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The Value of G7 to Brand Owners

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“Color is one of the most emotional attributes of a brand...”

Janet Odgis, Creative Director, Odgis + Company

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About the Author

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About Idealliance

Idealliance (International Digital Enterprise Alliance) is a not-for-profit membership organization that has been a leader in information technology and publishing since 1966. Idealliance advances core technology to develop standards and best practices to enhance efficiency and speed information across the end-to-end digital media supply chain - creation, production, management, and delivery of knowledge-based multimedia content - digitally and in print.

Idealliance is where media creators and technology communities collaborate to craft best practices, advance standards, and certify people, processes, and systems to achieve the highest performance in creation, production and delivery of graphic communications.

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The Value of G7 to Brand Owners

Consumer product companies and their agencies realize substantial business benefits from a measurable, predictable, uniform color management process.

Color is an important part of why people embrace (or reject) a brand. Experts have explored color as a means of creating or sustaining brand images in consumers' minds.¹ Often, studies deal with the color of the product—showing how color contributes to perceived value or quality.² The impact of color in marketing media is less often discussed, but just as important.

Brand marketers must use all forms of media to stimulate consumer interest and increase attention and purchase intent at the point of sale. They must also take steps to enhance consumers' experience with the product and add to its public reputation. While online media plays an increasing role, printed media is essential to all these efforts. Without the use of printed collateral, advertising, signage, and especially packaging—each with its own demanding color requirements—most brand marketing efforts would fail.

Inconsistency with colors associated with a brand subconsciously diminishes it, and erodes brand loyalty.

In a more recent interview, she elaborated. “Color is one of the most emotional attributes of a brand,” she said. Inconsistency with colors associated with a brand subconsciously diminishes it, and erodes brand loyalty.

“On a primal level, color is a real trigger.” She noted that to people familiar with a brand, consistency reinforces trust. Inconsistency with colors associated with a brand subconsciously diminishes it, and erodes brand loyalty.

Color issues pose a similar risk to the complex process of attracting potential new customers. Noting the importance of repetition in getting an audience's attention, Odgis pointed out that color inconsistency creates confusion in the primal communication of that repeated message. “Color is a visual language,” she said. “If you're all over the place, you lose that cadence of response.” She maintained that if the color aspect of brand message is inconsistent, it will diminish its effectiveness in gaining audience attention.

The Importance of Color Consistency

In her 2015 [Huffington Post blog](#), Janet Odgis of brand strategy and design firm [Odgis + Company](#) highlighted the importance of color quality and consistency across all expressions of a brand, whether online or in print.

¹ Madden, Thomas, Kelly Hewett, and Martin Roth. “Managing Images in Different Cultures: A Cross-National Study of Color Meanings and Preferences.” *AMA Journals*, American Marketing Association, Jan. 2000. Web. <<http://www.jstor.org/stable/25048831>>.

² Zeithaml, Valarie. “Consumer Perceptions of Price, Quality, and Value: A Means-End Model and Synthesis of Evidence.” *AMA Journals*. American Marketing Assoc., July 1988. Web. <<http://www.jstor.org/stable/1251446>>.

In her blog, Odgis listed many of the conditions and variables that make consistent color difficult. For print, these include many of the factors discussed in the Idealliance companion piece, The Value of G7 to Print Service Providers, including many unpredictable variables:

Different papers and substrates	Different types of ink or toner	Many different printing types	Environmental & process issues
Hundreds Of Variations In Materials And Operating Conditions (Thousands Of Potential Error Combinations)			

Many brands start with a carefully selected identity color-like “Coca-Cola red”-and use compatible or complementary colors in their visual media. Often, this identity color relies on a custom or spot ink. (Custom ink use can be color managed, but that is outside the scope of this paper.) There is bigger problem, however. Very often, custom or spot inks cannot be used to print brand identity colors. Digital presses, for example, almost always rely on process CMYK ink or toner to replicate brand colors, as well as non-brand-specific color. The same is true for signage, brochures, direct mail, publication advertising, catalogs, and many types of packaging.

