interactive way, creating a positive association with the brand and its products. By incorporating elements of gamification, businesses can capture the attention of consumers and encourage them to explore products they might not have considered otherwise. The underlying psychology is that when individuals are entertained or engaged in an activity, they are more likely to let their guard down and make impulsive purchases. This strategy leverages the concept of "retail therapy", where shopping becomes a pleasurable distraction from boredom or waiting. Furthermore, by creating a sense of excitement and competition, businesses can enhance customer engagement and drive sales. This approach not only increases the likelihood of immediate purchases but also fosters a sense of loyalty and connection to the brand, encouraging customers to return for future interactions. Marketers often target customers' pain points by addressing issues such as excess weight, unpleasant body odors, skin conditions, and sweating when advertising products, successfully driving sales. Thus, neuromarketing fundamentally revolves around emotions. Every neuromarketer understands that the path to a customer's heart is through emotions and feelings. While each customer's preferences may vary, it is possible to create elements that unify them, such as color, scent, appearance, decoration, interior design, and home layout. By strategically utilizing these sensory elements, marketers can capture customers' attention and create a compelling shopping experience.

For instance, the use of specific colors can evoke certain emotions – warm colors may create a sense of urgency, while cool colors can promote calmness. Similarly, pleasant scents can enhance the shopping environment, making customers feel more comfortable and inclined to explore products. Moreover, appealing product displays and thoughtful interior design can create an inviting atmosphere that encourages customers to linger longer, increasing the likelihood of impulse purchases. By tapping into these sensory experiences, businesses can effectively engage customers on an emotional level, fostering a deeper connection with the brand and ultimately driving sales. In summary, neuromarketing leverages emotional triggers and sensory experiences to influence consumer behavior, making it a powerful tool for businesses aiming to enhance customer engagement and satisfaction. Colors have a direct impact on human emotions, as different colors evoke various reactions. In marketing, colors play a crucial role in advertising campaigns, product design, store layouts, and service presentations. Each color elicits distinct feelings in consumers, which can be understood through the lens of color psychology. For example:

Red: Often associated with excitement, passion, and urgency. It can stimulate appetite and is frequently used in food marketing.

Blue: Conveys trust, calmness, and professionalism. It is commonly used by financial institutions and healthcare brands to instill a sense of security.

Green: Represents nature, health, and tranquility. It is often used in products related to wellness and sustainability.

Yellow: Evokes feelings of happiness and optimism. It can grab attention and is often used in promotional materials to create a sense of cheerfulness.

Black: Symbolizes luxury, sophistication, and elegance. It is frequently used in high-end products and fashion marketing.



Understanding the psychological effects of colors allows marketers to strategically choose color schemes that align with their brand message and target audience. By leveraging color effectively, businesses can enhance brand recognition, influence consumer behavior, and create a more engaging shopping experience. If you have a specific graph or (Figure 5) related to color psychology that you would like to discuss or analyze further, please provide the details, and I can assist you with that! Organizations and brands that mysteriously captivate customers ensure they never lose them. This is because a significant amount of effort is invested in building trust regarding a particular product. Ultimately, every brand aims to establish a presence in the subconscious mind of the consumer. Colors play a vital role in this process, as they elicit various reactions in individuals and carry specific meanings. By strategically using colors in branding and marketing, companies can influence consumer perceptions and emotions, thereby enhancing their connection with the brand. For instance, a brand that uses warm colors like red and orange may evoke feelings of excitement and urgency, encouraging quick purchasing decisions. In contrast, a brand that employs cool colors like blue and green may Psychology of colors and description of the meanings they mean foster a sense of calm and trust, making consumers feel more secure in their choices. The psychological impact of colors can significantly affect consumer behavior, making it essential for brands to carefully consider their color schemes in marketing materials, product packaging, and store design. By doing so, they can create a compelling brand identity that resonates with consumers on an emotional level, ultimately leading to increased loyalty and repeat purchases. In summary, the strategic use of colors in marketing not only enhances brand recognition but also plays a crucial role in establishing trust and emotional connections with consumers, ensuring that they remain engaged with the brand over time.

