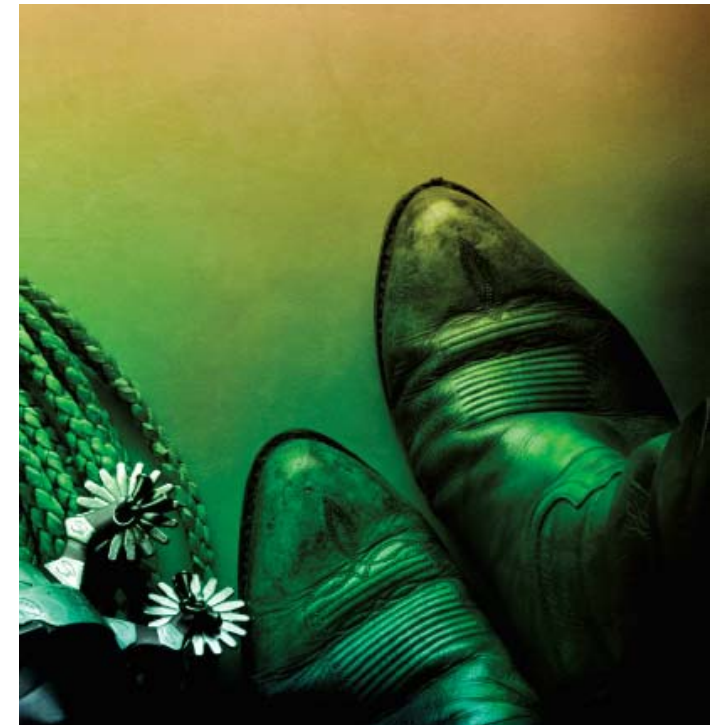
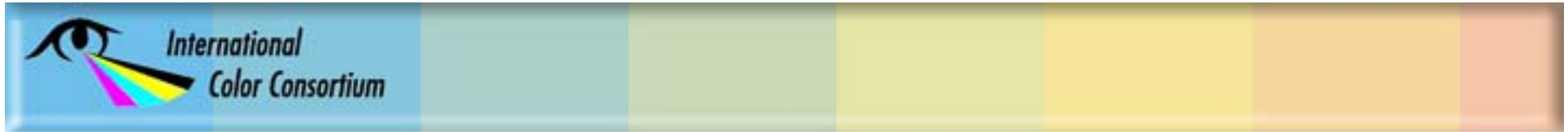


Successful Investments in Color Management: Some Notes from the Real World.

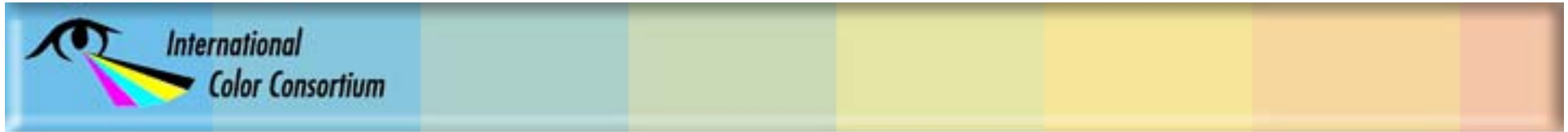
Tom Lianza
X-rite





Does Color Management Help the “Bottom Line”?

- **From a technical standpoint, Color Management is complex, arcane, and often misunderstood.**
- **Implementation issues are daunting, but in production workflows, specific problems lead to specific solutions.**
 - Key point: there isn't a “single” solution to all workflows.
 - Key point: Customer color problems are Vendor opportunities
- **If Color Management cannot be shown to be fiscally beneficial, support for implementation and utilization will fail.**
- **Return on Investment is not easily calculated at each point in the workflow.**
- **Let's take a look at some real world customer comments:**



Notable Quotable



“Establishing objective color definitions and providing digital communication of brand colors has many advantages outside of accurate color reproduction, including quicker time to market for new packaging, simplified digital proofing, and easy access of true color for creative design and marketing”

Jay Sperry

Clemson University

Notable Quotable

chico's



“Controlling shade for one of the largest bridal retailers was made possible only by the use of color management tools. 30 colors were established and shade maintained for 5+ years across different fabrications, under 3 light sources and multiple product categories.

