

MOBILE ACTIVATED PRINT IN MAGAZINE ADVERTISING INCLUDING QR CODES AND WATERMARKS Q2 2012

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A total of 2200 codes were printed during the quarter, up from 1365 in Q1 (61% growth).

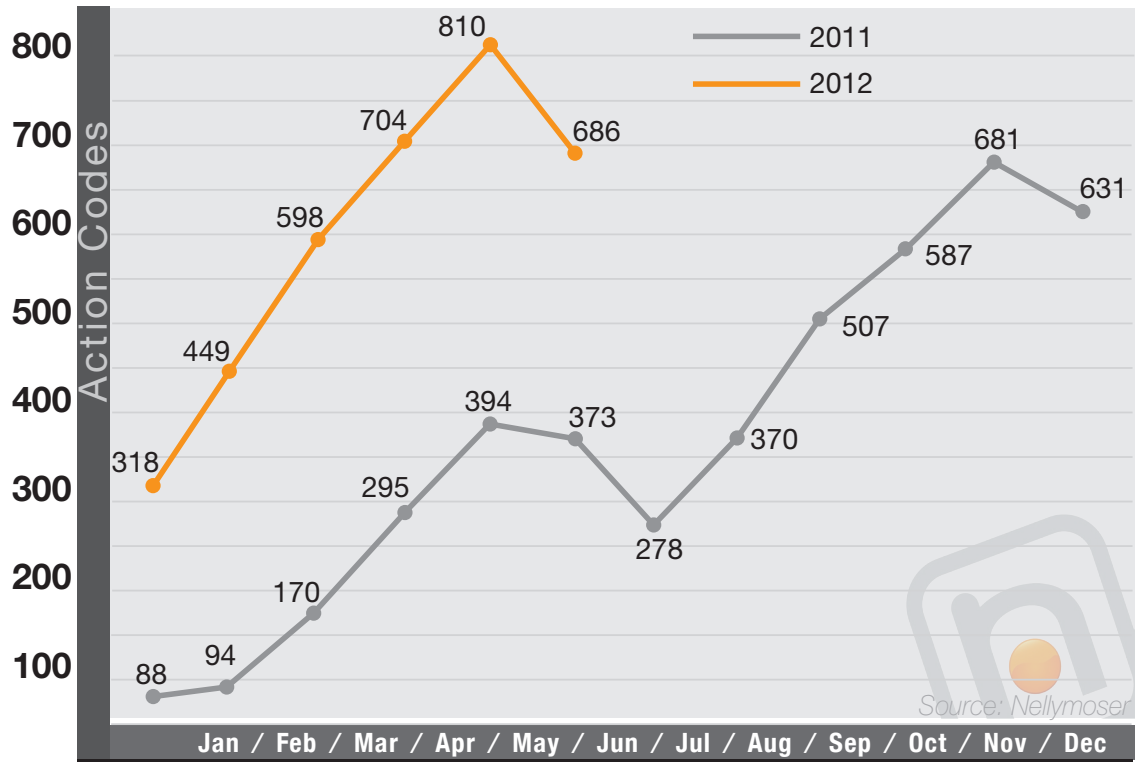
The number of mobile action codes, such as QR codes, Microsoft Tags and digital watermarks, in the Top 100 U.S. magazines jumped dramatically in Q2 2012. A total of 2200 codes were printed during the quarter, up from 1365 in Q1 (61% growth). This is more than double the 1062 codes printed one year earlier in Q2 2011 (107%).

To understand how these mobile action codes are being used in magazines, Nellymoser surveyed every issue of the top 100 U.S. magazines by circulation in 2011 and the first six months of 2012. The study is limited to national titles readily available on newsstands. This eliminated publications that require a membership, such as AARP



Every magazine in our study printed at least one mobile action code during the quarter.

Action Codes Per Month



Top 100 Magazines

magazine and regional titles. For the purposes of this study, we refer to this list as the Top 100 magazines.

To compile the data, Nellymoser analyzed every page in each issue within the Top 100 magazines. In Q2 2012, we counted:

- 46,132 total magazine pages, up from 38,719 in Q1 2012.
- 19,976 total advertising pages, up from 15,691 in Q1 2012.