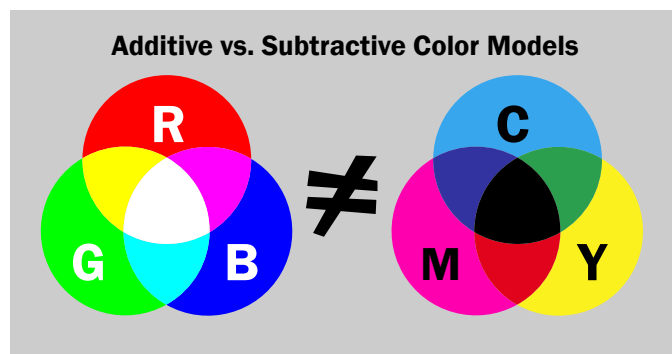
With brand marketing so dependent on different types of CMYK printing, and a fragmented, international print supply chain, the only way to achieve consistent color is with a uniform, standardized approach to color management.

The ICC Profile Approach

Color management has evolved considerably since the early 20th Century work of the [International Commission on Illumination \(CIE\)](#). More recently, the [International Color Consortium \(ICC\)](#) formalized this as a vendor-neutral color management system of CIE-based profiles. For RGB photography, video, and website use, ICC profiles are a straightforward solution. Print is another matter. Even though additive color (RGB) and subtractive color (CMY) are related, they differ significantly. In particular, printers must add black (K) ink or toner, for a number of practical

reasons. These include overall image quality, total ink reduction, and reproduction of fine detail in type and other black elements.

Figure 1



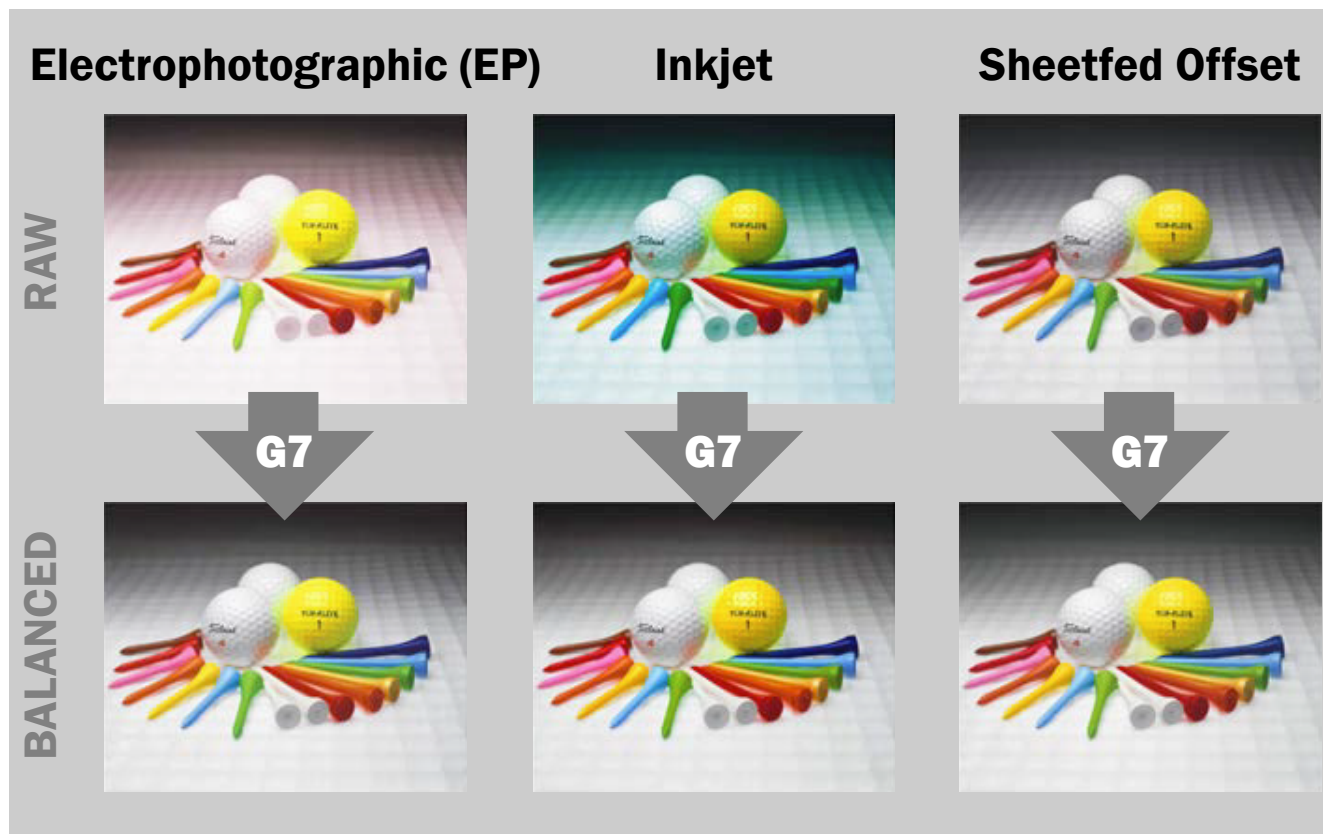
As detailed in the companion report, ICC profile-based color management can help printers reproduce color accurately on many different devices, and across many different conditions. However, doing so can require significant additional press and operator time-to-generate and manage profiles under changing or unstable conditions. However, most printing companies cannot afford the time and labor costs needed to create and continually update press profiles for every device. To reduce the “heavy lifting” aspect of ICC color management, a common calibration methodology is required.

