

ADVANCEMENTS IN MEASURING TOTAL BRAND EXPOSURE AND THE IMPLICATIONS FOR MAGAZINE PLANNING

David Shiffman, Senior Vice President/Research Director, MediaVest USA
Tony Incalcaterra, Chief Operating Officer, Affinity

Background

The rapid adoption of iPads, eReaders and other digital platforms is changing consumers' media consumption habits and the ways in which they access information, entertainment, and a growing number of social connectivity channels. The opportunities that these emerging technologies offer to deliver magazine-branded content and advertising in new ways is creating a stream of anticipation among consumers, marketers, agencies and publishers, the likes of which the magazine industry has never seen. As a result, magazine research must keep pace with this evolution by addressing a number of relevant questions on both the audience and accountability fronts: How many consumers are interacting with the digital extensions of specific magazine brands? Do the profiles of these readers differ from readers of the traditional printed editions of magazines? How effective is the advertising delivered on these new platforms? And in practical terms, how will new measurement benchmarks that span both print and digital magazine platforms be incorporated into the planning process?

The Publisher Perspective

To extend the reach of their brands, explore new business models and offer marketers new platforms to deliver their advertising campaigns, publishers are embracing digital technologies. To initially measure the impact of these new channels, publishers have leveraged a wide variety of custom research techniques – from “in app” studies to the analysis of passive measurement data. While these preliminary custom findings have been insightful, the marketplace need has clearly arisen for new syndicated benchmarks designed to quantify audience delivery and advertising effectiveness across print and digital channels for the entire universe of magazine brands.

The MediaVest Perspective

With technology placing even more control in the hands of consumers, agencies and their clients are afforded unprecedented options to engage their target segments through new platforms and advertising models. At MediaVest, the agency invested resources early on to build a foundation of learning to shape its perspective, knowing that the magazine world of yesterday was transforming quickly. Moving forward, eReaders, tablets and other digital platforms are going to play a critical role in the consumer experience - complementing, supplementing, and in some cases, replacing the printed page as the core means of advertising communication. There is an unprecedented need to understand what consumers are looking for from these new platforms, how and why they will adopt them as viable options to access magazine content, and the extent to which the reader experience may differ across channels.

A New Planning Model

Historically, the process for planning print-only campaigns typically relied on a magazine's ability to deliver the advertiser's target audience, while factoring in the cost efficiency of the publication. While additional inputs like circulation vitality, a magazine's editorial environment and secondary studies focusing on the qualitative attributes of a magazine's readers were often considered, the core foundation of the magazine plan was driven by target audience delivery and cost efficiency. In 2005, a new dimension was added to the magazine planning process – a syndicated accountability metric provided by Affinity's VISTA Service that is based on actual in-market advertising performance. VISTA data have been used by MediaVest to create effectiveness indices for unique magazine brands and campaigns, and the incorporation of this accountability component into the planning mix has had a dramatic impact on the final outputs of its magazine plans.

But the days of planning print-only campaigns are over. As recently reported in the media trade press, up to 85% of all publisher proposals being presented to agencies today include a cross-platform solution that consists of a magazine's print and digital offerings. To meet the challenges associated with planning magazine-branded campaigns in this new environment, MediaVest requires a contemporary audience metric to evaluate the target delivery of magazine brands in a platform-neutral way that ensures consistency and fairness across channels. Equally important is the need for expanded advertising effectiveness benchmarks that provide meaningful insights across print and digital platforms in order to evaluate advertising opportunities beyond potential exposure. When combined, these new research tools power a data-driven, scientific approach to planning cross-platform magazine campaigns that enable MediaVest' clients to take full advantage of the opportunities across an expanded publishing marketplace and to allocate advertising budgets effectively.

Affinity’s American Magazine Study, which is the first service in the U.S. to offer unduplicated readership data for printed magazines, eReaders/tablets, smartphones, magazine Websites, social media networks and other digital magazine platforms, provides the solution. In addition, Affinity’s expanded VISTA Service, which now measures the effectiveness of magazine ads delivered via iPads and other mobile devices, is another critical input designed to meet MediaVest’s new planning objectives.

