

## Media engagement

Engagement is “any action reflecting an experience or touch point with a brand, product, group, or message.” That could involve interacting with an ad, requesting an ad, or even talking about an ad or product experience. The future of advertising is said to be based on engagement, and a study on media engagement offers positive news about newspapers—and by extension other print media—relative to electronic media. The 2005 Media Engagement Study, conducted by research firm Millward Brown, interviewed over 3,000 respondents to determine their attitudes toward advertising and content in media. It found that newspaper readers are more engaged than consumers of other media, and consider papers a top source for trusted and comprehensive news and information. An overwhelming majority of survey respondents said they turn to the Internet first for information, followed by newspapers. Because newspapers have such a trusted voice, consumers believe newspaper advertising is more credible than ads on the radio or the Internet. Only 16 percent of respondents found Internet advertising credible, while 42 percent thought newspapers are.

This study is part of research designed to demonstrate the ability of media to attract and hold the attention of consumers for advertisers, and it claims that printed newspapers are still an engaging medium despite the inroads of electronic media, especially the Internet. The study, which was commissioned by the Newspapers National Network (NNN) and the Newspaper Association of America (NAA), is one in a series of studies being conducted by print media. The NAA separately is underwriting two studies designed to demonstrate the relationship readers have with the papers they read.

This research (and more) is intended to capitalize on Madison Avenue’s present focus on engagement as a core metric for evaluating media decisions. While there are currently no standard industry methods for measuring, or even defining engagement, a committee of advertisers and ad agency executives currently is developing them for the Advertising Research Foundation.

Most respondents noticed advertising

on TV and in magazines more frequently, but consumers believed newspaper advertising was the most reliable and most influential on buying decisions, while radio advertising had the least impact. Since papers are perceived as a comprehensive news source, there is a noteworthy halo effect on newspaper advertising that’s noteworthy. Despite its growth, Internet advertising was found to be least credible among all media. Sixty percent of respondents consider TV their main source of entertainment; newspapers came in last.

Convinced that their mediums are equally, if not more engaging than TV, both the magazine and newspaper industries have been investing significant research dollars to demonstrate such engagement. The Magazine Publishers of America was the first to release a major study on the subject, its so-called “reader experience” research, which is believed to have had a significant influence on Madison Avenue. At least one of the newspaper industry’s studies is modeled on this approach. The Millward Brown study, ironically using the Internet as a research method, interviewed 3,013 adults online, and found that newspapers rank ahead of other media in engagement.

It is unclear how representative the study is, as it was specifically conducted among newspaper readers—people who said they had read three or more issues of a newspaper in the past seven days. According to the findings, both newspapers and the Internet average only 1.3 “conscious concurrent activities” (multi-tasking) while they were being used. TV had the highest ratio, 2.4, followed by radio (2.1) and magazines (1.9).

Any particular medium facilitates, emphasizes, intensifies, amplifies, enhances, or extends certain kinds of media use or experience while inhibiting, restricting, or reducing other kinds. It’s an engaging study.

### DID YOU HEAR?

- The 2005 retail value of wide format digital graphics in North America is \$9 billion for UV-curable, solvent, and aqueous technologies. This number is expected to reach nearly \$13 billion by 2009, a growth rate of 10.2 percent (InfoTrends/CAPV).
- Demand for Uncoated Free Sheet (UCF) paper has declined by two million tons since 1999, according to AF&PA data. This is the equivalent of four trillion 8.5"x11" sheets of 20# paper and eight trillion pages.
- Sixty million U.S. adults use search engines on any given day, up from 38 million in June, 2004, according to the Pew Internet & American Life and comScore Media Metrix. Pew’s results show that the use of search engines climbed from 30 percent of the Internet population to 41 percent in September, 2005. ComScore shows that the average daily use of engines jumped 23 percent from 49.3 million users to 60.7 million users, 2004 to 2005.
- Robert J. Coen, senior vice president and forecasting director at Universal McCann, lowered his estimate of ad spending for 2005 to a gain of 4.6 percent from 2004. That compared with the gain of 6.4 percent he predicted in December, 2004 and the gain of 5.7 percent he predicted in June, 2005. Ad spending last year rose 7.4 percent from 2003. Coen has been on the job since 1948 and is considered the dean of forecasters.
- The New York Times ran more online display ads in one month than any other advertiser in the consumer goods category, according to data from Nielsen/NetRatings’ AdRelevance. Online ads for consumer goods accounted for five percent of all online display ads; the total estimated ad spend for consumer goods display ads was \$28.7 million. The Times was responsible for 9.2 percent of impressions in the consumer goods category—up from 1.1 percent in 2004. Many of those impressions promoted home-delivery of the hard copy of the paper.

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## THE SEVEN FINANCIAL AGES . . . AND MAIL

First class mail volumes, half of which are made up of bills, payments, and financial statements, are largely tied to the age of recipient, which is closely tied to economic activity. As consumers enter and exit the workforce, the extent to which they patronize businesses and services changes. Historically, the most economically active consumers have received the most First Class mail volume.

