



PRINTtips

Using Color to . . . Appeal to Your Customers



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Our world is rich with color – in nature, in our homes and offices, in our clothing, in the visual images on our computer screens and personal communication devices, and in the printed materials we read. Not so long ago using full color in business printing added expense and time to production.

Not anymore. Digital printing devices have dramatically changed the economics of full color printing, leading to expanded use of color in branding, advertising, and printed products. This change means that business owners and marketing executives need to understand the psychology of color and how it can be used to influence buyer behavior.

What is Color?

Color results from energy waves grouped together in a color spectrum. In 1666, Sir Isaac Newton observed that when pure white light passes through a prism, it separates into single wave lengths of six different colors – violet, blue, green, yellow, orange, and red – that comprise the visible spectrum (the part of the total spectrum that is visible to the human eye). A rainbow is a familiar representation of the visible spectrum.

Color has three dimensions – hue, value and chroma.

- **Hue** is the relative position of the color on the color wheel; its color family. The words



NOTE: This makeover appears in the new book "Logos Redesigned: How 200 Companies Successfully Changed Their Image" by David E. Carter.

warmer and cooler are often used to describe differences in hue.

- **Value** is the lightness or reflectivity of a color. It is measured against a gray scale of white at the top and black at the bottom. The words lighter and darker are often used to describe differences in value.
- **Chroma** is the intensity, purity, clarity, or saturation of a color. It is measured by how far it departs from grayness. The terms clearer and grayer are often used to describe differences in chroma.

Using Color to... Appeal to Your Customers (cont.)

Colorants are the materials used to produce color – inks, toners, pigments, dyes, or phosphors.

Color Influences Moods, Feelings, and Behavior

Just as graphic design enhances the power of ideas being communicated to an audience, the color choices used in a design also work on the audience to invoke a response or influence behavior. For an example, look at the difference between the two logos on the front page.

The psychology of color is the study of emotional response to color and has become an important consideration in advertising and product design. In fact, color is so important in branding that in 1985 the U.S. Supreme Court ruled that colors can sometimes be a trademark-eligible designation of origin.

Color Psychology

How an individual reacts to color is influenced by culture, ethnicity, gender, and age as well as the specific shade of the color. Kate Smith, CMG, CFYH, a recognized color expert and the founder and contributing editor of www.sensationalcolor.com, explains the general responses to color for people in the Western Hemisphere in her article *A Glimpse into the Meaning, Symbolism and Psychology of Color*. According to Kate, the responses are based on research, historical significance of color, and word association studies. Here is Kate's analysis:

- **Red** has more personal associations than any other color. Recognized as a stimulant, red is inherently exciting and the amount of red is directly related to the level of energy perceived. Red draws attention, and a keen use of red as an accent can immediately focus attention on a particular element.
- **Orange**, a close relative of red, sparks more controversy than any other hue. There is usually strong positive or negative association to orange and true orange generally elicits a stronger “love

it” or “hate it” response than other colors. Fun and flamboyant orange radiates warmth and energy.

- **Yellow** shines with optimism, enlightenment, and happiness. Shades of golden yellow carry the promise of a positive future. Yellow will advance from surrounding colors and instill optimism and energy, as well as spark creative thoughts.
- **Green** occupies more space in the spectrum visible to the human eye than most colors, and is second only to blue as a favorite color. Green is the pervasive color in the natural world, making it an ideal backdrop in interior design because we are so used to seeing it everywhere.
- **Blue** is the overwhelming “favorite color.” Blue is seen as trustworthy, dependable, and committed. The color of ocean and sky, blue is perceived as a constant in our lives. As the collective color of the spirit, it invokes rest and can cause the body to produce chemicals that are calming; however, not all blues are serene and sedate. Electric or brilliant blues become dynamic and dramatic – an engaging color that expresses exhilaration. Some shades of blue may come across as cold or uncaring.
- **Purple** embodies the balance of red's stimulation and blue's calm. This dichotomy can cause unrest or uneasiness unless the undertone is clearly defined, at which point the purple takes on the characteristics of its undertone. With a sense of mystic and royal qualities, purple is a color often well-liked by very creative or eccentric types and is the favorite color of adolescent girls.
- **Pink** can be youthful, fun, and exciting, and some have the same high energy as red; they are sensual and passionate without being too aggressive. Toning down the passion of red with the purity of white results in the softer pinks that are associated with romance and the blush of a young woman's cheeks. It's not surprising that when giving or receiving flowers,

