

Does Quality Trump Price?

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Color Quality Conference 2023

Agenda- Is Quality More Important Than Price?

- ◆ Print Buyer expectations
- ◆ Tools for setting expectations
- ◆ Print Buyer example
- ◆ Putting it into practice
- ◆ Reporting establishes trust

Communicate Expectations

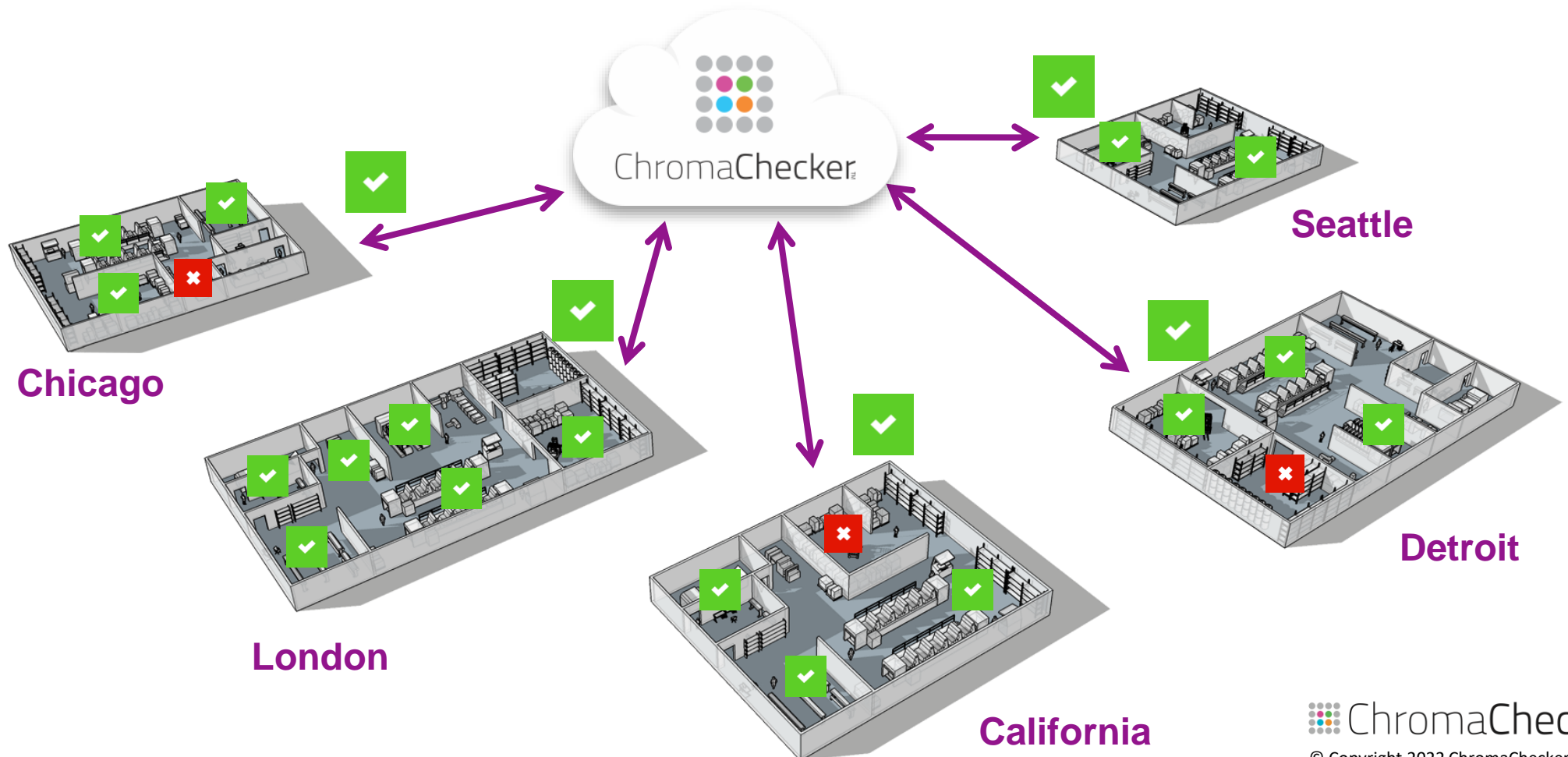
Defining Salability vs. Waste

- ◆ How different is too different for customer to accept?
 - ◆ 1= Proof
 - ◆ 2= Acceptable?
 - ◆ 3= Not...



Global Requirements for Color Matching

Locations throughout the world – Who is Accountable?