Further, the age of a consumer is not only tied to his overall economic activity, but is also associated with a distinct spending pattern. A UK study by Prudential found that a consumer's life can be broken into seven discrete life stages that are associated with specific earnings, spending, and material consumption patterns. Although US consumers experience relatively few life stage events during their most economically active years (45-54), the life stage events of their children and parents greatly affect spending patterns, especially among middle to upper middle class consumers. The expensive life stage events of family members include participation in sporting leagues, orthodontia, and academic coaching for children, and entry into managed care facilities for parents.

### The Seven Financial Ages

<i>Age</i>	<i>Name</i>	<i>Spending pattern</i>
Pre-18	The Unburdened Years	Most of what we consume and spend is supplied by our parents. Our responsibilities are few.
18-24	The Burning Years	Money's for spending, even if we don't have a lot of it. We have a 'live for the day' attitude and spend proportionately more money on leisure and luxuries than at any other time in our lives.
25-34	The Learning Years	The realities of self-sufficiency hit home. Careers blossom, as do families and therefore costs.
35-44	The Earning Years	We tend to be career-focused and maximize our income.
45-54	The Discerning Years	Our tastes are at their most extravagant and we can afford to splash out a bit more with our children leaving home.
55-64	The Concerning Years	We increasingly worry about the gap between what we have saved and what we'll actually need for retirement.
65+	The Yearning years	Many of us wish we had invested and planned more for retirement.

Source: Prudential (2005)

Despite past predictions that life stage events, like technology cycles, would gradually occur earlier and earlier in a consumer's life cycle, consumers have actually started to delay some life stage events, including postponing, not hastening, marriage and childbearing, causing these events to coincide with more affluent life stages (Alvin Toffler, 1970). Given the above age-based spending patterns, and the fact that mail receipt is largely tied to economic activity, it is reasonable to conclude that age will continue to be a strong predictor of mail use and receipt for Standard A and First Class as well as Total Mail.

*From "The Impact of Age, Generation and Life Stage on Use of Mail and Media," by Chrystal Szeto (Pitney Bowes), Background Paper No. 11, July 13, 2005.*

# BIO-INK PRINTS ON BIO-PAPER WITH BIO-PRINTER

A hydrogel developed by University of Utah medicinal chemist Glenn D. Prestwich, Ph.D., will play an integral role in a \$5 million National Science Foundation-funded (NSF) study that includes a component for organ “printing.” A developing branch of medicine in which cells are taken from a damaged organ and used literally to print living, three-dimensional tissue for repairing diseased and damaged organs, organ printing can potentially help millions of people who need transplants.

“Our gel is an essential part of the whole process for organ printing,” said Prestwich, presidential professor of medicinal chemistry at the Utah College of Pharmacy. “I believe in five years we’re going to be able to print simple organs, such as a cardiovascular network or a urethra.” The five-year study, led by organ-printing pioneer Gabor Forgacs, Ph.D., professor of biological physics at the University of Missouri-Columbia, aims first to understand basic mechanisms that control biological self-assembly. Self-assembly is a fundamental process in which disordered parts of a living system come together to form patterns and structures, such as blood vessels and organs. Forgacs particularly is interested in the self-assembly mechanisms that regulate changes in shape as a human being develops from a spherical egg to a fully grown person.

Once he understands the mechanisms of self-assembly, Forgacs’ goal is to mimic the process and apply that knowledge to organ printing. That’s where Prestwich’s gelatin-like hydrogel comes in. Like any printing process, organ printing requires ink, paper, and printer. The “bio-ink” consists of cells taken from an organ, such as a blood vessel or heart valve. The “bio-paper” is Prestwich’s hydrogel. The printer can be a standard ink-jet model, modified to use a solution of cells and liquid hydrogel instead of ink, or one designed to use bio-ink.

The cells and liquid hydrogel are placed in the printer cartridge and then dropped in three-dimensional, 1-microliter dots that form layers as the hydrogel solidifies. After many layers have been made, the cells fuse into tissue that forms 3-D structures. The hydrogel is removed, and new healthy tissue is left to implant into a damaged or diseased organ. “We already have printed 3-D structures that mimic blood vessels,” Forgacs said. Prestwich’s hydrogel consists of two sugar chains that, when mixed with a reactive substance, crosslink—the chemical equivalent of weaving cloth—and change within minutes from liquid into gel. The hydrogel breaks down and the cells use these fragments to

build a scaffolding that induces tissue regeneration and in wounds promotes faster healing. “The beauty of our gel is that cells can digest it and turn it into a new matrix that allows them to create what they need to make tissue,” Prestwich said. “The key feature is that the gels crosslink, turning from liquid to solid in the presence of living cells.” Forgacs said he’d used other hydrogels, but likes

Prestwich’s because of its bio-compatibility with cells.

The grant was one of three selected from about 90 applicants to the NSF’s Frontiers in Integrative Biological Research program. The awards support interdisciplinary research leading to new technologies that address important biological questions, such as the ones Prestwich and Forgacs want to answer.