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pink blossoms are a favorite. Pink is the color of happiness and is sometimes seen as lighthearted. For women who are often overworked and overburdened, an attraction to pink may speak of a desire for the more carefree days of childhood.

- **Brown** says stability, reliability, and approachability. It is the color of our earth and is associated with all things natural or organic.
- **Gray** is the color of intellect, knowledge, and wisdom. It is perceived as long-lasting, classic, and often as sleek or refined. It is a color that is dignified, conservative, and carries authority. Gray is controlled and inconspicuous and is considered a color of compromise, perhaps because it sits between the extremes of black and white. Gray is a perfect neutral, which is why designers often use it as a background color.

- **Black** is authoritative and powerful; because black can evoke strong emotions, too much can be overwhelming. Black represents a lack of color, the primordial void, emptiness. It is a classic color for clothing, possibly because it makes the wearer appear thinner and more sophisticated.

- **White** projects purity, cleanliness, and neutrality. Doctors don white coats, brides traditionally wear white gowns, and a white picket fence surrounds a safe and happy home.

Invoking human emotion to sell a product or service is not new. Just be sure you consider the psychology of color and its likely effect on the audience.

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The Relationship Between the Colors

In *Opticks*, Sir Isaac Newton organized a color wheel or color circle to show the relationship between the colors in the visible spectrum (violet, blue, green, yellow, orange, red). Most color wheels have twelve main divisions: three primary colors, three secondary colors, and six intermediate or tertiary colors (formed by mixing a primary with a secondary).

- An artist's color wheel is based on the primary colors of blue, red, and yellow; secondary colors of green, orange, and violet; and tertiary colors of red-orange, red-violet, yellow-orange, yellow-green, blue-violet, and blue-green.
- An additive color wheel is based on primary colors of red, green, and blue (RGB) with secondary colors of cyan (blue), magenta, and yellow. Taken together, all the colors of the additive color wheel produce white.

- A subtractive color wheel is based on primary colors of cyan, magenta, and yellow with secondary colors of red, green, and blue. Taken together, all the colors of the subtractive color wheel produce black.

On the color wheel, colors are either analogous or complementary. Analogous colors are those that appear next to each other on a color wheel and share the same undertones. Red, red-orange and orange are examples of analogous colors.

Complementary colors appear across from each other on a color wheel; red and green are complementary colors.

Analogous colors harmonize and so appear calming; complementary colors appear brighter and so appear more exciting.



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Consider Using Stock Photography

If your company's marketing materials need full color photographs for impact, consider using stock photos as a source. Stock photos are photographs that have been taken by professional photographers and assembled into a collection, usually on a specific topic. For example, a stock photo collection of nature might include outdoor scenery, close-ups of flowers, and photos depicting scenes of spring, summer, fall, and winter. Once purchased, the individual images or collections are royalty-free.

Stock photo images cover a wide range of subject matter suitable for business or personal use as well as graphic effects like

textures and finishes. Stock photos can be purchased individually and immediately downloaded for use, ready to drop into your document or publication.

If you aren't familiar with stock photography sites, check out iStock Photo, Shutterstock, Fotosearch, Veer, Fotolia, stock.xchng (owned by Getty Images), Corbis and Getty Images. All offer watermarked images for download prior to purchase.

Here at TechneGraphics, we use ThinkStock Photos, which is also owned by Getty Images.



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