

Making Better Media Decisions



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Executive Summary

"Making Better Media Decisions" is an update of the Advertising Research Foundation's historic 1961 monograph, "Toward Better Media Comparisons." It has been revised to include new levels of paid media performance—attentiveness, persuasion and response—and to consider new media types, especially online media and Interactive TV.

The new model contains eight levels at which media performance can be measured to help marketers plan their advertising campaigns:

1. **Vehicle Distribution.** This is a count of physical units through which advertising is distributed. It is a pure media effect. (Current measurement techniques include newspaper and magazine circulation studies, TV and radio tuning studies, online-media page requests, billboard locations.)
2. **Vehicle Exposure.** This is a count of the people exposed to the media vehicle whose eyes or ears are open. It too is a pure media effect. (Current measurement techniques include radio and TV-people ratings, magazine-readership studies, online media page-view counts, billboard-traffic counts, etc.)
3. **Advertising Exposure.** This is a count of the people exposed to the media vehicle who also are exposed to its advertising. It is the highest level of measurement that is still a mostly pure media effect. (Current measurement techniques include radio and TV commercial-audience ratings, print ad page-exposure studies, online ad-view counts, billboard-traffic counts, etc.)
4. **Advertising Attentiveness.** This is the degree to which those exposed to the advertising are focused on it. It is the first measurement level at which the effects of the medium are significantly confounded with the effects of the creative. (Current measurements include dedicated attentiveness studies, recall or campaign tracking studies, brainwave research, etc.)
5. **Advertising Communication.** This is a measure of the information retained by the consumer after exposure to the message. (Current measurement techniques include advertising and brand awareness tracking, copy testing/recall, advertising recall studies, etc.)
6. **Advertising Persuasion.** This is a measure of the shift in intentions produced by Advertising Communication. Here we are interested in the medium's ability to frame the message in ways that make it more credible, more relevant and hence more persuasive. (Current measurement techniques include advertising tracking, copy testing, intent to purchase, willingness to consider, etc.)
7. **Advertising Response.** This refers to measures of consumer response short of sales. Examples include visiting a showroom, calling a toll-free number, clicking on an online ad, requesting a brochure, etc. In direct mail and interactive media, such responses can be measured directly. (Current measurement techniques include click-through, post-click-through interaction, lead generation, telephone and mail response, coupon redemption, etc.).

Executive Summary, cont'd

8. Sales Response. This is purchase of the advertised product or service in response to the advertising. Of all the measures listed, it is the most relevant to the advertiser, but the least dependent upon advertising and media effects. In addition to sales, useful measurements include Return on Investment (ROI), which is the profitability of those Sales generated by advertising, and Consumer Lifetime Value (CLV), which is an estimate of the future profitability of a newly acquired customer. (Current measurement techniques include sales tracking, test markets, single-source panel research, and marketing-mix modeling.)

The way advertisers think about media has changed in the last forty years. Direct Response advertising, The Internet and Interactive TV have expanded media's job from simply exposing a message to include encouraging and facilitating a response. The concept of recency has focused marketers on advertising's contribution to making the next sale. And more and more, it is on response that media are being judged.

We believe that media measurement has no choice but to follow media's newly expanded purposes.

Introduction

This is a new edition of the 1961 ARF monograph *Towards Better Media Comparisons*. It acknowledges the changes in advertising theory and practice that have occurred since the original publication was issued 40 years ago.

Specifically, it includes new levels of paid media performance—response and interaction—and considers new media types, especially online media and interactive TV.

It relates the old model to today's practice of media planning by introducing the concept of recency.

It encourages the use of the industry's new measurement capabilities, such as scanner data and marketing-mix modeling, to help establish measurements of media value at the *response* as well as the *exposure* level.

It includes costs more explicitly in the media calculus.

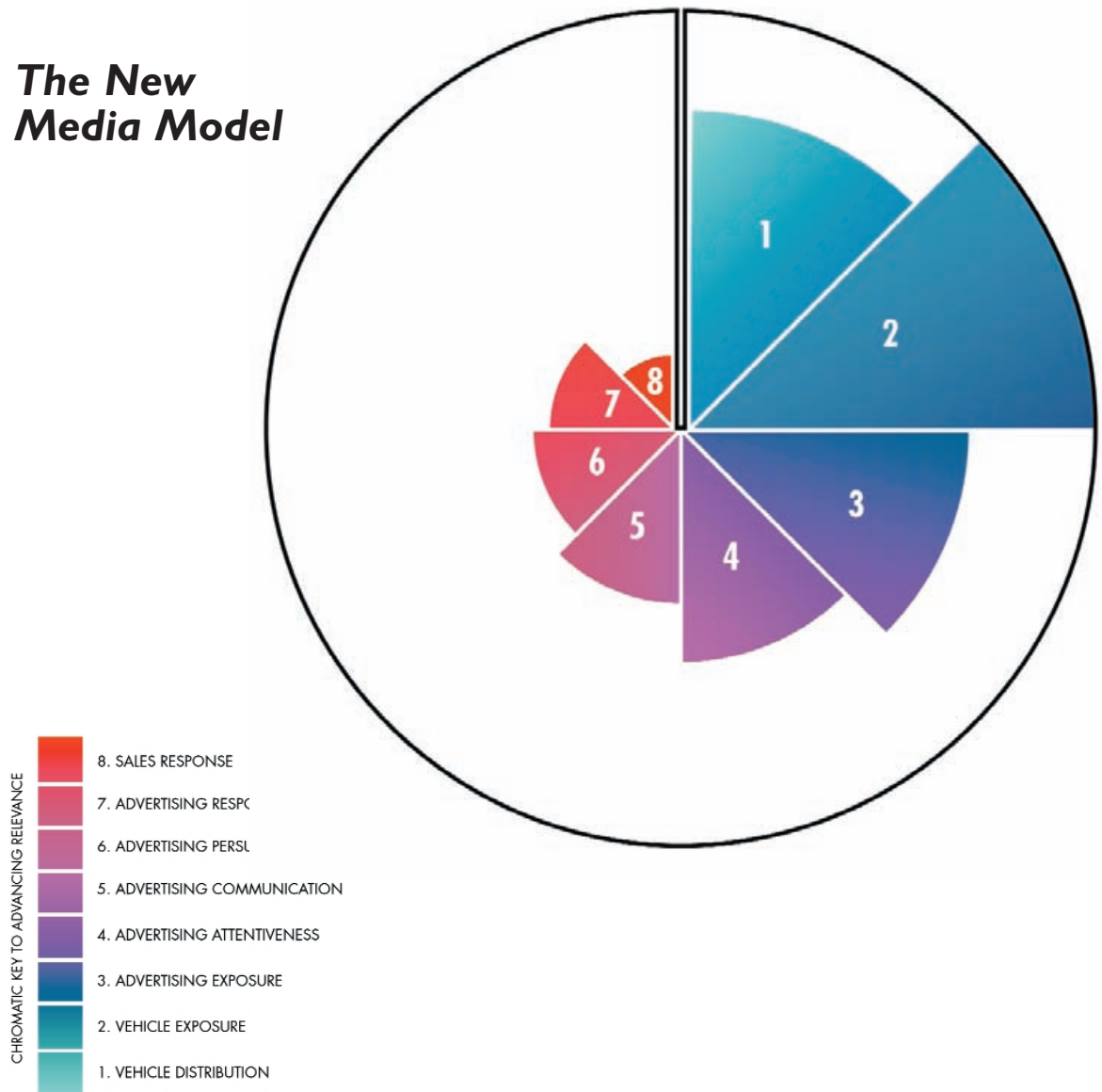
Those are the new elements, but the original purpose remains: to encourage media planners and buyers to use explicit estimates of performance in choosing media, replacing feelings, last year's plan or common practice with measurements. In short, its goal is to advise advertisers and their agencies on what measurements to use to make better media decisions.