## Trends in Flexographic Packaging

### *Objective*

The purpose of this research is to determine the impact of numerous technological advancements within the flexographic printing industry upon our society. The study is focused on identifying global issues that will affect flexographic industry businesses, driving forces within specific market segments, human resource issues, what average consumers will see in coming years, and issues that pose concern to one’s organization.

### *Approach*

A series of personal and phone interviews with “industry experts,” questionnaires to flexographic printers representing various market segments, and work with a professional trade association were used to gather data.

### *What is Flexography?*

Flexography is a method of direct rotary printing that uses resilient, relief-imaged plates made of a photopolymer or rubber material. These plates are attached to plate cylinders and receive ink through an ink-metering, cellstructured, “anilox” roll. Fast-drying fluid inks enable printing on virtually any absorbent or nonabsorbent sub strata. Each revolution of the plate cylinder produces an image.

### *Key Findings and Implications*

- Although digital printing was identified as being used by half of the respondents, digital imaging may not yet be a priority due to the high cost of conversion from film and the quality that some products require can be easily achieved using conventional methods. Only 24 percent of the respondents believe that higher quality can be achieved with use of digital printing.

- 31 percent of the flexography printers reported that they will be purchasing new

or additional equipment in the next three to five years; this is primarily due to new business or products (24 percent) and productivity increases (21 percent).

- The average consumer is likely to see many new products/applications as the result of new technology. Items identified included RFID, multi-functional labels, more colorful packaging, and hexachrome process printing. Re-closable packaging features will increase in a wider market application and will influence the purchasing habits of many consumers.

- Flexography will be increasingly accepted as a high quality printing medium. This will result in additional growth opportunities. These innovations will also increase consumer confidence in product quality.

- Although the majority of respondents indicated that the threat of smart labels was not likely to invade one’s personal privacy with the use of “smart labels” was low, several respondents expressed concern that privacy could become an issue as the use of RFID smart labels increases.

- Competition among flexography printers is strong in the U.S., but foreign competition is becoming an increasing concern for many respondents. Twenty-two percent of the respondents indicated controlling costs would be the largest global factor, with 20 percent naming prices for raw materials and new technology.

This paper was made possible through a research grant provided by The Electronic Document Systems Foundation (EDSF) to Pennsylvania College of Technology, and researchers James Lentz, Marie Szabo, and Joshua Hayden. “Trends in the Flexographic Packaging Industry” can be found at [www.edsf.org](http://www.edsf.org).

## Greeting cards & e-ephemera

Ephemera are those bits of throwaway paper of every day life (advertising, ticket stubs, programs, and greeting cards). Picture yourself in the year 2170 having just bid \$50,000 for a rare e-greeting card with elves that sing and dance. It is doubtful that such e-memorabilia will be around, but paper cards may be.

A 162-year-old Christmas card, one of the first commercial cards produced for the holiday season, recently sold at auction in England for \$16,000. The hand-colored card, which shows a family celebrating around a table, is one of about ten surviving from an original batch of 1,000 printed in 1843.

The cards were commissioned by Londoner Sir Henry Cole, who is considered the inventor of the commercial Christmas card. The card was originally sent to a Miss Mary Tripsack, a close friend of poet Elizabeth Barrett, wife of poet Robert Browning. John Calcott Horsley, a British painter, designed the card for Cole, who was the first director of London's Victoria and Albert Museum. Cole printed 1,000 of the cards on a lithographic stone before having them hand-colored.

The card drew criticism from prudish Victorians because it shows some of the family enjoying a glass of wine, but the practice of sending holiday cards caught on nonetheless. Although wood engravers produced prints with religious themes in Europe during the Middle Ages, the first commercial Christmas and New Year's cards are believed to have been produced by Sir Henry Cole in 1843.

## Touchy tables & spot audio

Picture a conference table where information is literally at your fingertips. Also picture (hear?) an audio "spotlight" that beams sound to exactly where you want it. The DiamondTouch Table from Mitsubishi Electric Research Laboratories is essentially a large flat computer screen embedded in a tabletop. It responds to touches or gestures made by up to four users simultaneously. The screen is about the size of a coffee table, and it allows users to view and manipulate data or images such as maps or photos simultaneously. Use it to promote a product or play advergames at a bar or restaurant—the table is said to be "debris tolerant."

MERL has manufactured about 100 of the DiamondTouch tables and put most of them on loan to universities and research organizations to test different applications. However, it is selling the table and related products to developers to encourage commercial uses of the technology.

Tie the "touchy table" to an Audio Spotlight, made by Holo-sonic Research Labs. The audio system uses ultrasound to create a narrow beam of sound that can be directed anywhere. A message will be heard only by someone in the beam's path—and not by anyone else. Holo-sonic's customers include Procter & Gamble, SEGA, Starbucks, Time Warner, and Walt Disney. The company says on its website that it has installed over 1,000 systems worldwide since 2000. When it comes to ad messages, the only limit is your imagination. There is no sanctuary from advertising. Advertisers, it seems, have a new way to slip a word in edgewise

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