The Planning Model’s Audience Input – Affinity’s American Magazine Study

The American Magazine Study measures the audience delivery of printed magazines, as well as a variety of digital delivery platforms. These platforms include magazine Websites, mobile/smartphones, eReaders/tablets, social media networks and other digital delivery. AMS reports unduplicated audience estimates for the total magazine brand across print and digital channels, the unique delivery of each individual platform, and the unduplicated delivery of any combination of magazine delivery channels.

Example: Total Brand Audience Delivery of Select Fashion Magazines

<u>Magazine</u>	<u>Total Brand Audience (000)</u>	<u>Total Print Audience (000)</u>	<u>Total Digital* Audience (000)</u>
Cosmopolitan	19,101	17,037	4,505
Glamour	14,067	12,448	2,838
Vogue	11,221	9,900	2,122
InStyle	11,081	9,506	2,543

**Total digital platforms include magazine Websites, mobile/smartphone, eReader/tablet, social networks, other digital delivery; Online audience estimates provided by comScore, Inc.*

The Challenges

A comprehensive series of pretests were fielded by Affinity to validate the AMS methodology. The tests addressed the lower incidence of digital readership and a number of specific challenges associated with measuring magazine readership across print and digital channels:

- Generating sufficient in-tab responses to provide audience detail for all of the platforms that deliver magazine content
- Providing clear instructions to respondents to ensure that they understood the media forms that they may not be totally familiar with (eReaders, tablets, etc.)
- Developing survey questions that would capture respondent’s exposure to the full range of paper and electronic magazine content
- Minimizing survey-inherent biases, including pure positional bias, positional screen-in punishment bias, and magazine title confusion

Methodology

AMS employs a contemporary, web-based methodology that quantifies the total brand audiences of the leading magazines in the U.S. The survey is conducted among adults, age 18 or older, across all 50 states and the District of Columbia. With the goal of reporting individual platform level data, AMS employs a sample frame almost three times larger than traditional methods in order to provide granular measurement for emerging platforms such as tablets, eReaders, and smartphones. Annually, AMS surveys 60,000 respondents. (The initial Spring release of AMS’ multi-platform data occurred in June 2011, representing 34,868 respondents. The Fall 2011 wave, currently in field, will be combined with the Spring wave, representing the full 60,000 annual sample.)

Sample Plan

The core sample frame for AMS is KnowledgePanel® – a nationally representative online research panel that has been randomly recruited by Knowledge Networks (KN) using probability-based sampling techniques. While the KnowledgePanel® sample is robust, it is not large enough to solely support the total sample requirements required by an ongoing syndicated study measuring total magazine brand audiences, including their emerging platforms. As a result, a parallel sample provided by Research Now (RN) is included in the sample plan and is designed to replicate the demographic composition of the KnowledgePanel® and the U.S. population of adults 18+, as benchmarked to the U.S. Census’ current Consumer Population Study.

In addition, a targeted oversample of known digital users is employed. In 2010, Affinity launched a screening process, utilizing the Research Now panel, designed to identify digital and mobile users. Approximately 79% of the total AMS sample is comprised of the combined KN and RN parallel population samples, and the remaining 21% represents the digital user oversample. While the population sample is subject to typical weighting schemes for sample balancing, the digital oversample employs a dual weighting system, first weighting respondents demographically, and then applying a series of secondary weights to realign their media behavior levels to those established by the population sample.

Recency and the 6-Month Screen Question

To determine the audience levels of printed and digital magazines, AMS employs a recent reading technique and the use of a 6-month screen question. Unlike traditional approaches that screen respondents for print only readership, the 6-month screen question for AMS has been expanded to include both print and digital magazine delivery. (As a result, prior waves of AMS that reported the audience delivery of printed magazines only cannot be combined with, or compared to, the new AMS findings.)