Nellymoser activated every QR Code, Microsoft Tag, Digimarc watermark, SpyderLynk SnapTag, JagTag, recognizable image and any other code we found with an iPhone or Android device. We ran every campaign, watched every video and visited every web page.

Action Code Growth

For the first time in Q2 2012, every magazine in our study printed at least one mobile action code. All but ten of the magazine titles printed 10 or more codes in the quarter.

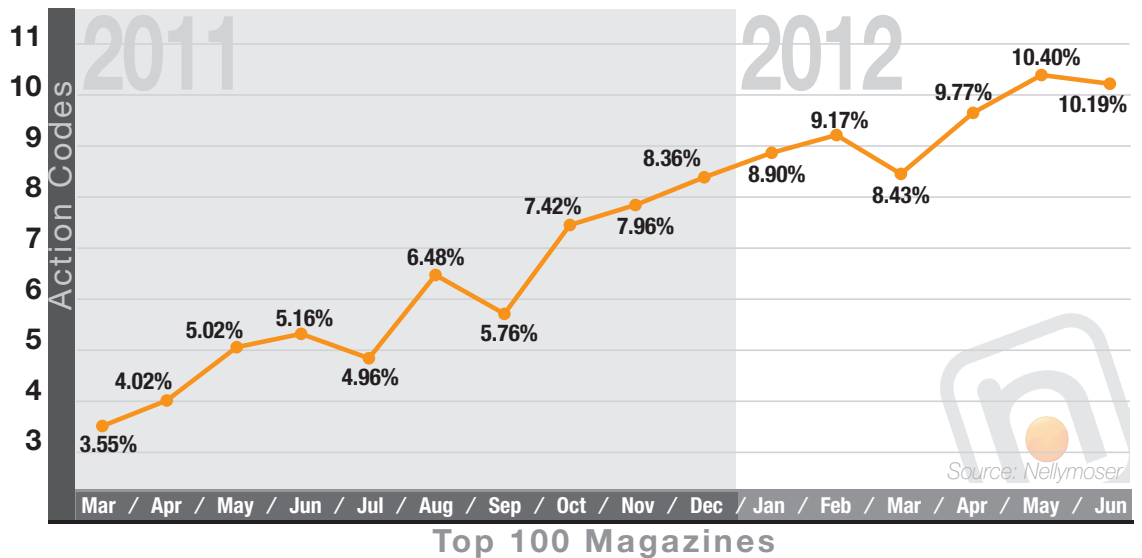
Most months in 2012 showed a continuing upward trend from month to month, as the graph above illustrates. In addition, the lines for 2011 and 2012 appear to be parallel, indicating that interest and investment in mobile activation codes continues at a rapid rate.

A year-over-year analysis shows that the number of action codes rose more than 150% in the first half of each year (3565 vs. 1414). If this trend continues, more than 11,000 codes will be printed in 2012 with more than 1000 codes printed per month starting in September or October.

The projected growth pattern for Q3 may well be exceeded. Two magazines have already announced record breaking code use for September. *Seventeen's* September 2012 issue will contain more than 250 activated images. *GQ* announced that their September issue will activate every advertising page with image recognition.

The code count growth rate tells only part of the story.

Percentage of Ad Pages With An Action Code



More than 10% of magazine ad pages contained a code in Q2 2012, up from 5% just one year ago.

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The most revealing way to understand the impact of action codes on a month-to-month basis is to look at the percentage of advertising pages with an action code. This is because the percentage calculation normalizes for the number of issues printed and the number of ad pages per issue.

Reasons for focusing on percentage numbers for month-to-month comparisons include: (1) weekly magazines print more issues in some months than others, (2) some magazines skip or combine issues for certain months or weeks during the year -- especially in the summer and around the year-end and (3) certain months, especially during the holiday season, tend to have more advertisements.)

As the chart above indicates, more than 10% of magazine ad pages contained a code in Q2, up from 5% just one year ago.

