



for Affiliates this month in Center research:

## 2009-2010 Research Proposal Preview

Happy New Year!

This month we will be taking a break from our normal research summaries to provide a preview of the research proposals that will be published in 2010. Next month we will resume our research summaries with content from *Test Targets 8.0*.

### Revision of "An Investigation into Printing Industry Demographics" (PICRM-2003-01)

*Frank Romano, Professor Emeritus, School of Print Media, RIT*

The goal of this study is to update the 2003 study that defined the printing industry universe. There are about a dozen major sources of information about the printing industry, only one of which is the Federal Government. Although printing is one of the most documented industries in the United States, source arrives at a different view for the size and scope of the industry. This report investigates the challenges in developing a meaningful set of criteria for defining and quantifying the printing industry based on the 2003 report. Using the criteria from over 15 points of definition, all relevant data sources will be reviewed. The goal is to understand the demographics of all services that reproduce information on paper.

The final result is expected to be a proposed re-definition of the printing industry with possible scenarios for qualification and quantification. This report will only update the 2003 report and not investigate printing trends or practices.

### Test Targets 9.0

*Robert Chung, Gravure Research Professor, School of Print Media, RIT*

*Published by the RIT School of Print Media with funding from the Printing Industry Center at RIT*

*Test Targets*, published annually by the School of Print Media since 2002, is the result of teaching and learning from the SPM curriculum. Students, faculty, and staff work together to create content focusing on process control and color management. In addition to research and content creation, the group also performs pre-media, prepress, and printing tasks using facilities at SPM and PAL. The quality of the publication and its track record have won accolades in the U.S. and worldwide.

To learn more about *Test Targets* and download previous versions, visit [the Test Targets website](#).



#### Center Spotlight



Print in the Mix

Print in the Mix is "a unique site demonstrating the role of print as a viable information medium in the marketing mix." This **freeresource** is published by the Printing Industry Center.

#### Sample Fast Fact:

*Cited among the top marketing happenings of 2008 is the integration and enhancement of print advertising and mobile devices as a compelling way to engage consumers.*

*Technology from mobile marketing company SnapTell allows readers to snap a picture of a magazine advertisement, send the picture to SnapTell, and instantly get back content from an advertiser, which can include coupons, video or photos, website links or product information.*

[Read the full fast fact here.](#)

Have you visited **Print in the Mix** yet? Find out how this site can help you 'make the case' for print!

[printinthemix.rit.edu](http://printinthemix.rit.edu)

Funded by The Print Council



RIT Industry Education Programs  
February & March 2009

RIT provides training in both traditional and digital technologies using world renowned instructors, comprehensive prepress and press labs, and state-of-the-art imaging facilities.

Our programs and services

## Evaluating the Viability and Usefulness of a Distribution Center for Commercial and Newspaper Printers

*Twyla J. Cummings, Ph.D., Paul & Louise Miller Distinguished Professor, School of Print Media, RIT*

The need to differentiate one print services provider from another is not only based on products or technology, but also on the unique value of the provider as perceived by the customer. The benefit to the customer is in having one supplier responsible for managing both print and distribution, while the value to the print services provider is a continuous and steady flow of work. Furthermore, many value-added services are a natural extension to or can be integrated with distribution, such as fulfillment, warehouse management and facilities management.

One way to ensure that distribution services are adding value to an operation and its customers is to have an internal infrastructure that can adequately support the goals and objectives of the company. One approach is to establish a formal distribution center that encompasses many functional departments.

The primary objectives of this research are:

1. To introduce the distribution center concept to a select number of print service providers. This will cover physical as well as e-distribution centers.
2. To determine if print service providers are offering any or all of the services outlined in the proposed distribution center model. If so, where are they offered in the company and how are they structured? Are they managed in an organization similar to the model?
3. To test the validity and viability of the model.

## A Qualitative Study of High Value News Media Audiences

*Howard Vogl, Visiting Professor, School of Print Media, RIT*

Considerable quantitative research has been done on news media audiences. However, there is a lack of deep understanding of the portion of the audience that, in the near future, will be of high value to newspaper organizations and their advertisers.