To ensure that the respondent understood and responded accurately to an expanded screen in question that included both their printed and digital magazine readership, the AMS survey begins with a detailed explanation of the different ways that a respondent might access magazine content before the expanded 6-month screen question is presented:

Q. This question is about your readership of magazines – both traditional printed copies of magazines, as well as the variety of ways that people can now access magazine related information electronically through a computer or mobile electronic device. Specifically, this question is about how you read, look through, or interact with magazine content in any of the following ways:

Traditional printed copies of magazines – This includes magazines that you subscribe to, purchase at a newsstand or retail store, as well as magazines that are passed along to you, or ones that you read in a public place like a library, beauty salon, health club, etc.

Desktop or Laptop Computer - This includes any magazine related information that you access via a computer, including magazine Web sites that you may visit, or any other Web site that features magazine related content (articles, videos, blogs, etc.), as well as social networking Web sites like Twitter and Facebook where magazine content is often available. This also includes any magazines you may subscribe to electronically, where a file is sent to you or downloaded on your computer.

Mobile Electronic Devices – This includes mobile phones and smartphones where magazine information may be available through an “app” that you download, as well as tablet PCs and eReader devices such as the Apple iPad, Amazon Kindle, Barnes & Noble Nook, etc. This also includes any magazine Web sites, or any other magazine related information, that you may have accessed through a mobile device.

To validate this approach, Knowledge Networks was commissioned to conduct in-depth telephone interviews with test respondents as part of the pretest initiative in order to evaluate respondent’s comprehension of the survey instructions, the 6-month screen, as well as the survey questionnaire in its entirety. Based on those interviews, Affinity concluded:

- Respondents clearly understood the screening and recent reading questions
- Respondents understood the differences between the various devices that they were being queried about
- The inclusion of photographic images in the survey helped respondents understand the full scope of reading behavior, between the
- printed versions and the electronic versions of magazines
- It was critical to keep the survey length under 30 minutes in order to maximize cooperation from respondents

(As a result, specific modifications were made to the survey instrument prior to the official launch of the Spring AMS wave.)

Integrating Passive Measurement with Self-Reported Data

A key advantage of AMS’ Web-based approach that differentiates it from traditional offline methodologies is the ability to incorporate direct, passive measurement for specific digital channels. To that end, Affinity has established an agreement with comScore, a leader in the direct measurement of online behavior, to create a process that identifies an AMS respondent’s comScore tag ID while they are completing the survey questionnaire. This information is used to track a respondent’s actual online behavior and to identify which AMS measured magazine Websites they visit. (This process launched with the fielding of the Fall wave of AMS.)

For the Spring wave of AMS, leading marketing scientist Gilles Santini designed an integration model that calibrates the AMS Website estimates for magazines to the 30-day Unique Visitor estimates reported by comScore’s Unified Digital Measurement service. In order to moderate changes in monthly levels while the AMS questionnaire was in the field, the calibration process incorporated the six-month average of comScore’s 30-day Unique Visitor counts from October 2010 to March 2011.

The underlying principles of the calibration process are reliant on the derivation of individual probability of exposure, and the calibration of such probabilities without modifying the shape of their distribution as captured by the variance.

The process was executed in several phases:

Phase I – Probability Distribution Estimation

The sample population is split into several target cells, based on gender and age; within each cell an estimation of beta distribution of the probabilities is performed using the frequency and recency questions in the self-administered AMS survey. The beta distribution is the model of choice since it is extremely flexible and able to account for the distinct behaviors of sub-groups of respondents.

Phase II – Respondent’s Probability Ascription

Each respondent is assigned a probability according to a priority order derived from the AMS questionnaire in such a way that the resultant probability distribution reproduces the estimated beta distribution of the cell in which it belongs.

Phase III – Respondent’s Probability Adjustment

The set of probabilities of all the respondents within a given cell is adjusted using an iterative process, taking advantage of an algebraic transform that keeps invariant the ratio of one probability to the other.

Phase IV – Quality Assurance













Standard statistical checks were performed on the final distribution of probabilities. The ability to reproduce the reference source (comScore’s 6-month average of 30-day unique visitors) was verified on the socio-demographic cells. Accumulation over time was also calculated to verify that the outcome was usable in a reach and frequency system.