(Figure 5) Color psychology is the scientific study of how colors influence human emotions and behaviors.⁶

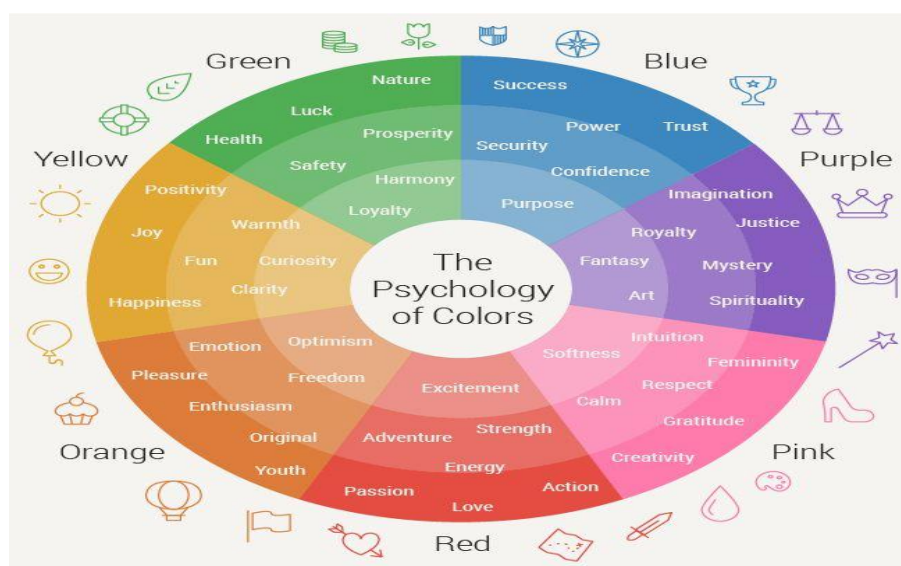


Figure 5. Psychology of colors and description of the meanings they mean.

⁶ Monali Thakur, DIDT. Color psychology

For example, the color red expresses positivity, energy, passion, strength, and love. This color captures attention quickly and encourages people to make immediate decisions. For this reason, many brands utilize red during major advertising campaigns. Popular brands like Marvel, Coca-Cola, and Kit Kat have successfully implemented this color in their branding, making them globally recognized. The strategic use of red not only enhances brand visibility but also creates an emotional connection with consumers, driving engagement and loyalty. By leveraging the psychological effects of color, these brands effectively communicate their messages and values, ensuring a lasting impact in the marketplace. The color green evokes a sense of nature, tranquility, and healthy living. This color is widely used in brands that promote eco-friendly products and a healthy lifestyle. In marketing, we often see this color utilized in social advertising campaigns that call for the preservation of nature and natural resources. Globally recognized brands like Spotify and Tropicana leverage green in their promotions to convey their commitment to sustainability. Blue represents trust, stability, and security. In marketing, blue is commonly used by brands in the business and finance sectors, particularly banks and insurance companies. Additionally, technology brands like Intel and Microsoft use blue to instill a sense of confidence and reliability in their products and services. By incorporating these colors into their branding strategies, these companies effectively communicate their values and foster positive associations with their audiences. The color yellow signifies happiness and positive energy. In marketing, yellow is effective in capturing attention and is frequently used in advertisements and product packaging. We often see this color widely utilized in food and beverage brands. Pink, often regarded as a favorite color among women and girls, represents innocence, youth, and affection. In marketing, pink is commonly used in cosmetics and women's products. Additionally, companies that produce toys for young girls often choose pink to appeal to their target audience. By using pink, brands create their image and evoke the desired emotional responses from consumers.

Currently, all neuromarketing techniques are focusing on "pressing" pain points related to themes such as fear, obesity, health, and relationships between men and women. In the near future, it wouldn't be surprising to see the creation of smart bracelets, watches, or rings that reflect human emotions, feelings, and excitement levels. Imagine a smart bracelet or watch that senses your desire for coffee and provides information about nearby places where you can get a cup. In conclusion, neuromarketing is not just about new technologies; it is an art of approaching human nature, understanding emotions, and responding not just to needs but to desires. To occupy a place in the consumer's heart, one must first gain access to their mind. Only then can marketing have a true impact.

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