MEASURING MULTIPLATFORM AUDIENCES: REVISING GFK MRI'S PRINT MEASUREMENT METHODOLOGY

Dr. Julian Baim, Risa Becker, Dr. Martin Frankel, Lindsey Draves, GfK MRI

Introduction

For over 30 years, GfK MRI has measured average-issue audiences of more than 200 of the largest circulating consumer magazines in the United States. These estimates have served as the currency for magazine planning and have provided essential information about consumer behavior and lifestyle/attitudes of these readers for publishers, agencies and advertisers, alike. Since its first study in 1979, GfK MRI has consistently employed the same preamble for describing "reading or looking into" a publication as part of its audience measurement procedure. That preamble was drafted when magazines were only published in hard-copy and even the growth of publication brand websites over the past several years did not necessitate a change. However, recent developments, including the rapid growth in ownership and use of e-readers, tablets and smartphones, strongly suggested that GfK MRI consider revamping its questions measuring magazine readership. This included rewording the preamble to the magazine readership section and changing/expanding possible answer choices to the recent reading and subsequent reading behavior questions. The ultimate objectives were to capture the total audience reach of print brands across all delivery platforms and retain continuity in the measurement of any print audiences. Before implementing any of these changes to the National Study, GfK MRI conducted a substantial test of the likely impact of the revised wordings on print readership estimates. The methodology and results of this test and some preliminary data from the first wave of implementation are discussed in this paper.

Background

The introduction of electronic readers (e-readers), such as the Amazon Kindle or the Barnes & Noble Nook, tablets, such as the Apple iPad or the Samsung Galaxy Tab, and more advanced smartphones in recent years has opened up a vast array of opportunities for print brands to provide their content in many and varied ways. Recent figures suggest that over 12 million e-readers were sold just in 2010 and twice that may be sold in 2011, and that iPad sales have reached over 28 million worldwide since its initial release in April, 2010¹. Along with Zinio, Coverleaf or other electronic versions of the printed edition, all these platforms mean that print brands are not limited to delivering their editorial and advertising messages in only a hard-copy format. The acknowledgement that these devices are potentially producing a seismic change in the print medium is further reflected in other recent developments. The Magazine Publishers of America (MPA) has formally changed its name to The Association of Magazine Media to signify the new print environment. In addition, our own Worldwide Readership Research Forum has renamed itself as the Print and Digital Forum in similar recognition of the changing print media landscape.

All these developments strongly indicate that a magazine survey preamble failing to mention all possible delivery platforms is not adequate in today's environment. GfK MRI's challenge was to draft a new question wording that incorporates all required elements for measurement while simultaneously ensuring a consistent measure of the print or hard-copy audience. (At the same time, we also recognized that continuous innovation by publishers means that changed wording might be outdated soon after it is introduced into the survey.) These were the objectives of the test that was conducted in 2010.

Test Questionnaire Development

GfK MRI carried out initial qualitative research on different wording alternatives to describe all print brand platforms (i.e., the preamble) in late 2009. Our objectives in developing questionnaire language were threefold: 1) capture those respondents who read or looked into the electronic version indicated, 2) exclude non-users (minimize overclaims), and 3) avoid alienating, through use of complex or technical terminology, those respondents unfamiliar with the versions and/or devices listed.

Internal testing of the questionnaire language was informal, but thorough. Testing consisted of administering different versions of the preamble and subsequent questions and then debriefing the test respondents to determine whether their responses

¹ Source: IDC Press Releases: March 10, 2011 and September 14, 2011; Apple Press Releases: September 19, 2011, April 20, 2011, January 18, 2011, October 18, 2010, July 20, 2010.

reflected actual behavior. We included in our discussions a variety of individuals, some of whom were familiar with the new technologies and some who were not.

Ultimately, we designed the preamble primarily to reference different devices that a respondent might use to read a magazine, as opposed to describing all the different possible electronic versions. We found that this approach, combined with a reference card with pictures of the devices, was a straightforward, not overly technical way to capture and/or exclude the correct respondents.

