

Perspectives on the ROI of Media Relations Publicity Efforts

by

Fraser Likely, David Rockland, Mark Weiner

Members

Commission on Public Relations Measurement & Evaluation

Published by the Institute for Public Relations
May, 2006

Perspectives on the ROI of Media Relations Publicity Efforts

By Fraser Likely, David Rockland, Mark Weiner

Executive Summary

This paper discusses several different approaches to deriving a Return-on-Investment (ROI) for the support provided by media relations publicity efforts within a marketing campaign. The primary questions discussed in the paper are whether it is possible to show that media publicity helped generate sales or other business outcomes, and can a financial return be attributed to the publicity?

Media relations publicity is a part of public relations that is generally included in Marketing Communications or MARCOM, Marketing PR or Media Relations-based Marketing. This paper is not concerned with the ROI of the many other aspects of public relations or their derivatives. The scope of the paper is more narrow and focused specifically on how to show the business value of a story in the media that has been placed as a result of public relations within the marketing campaign mix (print, TV, radio, outdoor, and internet Advertising; direct mail; point-of-purchase; contests, coupons and continuity programs of sales promotion; media relations publicity; etc.). Most practitioners believe that such media placements have a positive effect on eventual sales. Lacking, however, have been clear methods to demonstrate that effect.

This paper is not intended as a be-all and end-all documentation of how to calculate the ROI of media relations publicity as part of a Marketing campaign. Instead, this paper attempts to list various approaches now in use and to provide a critique of their strengths and weaknesses. The paper is from the perspective of three practitioners, each of whom works in a different aspect of the field. Fraser Likely is an independent PR/communication management consultant (Likely Communication Strategies). David Rockland is a partner and research director for a large agency (Ketchum). Mark Weiner is the CEO of a media measurement firm (Delahaye). We hope this paper inspires continued debate and a refinement of the techniques we describe - and that it contributes to the advancement of the field in general. This, then, is a primer – with the intent of encouraging additional studies and papers in the future.

I. Why ROI?

Why is demonstrating ROI so important today?

- *Resources are limited.* In today's economy, there is constant pressure on all marketing budgets, including media relations publicity. This means an organization will only invest in publicity activities that they know will make a direct contribution to increased revenues. Media relations publicity must prove it has an impact on the bottom line.
- *Scrutiny is increasing.* Clients are increasingly holding their PR firms, departments, and consultants accountable for demonstrating public relations results. This accountability includes comparing those results against what was invested to obtain them. It is not enough to simply generate impressions through publicity; the quality of those impressions are equally important, as well as their impact on target audience behaviors and the resultant financial consequences.

- *Marketing has become more sophisticated.* Public relations is expected to contribute to the execution of business strategy and thus the results obtained from that execution – not just create “noise” or “buzz” or “image.” The head of marketing is now asking: “Other areas supporting marketing campaigns can measure ROI, why not the PR function?” “What’s the ROI of our media relations publicity efforts in our marketing campaigns?” “Should I buy more or less advertising or media publicity, or invest it all in store promotions?”

II. Definitions

ROI

The concept of “return on investment” or ROI, has long been used by financial professionals to determine the value of an investment – it is a measure of the financial benefits of an activity against its associated costs. The Dictionary of Modern Economics (4th Edition) defines ROI as “a *general concept referring to earnings from the investment of capital, where the earnings are expressed as a proportion of the outlay.*” In other words, when someone asks about ROI, they are really asking, “What did I get back (benefit) from the money I spent (cost)?” Return on investment is the relation between overall expenditure on a communications activity and the benefits to the organization or one of its business units derived from the activity. Benefits can be expressed in many ways such as revenue generation, cost reduction, and cost-avoidance through risk reduction.

ROI is typically calculated by dividing the *incremental gain* (or “*return*”) resulting from an action by the cost of the action (the invested resources). ROI is then expressed as the percent of return for every dollar invested:

$$\text{ROI} = \frac{\text{Incremental Gain}}{\text{Invested Resources}} \times 100\%$$

Another way of expressing ROI is:

$$\text{ROI} = \frac{\text{Total End Value} - \text{Costs}}{\text{Costs}} \times 100\%$$

The ROI ratio can be used a variety of ways, from evaluating the performance of business units or companies over time, to evaluating individual investment decisions to determining their feasibility and/or the expected financial benefits. Basically, any positive ROI shows a positive return in excess of what was invested, based on the formulas above.

