



TECHNOLOGY • SOLUTIONS • RESOURCES

# 2014 FORECAST

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# THE PRINT PRODUCTION PROCESS

july 2014 vol 6 issue 7 \$15

WHAT'S NEXT FOR DIGITAL PACKAGING?

FUTURE OF AUTOMATED PRINTING WORKFLOWS

Printing Industries of America and its Affiliate Your National and Local Resource



August 1, 2014

Thank you for being part of the July 2014 Forecast issue of Printing Industries of America: The Magazine. Your author copy of The Magazine is enclosed.

We truly appreciate all the thought, time, and effort you put forth in preparing your contribution. Your insights will prove invaluable for member companies as they prepare strategies for the end of 2014 and beyond.

Thanks again for contributing.

Amy Woodall

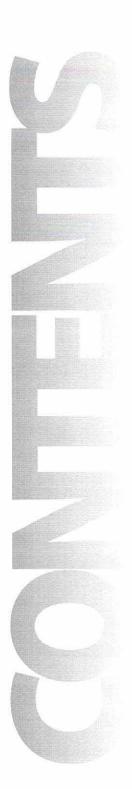
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# Exploring the Value of Contract Color Proofs

Bruce Leigh Myers, Ph.D. Assistant Professor, School of Media Sciences Rochester Institute of Technology blmppr@rit.edu

Much can be learned about the likely future of the graphic communications industry by examining which technologies are on a growth trajectory. Such an analysis yields insight into what is important to media buyers and what this implies for the market. These implications provide the factors that determine which products will see increased adoption by printers. It is suggested here that the contract color proofing, in particular, offers insight into the minds of media buyers: relevant questions include which technologies buyers are willing to pay for, and what does this imply for the market?

Recent research conducted at the School of Media Sciences at RIT suggests that, for the commercial printing market segment, the growth technologies for contract color proofing include less sophisticated methods—uncalibrated monitor-based soft proofs and even jobs that require no contract proof at all. The implications of these realizations suggest a shifting paradigm for commercial color reproduction.

Increased pressure for faster turnarounds, shorter runs, and escalating adoption of standardized printing conditions likely contribute to these realizations together with the omnipresent desire to drive costs out of the process.

### **Not Always a Good Bet**

One conclusion to these findings is that lower-cost jobs simply do not dictate the time and cost investment required of a contract proof. A contract proof, after all, is a form of insurance. Consider that in *Naked Statistics*, Dartmouth professor Charles Wheelan warns against the logic of purchasing the "extended warranty" on a \$99.00 desktop printer. Wheelan states, "As a consumer, you should recognize that insurance will not save you money in the long run . . . Buying insurance is a 'bad bet' from a statistical standpoint, since you will pay the insurance company, on average, more than you get back" (p. 81). While there is risk in not purchasing insurance in the form of extended warranties, statistically the buyer is at a disadvantage; otherwise, the insurance would not be offered.

Have print buyers realized that the cost, in both time and money, for a carefully controlled contract proof is simply not worth the risk? This is likely a contributing factor to the growth of less sophisticated proofing

technologies and jobs that require no proof at all. I would like to offer the following story to further illustrate this example:

In several classes that I teach, I share examples of "bad" printing and ask students to do the same. I maintain a file that I call "the gallery of bad printing," which includes examples of pixelated images, moiré, poor color-to-color registration, bad trimming/folding, and others. One of my students, a customer service manager for a printing company, brought in a job in which the Open Prepress Interface system failed—the high-resolution images were not substituted for the "for position only" low resolution images at the time of platemaking. This job went to platemaking, and to press, and the customer signed off on the job with the low-resolution images at the press okay. When printed, bound, and delivered, the customer noticed the low-resolution images. Even though the customer had approved the low-resolution images on press, the printing company was compelled to reprint the job as a show of goodwill to maintain the relationship with the customer, even though it is likely that legally, and even ethically, they were not compelled to take such a magnanimous action.