Minimizing Survey Bias

Previous symposium presentations have focused on the topics of survey-inherent biases (positional, positional screen-in punishment, etc.). In order to minimize these effects, AMS utilizes a double-rotation methodology designed to ensure that no magazine is disadvantaged based on where they appear in the presentation of magazine logos. AMS’ Web-based approach presents respondents with a maximum of 12 logos per screen, situated in a grid, 4 logos across and 3 logos down. A benefit of presenting multiple logos on a single screen is that it minimizes title confusion because titles are grouped by genre and/or confusingly similar titles (*People/People StyleWatch, Country Living/Coastal Living, etc.*), thereby minimizing false positive or false-negative claims of exposure.

Please indicate whether you have read or looked into any printed copies of these magazines, or accessed any information electronically from each of these magazines in the past 6 months.

Select one answer from each row in the grid

 People Magazine <input type="radio"/> Yes <input type="radio"/> Not sure <input type="radio"/> No	 People StyleWatch <input type="radio"/> Yes <input type="radio"/> Not sure <input type="radio"/> No	 National Enquirer <input type="radio"/> Yes <input type="radio"/> Not sure <input type="radio"/> No	 Soap Opera Digest <input type="radio"/> Yes <input type="radio"/> Not sure <input type="radio"/> No
 Soap Opera Weekly <input type="radio"/> Yes <input type="radio"/> Not sure <input type="radio"/> No	 OK! Weekly <input type="radio"/> Yes <input type="radio"/> Not sure <input type="radio"/> No	 In Touch Weekly <input type="radio"/> Yes <input type="radio"/> Not sure <input type="radio"/> No	 Life & Style Weekly <input type="radio"/> Yes <input type="radio"/> Not sure <input type="radio"/> No
 Star <input type="radio"/> Yes <input type="radio"/> Not sure <input type="radio"/> No	 TV Guide <input type="radio"/> Yes <input type="radio"/> Not sure <input type="radio"/> No	 Entertainment Weekly <input type="radio"/> Yes <input type="radio"/> Not sure <input type="radio"/> No	 Us Weekly <input type="radio"/> Yes <input type="radio"/> Not sure <input type="radio"/> No

Roughly one-third of the magazines measured by syndicated magazine audience studies are subject to respondent confusion based on similar sounding titles. As part of the pre-test initiative, a study was fielded by Affinity to determine the impact of presenting magazine logos in the grouped fashion employed by AMS as opposed to the traditional random presentation of magazine logos. The control group was presented with 15 screens of logos grouped by similar editorial (Entertainment, Fashion, etc.) or similar titles (*National Geographic/National Geographic Traveler, etc.*). The test group was presented with 15 screens of randomly rotated logos. All other elements of the survey were identical between the control and test groups. Based on the results of the test, the effect of title confusion on 21 pairs of titles and 4 triplets was analyzed.

On a title-by-title level, confusion was evident in the test group, with 23 of 54 titles measured having more than a 10% difference in screen-in levels and 33 of the titles exhibiting more than a 10% difference in reads compared to the control group. As an example, *People StyleWatch* had the most positive lift in screen-in level based on the random presentation of its logo,

rising 70% above levels seen when presented side-by-side with *People*, as it is in the AMS questionnaire. *Men's Journal* benefited the most in terms of readership, gaining 43% more readers than when grouped along with *Men's Health* and *Men's Fitness*. Presentation order in the test group also had a pronounced effect on screen-in and reading levels. For example, when one title was shown before its paired title, it generated, on average, 15% more screens and 4% more readers.

The Planning Model's Accountability Input – Affinity's VISTA Service

VISTA measures the effectiveness of issue-specific magazine ads appearing in the leading U.S. consumer publications (VISTA Print), as well as the growing number of digital ads delivered via iPads and other mobile devices (VISTA Digital). VISTA currently measures 155 individual magazine brands, representing more than 9 out of 10 dollars spent on all national magazine advertising. In addition, VISTA studies measure select editorial features and quantify the reader engagement levels of individual magazine brands. Syndicated VISTA data are available through subscription to advertisers, agencies and publishers.

Methodology

VISTA Print studies are fielded online among respondents that screen in for issue-specific readership of the printed edition of a measured publication. VISTA Digital studies include additional levels of screening in order to identify the specific platform and device that a potential respondent used to access the electronic issue of a magazine.