Fitting a trend line to this data projects that the percentage of advertising pages containing an action code will reach or exceed 12% in September 2012.

The average and median number of codes in Q2 2012 were the highest we have seen, except for Q4 2011, which was helped by holiday season promotions. The greatest number of codes in a magazine issue was 51.

QR Codes Lead Market

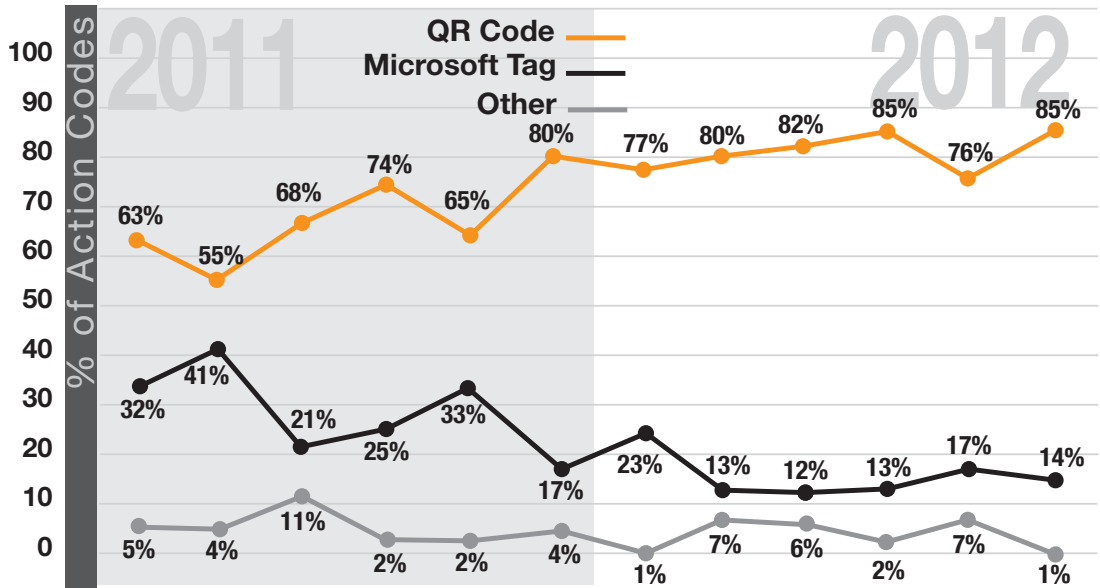
As the graph on the next page shows, QR codes and Microsoft Tags continue to dominate the mobile activation market. However, QR now has a significant lead with more than an 80% market share. This is a significant change from Q2 and Q3 of last year when the market was split between QR and Microsoft Tags.

Number of Action Codes Per Issue

	Q1 2011	Q2 2011	Q3 2011	Q4 2011	Q1 2012	Q2 2012
Average number of codes per issue	2.33	4.23	4.83	6.50	4.88	6.07
Median number of codes per issue	2	3	4	5	4	5
Greatest number of codes in an issue	12	29	54	70	32	51

Number of action codes per issue for issues that contained at least one action code. Each weekly issue of a weekly magazine counted as a separate issue.

Action Code Market Share By Month



Type of Code	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Aug. Reality									1			
Digimarc						5		29	8	8	46	5
JagTag	7	14	10	9	10	3	2	3	3	3	3	4
MSFT Tag	88	152	109	145	226	105	72	57	69	88	139	96
NFC										1		
Other										1		1
QR	175	202	346	433	440	502	244	359	494	599	615	576
SpyderLynk	7	1	40		5	14		1	24	1	7	2
WIMO	1	1	2			2				2		2

Two new technologies made their first appearance in 2012.

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Digimarc watermarks now lead the "Other" category, having risen from just five codes in all of 2011 to 96 codes in the first half of 2012. Digimarc watermarks enable publishers to create custom branded icons which match the look and feel of the brand instead of QR codes. This makes them popular with many designers.

Two new technologies made their first appearance in 2012. Image recognition,

used with augmented reality, appeared on the cover of the *Sports Illustrated* in March 2012. Image recognition is attracting interest in magazines as they do not require any change in the image itself or the pre-production process, as other mobile action codes do.