GfK MRI thus finalized a revised preamble to capture print brand total audience. In order to test the possible impact of introducing the new preamble on readership estimates in the National Study, we designed a paired- cluster match test of the current and suggested new preamble.

The text of each preamble version is below:

CONTROL VERSION

The titles of magazines and other publications are printed on these cards. Some of these publications are weekly newspapers.

This is a sort board. I'd like you to sort these cards into piles on the board to show whether or not you've read or looked into them in the last 6 months.

If you are sure that you have read or looked into the publications, put the cards in this position (POINT TO BLOCK FOR "YES-SURE HAVE"). If you are not sure if you have read or looked into the publications in the last six months, put the cards in this position (POINT TO BLOCK FOR "NOT SURE"). And finally, if you are sure that you have not read or looked into the publications, place the cards in this position (POINT TO BLOCK FOR "NO-SURE HAVE NOT")

(Any Copy:) We want to know whether you've read or looked into any copy, whether it belonged to you or not. (Anywhere:) It could have been in your home, someone else's home, or any other place at all, such as the beauty (barber) shop, doctor's office, etc.

(Any Reading or Looking Into:) It doesn't matter whether you read it, or just looked into it.

Now, would you sort these cards to show whether you've read or looked into the magazines and other publications in the last 6 months? Please take your time and consider each one carefully.

TEST VERSION (Differences from Control Version are grey-shaded.)

(GIVE RESPONDENT LAMINATED COLOR SHOWCARD)

Magazines can be read or looked into in different ways. This card shows examples of some of them. They can be printed on paper or they can be published electronically, such as those read on a computer or on the Internet or with an electronic reader. You may also be able to read or look into a magazine on a cell phone or other mobile device or you may look at the magazine's website. (TAKE AWAY LAMINATED COLOR SHOWCARD) I'll give this back in a moment.

The titles of magazines and other publications are printed on these cards. Some of these publications are weekly newspapers.

This is a sort board. I'd like you to sort these cards into piles on the board to show whether or not you've read or looked into them in any of these ways in the last 6 months.

If you are sure that you have read or looked into the publications, put the cards in this position (POINT TO BLOCKFOR "YES-SURE HAVE"). If you are not sure if you have read or looked into the publications in the last six months, put the cards in this position (POINT TO BLOCK FOR "NOT SURE"). And finally, if you are sure that you have not read or looked into the publications, place the cards in this position (POINT TO BLOCK FOR "NO-SURE HAVE NOT")

(Any Copy:) We want to know whether you've read or looked into any copy, whether it belonged to you or not. (Anywhere:) It could have been in your home, someone else's home, or any other place at all, such as the beauty (barber) shop, doctor's office, etc.

(Any Reading or Looking Into:) It doesn't matter whether you read it, or just looked into it.

Please include copies printed on paper as well as electronic versions, such as copies read on the Internet or with an electronic reader, cell phone or other mobile device. Also please include reading or looking into the magazine's website. You can use this card as a helpful reference. (GIVE RESPONDENT LAMINATED COLOR SHOWCARD.)

Now, would you sort these cards to show whether you've read or looked into the magazines and other publications in the last 6 months? Please take your time and consider each one carefully.

Along with the wording changes in the preamble, GfK MRI also developed a laminated card showing respondents different platforms/devices that should be considered when answering the readership question. A reproduction of the laminated card is shown below:



The interviewer displayed the card to the respondent prior to beginning the magazine reading section of the questionnaire.

The new multiplatform measurement required one additional change to the set of reading questions. The traditional or current procedure did not probe for the type or platform of readership until the "source of copy" question. Since the revised preamble specifically asks the respondent to include all consumed print content, including magazine websites and electronic reproductions, the interviewer asks the respondent to indicate whether he or she read or looked into the publication in its printed (paper) form and/or an electronic form. The question used in the test survey is shown below:

(VERSION)

Thinking of (FIRST TITLE CIRCLED IN "YES-SURE HAVE"), which version or versions from this card did you read or look into in the last (TIME PERIOD) days?