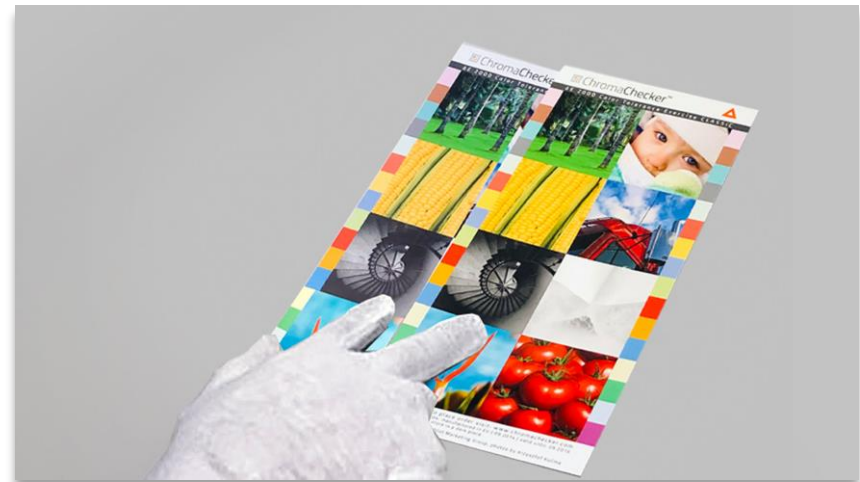
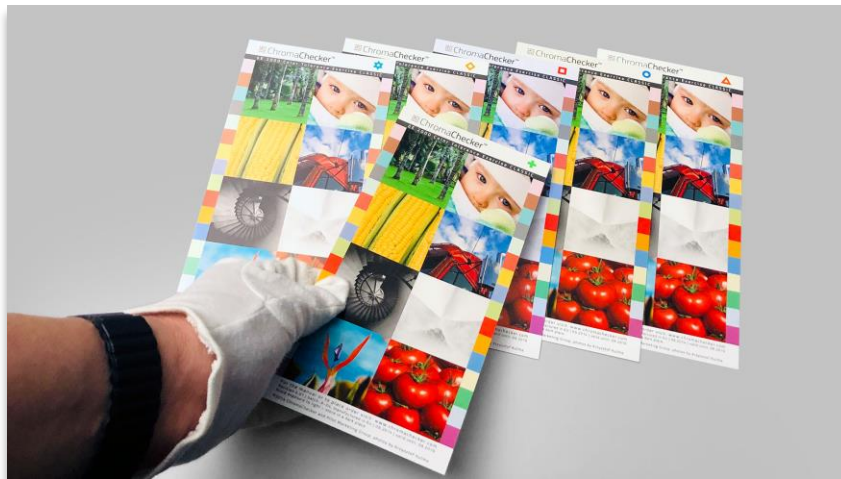


Scientific Research to Quantify Salability

Everyone has different Expectations (E-Factor)



- ◆ Visual Survey of 200 Print Buyers
- ◆ Comparison images built with type of ΔE - 95th Percentile CRF
 - *Provided 80 random paired comparisons, D50 Lighting*
 - *Graded Match: Excellent, Good, Fair, Poor, Unacceptable*