The measurements recommended are tied to eight stages of media performance. The first three stages—Vehicle Distribution, Vehicle Exposure and Advertising Exposure—describe advertising stimulus. The last five—Advertising Attentiveness, Advertising Communication, Advertising Persuasion, Advertising Response and Sales Response—describe consumer reaction. Although at these last stages, non-media factors like the creative execution dominate, the recommended measurements attempt to isolate media's contribution.

Media merit this separate consideration because of their cost, complexity and importance to the advertising process. Explaining the total process is left to a future initiative, with the goal of integrating this media segment into that larger model.

The only media considered here are those paid by advertisers to carry commercial messages.

The New Media Model



This picture of the model shows the eight levels at which media performance can be measured as eight segments of a helix seen from above.

The segments are numbered and colored in increasing order of advertising relevance. In this example the relative sizes of the slices suggest the relative numbers of people involved at each level.

The number of people who buy the advertised product (Sales Response, segment 8, colored red) is smaller than the number persuaded by the advertising (segment 6), which is smaller than the number attentive to the advertising (segment 4) and so on.

The number of people exposed to the vehicle (segment 2) is usually larger than the number of vehicles in circulation (segment 1), since more than one person is likely to read a copy of an issue of a magazine or watch a TV set tuned to a TV program.

The picture is not meant to suggest that the levels are necessarily consecutive; beyond advertising exposure, they need not be. Rather, it simply is a way of laying them out in an easily observable format for purposes of comparison.

A General Survey

Whenever money is spent on advertising, a decision is made about the way it will be allocated among media. Given adequate information about the product, the market and the media, it ought to be possible to determine the best possible allocation. Our present problem is to describe those measurements that will facilitate the advertiser's task.

I.

Probably the first task of the advertiser is to decide to whom it wishes to advertise; then it can turn its attention to the task of doing it efficiently and effectively. In defining its marketing target, the advertiser should consider not only consumers' household characteristics and demography but also their product purchase, usage and shopping behaviors as well as more transient states like recency ("ready to purchase") and receptivity ("ready to listen").

In considering media, the advertiser will find that some will carry its message less expensively than others, and it will wish to calculate the cost in terms of the number of copies of its advertising that actually appear or the number of receiving sets through which it will be broadcast.

However, a great deal more information is needed. In an attempt to gain precision, the advertiser will be interested in data that describe the people actually exposed to its message. A radio commercial may have been received by a radio but not by the household member who represents the advertiser's market. Similarly a magazine may be bought, and the advertiser's message read, by no one or possibly by a great number of people.

II.

Up to this point the advertiser has been concerned with maximizing the number of people in its market that can be reached by its advertising. It will not have considered either how it reaches them or what it says to them when it has their attention. We shall see that, when the advertiser takes these factors into account, it may well be satisfied with something less than the maximum exposure it can gain for its fixed advertising investment, if it can make its message work more effectively on some smaller number of people.

For example, identical advertisements in two different women's magazines may be compared in terms of exposure. But such a comparison fails to account for any possible influence of differences between the editorial content of the two magazines, the intensity with which they are read, and other qualitative factors.

The circumstance of the exposure itself may be one of the most important determinants of advertising effectiveness. Observing a commercial with undivided attention in a darkened room, hearing a radio commercial in a car stuck in traffic, being able to make a leisurely study of the product's claims in print, or being subject to any of the unique advantages the various media have to offer may be of prime importance in developing response to the advertiser's message.

A General Survey, cont'd

III.

Now we turn to advertising effects and how they may be measured. The first and most obvious kind of effect that suggests itself is Sales Response to advertising. This we define as a positive impact on sales effected by advertising. A positive impact can be to increase sales (or price paid), prevent sales from decreasing or even slow a rate of sales decrease.

However, the advertiser appreciates that the sales of its product, though influenced by its advertising, usually cannot be attributed to it directly. Marketing activities of various kinds, retailers' policies, packaging changes, price levels, seasonal influences, competitive activities and a great many other factors together determine sales levels, and the effect of advertising may be obscured by them. Since Sales Response suffers from these handicaps, we consider alternative measures that the advertiser might employ.

Of those consumers who are exposed to an advertising unit, some will be attentive to it. Such measurements belong to the Advertising Attentiveness stage of media performance evaluation. Of those who attend to the unit, some will retain information it conveys. This is the Advertising Communication stage. Of those who retain information, some will be positively affected by it. This is Advertising Persuasion. Of those persuaded, some will take action short of purchasing the brand. This is Advertising Response. Examples include visiting a showroom, calling a toll-free number, and clicking on an online ad. Brand purchase due to advertising is Sales Response, the highest stage.