The first Near Field Communications (NFC) campaign appeared in *Wired*, which is not one of the Top 100 magazines. NFC

Demonstration of New Mobile Activation Technologies

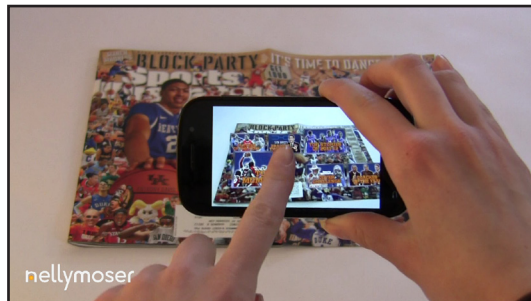
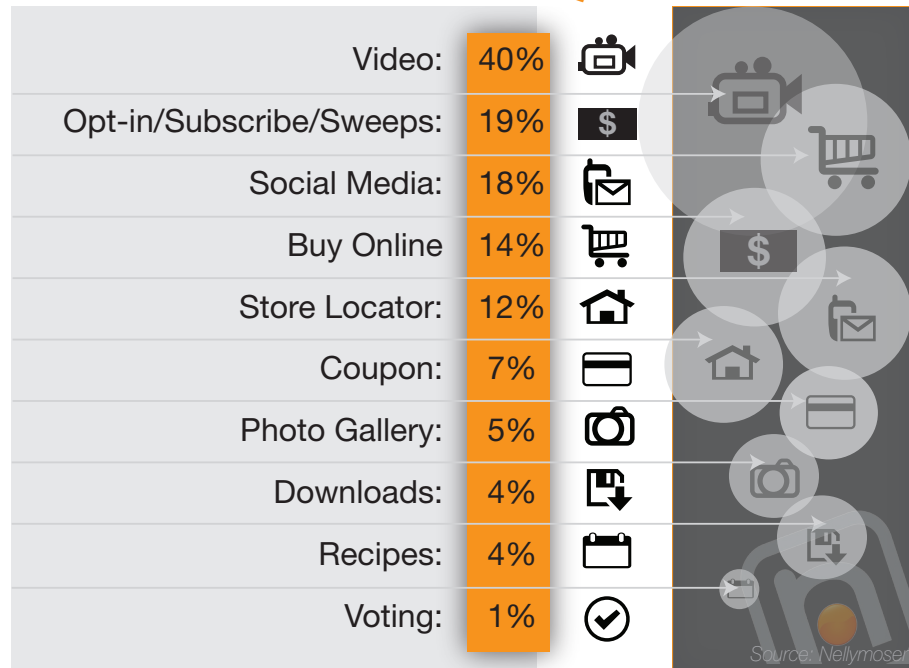


Image recognition with augmented reality (left) and Near Field Communications are two new technologies that appeared in 2012. Short video demonstrations (about 90 seconds) of these technologies may be seen at <http://www.youtube.com/nellymosertv>.

Uses for Action Codes Q2 2012



NOTE: Columns total more than 100% because each action code may lead to more than one engagement. For example, it may show a video and then offer to share the video.

Video is by far the most widely used mobile experience (40%).

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enables a phone to be activated just by placing the device on an ad. However, it adds the expense of embedding an NFC chip into the advertisement. We believe that cost will slow NFC adoption in the near term.

How Action Codes Were Used

As shown in the chart above for Q2 2012, video is by far the most widely used mobile experience (40%). Sweepstakes and social media are the next most common uses, with each being around 20%.

Nellymoser scanned every code, activated each campaign, watched each video and completed actions requested for the mobile campaigns. Our qualitative analysis is that most action codes were used for one or more of the following four purposes:

- **Branding and Demonstrations:** By far, the largest usage for action codes was to showcase a video. These videos are often created specifically for mobile use. Examples include:
 - A behind-the-scenes look
 - A product demonstration
 - A how-to video
 - An entertaining video

- **Data Capture and List Building (Opt-ins / Subscriptions / Sweepstakes):** Action codes are effective for building databases because readers can respond immediately and wherever they are reading the magazine.