If this situation is indicative of the commercial printing market, it is no surprise that more and more print buyers are reluctant to purchase a contract color proof. Proofs are likely seen as safeguards designed to mediate potential conflict resolution, and therefore are on the decline, as many short-run, fast turnaround jobs are approaching the stage where the investment in a contract color proof is simply not worth it. It is relevant to note that RIT research suggests that turnaround time is also a major factor. The cycle time needed to complete the contract proofing cycle is a luxury many jobs cannot afford.

#### Where Should You Settle?

Some would suggest that these realizations suggest that "pleasing" color is now sufficient for many buyers, and that the days of exacting color matching are over. It is important to recognize, however, that color printing has always relied on acceptability-based tolerancing versus perceptibility tolerancing. If you look closely enough at two consecutive press sheets, you will see some nuance of difference. The demand for halftone proofing technologies has remained steady. There is a largely unchanging minority market segment that still demands, and is willing to pay for, digital halftone proofs, including press proofs.

A more optimistic individual may conclude that the quality of raw materials combined with process controls and printing based on industry standards has evolved to the point where the buyer is confident in the ability of the printer to successfully reproduce the job without the contract proof. These conditions are likely a contributing factor here. While every commercial printer is quick to bemoan errors in the digital images provided by their customers, perhaps some image providers

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have finally realized they can keep costs down by taking the time to learn how to use imaging tools to provide the quality of images required for consistent, quality reproduction.

Recognizing these conditions, it is reasonable to expect a future where companies are poised to offer tools to facilitate faster turnarounds and give buyers the tools for quicker approval cycles. Today's MIS workflow solutions allow buyers to submit and track jobs in real time. More and more, print buyers will likely demand such real-time connectivity to additional aspects of their jobs. There is no reason why the growth of less sophisticated proofing technologies cannot be increasingly embraced and integrated with such workflow solutions. Buyers will likely adopt practices where they expect to view proofs on a tablet or laptop via integrated proofing cycles as part of an automated workflow solution. The ability of print providers to offer comprehensive, real-time connectivity tools may help to differentiate such companies in the near future.

Bruce Leigh Myers, Ph.D. is an assistant professor in the School of Media Sciences at Rochester Institute of Technology, teaching undergraduate and graduate courses in color reproduction, printing materials and processes, and research. An industry veteran of over 25 years, Dr. Myers has worked in various technical, sales, management, and training positions for Agfa and X-Rite, Inc., and is a long-time adjunct instructor at New York University.

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### Curing Technologies & Emerging Print Applications

Jackie Bland Research Director PRIMIR jbland@primir.org

Continuously watchful of emerging and "just over the horizon" new technologies and applications, PRIMIR, a dedicated industry research leader, conducts relevant and timely studies for graphic communications firms to explore new opportunities.

PRIMIR's recently released study, *Emerging Printing Technologies* and *Applications*, explored several of today's most critical trends with emphasis on printed electronics and displays, 3D printing and biomedical printing, 2D barcodes and security printing, and, more importantly, their applicability for commercial printers and printing industry suppliers.

Another new PRIMIR study, *UV/EB Curing Technologies in Printing* provides an understanding of the key drivers and opportunities for growth in the use of both UV and EB curing technologies in various end-use applications for both digital and analog printing processes.

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### **Emerging Printing Technologies** and Applications

Among the wide range of budding technologies and applications the study investigated, those with the most direct impact on the commercial printing industry are security printing, barcodes, 3D printing, and nanotechnology.

**Security Printing.** The area most relevant to commercial printers is security printing. While originally developed for anti-counterfeiting efforts in currency and negotiable securities, security printing technologies are now employed to prevent fraudulent activity in a wide variety of applications such as legal forms; tickets, tags and labels; passports and visas; drivers licenses and birth certificates; access or entitlement ID cards; personal data communications; and brand protection.

Digital technologies aid a new breed of forgers and counterfeiters, posing new challenges to security printing. Thus, there is a shift away from security features identifiable by simple, visual inspection toward automated and instrumented systems. These new approaches include a combination of visual and automated detection technologies: 2D and