Describing Advertising Response in terms of a few clear-cut stages greatly oversimplifies the process. Response could more accurately be described as a continuous process in which we have made soundings at various stages. It is not always possible to say exactly where one stage ends and another begins. However, we have drawn attention to five levels of response, each of which contains some new element.

IV.

The three exposure stages are both hierarchical and sequential. For example, Advertising Exposure is higher (more valuable to the advertiser) than Vehicle Exposure but cannot occur without it. The five response stages are hierarchical but not necessarily sequential. For example, persuasion is higher than communication, but persuasion can occur without recall (a measure of communication).

Generally as we progress from lower to higher levels of response value, we meet with a greater degree of confounding of our measure of media effectiveness by other factors. Some of these factors are under the control of the advertiser, some are uncontrollable but have a significant effect on sales and can be measured, others are unidentified and their effects unknown. In these circumstances, advertising must be seen as only one factor contributing to sales.

Conceptually, Sales Response can be explained satisfactorily in terms of some limited

number of factors acting together. Using mathematical methods like marketing-mix modeling, advertising researchers are now able to isolate the effects of these factors to some extent.

The Internet is one medium whose advertising effectiveness can be measured quite directly. The Internet is training traditional advertisers in Direct Marketing. Because of immediate, detailed feedback, Internet advertisers can increase responses (such as Click-Throughs) by targeting audiences precisely and by modulating online site selection and the offline media mix. As TV becomes interactive, similar control promises to leap over to television and move us rapidly to TV-program selection based on immediate measures of response and sales. Indeed, advertisers are beginning to compile databases of their customers and devise ways to communicate with them one on one so as to increase their likelihood of purchase and their future value.

Once Sales Response can be averaged across many advertisers and analyzed program by program to isolate media effects, advertisers with direct consumer sales data may choose to ignore Attentiveness and go directly to Sales Response data. Other advertisers who sell through channels might use Attentiveness instead. There are various measurements we can focus on, and learning which are the most useful is an important matter.

V.

A useful media model should establish a simple system of cause and effect. The decision maker wants to select media that increase the probability of the brand campaign's succeeding. So the decision should be made with an awareness of the brand's objectives and the measurements that will be used to evaluate success. For example, if the brand's strategy is focused on increasing awareness, then measures that predict media's ability to help create awareness should be included in the decision process. Here ad recall measures for the brand's message, across a variety of media environments, would provide useful data. Although commercial recall is not the same as brand awareness, it is more closely related than Advertising Exposure. Therefore this decision maker might choose to use ad recall data in weighting CPM's to select those vehicles most likely to help the advertising meet the brand's objectives.

Unfortunately, there are few studies of media effects beyond simple Vehicle Exposure. There are enormous databases available on Vehicle Exposure, but there are few studies available on Advertising Exposure and even fewer that compare Advertising Recall across media. Those studies that are available are likely to be decades old and limited to a specific product category. There are a number of reasons for this lack of information:

I. Media relevance. In measuring advertising effects, the performance of the medium is not independent of the performance of the creative. This is clear for advertising recall, which is certainly more a function of the message than the medium, but it is even true of Advertising Exposure. Today TV and radio commercials are run in pods of several

A General Survey, cont'd

commercials, so an intriguing first spot can raise the percentage of viewers who stay tuned and/or in the room, while a dull or offensive commercial can drive viewers and/or listeners away. Media resist being judged on such things beyond their control and balk at providing financial support for such studies. This actually works against their best interests since they could generate advertising demand by documenting such values.

2. Greater confidence in current measurements. Vehicle exposure measurements in the forms of TV and radio ratings and print issue readership are familiar, robust and accepted. There is the fear that new media measurements, although perhaps more relevant to consumer response, would also be more fragile and controversial. This is not a rational fear since the challenge to collect robust and non-controversial data exists at every level of the Model equally.

3. Fear that new measures would challenge pricing. In the United States, Vehicle Exposure (CPM Audience) is the currency of the media marketplace. Moving the marketplace to response-level measures like Advertising Exposure or Communication might improve media effectiveness, but it might also destabilize the price/value structure upon which the business is built. This fear is not rational either. In reality pricing ought to reflect value, and everyone gains by knowing more about where the true values lie.

4. Comfort with the present system. Agencies believe they do consider things other than Vehicle Exposure. This reflects a research-bolstered judgment that has evolved over the past half century. Generally agencies feel comfortable enough in their judgments that the media "impact weights" implicit in their media selections are seldom quantified. This is a subset of the well-known phenomenon of being comfortable with the familiar, otherwise known as inertia.

None of these four reasons is a cause for pride. All of them are outworn, and serve none of us well. Only by comparing media at all levels of the Model will the industry keep up with the advertiser's needs and will advertising not be shunted aside by other forms of marketing.

For these reasons media research (especially in the United States) has stalled at the Vehicle Exposure level. Today, however, there is a strong force for change. The advertiser drive for media accountability appears systemic and permanent. To respond, our measurements have to be more sophisticated than CPM target. Advertiser supported marketing-mix models, which can isolate media's contribution to sales, will champion measurements of media value that better predict those sales.

Reach optimizers also have played a central role in helping us organize our thinking about media value. These systems are used to select radio and TV program combinations that increase the reach of a target audience for a given budget. Agencies have turned to optimizers because fragmentation has made traditional planning tools inadequate.