The discussion thus far has focused on the ROI of Media Relations activities intended to drive sales leads, and from sales leads actual sales, and from an increase in sales, revenue generation. Besides the level of activity or activity outputs, ROI can be measured at the level of program or campaign and sub-function or function.

Cost-Effectiveness (vs. ROI)

The generation of new revenue is only one type of program or campaign ROI. There are two others. One is the use of PR/C programs or campaigns to reduce costs within an organization, e.g., by changing employee behaviours in ways that reduce administrative, production and other operational costs. The other is the use of programs or campaigns to avoid costs in the first place by mitigating risk such as negative legislative, regulatory or legal actions through changes in stakeholder and/or organizational behaviours.

The ROI of the PR function or sub-functions can be determined through a concept called compensating variation, wherein stakeholders are asked to estimate the value of the public relations function and its return on investment.

The "return" in return-on-investment is the financial benefit derived by the organization or one of its business units from the public relations or communications program or campaign. The "investment" is the resources consumed by the program or campaign. This suggests that there is a direct link between the program or campaign and a change in financial situation, that is, the program directly caused the change.

The "cost" in cost-effectiveness is the same as the term "investment" in return-on-investment, that being the resources consumed. The "effectiveness" is how well the program or campaign was in meeting its objectives. These objectives are presented as changes in communication effects: cognitions (awareness, knowledge, understanding or comprehension); motivation (beliefs, attitudes, opinions, intent); and behaviours (commitment, action, adoption). The only really important objectives are those involving behaviour change. Therefore, did the program or campaign change the behaviour of a targeted public – and at what cost?

In both cases, there must not be any competing programs or campaigns within the same time period or geographical location (such as an advertising campaign) nor any other incentives that would affect behaviour (rewards, punishments, supervisory direction, point-of-purchase, etc.) to be able to clearly measure ROI or cost-effectiveness. Demonstrating cost-effectiveness and ROI requires a good degree of transparency in the form of numerous stages of measurement to show cause and effect.

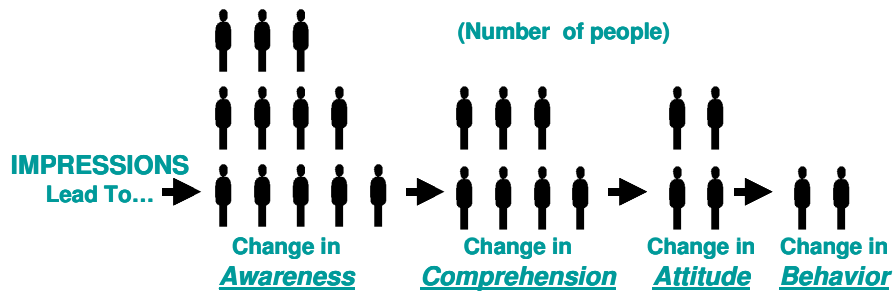
III. Media Relations Publicity ROI Measurement Approaches

In this section, we provide a review of four possible models to calculate media relations publicity ROI. Each has its pluses and minuses. All, with the exception of number four, dealing with Advertising Value Equivalency (AVEs) can be used with the right data and caveats to determine an ROI. The use of AVEs as an ROI measure is somewhat suspect, but many use this metric to determine levels of advertising versus PR budgets.

A. Return on Impressions Model

This approach demonstrates how the impressions produced by media relations publicity activities drive behavior. The objective of most media relations efforts is to communicate a specific message(s) that influences the target audience to first think and then act in a particular way. Behavior change, typically, is the ultimate desired outcome.

The approach is based on the rationale that there are a set number of impressions – each containing the desired message - required to make one person in the target audience become newly aware of a product or service. The number varies widely but an approximation is often found in existing campaign and tracking studies for the same or similar products or services. The idea is that once a certain number of people in the target public are aware, a diminishing number will change levels of knowledge, understanding, motivational attitudes and opinions; and finally their commitment, actions and adoption behaviors. This has been called the Domino Theory or Social Diffusion Theory. The theory is represented as follows:



In the Return on Impressions approach, behavior change is expressed in dollars or gross sales revenues to provide a commensurate measure against the costs of the impressions.

Hypothetical Example:

- A media relations publicity campaign for a new camera created 1,000,000 impressions at a total cost of \$100,000.
- If previous studies in the same or a similar media relations publicity campaign showed that four impressions are required to make one person aware, 250,000 people are now aware.