A high value component of the future news media audience is college students. They have above average education levels, which will correspond to above average income and more discretionary spending. Therefore, the goal of this research is to conduct a qualitative analysis of this high value component of the news media audience.

The objectives of this research are:

1. To gain a deeper understanding of the news media usage habits of a select high-value group of users.

can help your organization make the most profitable use of new technologies, enhance productivity, boost customer satisfaction and produce a healthy bottom line.

**Upcoming Industry Education Programs include:**

► **February 23 - 27**

Orientation to the Graphic Arts

► **March 3 - 4**

Variable Data Printing: Adding Value with Digital Printing

► **March 10 - 12**

Digital Printing Bootcamp

► **March 25 - 27**

Lithographic Relationships & Variables

For more information on these and other programs, or to register for any of these programs, visit

[www.seminars.cias.rit.edu](http://www.seminars.cias.rit.edu)

### The eReview

The eReview is a monthly publication of the Printing Industry Center at RIT for registered Affiliate companies. Articles are also published in the quarterly printed publication *PrintReview*.

### Subscriptions

You are receiving this newsletter because you registered as an Affiliate of the Printing Industry Center.

[unsubscribe](#)

### Contact the Center

Co-Directors (email):  
[Frank Cost](#) and [Pat Sorce](#)

Communications Coordinator (email):  
[Ashley Walker](#)  
(*Web site, publications, general info*)

Mailing Address:  
Printing Industry Center  
at RIT  
College of Imaging Arts  
and Sciences  
Rochester Institute of

2. To detect new usage patterns that would be valuable to news media organizations and their supporting businesses.

3. To confirm or deny current assumptions about the media usage habits of this group.

---

## Open Publishing Guide - Development: Phase 2

*Patricia Albanese, Gannett Distinguished Professor, School of Print Media*

*Matthew H. Bernius, Visiting Assistant Professor, School of Print Media, RIT*

Over the past year, the Open Publishing Lab has enlisted students as well as faculty to produce an informative publishing resource entitled "The Open Publishing Guide". A beta version of the site is located at <http://opg.cias.rit.edu>. Over the past year we have developed the foundation of the site. In the coming year we propose to further develop, refine, and evaluate the usefulness of the content, features and tools of the site. Furthermore, we would like to propose a method for on-going maintenance of the site.

---

## Content Management for Consumer Photography

*Franziska Frey, Ph.D., McGhee Distinguished Professor, School of Print Media, RIT*

Content management is one of the new frontiers in consumer photography. While less and less people print their images at the moment they take them, the digital files are kept for future use. How these images are used depends on whether consumers can find and access them later on - hence how successful their content management strategy is. Newer technologies like facial recognition and automatic tagging, just to mention a few, will further support the consumers' efforts to find certain photographs. If companies want to be able to monetize consumer photographers' digital assets they need to understand how content management is used by the consumer. A successful strategy to move digital images into products - printed and digital - will have to combine the consumer's desire to keep their memories with new and easy workflow solutions to create these products.

Specific research objectives and questions include:

- Understanding the use of content management for consumer photography.
- What has changed for the consumer with the shift to digital?
- What is the importance of permanence in a digital world?
- What infrastructure needs are being posed to consumer photographers by the use of content management?
- What are the technical problems that still need to be solved to make content management work effectively for consumers? This also includes

Technology  
55 Lomb Memorial Drive  
Rochester, NY 14623

Phone:

 (585) 475-2733

Fax: (585) 475-7279

## About the Center

Dedicated to the study of major business environment influences in the printing industry precipitated by new technologies and societal changes, the Printing Industry Center at RIT addresses the concerns of the printing industry through educational outreach and research initiatives.

Support for the Center comes from:

Sloan Foundation  
Rochester Institute of Technology

Adobe  
Avery Dennison  
Eastman Kodak Company  
Heidelberg  
HP  
NewPage Corporation  
NPES  
Standard Register  
Scripps Howard Foundation  
U.S. Government Printing Office  
VIGC  
Xerox Corporation

taking a close look at the standards needed to make content management work.

- What are the business models for content management for consumers?
- What are the workflow models to incorporate content management into the consumer photographer's workflow? How are these workflow models different from the workflow models professional photographers are using?