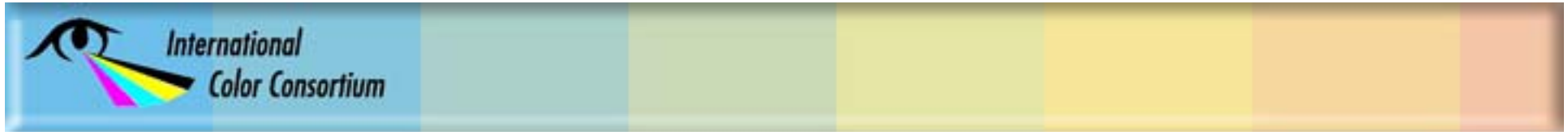
Sarah Kang
Chico's

DIAGEO

Kevin Chop
Diageo



“Diageo NA utilizes a spectral based Brand Color Management Program which is instrumental when managing Diageo’s Brand colors across multiple substrates and print/manufacturing disciplines. This gives Diageo the ability to globally communicate color standards and expectations, enhance color consistency of packaging, enhance productivity through reduced subjectivity, and minimize make readies.”



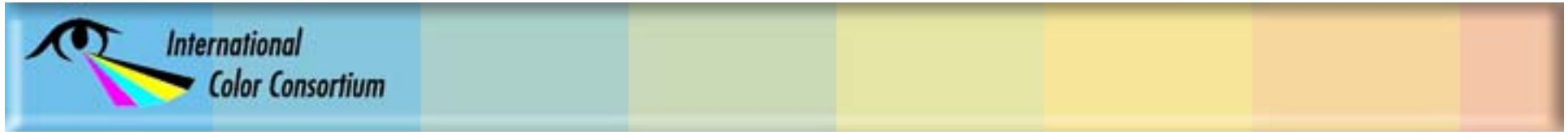
Notable Quotable



Color accuracy and consistency are essential criteria in the production of all our packaging materials. Our consumers are acutely aware of the hues of their favorite products and the implied flavor profiles they connote.

Integral in meeting these goals are programs that establish targets and tolerances for color based on spectral information and that continuously monitor compliance.

Kurt Sands
Frito Lay

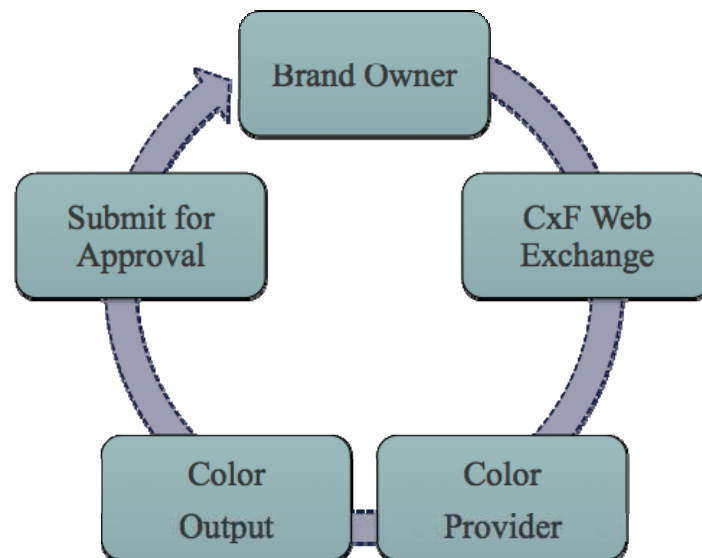


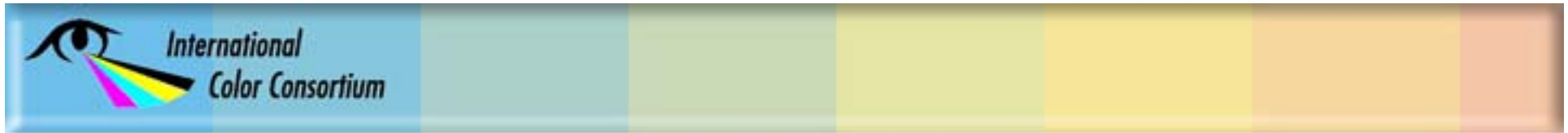
What do we learn from our customers?

