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## THE USE OF COLOR PSYCHOLOGY IN INTERFACE DESIGN

Color psychology plays a key role in interface design, shaping the way users interact with digital platforms and products. As our lives become more and more intertwined with technology, the importance of creating visually appealing and emotionally rich interfaces with the use of color psychology cannot be overstated.

Color psychology studies how the human psyche reacts to different colors. Its goal is to understand how colors affect human behavior, emotions, and thoughts. Using the principles of color psychology, designers can optimize their projects to evoke a certain reaction from the consumer (Opatsa, 2023).

Color in brand creation performs such important functions as attracting the attention of potential consumers, helping to understand the nature of a product or service, improving brand memorability, highlighting certain important elements, and forming an impression on the consumer.

Considering the psychology of color when creating interface design is becoming increasingly important as companies strive to create an attractive brand identity in a competitive market.

The interface, which is a system of communication between technology and the user, is called the "user interface" (Що таке інтерфейс і для чого він служить?, n.d.). UI is a visualization process that allows you to create prototypes of websites, applications, and other web resources.

The UI designer works on the graphic components of the interface creates animations, illustrations, and buttons, selects fonts, colors, and shapes (Що таке інтерфейс користувача та як він впливає на продажі | Wezom, n.d.). Therefore,

it is important to understand what role color plays in shaping the brand itself and what causes consumer reactions and influences their behavior.

People are very sensitive to visuals, and color is one of the most important aspects among them. Color is a powerful mean of communicating and expressing brand identity. At a time when people are exposed to a large number of interfaces, advertising products every day, understanding the psychology of color is becoming irreplaceable for creating effective, interesting projects and building brand success and awareness (Кольорова психологія, що застосовується до логотипів, n.d.).

Colors are as powerful as language. They can emphasize certain features, convey a message, and attract users. The atmosphere, idea, and symbolism of a brand, product, or interface can be conveyed through color.

The Pantone Color Institute has found that users spend about 90 seconds evaluating the quality of online products. On a subconscious level, from 62% to 90% of all product evaluations by people depend on the product color. For this reason, choosing the right colors for the interface should never be ignored (*Colors in UI design: A guide for creating the perfect UI - usability geek*, n.d.).

Different colors in interface design broadcast different ideas.

Colors like red, orange, and yellow evoke feelings of warmth and comfort. But they can also signify irritation, hostility, or passion and give the impression of urgency and excitement.

Whereas cool colors such as blue and green can evoke calm and relaxation (Opatsa, 2023). Blue symbolizes security, trust, and protection. It is used by companies such as Skype and Microsoft Word. While green is a color that gives a sense of calm and renewal.

Yellow is often associated with joy, happiness, and sunshine. This color is ideal for social media, which is why Snapchat uses it in its logo.

There are also certain rules for using color, especially, in interfaces.

The first rule, 6:3:1, is also known as the Golden Rule of color. The best proportion for color balance is 60% to 30% to 10%. While using the 6:3:1 rule, designers have to choose a dominant color and use it in 60% of the space, a secondary color in 30% and a final color in the remaining 10%. The 6:3:1 rule eases the eye of users to move from one point to another comfortably (*Understanding colors for UI/UX design: A comprehensive guide*, n.d.).

The second rule is no more than three primary colors. This is the best way to avoid an overly disorganized visual appearance and keep the interface balanced (*Colors in UI design: A guide for creating the perfect UI - usability geek*, n.d.).

In addition, when a specialist develops a user interface design, it is important to remember to use color combinations and avoid overload and chaos in the design.

As digital technology continues to evolve, the role of color psychology in interface design is becoming fundamental. Moreover, designers must consider cultural, contextual, and user factors when choosing the color, recognizing that what resonates with one audience may not work with another.

Thus, the use of color psychology in interface design is not just a decorative element but also a powerful tool that designers can strategically use to communicate with users.

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# RESEARCH AND DEVELOPMENT OF CRYPTOGRAPHIC METHODS FOR INFORMATION SECURITY IN CLOUD COMPUTING

The research and development of cryptographic methods for information security in cloud computing is a relevant and important area of information security in light of the rapid development of technologies and the widespread use of cloud resources. In this context, overcoming new challenges and threats related to the