Answer choices on a showcard were:

- 1. Paper
- 2. Electronic (including the magazine's website)

Next, for each title where the respondent indicated he or she read or looked into an electronic version of the magazine, the respondent was asked to identify: 1) the device used to obtain the electronic version or access the website and 2) a description of the electronic version. We set out to capture four types of electronic versions: 1) magazine websites, 2) pdf-like replicas such as produced by Zinio or Coverleaf, 3) magazine or magazine-related apps, 4) magazines read on e-readers that were primarily text. Among the challenges encountered were:

• Describing a pdf-like "replica" of the magazine paper version: Some respondents were unfamiliar with the term, "replica," or "pdf" and others could not state, without knowledge of the paper version, whether the digital edition was indeed a replica. For this reason, we felt it was crucial to avoid language that implied familiarity with specific hard-copy issues of the magazine or that required knowledge of whether advertising in the hard-copy vs. digital version was identical. Consequently, we rejected the term "replica" out of hand. Other language considered and abandoned included: "exact reproduction," "magazine or containing magazine-content", "looks very similar to a print edition" and "You can digitally turn pages and it looks like flipping an actual page".

While "replica" was deemed too exclusive, other phrases, such as "electronic version" were so vague as to unintentionally capture some respondents who had read only the website. Ultimately we decided on the language: "an on-screen, digital reproduction of a magazine that looks like the printed copy." This seemed to strike a balance between specificity and vagueness, without excessive description.

Describing an e-reader version that contains only articles and no advertising: While most magazines accessible on e-readers at that time were primarily text, we were concerned about making the definition too exclusive by mentioning the e-reader device, since e-reader versions may sometimes be accessed on computers as well. Instead, we simply described it as a "text-only" version of the magazine.

The exact wording of the "device" and the "version" questions is below:

(DEVICE)

Which statement or statements describes how you obtained the electronic version or visited the website of (TITLE) that you read or looked into in the last (TIME PERIOD) days?

Answer choices on a showcard were:

- 1. IT WAS ON A LAPTOP OR DESKTOP COMPUTER
- 2. IT WAS ON AN ELECTRONIC BOOK READER, SUCH AS THE AMAZON KINDLE OR SONY READER
- 3. IT WAS ON A "TABLET" COMPUTER, SUCH AS THE APPLIE IPAD
- 4. IT WAS ON A MOBILE PHONE OR DEVICE

(ELECTRONIC VERSIONS)

Here are some ways that people can look at a magazine electronically. On-screen reproductions of the magazine look like the printed copy, but are on a screen. Magazine websites look different than a printed copy. Which statement or statements describe how you read or looked into (TITLE) electronically in the last (TIME PERIOD) days?

Answer choices on a showcard were:

- 1. IT WAS AN ON-SCREEN, DIGITAL REPRODUCTION OF A MAGAZINE THAT LOOKS LIKE THE PRINTED COPY.
 - 2. IT WAS A MAGAZINE WEBSITE
 - 3. IT WAS A TEXT-ONLY VERSION OF THE MAGAZINE
 - 4. IT WAS AN "APP" FOR A MOBILE PHONE OR DEVICE

Sample Design and Methodology

The sample was selected from unused sample clusters in our Wave 63 (late 2009 – early 2010) fieldwork. In order to cover a wide spectrum of potential respondents from all Census regions of the continental United States, GfK MRI chose five strata from among the top ten GfK MRI DMAs. These DMAs were:

- Chicago
- Philadelphia
- Detroit
- Washington DC
- Dallas

In addition to these top PSUs, GfK MRI selected 15 additional PSUs from CBSAs ranging from Baltimore to San Diego.

Our sample design also considered the likelihood that upper income respondents were more likely to be purchasers of these new digital devices and consumers of electronic content. Accordingly, we oversampled upper income clusters (secondary selection units) in these areas to make the sample design more efficient. At this stage, we systematically selected paired clusters and interviewers were assigned to conduct interviews in both clusters of a matching pair. A total of 126 clusters (63 matched pairs) were selected. Interviewer protocols for selecting a respondent in a household and all other procedures, including validation, were exactly the same as used in the National Study. Altogether, a cross-section of 29 experienced and relatively new interviewers participated in the study.