- **Color Management is a Strategic Activity**
 - *“Our consumers are acutely aware of the hues of their favorite products and the implied flavor profiles they connote.”*
 - *“..outside of accurate color reproduction, including quicker time to market for new packaging, simplified digital proofing, and easy access of true color..”*
- **Color Management is more than ICC profiles**
 - Communication of color is essential
 - Color Management and control of specific devices is assumed to be well understood.
 - *“...a spectral based Brand Color Management Program which is instrumental when managing Diageo’s Brand colors across multiple substrates and print/manufacturing disciplines.”*

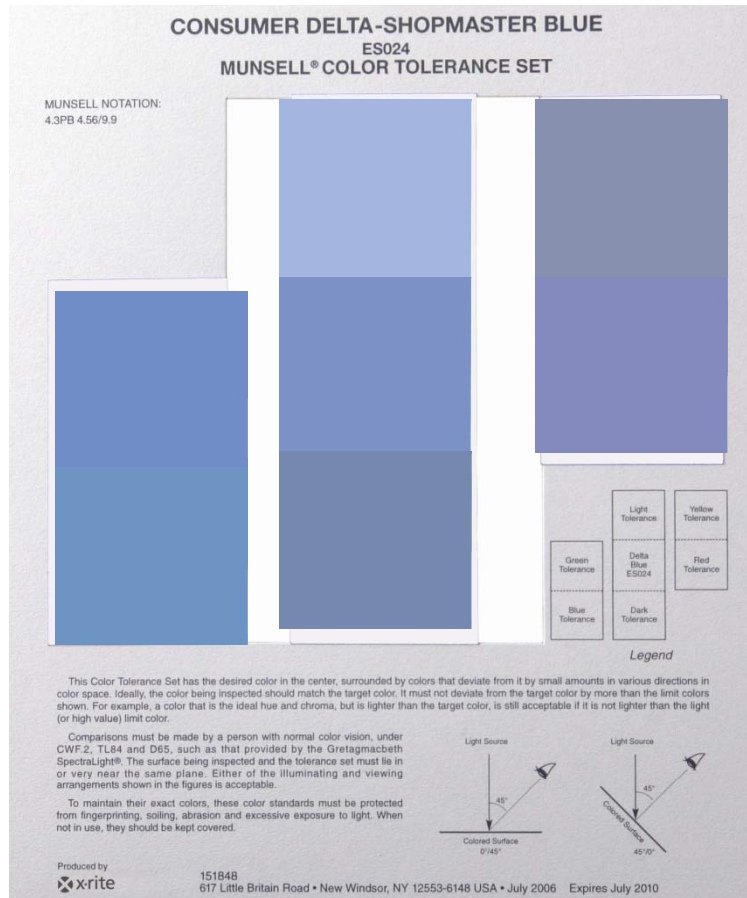
Managing Expectations and Creating Workflows

- Understanding the meaning of a specification and the requirements for a specification are more important than the specification itself.
- Identification of “color mine fields” and “time vampires” in the workflow are essential elements in the process.