Qualifying VISTA Print respondents are initially asked a series of reader involvement questions about the magazine (time spent reading, frequency of reading, source of copy, etc.). For VISTA Digital studies, these initial questions also include a series of digital-specific engagement questions (number of issues downloaded through a magazine app, the way the magazine app was obtained, etc.).

Respondents are then asked about select editorial features and all of the national advertising that appeared in the print or digital issue. Visual prompts of the measured articles and ads are presented to respondents on the survey screens, along with the associated questions.

For each editorial feature measured in an issue-specific VISTA study, the following attributes are collected:

- Total Readership - the percent of readers that recall reading or looking into a specific article
- Extent of Readership - the percent of readers that report reading more than half, or less than half, of that article
- Editorial Actions Taken - the percent of readers that report that they took, or plan to take, one or more of the measured actions as a direct result of reading that article:

(VISTA Print)

- Save the article for future reference
- Pass it along to someone
- Gather more information on the topic
- Visit a related Website
- Some other action

(VISTA Digital)

- Print the article
- email the article to someone
- Tap or click for more information on the topic
- Visit a related Website
- Some other action

For each advertisement measured in an issue-specific VISTA study, the following attributes are collected:

- Total Recall - the percent of readers that recall seeing a specific advertisement
- Brand Association - the percent of readers that report that they were aware of the sponsor upon viewing the ad
- Advertising Actions Taken - the percent of readers that report that they took, or plan to take, one or more of the measured actions as a direct result of exposure to that ad:

(VISTA Print)

- Save the ad for future reference
- Gather more information
- Visit the advertiser's Web site
- Visit a store, dealer or other location
- Recommend the product or service
- Have a more favorable opinion about the advertiser
- Consider purchasing the product or service
- Purchase the product or service
- Some other action

(VISTA Digital)

- Print, save, share or post the ad
- Tap or click for more information
- Visit the advertiser's Website
- Visit a store, dealer or other location
- Recommend the product or service
- Have a more favorable opinion about the advertiser
- Consider purchasing the product or service
- Purchase the product or service
- Some other action

For interactive digital ads that include advertiser-sponsored videos, photo galleries, 3D product views and other customizable features, VISTA Digital respondents are asked a set of unique questions pertaining to the interactive capabilities of a particular

ad, including their perceptions of the brands employing these techniques and to what extent the interactivity of the advertisement enhanced their overall magazine reading experience.

For both print and digital studies, all VISTA respondents are also asked a series of questions that focus on respondents' opinions of the measured brands for a number of qualitative attributes, their personal buying styles and preferences, their visits to the magazine's Website and related activities, and their demographic profile.

Sample Plan

The sample for individual VISTA Print studies is provided by Research Now and is comprised of more than one million consumers that have been pre-screened for their readership of printed magazines on a title-specific basis. For VISTA Digital studies, multiple panels have been utilized to pre-identify more than 75,000 consumers who are mobile device users that have downloaded magazine apps on a title-specific basis. Participants of VISTA studies are continuously recruited through a variety of controlled, "invitation only" techniques that fully comply with CASRO guidelines. (Banner ads for panel recruitment or purchased email addresses from third parties are never used in the recruitment process.) A consistent sampling approach is then executed across all VISTA studies. For each issue-specific study, a random list of consumers is selected from a subset of the database that has been pre-qualified for readership of a specific print or digital magazine. (The number of in-tab respondents for a particular study depends upon the number of ads being measured in the issue.)

The VISTA Print Service adheres to a strict respondent participation policy that prevents overusing respondents and helps to guarantee a consistently collected and reliable data set for each publication measured. Affinity allows respondents to participate no more than once per quarter in issue-specific studies, and no more than twice per year for any individual publication.