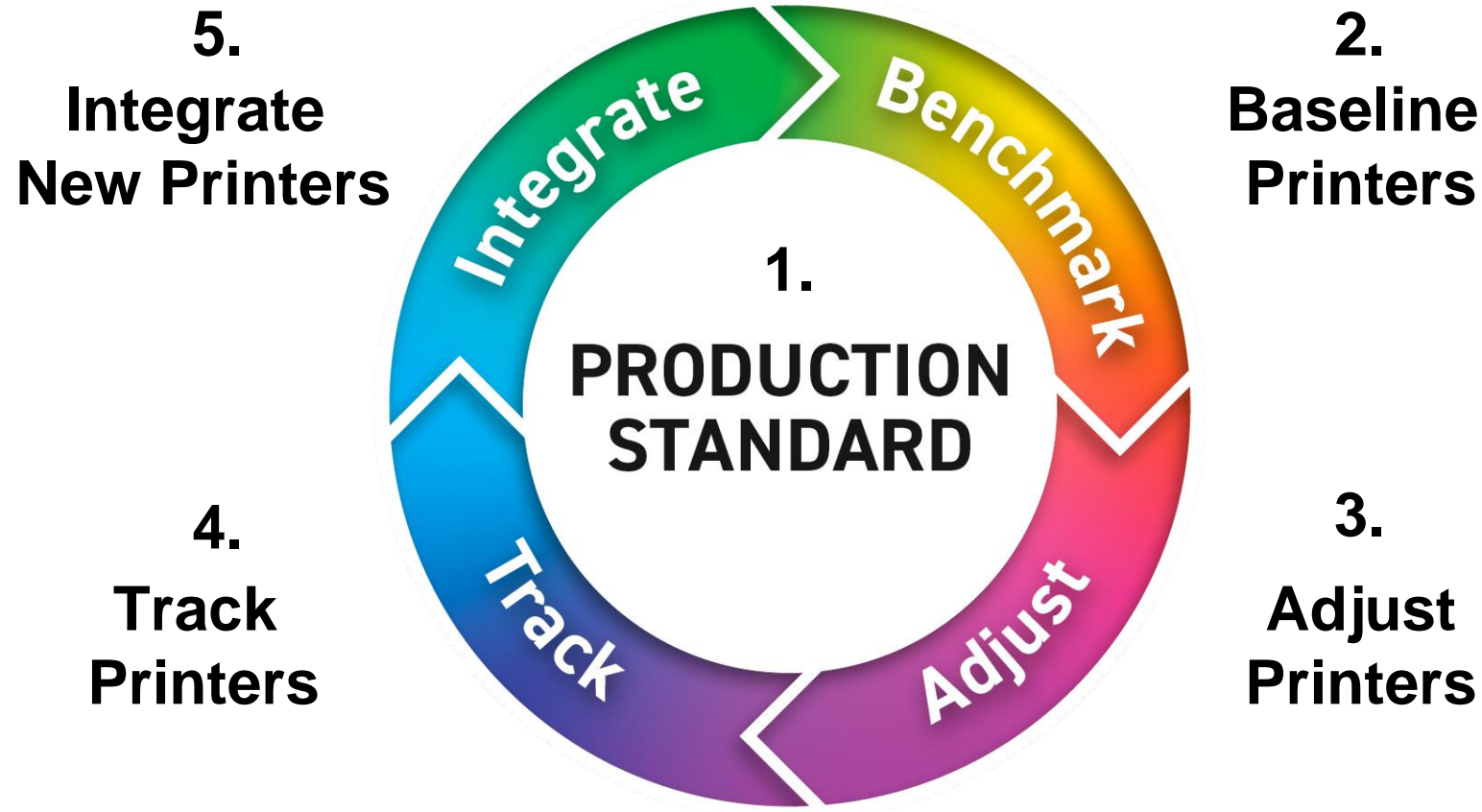
TAGA Research 2001, 2017, 2018

Current State - Analysis



ChromaChecker 5 Step Process – Road Map

Define Production Standard



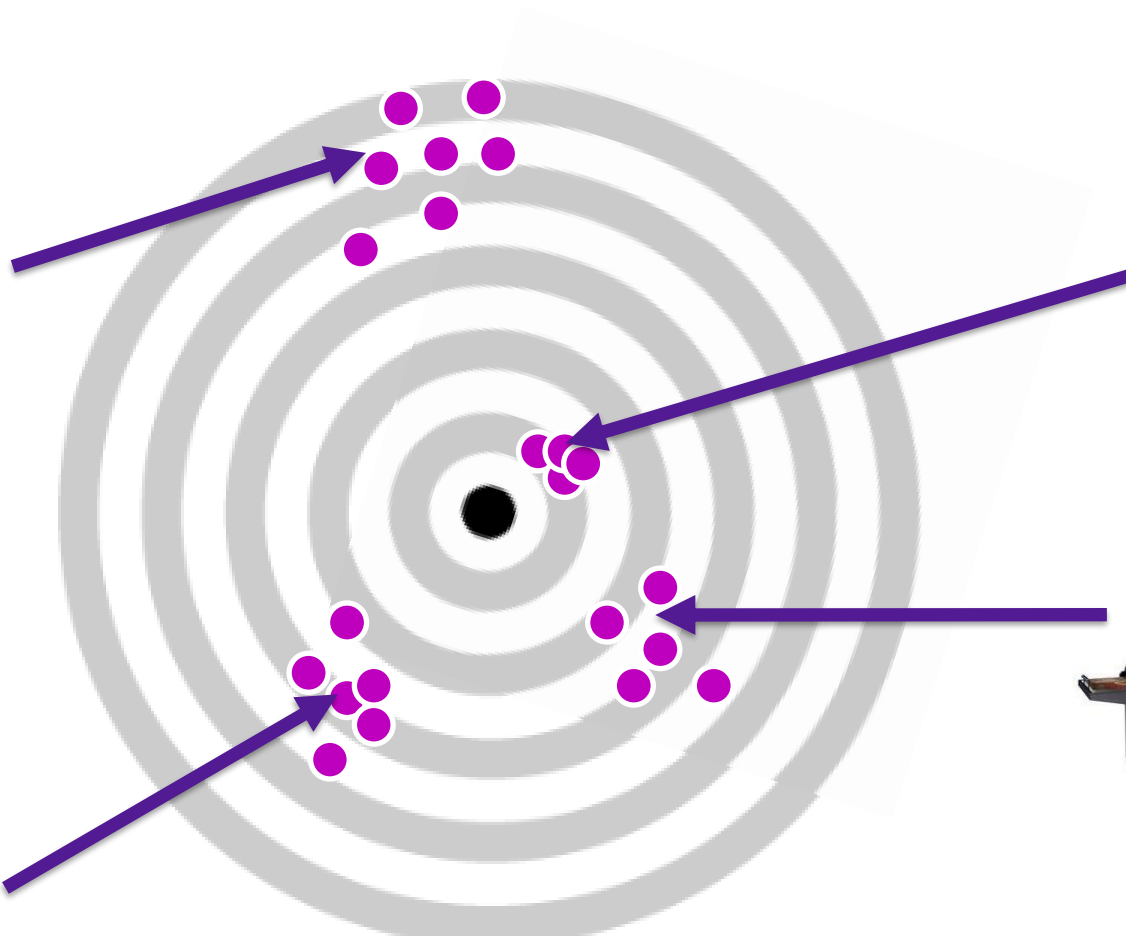
Quality Requires Precision (Consistency)