Color Specification

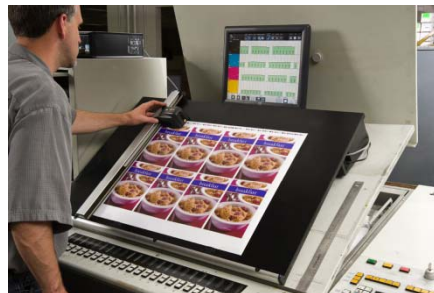
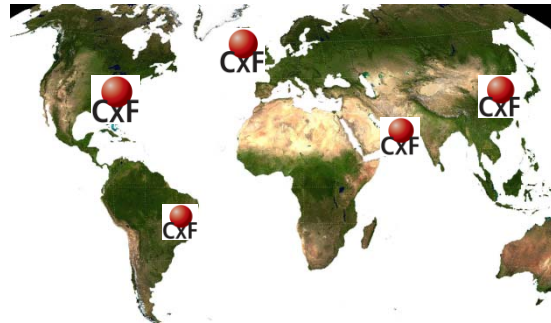
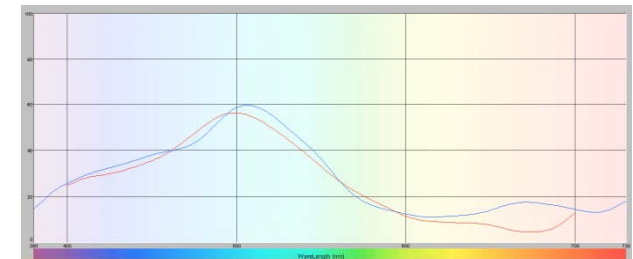
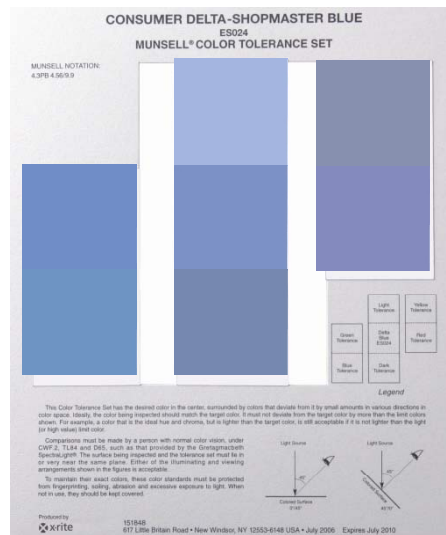


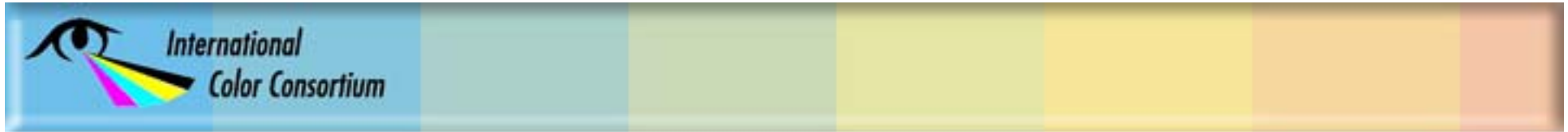
This is NOT a specification

This is a specification

Color Gestalt

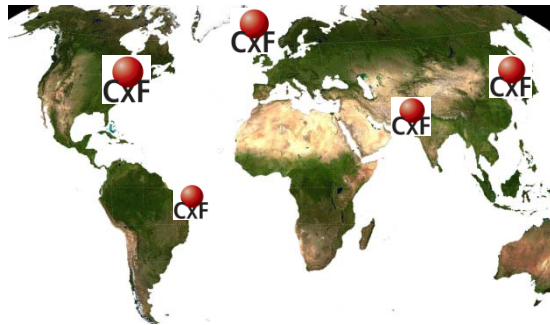
- **Greater than the sum of its parts**

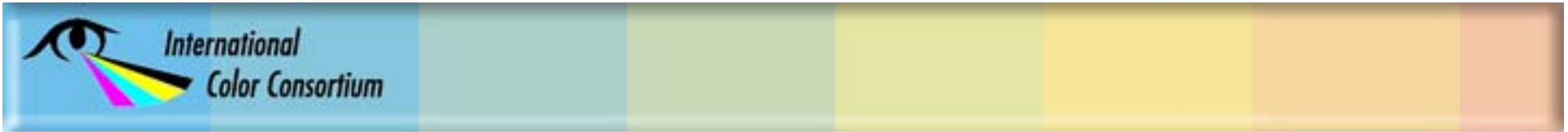




Color Communication and CxF: Bridging Design, Production and Approval across different continents.