Sweepstakes were, by far, the largest contributor in this category. While a sweeps can be run with just one action code, there is a growing trend towards sweepstakes that use multiple codes and span an entire issue with multiple advertisers and editorial sections participating.

- **Commerce (On-line Store, Brick-and-Mortar Store Locator / Coupon):** Readers can immediately scan and act on a desire to purchase. Links to a corporate e-commerce store led the category at 14% followed by in-app store locators at 12%. Some store locators used the phone's built-in GPS to find the nearest location.
- **Social Media:** Action codes were also used for sharing via Facebook, Twitter, Pinterest and email. In Q2, 18% of codes enabled readers to share a video link or product information via social

Nearly half of all action codes (49%) came from companies in just four industries: beauty, home, health and automotive.

media. (NOTE: Only social sharing that was part of the mobile campaign was included. Some video campaigns led to a YouTube Channel, which in turn has a social sharing feature. These were not counted.)

Mobile-Capable Sites

Almost all scans resulted in an experience that was technically viewable on a mobile phone. However, a quarter of these mobile experiences appear not to be designed or optimized specifically for mobile use.

Nellymoser classifies mobile experiences into the following categories:

- **Web Content** A web site that is technically viewable on a smartphone, but mobile was not a consideration in site design.
- **Mobile Capable:** Technically viewable on the phone (e.g., written in HTML5) but not optimized for conversion, campaign goals, etc.
- **Mobile Optimized:** Both Mobile Capable and optimized to achieve campaign objectives. It is fast and easy to use on a wide range of mobile devices.

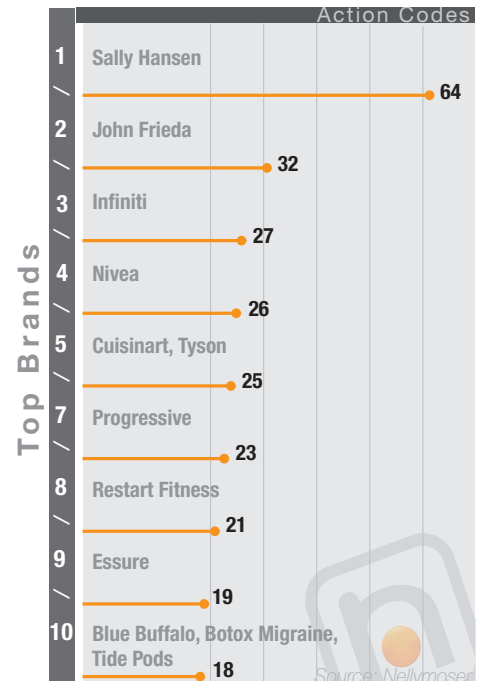
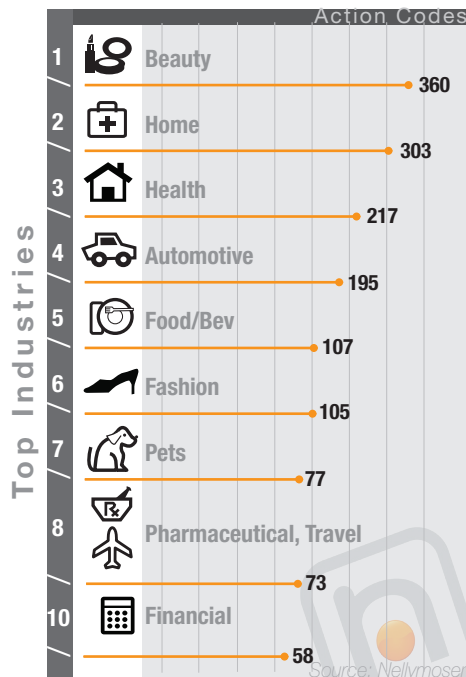
As Nellymoser tallied each action code for this study, our team took notes about the scanning experience. While our notes do not lead to precise counts, as the other statistics do, Nellymoser is able to identify general trends. We learned the following:

- Approximately 10% of all action codes went to “web content,” such as company home pages, a web form or a desktop-style e-commerce site.
- About 10% went directly to a YouTube video or a YouTube Channel mobile page. While they showed videos, they were not optimized with experiences after the scan, such as a sign-up form.
- Roughly 1.5% went directly to a Facebook page.
- Another 1.5% would not scan or contained bad links, including eight codes that linked to a QR code generator site. (Nellymoser categorizes these as “Does Not Work.”)