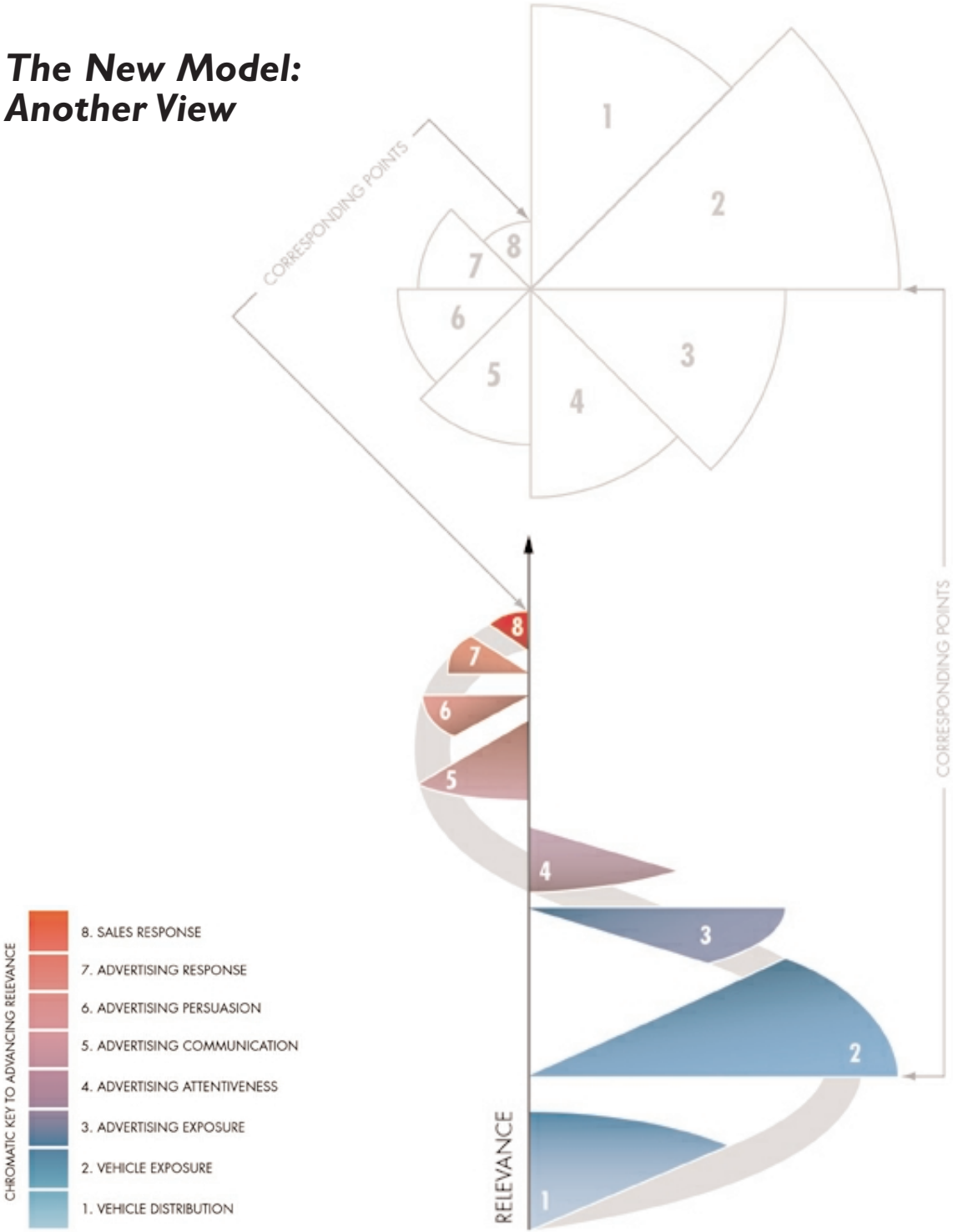
The use of optimizers has led to new agency-supported proprietary research studies to help provide media-effectiveness weights for use in optimizers.ⁱ The types of measures used in these studies range from attentiveness to brainwaves.

Recent research has shed valuable light on how to schedule media but has not provided vehicle-specific "value weights." Recency theory describes advertising as a weak force whose greatest effects occur when the messages are received close to the purchase occasion. Recency theory has had a strong effect upon the design of media schedules, making them more reach-focused, more continuous and more dispersed. However, it tells us little about the value of reach points in different media in producing response. That is the kind of research we need to encourage now.

The following sections recommend a set of measurement goals arranged in a hierarchy of value to the advertiser. In principle, it is best to compare media at the highest available measurement level, but this is tempered by the real problem of isolating media effects in higher level measurements.

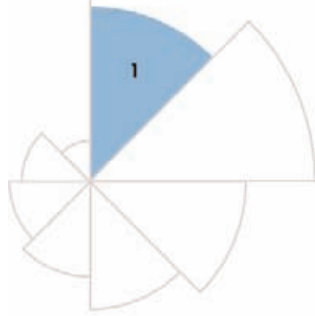
Within each level in the Model, we discuss some of the more promising measurements for future research. Virtually all of the methods suggested are being used and exist in the body of knowledge at the ARF Information Center.

The New Model: Another View



In this picture the model is seen from the side as well as the top. In this side view the vertical axis represents advertising relevance. In addition, pure media effects — the bottom three segments — are separated from hybrid effects — the top five segments — in which factors beyond media’s control are at work.

Vehicle Distribution

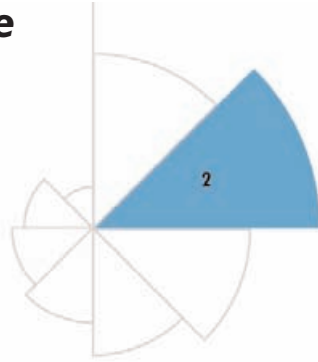


(Current measurement techniques include newspaper- and magazine-circulation studies, radio and TV tuning studies, online-media pages requested, billboard locations, etc.)

Vehicle Distribution means the number of physical units through which advertising is distributed. The nature of these units varies by medium. In print it is the number of copies of an issue of a publication that are circulated; in broadcast, the number of appropriately tuned receivers; in out-of-home, the number of billboards or other out-of-home units.

Vehicle Distribution provides the crudest measure of the exposure obtained by advertising. It is the only stage at which we consider physical units. At subsequent stages we consider the consumers reached by vehicles and advertising.

Vehicle Exposure



(Current measurement techniques include TV-people ratings, radio listening studies, magazine-readership studies, online media page-view counts, billboard-traffic counts, etc.)

Vehicle Exposure means the number and type of people exposed to a vehicle in which advertising is distributed. The concept describes open eyes or ears confronted by the vehicle. Usually it is a multiple of Vehicle Distribution, since each unit of a vehicle may be exposed to a number of people. One copy of one issue of a magazine may be read or looked into by many readers. One billboard may be passed regularly by thousands of people. One radio or TV set may be heard or viewed by an entire family.

A useful definition of Vehicle exposure must specify a measurement technique that will classify people as exposed or not exposed. All of our present systems do this imperfectly, and this presents different problems for different media.

In out-of-home, a billboard exposure might be described in terms of the number of people who pass by, but such a definition will include people who never face the board. Even a definition that excludes people who never face the board will include people who never look at it.