(Note: this 4-1 example is hypothetical, and ratios of 4-1 to 20-1 have been found in comparing impressions to awareness levels in various PR campaigns undertaken by Ketchum.)

- 20% – or 50,000 people – of those who are aware purchased the new camera (the desired behavior).

(Note: We know 50,000 people purchased the camera. What we don't know exactly is that those 50,000 were all the same people who saw the impressions. What we have is a relationship between the impressions in a certain time and place which is assumed to have generated a peak in sales at the same time.)

- If the gross revenue attributed to the media relations publicity effort as part of the overall Marketing program is \$500,000, the net revenue after media publicity costs of \$100,000 is \$400,000. This is not the profit because sales and other costs are not deleted. However, if one understands the profit margin for the product, one can come up with the profit/cost ratio.
- Return on Impressions ROI calculation:
ROI is calculated by dividing the incremental gain from PR by the invested resources, then multiplying this figure by 100%:

$$\frac{\$500,000 - \$100,000}{\$100,000} \times 100\% = 400\%$$

This approach is a “ball park” analysis, usually based on existing data. Many companies will have data on communication comparisons where they know total impressions generated and the sales behavior. It is the use of their existing data that makes this “back of the envelope” technique work.

The model suggests that all impressions are equal, in that all subscribers to a magazine read every story including the one containing the desired message. Or, that each TV viewer intently watched the 30 second clip containing the desired message and wasn't off getting a snack. We know from research that every subscriber to the *Wall Street Journal* does not read each and every news item,

though a majority might. Therefore, we must be realistic when using impression data obtained from various sources.

Similarly, even if the model suggests that the fall-off is modest from one stage to another, the real-world experience can vary widely. Though the data on hand may depict that 40% of those who become aware will eventually purchase, the actual percentage may be as low as 1% or as high as the actual awareness percentage.

While this model assumes a linear progression from message receipt to purchase, and that the message by itself caused the purchase, research has shown this is not the case for most people. People talk to and are influenced by other people. They visit web sites for more information. Previous behaviour (regular shopping trips to the same shoe store) may be a greater influence on a new purchase than an article in the local paper. What's important is not so much the total impressions, but that they are targeted to the media channel and vehicle favoured by the potential customer.

Another concern is how to isolate the effects of media relations publicity from other forms of marketing (e.g. advertising; sales promotion; etc). One method is to isolate the impressions from media relations publicity versus those of other methods, and then attribute changes in behaviour outcomes based on the relative numbers of impressions. Doing so would theoretically require an assessment of how good each impression was, so that a quality measure is assigned to impressions from various marketing activities. However, it is important to remember that this is a ballpark approach where one uses existing data on the ratios of impressions to awareness to behavior to get a general sense of ROI. As such, it is somewhat antithetical to take a back of the envelope approach and start tweaking components when the technique overall is just to develop a directional sense.

B. Return on Media Impact Model

Another approach to measuring media relations publicity ROI is by using a technique akin to market mix modeling. At its basic level, it involves tracking media coverage against sales over time in different markets. This type of statistical analysis is probably the ripest area for MARCOM measurement. It examines patterns in sales, usually by market and timeframe, and finds what mix of direct mail, advertising, point-of-sale promotions, etc. was being used at each time and place. By examining the variation in sales and in the marketing mix, you isolate what is driving sales.

A market mix model employs multiple regression analysis and its variations. The model analyzes key independent variables, which include media placements (quantity and quality), advertising sales promotions, price, weather and anything else that could affect sales. These independent variables are regressed against the dependent variable which is usually sales. These data are often compiled and analyzed by market and by week. Model variations could include lagged measurements that are used to control for time order (when publicity or advertising campaigns were in the field for example) or place (where in the field or market).

Through marketing mix modeling, one can determine the relative ROI on a campaign-by-campaign basis, as well as determine how much of the changes in sales by time and market can be attributed to each element of the marketing mix including PR-generated media placements.

New methods that are enabled by technology allow media relations publicity to show much more of a contribution than what could be shown even 10 years ago. Media impressions and content analysis data are gathered with more ease and thoroughness than ever before. With access to real-time sales data, pricing information and more thorough supermarket scanners, data warehousing and powerful computers make publicity data analysis an entirely different animal. This has been done by an increasing number of consumer products marketers such as P&G and Miller Beer.