Top Industries and Brands

Nearly half of all action codes in Q2 2012 (49%) came from companies in just four industries: beauty, home, health and automotive.

Top 10 Industries and Brands Q2 2012



The number of brands using action codes jumped by one-third from 451 in Q1 to 598 in Q2.

Automotive joins the top four industries list for the first time. There was a big jump in the use of codes by the automotive industry, from 81 codes in Q1 2012 to 195 codes this quarter.

The number of advertising codes used by the fashion industry has remained relatively constant since Q1 (105 versus 90). However, due to the growth in other categories, fashion fell from fourth place to sixth place in the list (from 15.7% in Q1 to 4.1% in Q2).

The number of brands using action codes jumped by one-third from 451 in Q1 to 598 in Q2. This shows increased adoption.

Most of the 12 brands on the top 10 list this quarter were not on the top 10 list in Q1. Only Tyson, Restart Fitness and Blue Buffalo repeated.

Top 10 Magazine Titles

Better Homes and Gardens, *InStyle* and *Popular Mechanics* topped both the list of magazines with the most number of action codes and the highest average number of action codes per issue during Q2 2012.

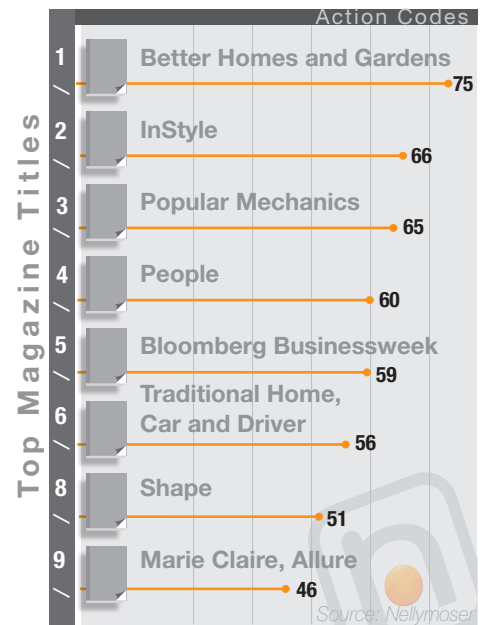
We believe that the average number of codes per issue is the best way to determine the Top Magazines because the calculation puts weeklies, monthlies and those that skipped an issue on the same basis of comparison.

All of titles on the Top Magazines By Number of Codes Per Issue list, except for *Better Homes and Gardens* and *Popular Mechanics*, appeared in the Q1 list. *Better Homes and Gardens* jumped to the top of the list with two issues containing nearly 30 codes each. *Popular Mechanics* rose to third place with two issues with 20 or more codes.

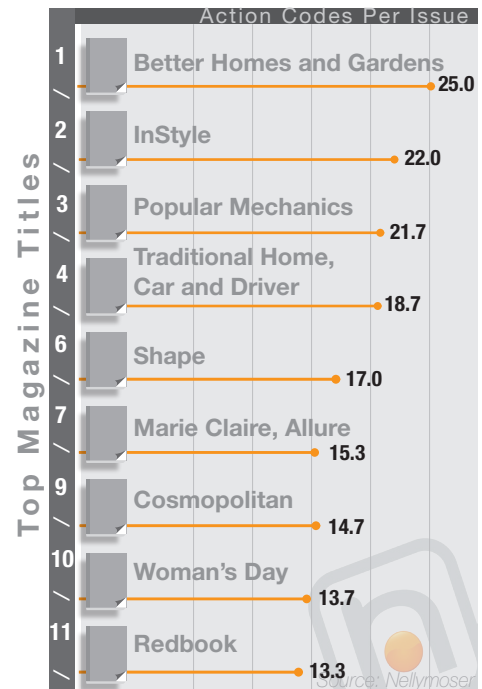
Action Code Text

In Q2 2012, 58% of all action codes were accompanied by information that described what happens after the scan. This is considered by many to be a best

Top Magazines Q2 2012



Top Magazines By Number of Codes Per Issue



practice and follows the pattern of many other calls to action.