In broadcast, it is impossible to obtain an objective measure of the people whose open eyes and/or ears are confronted by the vehicle. The diaries and meters used to measure persons viewing or listening are not objective, for they require respondent input. Our

concept of exposure is something objectively observed, requiring no such input.

Recognizing these difficulties, new passive electronic measurements for broadcast and outdoor use "presence near the vehicle" as the measurement of exposure. This broadens the definition of exposure to make the measurement more precise.

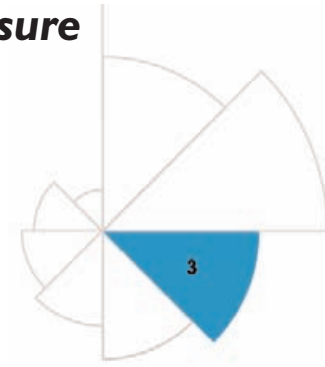
Exposure to television (and radio among other electronic media) presents another problem. Since it occurs in time, its advertising value is a function of its duration. Today one minute is the shortest reported increment of TV Vehicle Exposure. But TV channels can be switched much faster than that.ⁱⁱ

Thus for different media Exposure can be defined in different ways to approximate the general concept. Even for a single medium Exposure can be defined in several ways. Measurements of Exposure based on different definitions cannot be used to compare vehicles in either the same medium or different media.

So far we have discussed classifying people as exposed or not exposed to an advertising vehicle. Another dimension is necessary: the number of times each person is exposed in this way. To present this information completely requires a frequency distribution table. Often these data are compressed (with some loss of information) into two measures; the total number of people exposed or reached at least once, and the average frequency with which they are reached.



Advertising Exposure



(Current measurement techniques include radio and TV commercial-audience ratings, print page-exposure measurements, online ad-view counts, billboard-traffic counts, etc.)

Advertising Exposure means exposure to an advertising unit. It differs from Vehicle Exposure in that it excludes those people who, though exposed to the vehicle, may not be exposed to the relevant advertising within it.

Advertising Exposure information is more valuable to the advertiser. Like Vehicle Exposure, Advertising Exposure needs to be represented by a frequency distribution.

Advertising Exposure is the highest level of measurement that is still mainly a media effect. The rate at which the medium delivers audience to the advertising is primarily an effect of the medium itself.

In out-of-home media, vehicle and advertising exposure are the same.

In television, Advertising Exposure is reported as commercial audience in many parts of the world, where it is the currency used to negotiate the costs of TV advertising. In the US, Vehicle Exposure in the form of average-minute program audience persists as the currency. Current practice is to assume that the average-minute program audience and the average commercial audience are the same. However, research has shown that this is a questionable assumption.ⁱⁱⁱ

More precise data gathering, editing and reporting of TV dial-switching data by meters or cable set-top

boxes will add greatly to our understanding of this subject. But it is important that the industry move from average-minute audience to commercial audience for planning and buying.

Another level of TV-Advertising Exposure is persons viewing the commercial. Here the TV set may be tuned, but the viewer watching the program may leave the room during the commercial. It is unclear how much of this loss is captured by the people-meter technique.

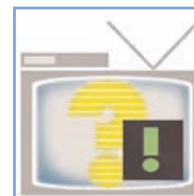
A method that has been productive for measuring loss of viewers at the commercial is the telephone coincidental expanded for such purposes. However, declining telephone survey-response rates present a challenge. Another promising method is the passive personal meter, which goes with the viewer and can capture exposure events in time slices shorter than 30 seconds.

Moreover, commercial audience is affected by pod position, the number of commercials in a pod and commercial position within a pod. Commercials in pods within programs consistently outperform commercials in pods between programs.^{iv} Commercials in pods with fewer commercials and commercials at the beginning of a pod are more likely to be recalled.^v Similarly, in radio, commercials in shorter blocks have more impact.^{vi}

In print there are similar problems. Page exposure data for magazines, and page and section readership for newspapers, are overdue necessities. Past research suggests that print-page exposures relate to type and category of publication, time spent reading, place and frequency of reading, and how an issue copy is acquired (subscription or single-copy sale and primary or pass-along reader).^{vii} Magazine ad-page audiences may be greater than issue readers due to multiple reading occasions.

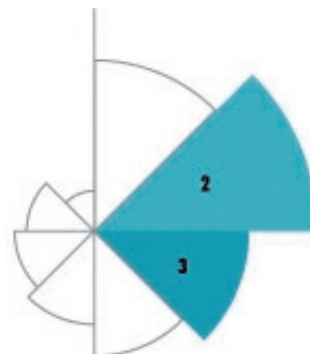
Clearly, the use of Vehicle Audience for inter-media comparisons may distort the true value relationship. There is no excuse for not moving media comparisons to Advertising Exposure to the extent current measurement technology provide it

THE MODEL IN USE



Comparing Magazines to Television at the levels of Vehicle Exposure and Advertising Exposure.

Vehicle exposure is measured in national television as TV ratings, defined as persons viewing during a program's average minute, and in magazines as readers, defined as *persons who read or looked-into any part of a magazine's average issue.*



National television commercial time and magazine advertising space are bought and sold on the basis of these vehicle exposure measures. This means vehicle exposure is used as a surrogate for advertising exposure, which is what every advertiser wants for his money. To the degree that one definition produces a greater probability of the message being seen than the other, moving to measures of advertising exposure (and repeat exposure for print) will provide a better basis for comparison. Data for doing this are currently available.

Advertising Attentiveness



(Current measurements include dedicated attentiveness studies, recall or campaign tracking studies, brainwave research, etc.)

Advertising Attentiveness means the degree to which the consumer is focused on the advertising message to which he or she has been exposed. It is the first measurement level at which the effects of the medium are significantly confounded with the effects of the creative. Like attentiveness of any kind, Advertising Attentiveness is psychological or "internal" and thus cannot be observed directly, but it can be inferred or indicated in a variety of ways.

In print-media planning, magazine-issue audiences can be adjusted to reflect historical attentiveness patterns based on how the issue is obtained (subscription or single-copy sale, primary or pass-along reader) and where it is read (in- or out-of-home).