G7: The Foundation for Consistent Color

In 2006, Idealliance released a new version of GRACoL, a color reproduction specification for commercial sheetfed offset printing. As detailed in the companion piece, they also released a new calibration method known as G7, for adjusting offset presses to a common or shared neutral appearance, using simple plate curves. Although originally developed for offset, G7 has rapidly gained acceptance for other types of print, including digital, flexographic, and others.

G7 can be applied to any printing system, like an offset press, a desktop printer, or an inkjet printer. It defines the two main visual attributes of gray, namely tonality

Figure 2



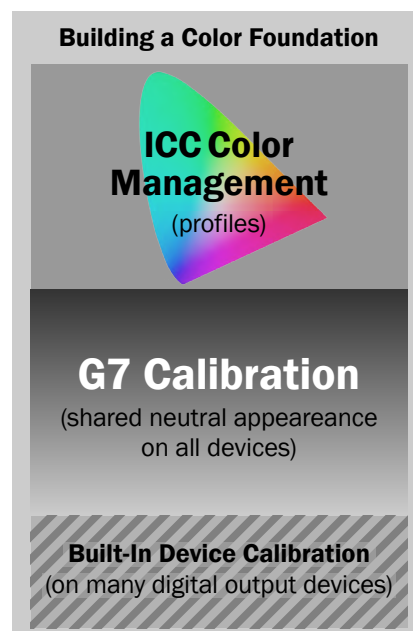
(lightness and contrast) and balance (neutrality). Although not a replacement for ICC color management, it is a universal calibration methodology that can be used to adjust any press or printing system to a common neutral appearance, regardless of inks, substrate, or printing technology.

Figure 2 (bottom row) shows how G7 matches neutral gray image areas on three different devices. Differences in the yellow golf ball show that G7 is not a true color management system. To match colors exactly, ICC color management would also be required.

“G7 is not a color management system. It’s a gray management system,” says G7 inventor Don Hutcheson of [HutchColor, LLC](#). “But getting grays right first, helps improve ICC accuracy and efficiency, and when the source color is unknown it’s often enough for ‘pleasing color.’”

A convenient way to view G7 is as a foundation for more precise color management (Figure 5). Some output devices—notably digital presses—already have automatic calibration built in. However, this usually only brings the device back to a manufacturer’s default state. With G7, any device can be brought to a

Figure 3



common neutral state, and easily monitored for deviation. Adding ICC color management to such a stable foundation bodes well for printers and brands alike, as it delivers greater color consistency as a lower cost.

A brief description of the G7 calibration process is included in the companion piece. There is no such thing as “G7 certified” presses, paper, or inks. Rather, G7 status is attained by trained individuals (G7 Professionals and G7 Experts) and by companies (printers, publishers, and agencies) who qualify for G7 Master status on an annual basis.⁴

While print service providers make up the majority of those with G7 credentials, brands like Diageo (see Appendix 1) are also beginning to add this expertise in-house. Even more notably, brands are increasingly requiring their print service providers to obtain G7 Master status—and to follow the process for all devices. By doing so, even a complex print supply chain can assure their brand partners that their use of color will be visually consistent, regardless of what kind of printing (or paper, or ink) is required.