Consistently from job to job, week to week

◆ How Precise to itself



Digital Press



Quality Requires Color Accuracy

How Close Printer is Matching Established Target

- ♦ Lower the  = More Accurate - Visually closer match



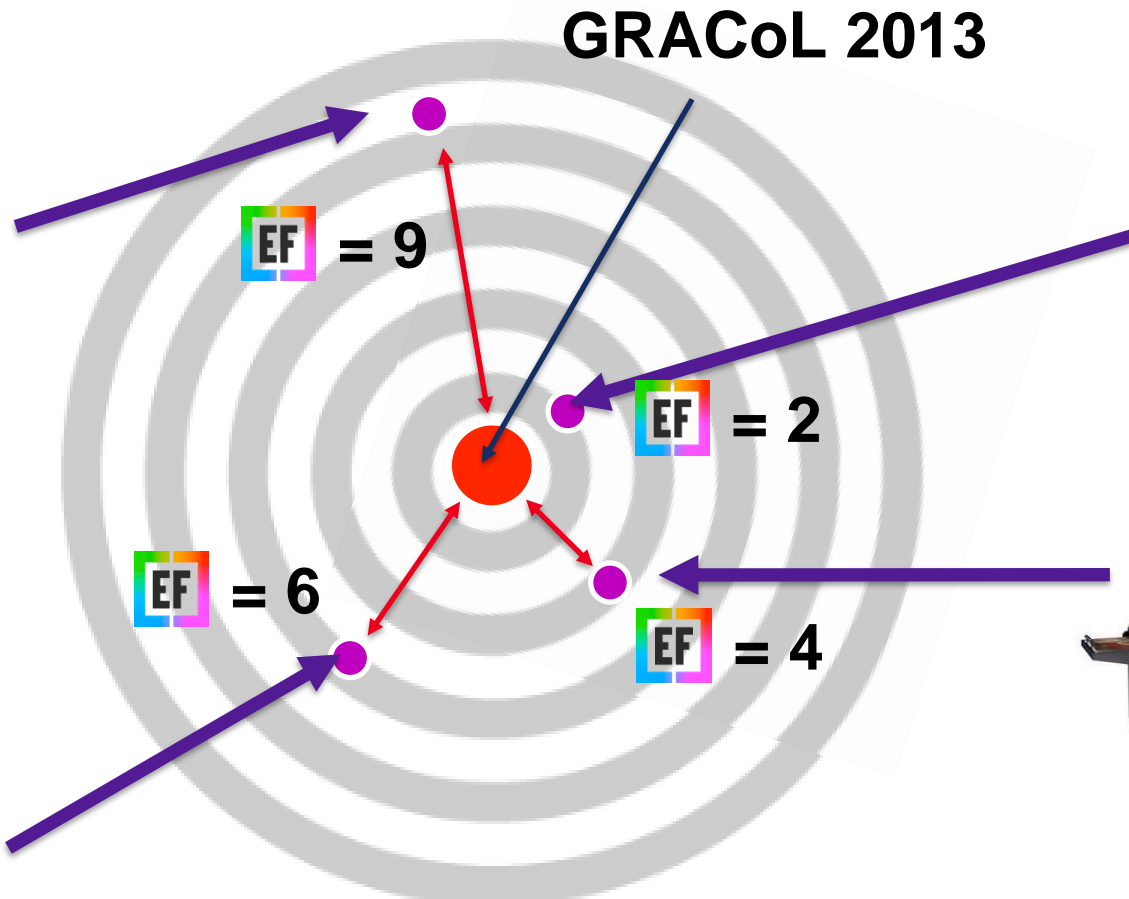
GRACoL 2013



Digital Press



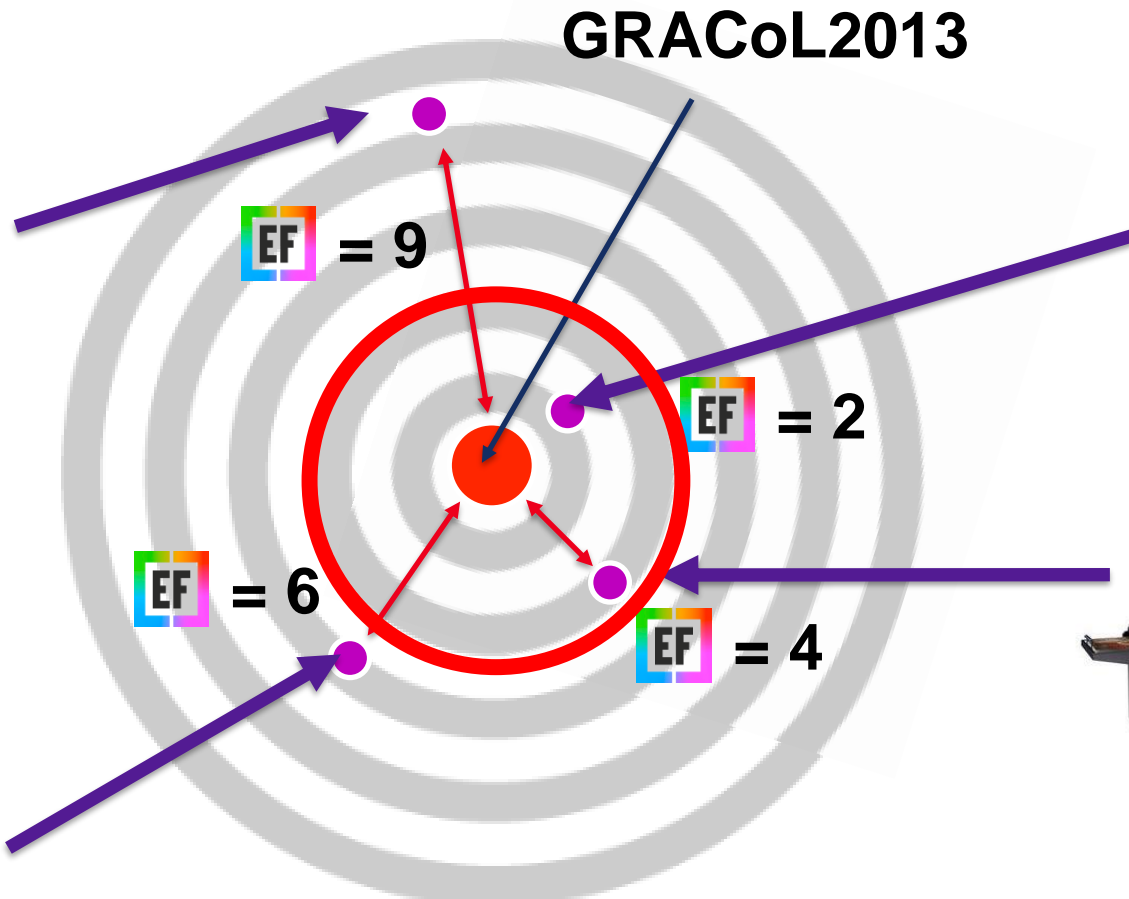