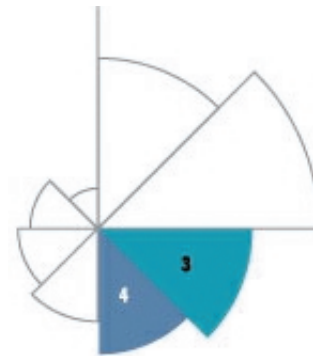
In TV, tuning duration and/or loyalty (viewing Y out of X telecasts) have been used as indicators of Advertising Exposure and Attentiveness. The use of such available measures as indicators needs to be validated.

Since multi-tasking and distraction lower attentiveness, it has been suggested that program audiences be discounted based on the location of the set (for example, kitchen sets getting, on average, less attention) and distractions caused by other viewers, especially children. This suggests creating indices based on co-viewing and circumstances of viewing. Such indices are easily derived from existing media research studies.^{viii}

THE MODEL IN USE



Comparing the Advertising Attentiveness of magazine readers using place-of-reading data.



Attentiveness is the degree to which those exposed to the advertising are focused on it. Readership surveys show differences in time spent reading when it occurs in home vs. out of home. Surely more time spent reading raises advertising attentiveness. Therefore in comparing magazines these data could be used to adjust the value of magazine audiences. This could lead to better media decisions.

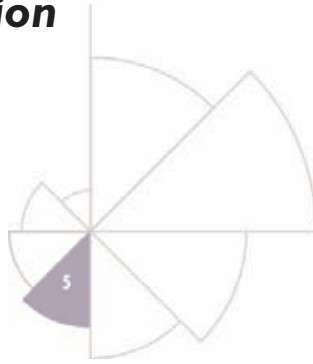
The advantage of these Indicators is that they are available from the live ratings database, which is constantly updated. Used together with deliberate measures of Exposure and Attentiveness, we can learn whether such readily available Indicators would lead to the construction of the same or similar schedules as would the actual Exposure or Attentiveness data.

Another type of Attentiveness indicator may be provided by studies of other things viewers do while watching each program or time period. It is plausible to assume that viewing is more valuable to the advertiser in cases where no other activities are being performed, and that mental activities like reading are more distracting than physical activities like eating. In radio, a 1995 update of a 1980 "Ironing Board Study" by Saatchi & Saatchi found that 25% of respondents exposed to radio commercials while ironing recalled something about them, and 21% recalled brand names unaided.^{ix}

The relationship between TV Advertising Exposure & Attentiveness and other factors including program genre, length, time of day and type of viewer is well documented. To the degree that the influence of these factors is validated, they can serve as rough indicators of Advertising Exposure and Attentiveness.

A good deal of our current judgment regarding relative media values derives from historical research on relative levels of Advertising Exposure and Attentiveness. These are recommended levels for ongoing media measurement and control because the media contribution is strong, advertiser relevance is high, and measurement is feasible. As we move to later stages, the role of the advertising creative begins to dominate, making those stages less suitable for ongoing measurement and control but more suitable for periodic assessment of the role of media in campaign and marketing effectiveness.

Advertising Communication



(Current measurement techniques include advertising and brand awareness tracking, copy testing/recall, advertising recall studies, etc.)

Advertising Communication is a measure of the information retained by the consumer after exposure to the message. Unlike Advertising Attentiveness, it cannot be measured without respondent input.

The effects of the advertising message and the medium in which it appears are thoroughly confounded in this measure and require careful analysis to sort out. It is safe to say that the advertising message generally carries most of the weight. The medium contributes more subtly, depending upon the degree of association between medium and message.

The prestige, appreciation, image or credibility of a program may be transferred to a sponsoring brand. Several studies have found that commercials in programs with higher ratings and more involved viewers are more likely to be recalled.^{xi}

This kind of research was not able to separate out how much of these effects were produced by the telecast-specific audience composition of the vehicle, as distinct from the pure effect of the program, but both effects exist. For example, younger people on average tend to recall more of commercials than do older people. Therefore, message playback will tend to be higher for programs whose audiences have larger proportions of younger people.

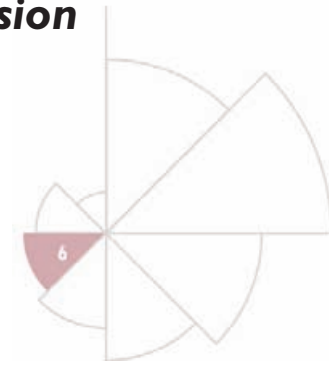
Pod position affects television commercial recall. Several studies have found that TV commercials that air toward the end of a pod are more likely to be recalled.^{xii} In radio, a commercial in the first position in a block is likely to have more impact.^{xiii}

Media scheduling is also a significant factor. Because Advertising Communication is hostage to the dynamic process of learning and forgetting, how frequently, how continuously and when exposures occur will all have an effect.

In this area of Communication, we are unable to recommend a single measure. Evaluation of communication must be framed in terms of campaign strategy and the advertiser's management process. As such it varies from case to case. Through meta-analysis, the potential exists to learn how the media contribute differentially to communication of the advertising message. As we develop such learning, we will match media and messages more productively.



Advertising Persuasion



(Current measurement techniques include advertising tracking, copy testing, intent to purchase, willingness to consider, etc.)

Advertising Persuasion means a shift in intentions produced by Advertising Exposure and the Communication that follows. It builds on Communication to take us one step closer to sales. Its most useful measures are those proven to predict behavior such as purchase. Here we are interested in the medium's ability to frame the message to make it more credible, more relevant and, in fact, more persuasive.

Persuasion can be measured through simulated purchasing by asking consumers to select a brand, exposing them to a commercial for that brand, repeating the selection process and noting the change (if any) in their responses. Alternatively, it can be measured in a test-control design in which attitudes towards the brand and intent to purchase are compared between samples of respondents who are exposed and unexposed.

At this level of measurement, the contribution of the medium and message are confounded, but the task of separating them is simpler than we will find at the Sales Response level, where other factors like purchase price and product distribution come into play.

The techniques now available for measuring purchase intent suggest that Persuasion may be one of the qualities that differentiate media.