---

### **A Survey into Metrics and Methods Employed by the Printing Industry to Measure, Track and Integrate Sustainability into Their Business Practices: Phase I**

*Sandra Rothenberg, Ph.D., Associate Professor, E. Philip Saunders College of Business, RIT*

*Marcos Esterman, Assistant Professor, Industrial and Systems Engineering, Kate Gleason College of Engineering, RIT*

The print industry is currently coming to terms with what it means to be more sustainable. It is widely recognized that energy consumption, paper consumption as well as environmental emissions need to be reduced. A consistent request that the principal investigators (PIs) have been fielding has been to help develop standardized sustainability assessments that would allow the comparison of different printing technologies, printing platforms, printing products and printing value chains. The issues that need to be addressed in order to accomplish these assessments is that (1) a set of metrics needs to be agreed upon and developed that would allow this comparison to be made; (2) the appropriate data acquisition and analysis methods would also need to be developed so that there is consistency between comparisons; (3) the appropriate sensing instrumentation would need to be identified along with the proper methods to install this hardware would also have to be developed.

The goal of this research is to perform a survey into metrics and methods employed by the printing industry to measure, track and integrate sustainability into their business practices. In addition, it is also recognized by the PIs that a great deal of work has been conducted in this area by the print industry, but that a proper inventory of the current state of the art is lacking. Therefore, the focus of this proposal is to define the research roadmap that will be required to develop this inventory and execute the first phase of that inventory. In addition to the inherent value of just the described service, this work would serve as the foundation for the future development of a printing value chain test-bed envisioned by the PIs.

---

### **An Experimental Investigation of Presentation Medium-Dependent Differences in Image-Intensive Content Consumption Habits, Retention, and Valuation**

*Frank Cost, Associate Dean and Professor, College of Imaging Arts and Sciences, RIT*

*Javier Rodriguez Borlado, M.S. Print Media from RIT, Technical Director of Tamar Graphic Arts and Technical Institute (ITGT)*

Do people consume image-intensive content such as photographs differently depending on the medium of presentation? Does the medium influence the amount of time spent with content, the information gained and retained from it, and the value placed on it by the end user? Anecdotal evidence indicates that readers may interact with the same content presented in either printed form and on a computer display differently. But hard experimental data is not available.

The objectives of this research are:

1. To gain a quantitative understanding of the differences in time that readers spend with identical photo-intensive content when it is presented in printed form and when displayed on a computer monitor.
2. To gain a quantitative understanding of the differences in the accuracy of information about identical photo-intensive content retained from either medium.
3. To gain a quantitative understanding of the differences in the value placed on identical photo-intensive content when offered in either medium.

---

## Typographic Expressiveness of Print Compared to Screen

*Charles Bigelow, Melbert B. Cary Distinguished Professor,  
School of Print Media, RIT*

*Hye-Jin Nae, Assistant Professor, School of Design, RIT*

*Adam Smith, Assistant Professor, School of Design, RIT*

Our objective is to test the hypothesis that print provides greater typographic expressiveness than the web. In particular we will investigate higher-order measures of expressiveness or “personality” using a technique called the “semantic differential,” pioneered by Osgood et al. (1957) and implemented specifically for typefaces by Wendt (1968), Shaikh (2005) and others.

The investigation will proceed in three phases. The preliminary phase will examine standard typographic distinctions of size, weight (light/bold), and cursivity (roman/italic) in order to analyze, calibrate, and control these basic parameters.

The second phase will investigate the expressiveness of approximately 30 standard “web safe fonts” used in most html and CSS-based web sites. This phase will replicate some of the methods and font selections used by Shaikh (op. cit.), in order to compare our results with those of the prior study.

The third phase will investigate a sample of the thousands of available fonts. This sample will include the 100 “most popular” fonts of each of the major font vendors, including Adobe, Monotype, Linotype and others. To this commercial sample will be added a sample of non-commercial fonts, selected from various “free” font sites, that are popular with college-aged computer users (RIT students).

[BACK TO TOP](#)



© 2009 Printing Industry Center at RIT