Large Format



Apply Production Standard to Print Results

How Close Printer is Matching GRACoL

- ◆ Lower the  = More Accurate - Visually closer match



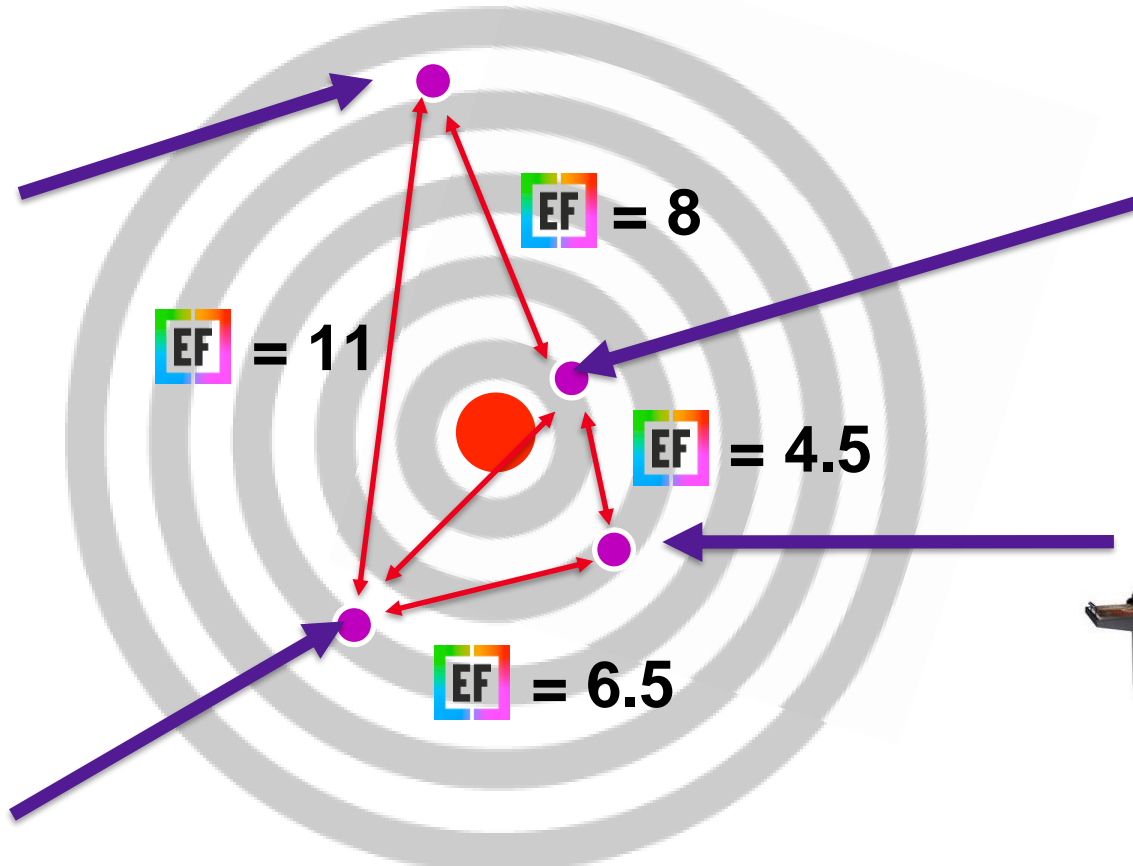
Digital Press



Quality Requires Matching

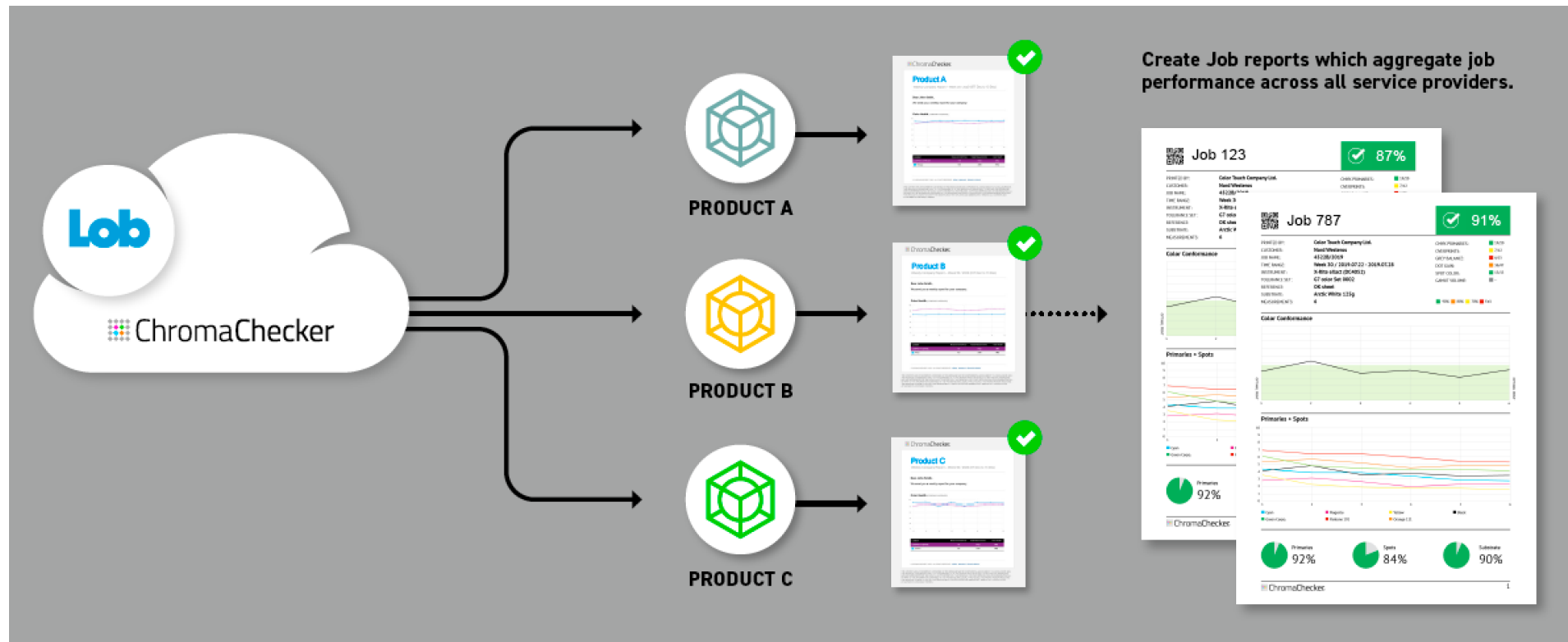
How Close Printers are Matching Each Other