Business Benefits Summary

Brand owners face an unprecedented level of competition for consumer attention. According to research by Elliot Young⁵ and others, the average supermarket shopper is exposed to over 17,000 products in a single, 30-minute shopping trip. The decision whether or not to pick up a package is only 2.6 seconds long, on average, so the brand marketer has only the briefest of opportunities to attract sufficient notice for any given product. Outside the point-of-sale experience, marketers face even greater competition.

The right use of color is a powerful tool in the struggle for consumer attention. Large, international brands—and an increasing number of smaller ones—understand that they must control the consistency of that color in a multi-device, multi-output world. For the print side of the marketing equation, a standardized, shared visual appearance is the only reliable starting point.

Donald Prust at Neiman Marcus acknowledged the need for consistent brand color—and the necessity of a common approach throughout the print supply chain. “Our quality depends on G7 as the common factor with all print facilities,” he said. “Without a common denominator we would not have the quality standard that we have grown to expect from our vendors. Our brand identity would suffer without this tool.”

As shown in the following appendices, G7 today is deployed indirectly by most brands—who increasingly require their supply chain partners to have G7 Master status. The bottom-line benefits are hard to quantify, but are undeniable. Consistent G7 calibration lowers operational costs throughout the supply chain, by reducing the amount of ICC profiling and re-profiling required.

“Without a common denominator, we would not have the quality standard we have grown to expect from our vendors. Our brand identity would suffer without this tool [G7].”

Donald Prust, Neiman Marcus

This ultimately benefits the cost of brand marketing, and provides the brand with a measurable, objective means of judging the performance of their print provider network. It also reduces time-to-market for the many different deliverables required in a complex marketing campaign.

There are also top-line benefits for brands using G7 as their print baseline. By starting with a common visual appearance in all printed elements, the overall effectiveness of a campaign will be clearer, and more likely to attract and engage the consumer. In the never-ending quest for consumer attention, having a more predictable, consistent use of color is an edge worth having.

⁴ See the Idealliance website for more on individual [G7 certification](#) and [G7 Master](#) qualification for companies.

⁵ Young, Eliot. “Packaging Research - Evaluating Consumer Reaction.” [Quirks Marketing Research Media](#). Quirk Enterprises, Inc., October 1987.

Case Study 1:

Brand Use Case – Diageo

A leading consumer brand utilizes standards-based color management to deliver reliably high-impact printed packaging.

“It’s critical to have a process that a supply chain can align to when it comes to shared color appearance. Because we’ve laid the groundwork and required our suppliers to own the G7 calibration process, I’m confident we can adapt to new ways of printing,”

Barry Sanel, Senior Graphic Services Manager, Diageo

G7 Case Study #1:

Brand Use Case – Diageo

[Diageo](#), the global leader in beverage alcohol and iconic spirits, beer and wine brands, owns the top two spirits brands in the world (Johnnie Walker and Smirnoff) as well as 20 of the top 100 spirits brands and a host of regional and specialty brands. Because a significant portion of each brand's quality and appeal is communicated via its printed packaging and labels, the quality and consistency of that printing is critical—especially when it comes to color.

Diageo's Senior Graphic Services Manager, Barry Sanel, has been developing packaging for Consumer Product Companies (CPCs) since 2000. For the past six years, he has overseen pack-aging commercialization for North America—from the point of handing off original design work through the validation of the first print run. Working with print supply chain partners and contracted reprographics companies, Sanel is focused on color and print technologies, and on standards. "The brand teams are not technical, but they do have specific design intent in mind when they hand off the artwork," he said. "It's our job to manage their expectations which includes color management when printing on different substrates across packaging categories. We take spectral readings of all branded colors submitted by the designers, and determine whether they fit in Diageo's existing color DNA library.' We then adjust colors to real world printing capabilities, then it's our job to make sure these colors are specified accurately so our print suppliers can achieve the design intent, initially and on all subsequent reruns."

"As a premium brand, it's critical to have a process that a supply chain can align to when it comes to shared color appearance."

Barry Sanel, Diageo

The importance of a standardized approach cannot be underestimated. "Everything we do at Diageo is about open format and ISO standards," Sanel declared, adding that process color consistency on multiple substrates is critical to their brands' success. "As a premium brand in the CPC world, we efficiently commercialize some of the most complex packaging globally. We communicate our brand elements on labels, cartons, aluminum & plastic closures, cans, deco-rated glass, and many different categories of shippers—often combining several printing effects in a component. The colors have to harmonize across a selling unit. It's critical to have a process that a supply chain can align to when it comes to shared color appearance."