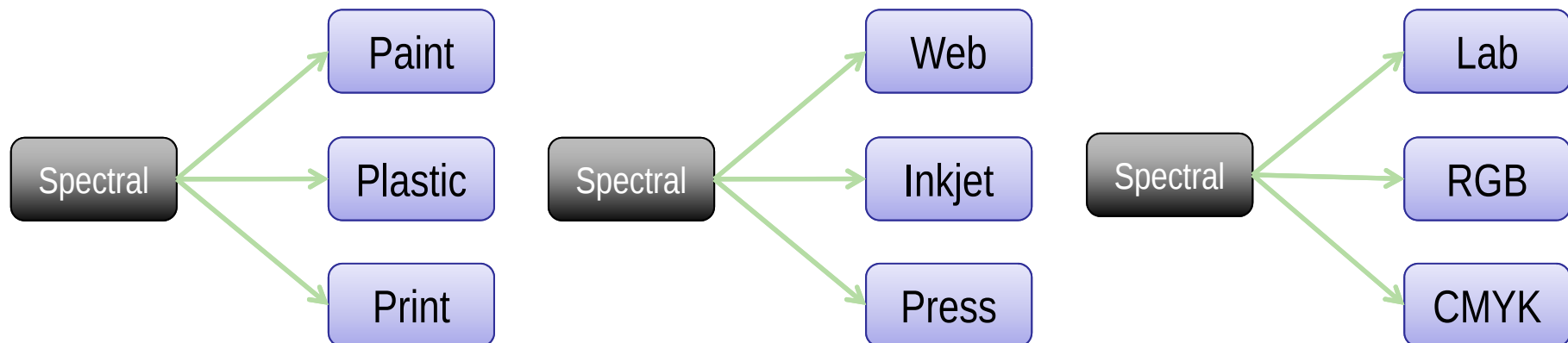
- The ability to exchange color information unambiguously is a key component of the Color Gestalt philosophy.