- ◆ Lower the  = More Accurate - Visually closer match



Print Buyer Reporting

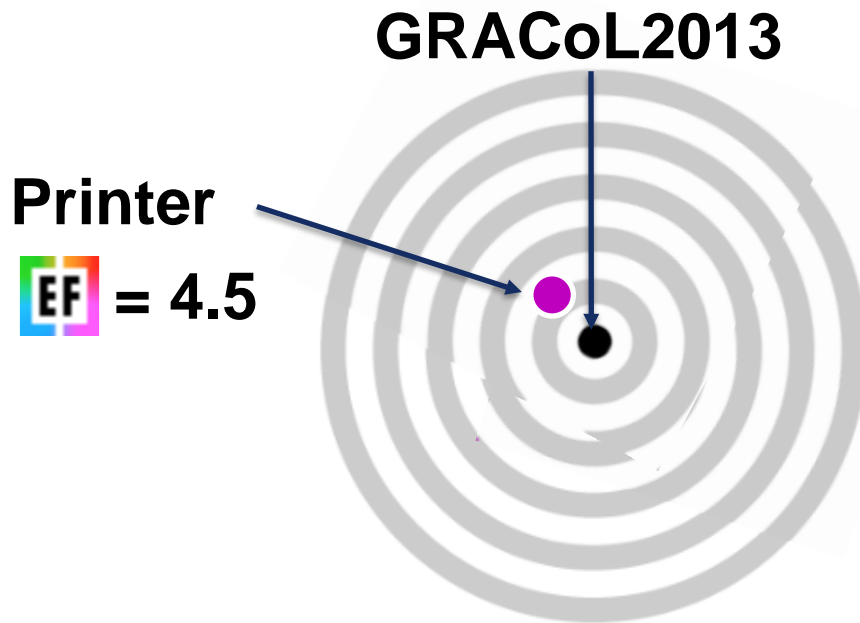
- ◆ Lob has many customers, all want to know how their job printed
- ◆ Partnership with printers to proactively eliminate waste



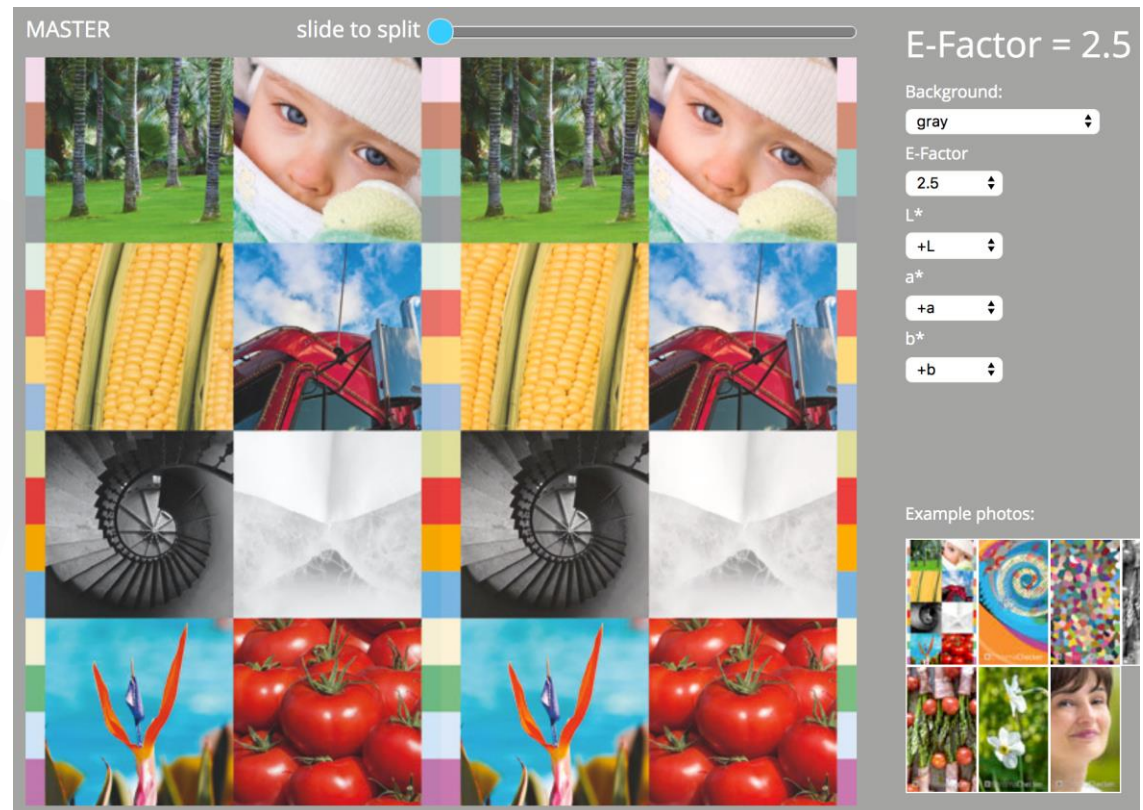
Printing to Industry Reference Condition