Scanner data show that certain Persuasion measures taken during commercial pre-testing correlate to sales

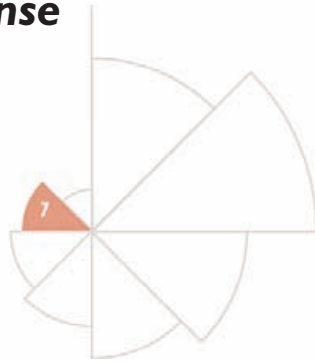
changes that follow the airing of these commercials. No similarly compelling body of "sales validation" data are available for Recall alone. The ARF's Copy Research Validity Project demonstrated that Recall and Persuasion measures together are more predictive of sales results than Recall measures alone.^{xiv}

This suggests that Persuasion measures that are used in advertising pre-testing can also be used to compare the value of different media environments, such as the same commercial in a high-rated broadcast-network vs. low-rated cable-network program, or the same ad in a news-weekly vs. general-interest monthly magazine. If the Persuasion measures show differences within media, and these differences correlate with Sales results, a significant difference in the pre-test results would be assumed to produce different Sales results.

We recommend that advertisers work with their pre-testing systems to learn how the choice of media vehicles affects Persuasion. The research would need to distinguish among a variety of effects, including the ability of the medium to deliver open ears or eyes to the ad, deliver attentive minds to the ad, contribute to Communication and enhance Persuasion, as well as the inherent market value and advertising receptivity of the medium's audience.

An aspect of Persuasion that needs better research is the effect of Sponsorship. Advertisers who associate with programs that are especially appreciated by consumers (like The Hallmark Hall of Fame, Revlon's historic sponsorship of The Academy Awards, or Visa's Olympics sponsorship) believe they realize specific benefits by doing so. NBC's studies of Olympic sponsorship have shown that aspects of Persuasion are strong, e.g. there is an increased willingness to consider the brand. A more systematic investigation of the Persuasion effects of sponsorship would be valuable, because the sponsorship form continues to grow on the Internet. Sponsorship also is becoming more attractive in television as clutter and commercial avoidance become more prevalent.

Advertising Response



(Current measurement techniques include click-through, post-click-through interaction, lead generation, telephone and mail response, coupon redemption, etc.)

Advertising Response is a measurable consumer action to the advertising short of purchasing the advertised product. Visiting a showroom or store, calling a toll-free phone number, clicking through an online ad, interacting with the commercial content to which an online ad is hyper-linked, and generating a lead (by identifying oneself in the process of requesting a brochure) are examples of consumer response that might be intermediate to sales or goals in themselves.

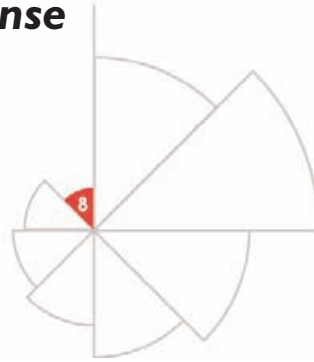
Click-through measures the performance of online ads that request an immediate response. The term refers to the process of being hyper-linked to an advertiser's Web site or commercial-content area as a result of clicking on a banner ad or interactive-TV (ITV) screen. Conceptually it parallels a direct-response TV commercial's telephone response or a magazine ad's coupon redemption. It can be measured directly as a count of consumers responding, or "clicking through," and can be expressed as a percentage of advertising exposures.

Like Click-Through, Post-Click-Through Interaction exists only in interactive media. It means further actions a consumer takes in response to options presented by the advertising material he or she finds after clicking through an online or ITV ad. It can be measured as a direct count of consumers "interacting" and can be expressed as a percentage of either Click-Through or

Advertising Exposure. Its presumed importance is that it signals involvement, which may or may not be predictive of Sales, depending upon whether the advertiser uses borrowed interest strategies like game playing or rewards to encourage interaction.

Leads are defined as consumers who identify themselves to an advertiser in order to receive additional information by mail, email or telephone. Leads are presumed to be excellent prospects for conversion to Sales. This suggests that a measure of Leads generated across relevant product categories also may be of some value as a measure of media performance for advertisers who do not have a response mechanism in their advertising.

Sales Response



(Current measurement techniques include sales tracking, test markets, single-source panel research, and marketing-mix modeling.)

Sales Response is purchase of the advertised product or service in response to the advertising. As a measure it may be stated as an absolute sales change, an increase in the proportion of a consumer segment's purchases, a change in unit market share, a change in dollar market share, or in many other forms. Each of these measures may be appropriate to different occasions and techniques of analysis; all are related to the absolute sales change. In addition to these, useful measurements include Return on Investment (ROI) — the profitability of those Sales generated by advertising — and Consumer Lifetime Value (CLV) — an estimate of the future profitability of a newly acquired customer. These are discussed further on page 28.

Of all the ways to evaluate media performance, Sales Response is the most relevant to the advertiser but the least dependent on advertising and media effects alone. It is influenced by a great many factors other than advertising, including consumer preferences, product availability, purchase price, market conditions and so on.

In theory, one could estimate the Sales Response to advertising by doing a test in which all sales influences except advertising are controlled. In one area the advertising would be displayed, in the other it would not, and then the sales in the two areas would be compared. In practice, such tests are very difficult to

do. No matter how hard we try to match markets, we usually find important differences, and we never know for sure if we have identified all the relevant variables.

Another problem with measuring Sales Response is illustrated by asking, "Sales over what period of time?"

Short-term effects are sales caused by advertising exposure close to the purchase occasion. These have been identified by single-source research analyses. They are the most easily estimated, but they may not reflect the full dollar value of sales generated by the advertising expenditure.

Medium-term sales include the value of repeat purchases across a year. At this level the product itself is the most important factor. A positive experience with the product may be reinforced by additional advertising exposures, but satisfaction with the product itself is critical. Medium-term sales effects can be thought of as the sum of short-term effects with some carry-over through memory and repeat purchase.

The long-term (one year or more) effects of advertising on sales are most difficult to measure. A variety of methods attempt to capture them, but none has been proven yet. Continuous tracking and marketing-mix modeling show promise in this regard.

At the micro (short-term) level, possible through single-source data analysis, we can observe the most concentrated version of advertising's effect on sales. When the purchase behavior of individual households is being tracked, an ad exposure days prior to a category purchase often shows a measurable sales response. However, this technique has not been able to provide the same level of media-actionable insight as macro-level analysis.

To this point, marketing-mix modeling of media's contribution to sales have focused largely on fast-moving consumer goods, because of the availability of scanner panel data. This has been a mixed blessing. Fast moving CPG (Consumer Packaged Goods) brands are characterized by little product differentiation, mature markets and sophisticated competitors. As a result, consumers' response to advertising is more muted than in other categories, and media effects are harder to read.