Interviewers were instructed to administer the current (traditional) preamble to the readership question in the first cluster and the test preamble version in the second or matched cluster. This design controlled for the potential impact of interviewer effect on any results. The training of the interviewers on the new preamble took place over several days and no interviewer was allowed to administer any live surveys until he/she demonstrated competence in asking the new version of the readership question.

The interviewing began on April 23, 2010 and lasted until November 14, 2010. 547 respondents completed the traditional survey preamble (control group); 512 respondents completed the test survey preamble (test group). The response rates for the control and test groups were 55.8% and 52.9%, respectively.

Results and Analysis

The objectives of this research study were two-fold:

- Analyze the impact of the revised preamble on current hard-copy (paper version) readership levels using the current wording
- Evaluate the reading levels for all electronic or digital sources obtained from the new preamble

In order to examine the effect of the new readership questions, we first compared the average number of screens (i.e., number of magazines read in the past 6 months) per respondent between the test and control versions. Table 1 shows these comparisons for adults, men and women, respectively.

Table 1

A Comparison of Average Screens Per Respondent
Between the Control and Test Samples

	Control Sample	Test Sample	
	N=547	N = 512	
Adults	19.23	20.18	
Men	16.41	17.84	
Women	22.68	22.73	

Since the test preamble version sample uses a more broadly defined definition of readership, we would expect the average number of screens to be only modestly higher than that found in the control version sample. The expected modest change is attributable to the relatively small audiences generated by these nascent platforms compared to the audience size of the printed version of the brand. This is indeed the case, although the differences are not statistically significant at the 95% confidence level for overall screens.

A comparison of the average number of total reads (i.e., reading in the publication period) between the control and test samples shows results that are consistent with the screen findings and are in the expected direction (see table 2).

Table 2

A Comparison of Average Reads Per Respondent
Between the Control and Test Samples

	Control Sample	Test Sample	
	N=547	N = 512	
Adults	7.53	7.95	
Men	6.50	6.87	
Women	8.79	9.12	

The critically important comparison of average number of paper or hard-copy reads per respondent, which is the basis for the traditional currency measure, is shown in Table 3. (Sample size limitations prevent an analysis of reading claims for any specific magazine.) Our revised wording is designed to maintain a consistency in paper or hard-copy ratings, while at the same time incorporating measurement of all print branded electronic content. The table shows that the average number of paper or hard-copy reads per respondent is consistent between the two versions. While we observe a modest (3-6%) decline in the average number of claimed reads in the test version, these results are not statistically significant at the 95% confidence level from those found in the control sample. The changes are more pronounced for women than for men, but neither of the gender-based test reading levels differences is statistically different from the control sample estimates.

This finding is especially critical: the study findings indicate that the revised wording and protocol do not have a statistically significant impact on hard-copy audience ratings. These findings suggest that if **substantial** changes are observed over time, they are not a function of the wording change, alone.

Table 3

A Comparison of Average Hard-Copy (Paper) Reads Per Respondent
Between the Control and Test Samples

	Control Sample	Test Sample	Test/Control
	N=547	N = 512	Index
Adults	7.20	6.97	97
Men	6.07	5.93	98
Women	8.59	8.10	94

Any evaluation of the impact of changing the preamble should consider two additional aspects. First, the traditional preamble is ambiguous about defining the type of readership (i.e., paper or electronic) being measured while the new preamble is quite specific in soliciting responses. We might therefore expect the more precise wording of the new preamble to elicit more accurate responses from respondents. Second, the observed effects on reading levels are based on averages across all magazines and may differ for any particular magazine or set of magazines.

The second objective of the study was to examine the pattern and nature of responses to the electronic/digital publishing platforms. The test preamble mentions websites and other electronically published content found on computers, e-readers, cell phones and other mobile devices (such as tablets). Since the study was conducted in the very early months of iPad's existence and since data from GfK MRI's National Study indicated that 14-18% of e-reader owners read magazines on their devices, we did not expect to find substantial reading claims for these electronic devices. We expected that website viewing would constitute the dominant share of electronic reading events. Our findings, as seen in Table 4, below, were consistent with our expectations.