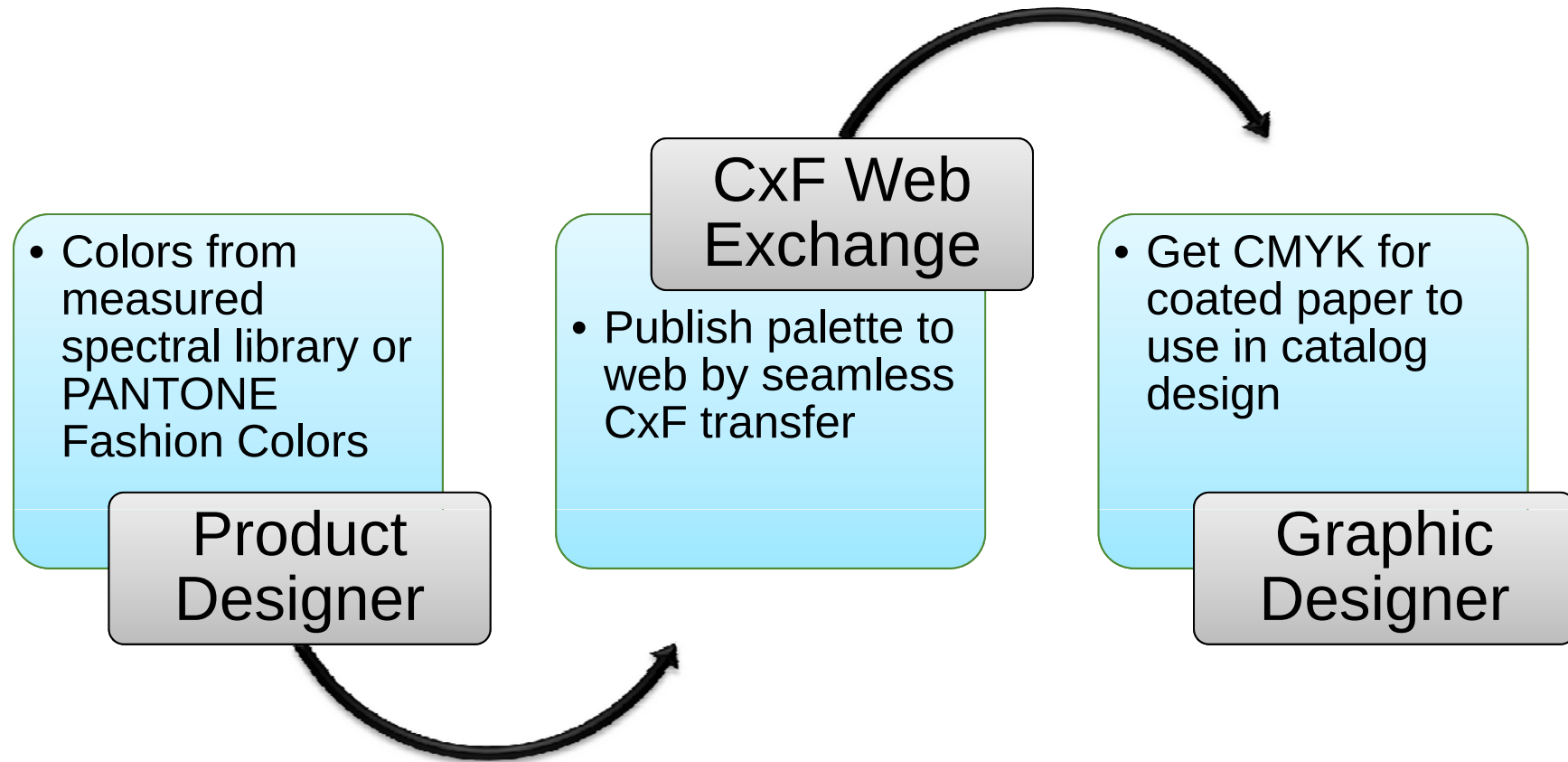


Spectral Color in CxF

- **Device independent and light independent color specification**
- **Provides a basis for high-fidelity color reproduction**
 - Across industrial
 - Across media
 - Across color spaces



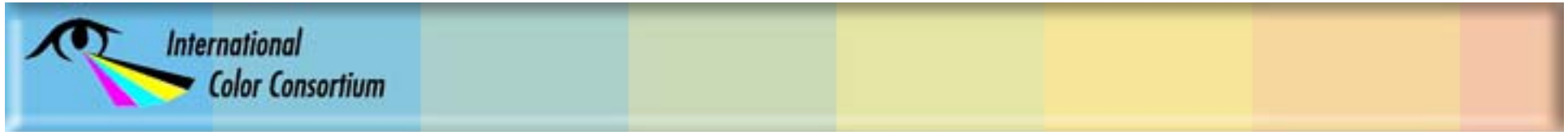
CxF-based collaboration on cross-media design



CxF Workflow – Example 1

X-rite ROI study using PM5 Workflow

- **MultiColor Separations:**
 - Time savings 150 minutes -> 20 minutes, single image
 - Time savings 10 hours -> 1.33 hours, full publication
 - Average cost savings \$1,040 per job.
- **Soft Proofing Benefits:**
 - Typical number of iterations from 3 to 1.
 - Typical savings over \$300
- **Hard Proofing Benefits:**
 - Press and Proofer characterizations minimize iteration on the press. Typical savings of over \$500 per job.
- **The Bottom Line**
 - Savings per job approximately \$1900
 - Increased throughput allows for more jobs
 - Annual savings over \$6,000,000 !



The fundamental impact is driven by saving Labor Hours

- **The major issues with respect to ROI in this situation are:**
 - Increases in Productivity and Thru-put allows for increased sales and better utilization of capital resources.
 - Increases in Productivity in the absence of increased sales will inevitably lead to work force reduction
- **Actuarial savings do not necessarily translate into real world dollars.**
- **Careful Management of the Color Management Processes in a corporate workflow is an essential part of the overall strategic capital planning in a “brand-driven” environment.**