Printer Match to GRACoL

- ◆ E-Factor used for primary production tolerance



GRACoL 2013 CRPC 6 EF-4.5
GRACoL 2013 CRPC 3 EF-8.0
GRACoL 2013 CRPC 2.5



Print Buyer – Wish List

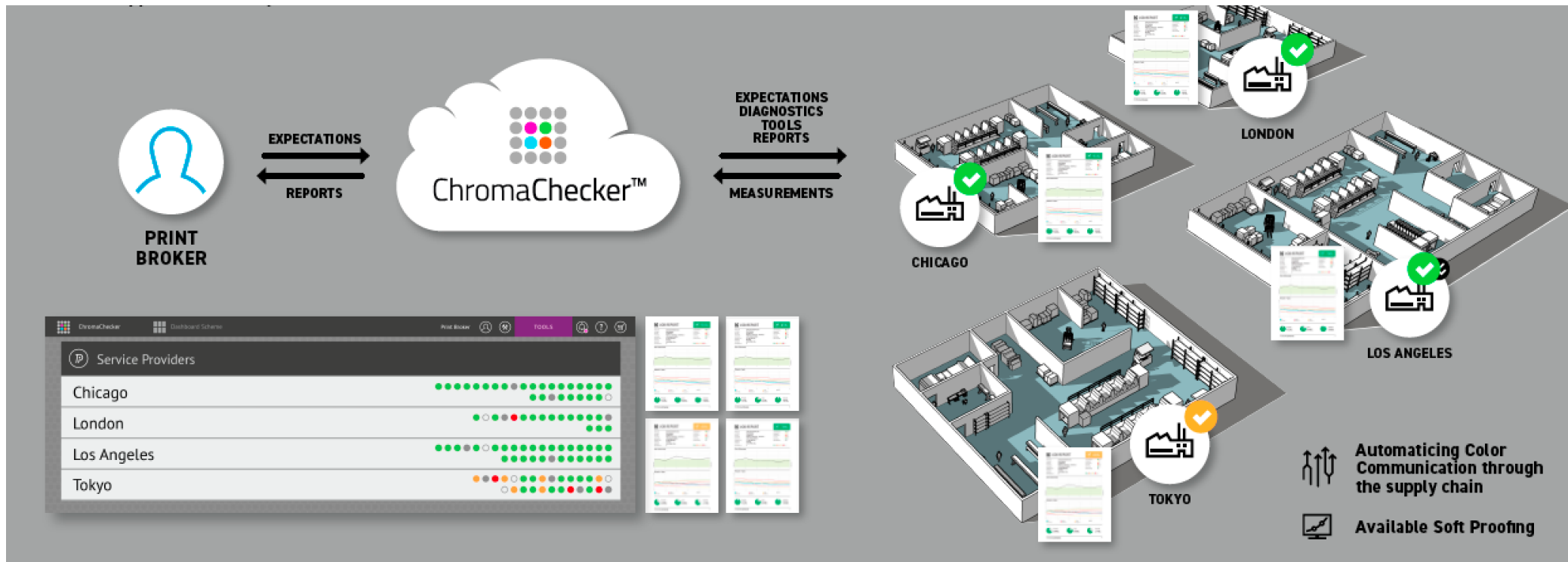
Solution Requirements

- ◆ Dashboard for Communication
- ◆ One metric for production tolerance
- ◆ Industry Standards to simplify implementation
- ◆ Support for all instrumentation
- ◆ Operators are provided with real-time feedback
- ◆ Production tools for adjusting workflow
- ◆ Consistency and Precision

Print Buyer – Not Just a Score Card

Tools that help Production

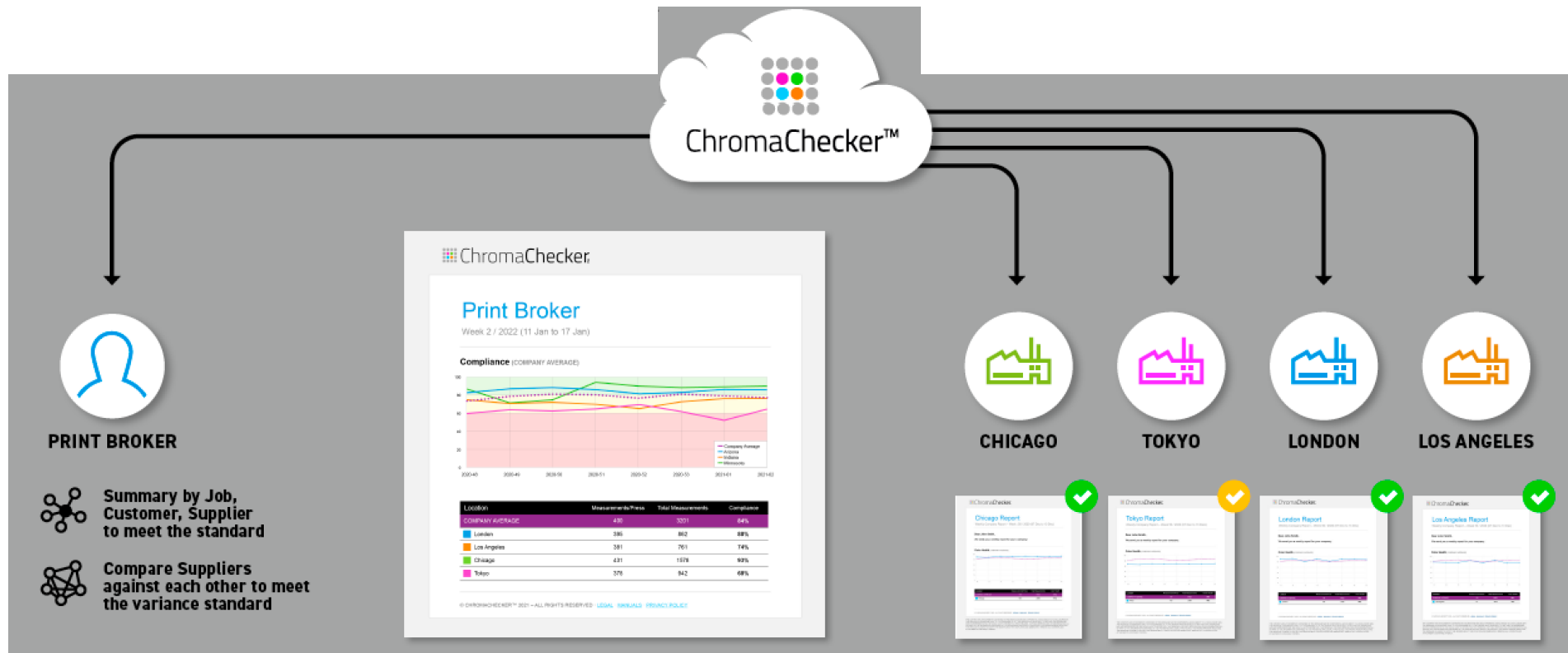
- ◆ Display Inspector, Create and iterate G7 Curves, ICC Profiles, Virtual Print