VISTA Service Deliverables

VISTA Print and VISTA Digital results are available in printed, issue-specific report form, as well as through Affinity's custom reporting tool, VISTA Views. VISTA subscribers have access to individual advertising effectiveness scores and comprehensive normative data that can be analyzed by brand, category, publication, magazine genre, or for a variety of ad attributes that are pre-coded for each VISTA study (ad size, coloration, premium positions, recipe ads, scent strip ads, etc.) In addition, a multivariate segmentation technique combines VISTA ad effectiveness scores with audience estimates from the American Magazine Study to report ad ratings for individual executions, presenting the projected audience of a magazine that recalls or takes action as a result of an advertisement.

MediaVest's Platform-Neutral Planning Solution

At the core of MediaVest's new approach to magazine planning is an understanding of the ways in which consumers use and interact with content that is relevant and valuable to them, and which channels and magazine brands they rely on most as trusted and influential sources of information, entertainment and personal inspiration. Critical to this process, is having a total brand view - a line of sight on a magazine brand's total footprint across all platforms and formats in order to evaluate the full potential of a publisher's brand to connect with and drive action among an advertiser's core consumers.

MediaVest incorporates platform-specific audience, reach and duplication data for each magazine brand with platform-specific advertising effectiveness data to align client brand objectives with the appropriate magazine brand and platforms. These inputs are then combined with cost data from its proprietary evaluation system to drive cross-platform title prioritization and allocation. A core tenant of the approach is that it bases allocations not only on the combination of a magazine's "total brand" and "platform-specific" audience, but also on the predicted business impact that each title and platform will have, as opposed to a system based on media silos or reach/cost efficiency equations alone.

The Components of the New Planning Model

- Total brand audience - illustrates each titles' total potential reach
- Platform-specific audience - informs channel-specific opportunities, by title
- Platform-specific ad effectiveness - aligns channel opportunities with historical and predicted advertising impact

Although the specific details of its platform-neutral planning process are proprietary to MediaVest and its clients, a simplified example helps to illustrate how cross-platform audience and accountability inputs can impact a magazine plan.

**Platform-Specific Example:
Evaluating the Print Edition and iPad App of ESPN the Magazine for Multiple Client Objectives**

*Print campaign objective: Increase purchase intent
Digital campaign objective: Drive Web traffic*

	<u>Total Audience</u>	<u>Average Ad Recall</u>	<u>Effective Audience Delivery</u>	<u>Client Objective Ad Effectiveness</u>	<u>Client Objective Audience Delivery</u>
ESPN the Magazine (print)	10,586,000	54%	5,716,000	18%	1,029,000
ESPN the Magazine (iPad)	94,600	62%	58,700	17%	10,000

Source: AMS (Spring 2011); VISTA Jan-June 2011; Client objective ad effectiveness based on readers recalling specific ads and indicating purchase intent for print and visits to an advertiser's Website for digital

The Planning Implications

- Based on the duplication between platforms, the addition of ESPN the Magazine's iPad issue results in incremental readership of
- approximately 58,000 (61% of ESPN's iPad users do not read the printed version of the magazine)
- Magazine ads appearing in ESPN the Magazine's iPad edition deliver a higher composition of overall effective audience delivery
- when compared to the printed edition (62% versus 54% respectively), while the rate of effective audience delivery against the two
- unique campaign objectives is similar (18% purchase intent for print and 17% visiting the advertiser's Website for the iPad edition).
- Based on actual proprietary costs, print and digital CPMs can be calculated and compared to the print and digital offerings of other
- magazine brands considered in the plan.

The Advantages of the New Planning Model

- The approach creates an allocation that is straightforward and based on valid, cross-platform data, with flexibility
- built-in based on an advertiser's unique needs
- Better informed allocation of advertising budgets by magazine brand and across platforms
- Takes advantage of total brand opportunities and the channel-specific marketing opportunities available within each
- magazine brand

Conclusion

By employing this new planning approach, which combines audience delivery, ad effectiveness and cost efficiency across platforms, MediaVest is in a position to make better-informed judgments on where to spend - and how much to spend - across the growing list of options in the publishing space. This allows MediaVest to better engage its clients' customers with relevant and compelling messages, based on what, where and how these consumers want to interact with magazines and associated advertising content. Moreover, evaluations are closely linked to brand objectives and advertising impact, so that magazine plans can achieve a client's total communication goals and ultimately drive business results.