Table 4

Number of Electronic Reading Occasions:
Types of Electronic Reads v. Reading Devices Used

Types of Electronic Reads

	Арр	Digital reproduction	Text-only	Website	Grand Total
			·		
Computer	17	100	25	469	611
Mobile Phone	22	5	9	37	73
Electronic Book Reader		3		3	6
Tablet		2		2	4
Grand Total	39	110	34	511	694

Devices Used

Beyond examining the types of devices, and those devices used to access electronic content, GfK MRI expected the average number of electronic copy reading events would be noticeably higher among the better educated, more affluent, younger respondents. Tables 5-7 support these hypotheses. Respondents who have attended or graduated from college are twice as likely to read or view electronic copies as are less educated respondents. The similarity between "attended college"

respondents and college graduates reflects the likelihood of using digital devices by income (see table 6). We observe a comparable pattern among income cohorts; more affluent respondents are much more likely to read or view print content on electronic/digital devices than are less affluent respondents. Table 7 shows that the youngest age cohort is more likely to consume print content on electronic/digital devices. We must caution that these estimates are based on sample sizes no greater than 200 for any single demographic group and, as such, are not statistically significant.

Table 5

A Comparison of Average Electronic Copy Reads Per Respondent:

Education

	College Grads or More	Some College	HS Grad or less
Adults	1.41	1.57	.65
Men	1.52	1.54	.45
Women	1.27	1.59	.87

Table 6

A Comparison of Average Electronic Copy Reads Per Respondent:

Household Income

	ННІ 1-49К	ННІ 50 -99К	HHI 100K+
Adults	.82	1.41	1.50
Men	.63	1.23	1.69
Women	.96	1.63	1.23

Table 7

A Comparison of Average Electronic Copy Reads Per Respondent:

	Age		
	18-34	35-54	55+
Adults	1.71	1.29	.87
Men	2.00	1.30	.60
Women	1.38	1.28	1.16

National Study Implementation

Beginning in March, 2011, GfK MRI implemented the revised preamble and methodology into its National Study. As expected, the quickly changing digital print landscape necessitated some revisions to the questionnaire language, especially with respect to the descriptions of electronic versions.

Some of the more obvious and easily addressed updates were:

- 1) Updated descriptions of devices: "Electronic book readers" was replaced by the now more generally recognized term "E-readers." One example of an E-reader, the "Sony Reader", was replaced with "Barnes & Noble Nook," as this brand had grown substantially in market share. The term "Tablet Computer" was replaced by "Tablet" to avoid respondents' potential confusion with desktop or laptop computers and to recognize the now generally accepted term.
- 2) The test preamble did not specifically reference "tablets," since the technology at that time was novel, and we were concerned about bewildering or alienating respondents. Instead tablets were implied in the preamble under "other mobile device." The term "tablet" is more widely recognized now, and we therefore added this term specifically to the preamble and to the laminated picture reference card.
- 3) Modifying the description for "Text-only" reading: Black and white, E-reader versions of magazines may now include pictures and/or advertisements, so we changed this description to "text-only or mostly text version."

More challenging considerations:

1) Communicating the distinction between a) a magazine app that reproduced, to a great degree, the paper version and b) an app that is a "special publication" of the magazine (e.g., *Conde Nast Traveler*'s Best of Italy) or a "branded app" that uses the magazine's brand name, but may not include content from any specific issue of the magazine (e.g. Vanity Fair's Movie Trivia): Our clients have expressed interest in measuring these platforms and in distinguishing between their respective consumers. To address this, we split the answer choice "App for a mobile phone or device" into two choices: 1) "a magazine app showing a digital magazine, which could include a cover, articles, pictures, advertisements and regularly updated issues" and 2) "a magazine app, but not a digital magazine". While somewhat lengthy descriptions, we found in internal tests, that respondents who used an app recognized the term "app," and the associated language in the answer choices helped them distinguish which type of app they used.