The general approach to Return on Media Impact is where media coverage – both the quality and quantity – are tracked at regular intervals (e.g., on a weekly basis) and are assigned algorithm scores. The algorithm is often done on a 0-100 scale where points are given for tone, message content, prominence, tier of publication, and presence of a third-party spokesperson. The allocation of the points is usually based on the goals of the program, and can be validated in this statistical model. Sales are also tracked at the same intervals as are all the other independent variables such as price and advertising. Statistical analyses (such as regression) are conducted to determine the percent of movement of sales described by different elements of the quality (e.g., tone, messages, spokesperson inclusion, etc.) and quantity (e.g., total mentions, Share of Ink or Impressions, etc.) of placed media coverage.

Example:

- Media coverage of Kodak cameras is tracked over a six-month period. Coverage is analyzed and given an algorithm score.
- Sales of new Kodak cameras are also tracked during the same period.
- Statistical analyses show that for every 5% increase in algorithm score, there is a corresponding 10% increase in sales.

The key to including media relations publicity data within a market mix model is to produce data with the same level of granularity and frequency as the sales data. Usually, this entails gathering weekly data in each market. But recent advances in output measurement provide data on the quantity and quality of media relations publicity efforts by timeframe and market on an ongoing basis. If you employ any of these tools, and your company or client uses market mix modeling, you are well on your way to showing media relations publicity's role in driving sales.

While many view Return on Media Impact or market mix modeling as a panacea, it is a relatively new field and not without issues:

- Media relations publicity and other forms of marketing communications such as advertising often affect sales over time, and estimating the lag effects can be quite complicated.
- Unless every factor affecting sales can be defined, the model is incomplete. There are likely to be extraneous variables that are driving sales, which make the model less precise.
- If advertising or other aspects of marketing communications have much greater resources than publicity, it may be difficult to isolate perturbations in sales due to media relations publicity.

C. Return on Target Influence Model

Surveys can be used to show how varying levels of desired outcomes, such as awareness, attitude or behavior change, are influenced by media relations publicity. One or a series of surveys is conducted among a representative sample of the target public to determine levels of change. In the same questionnaire, questions are asked to whether respondents were exposed to outputs of the media relations publicity campaign – media impressions - and what they took away from that (message recall; retention and attention). Using binary variable analysis, the change in the probability of the desired outcome(s) based on media exposure is determined.

A survey is needed if you want to determine if a message embedded in the impressions had an effect on the target audience. Most companies conduct attitude and usage or advertising tracking studies that lend themselves well to this approach. Did they recall the message, retain the message, attend to the message (go to a web site for more info, talk with a friend, call a 1-800 number; etc.)? After this

activity, did their levels of awareness and understanding change? Did their attitude change, such as intent to purchase? Generally, the steps to this approach are as follows (again, an example):

- Conduct survey (n=1,000) with questions, such as:
 - Did you buy...?
 - How many...?
 - Do you intend to buy...?
 - Do you have a favourable opinion to buy?
 - Are you knowledgeable about the product?
 - Did you seek out additional information? Where?
 - Do you recall/retain the message you saw/heard/read?
 - Did you see which media?
- Conduct regression analysis as follows:
 - Probability of purchase = f (see media x, y, y₁, y₂)
 - The x is usually a constraint and the y variables are other items that affect a purchase decision such as income, age, propensity for the particular category, etc.

Probability of purchase = a + bx + cy + dy

b = change in probability from seeing media impressions

If b = .05, then if a media impression is seen there is a 5% greater likelihood of purchase

(The number of people who saw media) x (.05) = Sales from Media Relations Publicity

Example:

- Probability of buying a new camera =
 - 10% +
 - (15% if tech-savvy) +
 - (5% for each \$10,000 in annual household income) +
 - (7% if exposed to one or more media outlets in which media relations publicity has a placement)

An issue with this approach is that, when asked, many respondents cannot differentiate between advertising and media impressions. They can't remember where they read/saw/heard the message. Often, precise language is needed to define each, to see if they remember a particular spokesperson used in case versus a cute talking animal in another. Sometimes when the advertising and media relations publicity are very similar, it may make sense to consider the two together in the questionnaire and then allocate impact based on relative amounts of each as expressed in impressions.

One survey at the end of the campaign or at the point of sale may not be enough in this model. Research has shown that media relations publicity, more times than not, has a delayed effect as do other MARCOM efforts. That is, awareness, motivation and/or behaviour change may occur some time later than when the media vehicle reached the target public. Whether one, two or three surveys are required probably depends on the complexity of the idea, product or service being sold.