Sales Response, cont'd

We hope that these modeling techniques will be applied to a range of other products and services, and sufficient data will be gathered to provide a good basis for comparing media on sales response. A recent study by AT&T showed that marketing-mix modeling applies just as well to long-distance telephone services as to consumer packaged goods.^{xvi} More such studies are needed.

Return On Investment (ROI)

ROI is a widely used computation of the profitability of the sales generated by advertising. Three factors enter the calculation. The cost of the media and advertising creative that contributed the sales in question is the denominator. The dollar value of those sales, minus costs, over the time interval assumed for the advertising's effects on sales is the numerator. This calculation produces the dollar contribution to earnings for each media dollar spent.

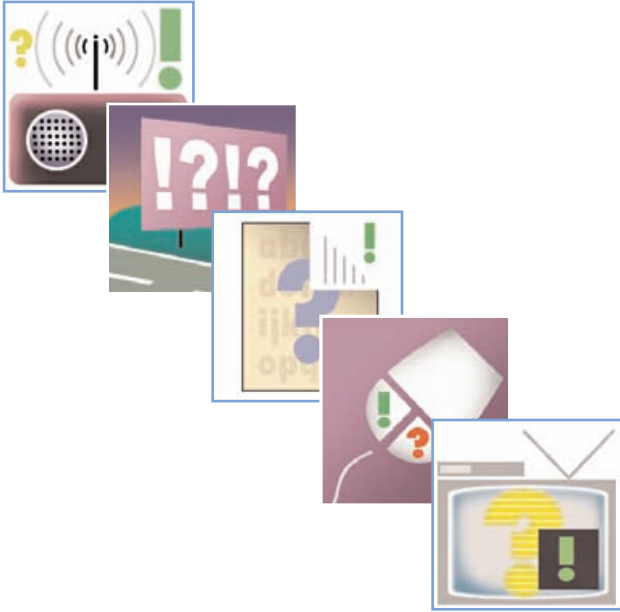
Consumer Lifetime Value (CLV)

CLV, a term from Direct Response Advertising, is an estimate of the future profitability of a newly acquired customer. It is a very long-term estimate of possible returns to advertising and a basis for comparing response media. It reflects several things about consumers: their age, their loyalty, the prices they are willing to pay, and the estimated volume of their future purchases. These factors together provide a rough estimate of the dollar value to an advertiser of a consumer in his or her lifetime.

In effect, the aggregate of CLV across all consumers could be taken as a measure of the "book value" of brand equity. When costs are added, CLV is similar to ROI projected into the future for the lifetime of present customers. These theoretical definitions are not intended to be mathematically precise; for example, CLV omits consumers who will be lost or attracted in the future.

One metric that has been suggested as potentially useful is ROI CLV, which is calculated as "increase in Consumer Lifetime Value" divided by "cost of achieving that increase." This in effect is a long-range projected ROI, while ROI as described above is typically a backward looking measure.

THE MODEL IN USE



Comparing Media at the Level of Sales Response



Static media comparisons can disguise marginal effects. Even when a medium has a distinct advantage in average effectiveness, additional spending may produce diminishing returns. In that case adding another medium might be a better choice.

Using Marketing-mix models to look at media ROI at different spending levels can provide data to improve media-mix decisions.



Conclusion

In measuring consumer exposure and response to media, we have a wide choice ranging from Vehicle Distribution to Sales Response. The more closely the measure we use reflects the advertiser's purpose, which is usually sales, the more it is obscured by other non-media factors like message, promotion, competition, product distribution and price. As a result, we have long avoided using the most relevant measurements, because they have eluded our measurement capabilities—until now.

Interactive media and direct response advertising have expanded media's job from simply exposing a message to also encouraging and facilitating a response. And more and more, it is on response that media are being judged. We believe that media measurement has no choice but to follow media's new purpose.

Footnotes

ⁱ Idell, Cheryl, Chief Strategic Officer, Western Initiative Media, Advertising Receptivity: A Study about how Consumer Attitudes and Viewing Environment Impact Advertising Attentiveness, presented at ARF Week of Workshops, October, 1999.

ⁱⁱ Three-Second Tuning Study, A.C. Nielsen, 1986. The study showed that measuring TV tuning at 3-second resolution detects over four times the channel changes that a 60-second resolution does.

ⁱⁱⁱ Ibid.

^{iv} Ted Bates Ltd., The Ted Bates Viewing Study, 1983-84.

^v Special CAB-commissioned Nielsen unaided recall study, April 2000.

^{vi} Effective Radio Advertising: An Analysis of Factors Influencing Effectiveness; Brennecke, Swantje, The Media Partnership, The Netherlands, ESOMAR, 1997, cited in Radio Ad Effectiveness Lab: Research Compendium, Feb. '02, http://www.radioadlab.com/RAEL_Compendium.pdf.

^{vii} Magazine Publishers Association, (1982) MPX—A Study of Magazine Page Exposure. Joyce, T., (1982), Recent Reading, Mediamark Research Inc. Papazian, Ed, Publisher/Editor, Magazine Dimensions 2001, Media Dynamics Inc., 2001.

^{viii} Such as Nielsen Audience Demographics (NAD) Reports, which provide TV-audience estimates by household characteristics and VPVH (Viewers per Viewing Household).

^{ix} The Ironing Board Revisited, Gould, Heather, for MSM-ILR UK, AdMap 1996, cited in Radio Ad Effectiveness Lab: Research Compendium, Feb. '02, http://www.radioadlab.com/RAEL_Compendium.pdf.

^x Statistical Research Inc., How People Use Television, annual studies 1991-98.

^{xi} Lynch, Kate (Starcom US) & Stipp, Horst (NBC), The Value of 'QUADS' for Assessing the Quality of the Audience for Advertising Effectiveness. Hooper 1968. Yankelovich Clancy Shulman 1988.

^{xii} BBDO Clutter Study, November 1969; Gallup & Robinson Study, 1974-77; both cited in TV Dimensions '98, Papazian, Ed, ed., copyright Media Dynamics Inc.

^{xiii} Brennecke, Swantje, ESOMAR, 1997, op. cit.

^{xiv} Haley, Rusell I. & Baldinger, Allan L., "The ARF Copy Research Validity Project," Journal of Advertising Research, April/May 1991, pgs. 11-32.



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