Print Buyer – Print Service Provider

Automatic Reporting

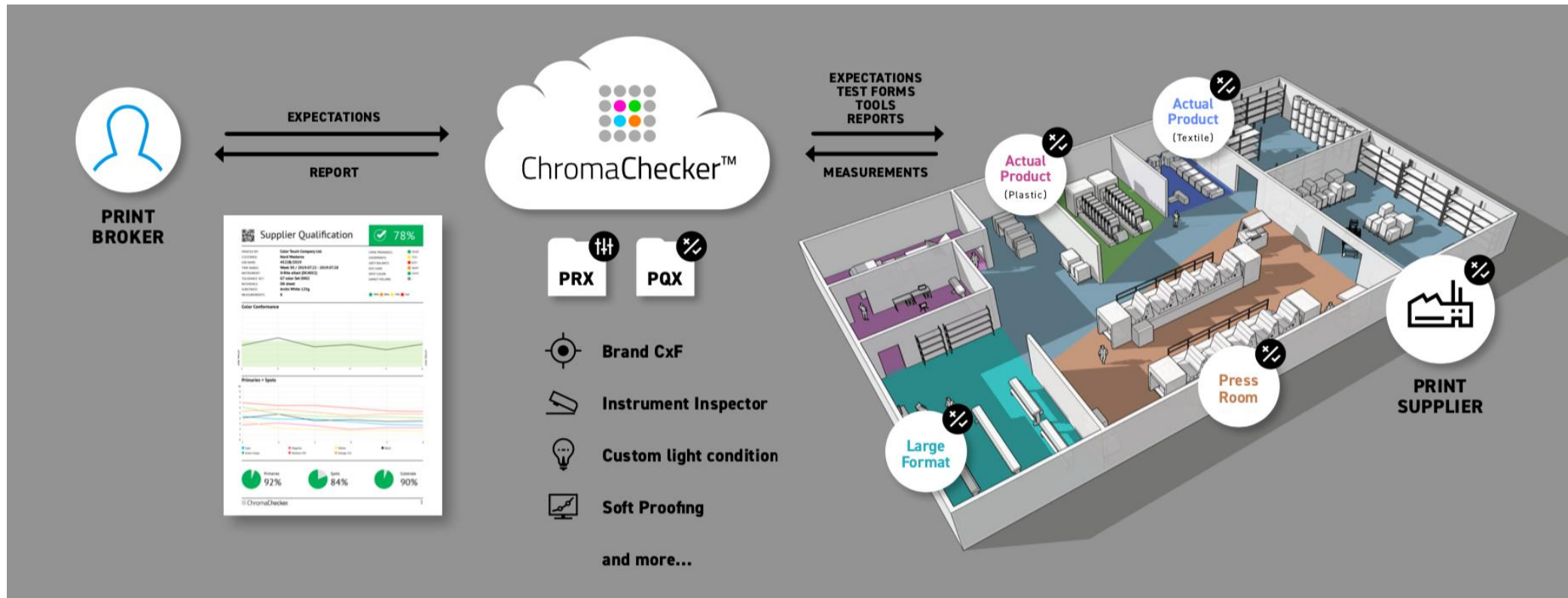
- ◆ Auto email generation showing how each supplier performed



Print Buyer – Print Service Provider

How does each printing device perform

- ◆ How does each **Printing device** perform, every job, every day
- ◆ ISO 20616-1 - ISO 20616-2



Print Buyer Partnership - Tangible

Print Buyers need to be accountable

- ◆ Agreed reference color
 - ◆ Color Inspector for Virtual Printing
 - ◆ Review tolerance with print buyer
- ◆ Substrate as the 5th color in printing
 - ◆ Use the Substrate Library
 - ◆ Work with procurement to get ahead of sourcing
 - ◆ Check substrate with PC Qualifier
- ◆ Instrument verification
 - ◆ Instrument Inspector to baseline instrument
 - ◆ Show the report and verification history
- ◆ Original artwork
 - ◆ Soft Proofing
 - ◆ Make it tangible with Display Inspector

Print Buyer – Color Communication

What we learned about color consistency across a large network of printing companies

- ◆ Color Communication is difficult
- ◆ Over dependence on G7 gray balance
- ◆ Best Practices not communicated or enforced
- ◆ Instrumentation variation
- ◆ Instrument verification - ISO 23031(2020) – T42
- ◆ Supply chain issues for supplies
- ◆ Alignment of different Make and Model of printers

Involve the Print Buyer

Initiatives that can help

- ◆ Use the color tools for setting expectations
 - ◆ eLearning – Quantifying Color Differences
 - ◆ Spot Color exercise
 - ◆ E-Factor exercise
 - ◆ Blind online version
 - ◆ Printed version
- ◆ Print Buyer Access
 - ◆ Provide a login to product tracks
 - ◆ Management login
 - ◆ Automated Reports
 - ◆ Share measurement data to Print Buyer account

ChromaChecker Manufacturing Framework

Automatic Sharing of Jobs and/or Print Tracks

- ◆ Allows Customers/Vendors view data and reports, no edits
- ◆ Does not share Make Ready scans
- ◆ Only Shares if Job ***passes*** compliance requirements

Data sharing	Measurements	Account
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Sharing settings

Sharing measurement

You automatically send measurements to up750 account whenever You enter up750 in Your customer field. You may choose to share only PASSing measurements or both PASSing and FAILing measurements.

Share measurements that

☒ PASS
☐ both PASS and FAIL


Save

Stop sharing


If You do not want to share any data to this user, please click button below:

Stop sharing

Print Buyer Dashboard



[← ChromaChecker](#)











Dashboard Scheme

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Printing Devices





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Involve the Organization

Initiatives that can add value for quality

- ◆ Create preferred substrate samples and use the Substrate Library
- ◆ Communicate Best Practices and enforce them
- ◆ Benchmark printers old and new
 - ◆ Communicate capabilities with organization
- ◆ Instrumentation Baseline
 - ◆ Instrument Gauge Factor
 - ◆ ISO 23031(2020) – T42
- ◆ Alignment of different Make and Model of printer
- ◆ Display the Dashboard