D. Return on Earned Media Model

The validity of Advertising Value Equivalency (AVEs) is a much-debated issue. For example, there are some on the Commission on PR Measurement & Evaluation who feel it is heresy. Other Commission members have done research to show the ability of AVEs to contribute to a ROI measure. The three authors of this document disagree on the appropriateness of AVEs. But, rather than simply ignoring or dismissing the subject, we thought we would present and critique the model.

To calculate AVEs, earned media is converted to paid media based on what it would cost to purchase the same amount of space in that same media outlet. This value is then adjusted based on the value of earned media. This adjustment can be altogether subjective and arbitrary - with many PR consulting and research firms applying different and so-called 'proprietary' earned media multipliers.

The result provides for a comparison of whether a dollar spent on media relations publicity is more or less effective than a dollar spent on advertising. If the assumption is made that the cost of purchased space for advertising is reflective of the market value of that space, then the (adjusted) AVE can be used as a proxy for return on a media relations publicity budget.

Example:

- Media relations publicity effort resulted in a full-page placement in *Field & Stream* magazine, where the cost of a full-page ad is \$60,000.
- The cost of the media relations publicity effort was \$35,000.
- The client has found in customer surveys that earned media is 2.5 times more valuable than paid media in terms of relative influence on purchase decision, but the quality of the placement (determined via algorithm) is 35% of desired messages, tone, etc. The 2.5 multiplier is totally subjective. Someone else may use a 1.5 or 4.5 multiplier. Remember that while media relations publicity is often touted as more valuable than advertising due to its presumed credibility, media relations publicity is often not able to deliver the full set of messages to the right people at the right time in the way that advertising can. Therefore, an algorithm is used to reflect what percent of a "perfect" placement is actually delivered.

- *AVE calculation:*

The AVE is calculated by multiplying the cost of advertising by the earned media multiplier and algorithm score:

$$\$60,000 \times 2.5 \times 0.35 = \$52,000$$

- *ROI calculation:*

ROI is calculated by dividing the incremental gain from media relations publicity by the invested resources, then multiplying this figure by 100%.

The *incremental gain* is the AVE less the media relations publicity investment costs:

$$\$52,000 - \$35,000 = \$17,500$$

$$\text{ROI: } \frac{\$17,500}{\$35,000} \times 100\% = 50\%$$

AVEs really are a cost-effectiveness measure and not a true ROI measure, unless we assume that the cost of an ad would not be what it is unless it was worth that much at a minimum. For example, if advertisers pay a certain amount for ads, and have been doing so for a long time, it can be assumed

that the market is functioning well and information about advertising's bottom-line impact is well known, AVEs start looking much "smarter" as a media relations publicity measurement. Return on Earned Media presents a method, albeit an imperfect one, to compare advertising to media relations publicity investments. It is a method less used than it has been previously. Newer and better approaches such as market mix modeling are rendering the use of AVEs less important. However, there are many marketers who need to decide on the relative efficacy of advertising and media relations publicity, and in the absence of other ways to derive the answer, AVEs can provide helpful guidance.

IV. How Much Does ROI Measurement Cost?

There are only rules of thumb when it comes to the cost of measurement and thus measuring ROI for media relations publicity. Though measurement costs vary, generally speaking, measurement should be between 2%-10% of a media relations publicity budget. Looking at the examples of various models provided above, for a more comprehensive model such as the *Return on Target Influence Model* costs would be closer to the high end given the need for survey research. For less comprehensive approaches, the lower end of the scale might apply.

V. Conclusion

What we have sought to do in this paper is to describe various approaches to media relations publicity ROI measurement within a marketing campaign. We have identified four models. Each model has pluses and minuses. Several are very data dependent, and such data can be hard to find.

MARCOM practitioners have long sought the "holy grail" that links media relations publicity efforts within marketing campaigns to sales and other financial results. This paper has not found that magic answer, but we are confident that there are models in existence that will work in the right circumstances and with the appropriate caveats. This paper gathers those existing models, each of which is not without warts. By no means is this research complete. We hope that there will continue to be efforts to refine the models we have presented here. It will be through this kind of refinement that media relations publicity will increasingly take its rightful place in the marketing mix, as well as helping public relations increase its influence at the Boardroom table.