Sanel's group incorporates G7 methodology as a key component of Diageo's ISO-conforming process for primary and secondary packaging as well as uncoated work. All print supply chain partners are required to follow G7 calibration requirements. "The upside is that, with a clear ownership & definition of make ready procedures, communication about color can now be more effective," he said. It's simple, clear, and no longer subjective." With the common framework provided by this approach, suppliers who have embraced this strategy have seen their make ready times halved. More importantly, adherence to this color approach has become the basis for selecting—or retaining—Diageo's print supply chain partners. Diageo's printers are not only required to be trained in G7 process, their output is also monitored for consistent gray balance and tonality.

While his work relates primarily to packaging, Sanel is confident the G7 approach will produce comparable color results for a brand's non-packaging applications involving offset litho and dig-ital print. Even as packaging

moves towards high-volume digital—the outlook is good.

“Be-cause we’ve laid the groundwork, and required our suppliers to own the G7 calibration process, I’m confident we can adapt to new ways of printing,” he said.

“With a standardized approach, we can keep the quality of color high, run over run.”

Barry Sanel, Diageo

To Sanel, a clear benefit of his suppliers all using G7 calibration is that they all have common definitions—making proof of quality an objective standard, not a subjective one. “If there’s a problem in the field, I can provide specific measurements and instructions, and they can follow the clear steps to fix it,” he said. For the brand owners, the benefit is print consistency globally when required. “Our packaging is already challenging enough. With a standardized approach, we can keep the quality of color high, run over run.”

Case Study 2:

Brand Use Case – USA Legwear

For an international clothing brand with a complex supply chain, consistent packaging color appearance is achieved through adherence to G7 methodology.

“Since we’ve been using G7 standards, there has been an increase in the quantity of buys in existing brands, as well as success in the introduction of new brands.”

Carina Zhong, USA Legwear

G7 Case Study #2

Brand Use Case – USA Legwear

Founded in 2009, USA Legwear (a division of [Basic Resources](#)) is in many ways a typical clothing brand, focused on creating high-quality products—with in-store packaging that draws attention and encourages consumers to buy. When it comes to their use of color, however, this particular brand has an advantage they like to brag about.

Like many brands, USA Legwear has its packaging for multiple products produced in many different locations around the world—typically at or near the respective factory for each item. Color decisions for packaging materials—mostly made from white paperboard—are made by developers like Carina Zhong, who work with Basic Resources marketing staff and major retailers to create products with the greatest shelf appeal. “Our approval process starts with the evaluation of substrates and the Pantones for each packaging category,” she said. “Once we have completed the evaluation, we report the findings to our domestic and international vendors.”

The problem with color reproduction at so many different location is that consistency varied widely, with negative results for the brand. Prior to implementing standardized color, “all colors and substrates were evaluated by the naked eye,” Zhong said. “Some of the challenges we faced with evaluating by eye were color variation and poor substrate qualities. This caused us to have concerns with the overall packaging life cycle.”

“After implementing G7 standards, our licensors looked to us for quality packaging that will meet the brands’ expectation.”

Carina Zhong, USA Legwear

Two years ago, the company retained G7 Expert Ron Ellis to help establish uniform color standards, and to apply measurement and control processes based on G7 methodology. “In the last two years, our company has implemented Color Management Guidelines for all print vendors that we work with domestically and internationally,” Zhong said. “This has successfully enhanced the quality and consistency in our packaging across all brands.” Although a few suppliers pushed back initially, Zhong and her team have seen substantial improvement in color quality and consistency.

Improved color control has had a positive effect throughout the USA Legwear supply chain. “After implementing G7 standards and color management, our licensors looked to us for quality packaging that will meet the brands’ expectation,” she said. “We have seen a consistent improvement in substrates and print colors as it has elevated our packaging at retail.”

Ultimately, color consistency has had a positive result for the brand itself. “Since we’ve been using G7 standards, there has been an increase in the quantity of buys in existing brands, as well as success in the introduction of new brands.”

In the highly-competitive arena of the retail store shelf, that’s an important advantage.