We also considered the best way to describe a replica-like app settling, finally, on "digital magazine." Other terms considered were "full magazine" or "replica", but again, these implied that the respondent had some familiarity with the corresponding paper version and we wished to avoid that implication. We found that "digital magazine," while not a standard term, was descriptive enough to capture the correct respondents and did not suggest that the app was identical to a paper version.

- 2) Accurately describing pdf-like, digital reproductions, such as those produced by Zinio and Coverleaf: In the test version, this choice was "an on-screen digital reproduction that looks like the printed copy." At the time of the test, these versions were almost exclusively static, pdf-like replicas of the print version. Over time, however, some of these versions have become more interactive and carry different advertising than the hard-copy. We were concerned that the phrase "looks like" was, again, implying comparisons to the print copy. So we focused the cue instead on the producer/distributor of the version and changed the answer choice to "digital reproduction obtained through Zinio, Coverleaf, Barnes & Noble Nook Newsstand or another digital newsstand service"
- 3) Determining whether the current preamble is appropriately inclusive: Distribution methods for magazine content continue to evolve and in order to capture a magazine brand's footprint, we wish to be able to measure these different versions. This raises the question, though, of whether the revised preamble, which refers simply to reading of a "magazine or the magazine's website," captures all individuals who, for example, used a magazine-branded app (as opposed to a replica-like magazine app), visited the magazine's social-networking site, visited a magazine's blog, or accessed content through a content aggregator, such as Flipboard or Zite. By not specifically mentioning these new branded platforms, could the preamble be failing to include some brand readers?

Ideally the preamble would be as inclusive as possible, however GfK MRI must also be aware of the potential for respondent fatigue and strike an appropriate balance between completeness and excessive wordiness. In this first, live iteration of the revised questionnaire, we chose not to change the preamble in any significant way from the test version. However, we are considering doing more extensive qualitative testing to investigate these issues further.

With GfK MRI's Fall report in November, 2011, GfK MRI plans to release readership estimates for each released magazine's total brand reach (print plus electronic readership), along with estimates of hard-copy readership. As part of our quality control and due diligence procedures, GfK MRI has implemented a procedure to clean data against a database of known electronic versions of each magazine. This database includes a listing of all Zinio, Coverleaf, Nook and Kindle versions of our measured magazines, as well as iTunes and Android apps. Apps are identified as either replica-like, digital reproductions or as magazine-branded apps, as described above. In addition, we are comparing the level of estimated electronic audiences of digital platforms with independent data from publisher statements and individual magazine sources.

As of September, 2011, with 8793 respondents reporting, early results from the National Study are encouraging and indicate the demographic profiles of those respondents likely to read an electronic version or the website of a magazine are consistent with results found in the test. Table 8, below, reports these early results and shows the likelihood by age, education and income of respondents to have read an electronic version of a magazine (or the magazine's website), expressed as an index against the general population.

Table 8

Likelihood of Reading an Electronic Version (or the Website) of a Magazine, by Age, Education and Income

	Index vs. General Population
Age	
18-34	153
35-44	150
45-54	89
55-64	70
65+	25
Education	
Graduated College +	130
Some College	111
Graduated High School	63
Less than H.S. Grad	35
нні	
\$100,000 or more	128
\$75,000-\$99,999	125
\$50,000-\$74,999	97
\$25,000-\$49,999	79
Less than \$25,000	69

Source: Preliminary Data from GfK MRI's Survey of the American Consumer, Fall 2011

Conclusion

This pilot test showed that the revised preamble and follow-up question wording changes had no statistically significant impact on the level of hard-copy readership obtained from the traditional GfK MRI measurement. While the continued adoption of these electronic platforms may ultimately affect hard-copy audiences, any observed changes in future National Study waves are likely not attributable to the revised methodology, alone.

While GfK MRI's magazine questioning language remained static for many years, we recognize that this section of our questionnaire must be become more nimble as we adjust to the present environment. We will continue to ensure that respondents understand the new questioning language by evaluating text and updating wording to reflect changes in the availability and capabilities of all electronic devices.