There is a clear trend moving away from having other content around the QR code, which is an indication of wider acceptance. Only 13% of codes were customized and only 6% were accompanied by an icon. Few codes were accompanied by an SMS campaign.

Action Codes In Print Q2 2012



There is a clear trend moving away from having other content around the QR code, which is an indication of wider acceptance.

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Action Code Page Location

More than 85% of action codes are placed on the bottom half of the page, the traditional location for a call to action.

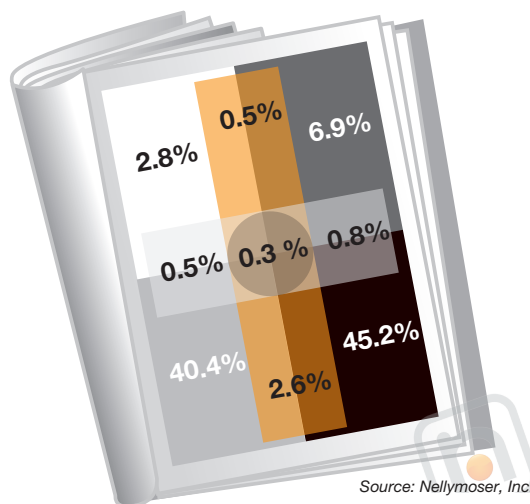
The diagram below divides a magazine page into quadrants and shows by percentage where the codes appeared. Numbers that overlap quadrants indicate that a code crossed quadrant boundaries.

Conclusion and Key Findings

For Q2 2012, Nellymoser analyzed 46,132 pages in the top 100 U.S. national magazines. We reached the following key conclusions:

- A record number of mobile action codes appeared in the top 100

Action Code Location on Page



magazines. The number of codes, 2200, exceeded even the 1899 codes printed during the 2011 holiday season.

- One out of every ten advertisements contained a QR code or other action code. The peak month was May with 10.4% of advertising pages containing an action code.
- The rate of growth in the percentage of advertising pages is growing fairly steadily. If the trend continues, the percentage of advertising pages with a mobile action code should exceed 12% by September 2012.
- QR codes are the clear market leader with more than three-quarters of the market since December 2011. Microsoft Tag remains in second place with a 12% to 17% share.
- Digimarc watermarks have become the leader in the "Other" category. New technologies, such as image recognition with augmented reality and NFC have entered the market.
- A significant number of campaigns that lead to desktop web sites have broken links or do not scan at all.
- Four types of campaigns dominate the use of action codes:
 - Video demonstrations and branding
 - Data capture and list building

A significant number of campaigns that lead to desktop web sites have broken links or do not scan at all.

- Links to e-commerce sites and store locators for brick-and-mortar locations
- Social media sharing with links to Facebook and Twitter
- About half of all action codes used in magazines came from companies in just four industries: beauty, health, home and automotive.
- More brands have adopted mobile action codes than ever before. The

number of brands jumped to 598 in Q2, up from 451 in Q1.

- More than 85% of action codes are placed on the bottom half of the page.

Nellymoser intends to update this report on a regular basis to identify trends.

Get notifications of future updates by following Nellymoser on Facebook at <http://www.facebook.com/nellymoser>.

About Nellymoser

Nellymoser, Inc., (<http://www.nellymoser.com>), is a mobile marketing and technology services company founded in 2000 and headquartered in Arlington, MA. Nellymoser creates interactive consumer experiences on mobile phones and tablets.

The company is expert in producing mobile-activated print campaigns, companion apps and mobile-optimized web sites that engage consumers, foster brand loyalty and drive revenue for clients.

Nellymoser's customers include leading publishers, advertisers, retailers and consumer packaged goods companies.

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