# A New Model for Media Content Analysis

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The public relations industry has championed the use of measurement and evaluation as integral to the practice of the profession for decades. While "lip service" is often paid to the value of measurement, too many corporate communications departments and their public relations agencies have managed to resist implementing these programs\*. The reasons cited for not measuring range from lack of interest to lack of staff resources to lack of funds<sup>†</sup>. As this paper explores, however, the actual reasons behind the lack of active measurement and evaluation programs has little to do with the reasons stated for not measuring public relations activities.

The premise of the authors is that the media content analysis methods commonly in use fail to address the fundamental information needs of public relations professionals. Currently public relations professionals rely on eight basic methods of content analysis. This paper reviews each of these methods and points out the fundamental flaws in each of these approaches.

Michaelson and Griffin suggest that rather than rely on these traditional methods, the better approach in conducting content analysis is to determine the presence of four key factors in articles that are to be content analyzed: correct information, incorrect information, misleading information and omitted information. The authors present two case histories conducted for MetLife that demonstrate how the analysis is conducted and how MetLife used this analysis to manage its media relations efforts on two key lines of business. The paper draws conclusions on the most effective way to implement this research approach as well as its limitations.

## Traditional Approaches to Content Analysis

In order to clarify and better understand the issues that challenge the advancement of measurement and evaluation in the public relations industry, it is essential to understand the eight various approaches to content analysis that are already widely in practice. These eight approaches range from simple "clip counting" to certain proprietary algorithms that purport to measure quality of coverage. Included in these approaches are human as well as machine and web-based classification and analytic systems. While each analytic method is discussed individually, several of these methods are often combined when content analysis is performed.

## Clip Counting

This is the most basic – and perhaps most antiquated – form of content analysis. With this system, relevant articles are collected and typically sorted chronologically or by date. The analysis generally consists of a summary listing the publications and dates of publication

<sup>\* &</sup>quot;Attitudes Toward Public Relations Measurement & Evaluation"; A survey conducted for PRTrak by David Michaelson & Company, LLC; October 2003

<sup>†</sup> These stated reasons include cost, uncertainty of how to measure, a lack of measurement standards, a lack of interest in measurement, fear of being measured, a lack of need and resistance from agencies.

as well as the total article count. Typically, these clips are bound together in chronological volumes. One of the analyses often used in clip counting is the "thud factor" or the volume of noise generated when the book of bound press clips hits a table.

The analysis contains no insights, discussion of or interpretation of the coverage and is dependent on the recipient of the report to draw judgments about the actual content. These judgments are generally only qualitative and are usually based on reading a handful of articles, articles that may not typify the actual coverage received.

#### Circulation and Readership Analysis

The next level of content analysis builds upon clip counting by adding information about each article that is gathered from secondary data sources. These sources typically include BurrelleLuce\*, Nielsen†, Arbitron‡, Scarborough§, Audit Bureau of Circulations\*\* (ABC), Simmons Market Research Bureau (SMRB) or Mediamark Research (MRI)††.

The specific types of information added to a clip counting analysis may include circulation of the publication or number of copies distributed, readership or the total number of actual readers (circulation multiplied by average number of readers for each copy), demographic profiles of the readership of each publication (e.g. age, gender, income, education) and possibly even lifestyle information.

A common approach with this type of analysis is to present a total circulation or total readership. However, these approaches can be modified to include "qualified" readers who are part of the target audience for the publication, regional analyses and other subsets. Actual analysis of the content of the articles is not part of this study.

#### Advertising Value Equivalence (AVE)

Advertising value equivalence is an estimate of the cost of purchase of advertising that has an equivalent size and location in a given publication on a specific day. These estimates are typically based on information provided by Standard Rate and Data Service (SRDS)<sup>‡‡</sup>. This approach is generally discredited by public relations practitioners as well as by leading researchers. While there are some applications where AVEs may have utility, this approach is generally flawed.<sup>§§</sup>

<sup>\* &</sup>lt;u>BurrellesLuce</u> provides press-clipping services that also include circulation information and other third party information about the article.

<sup>† &</sup>lt;u>Nielsen Media Research</u> provides television audience measurement and related services. These are used to determine audience size and composition for broadcast and cable programming.

<sup>‡ &</sup>lt;u>Arbitron</u> is a media and marketing research firm that is used to measure audiences for radio and for other media services

<sup>§</sup> Scarborough is a provider of readership information for local and national newspapers.

<sup>\*\* &</sup>lt;u>ABC</u> is a third party organization that audits and certifies the circulation of print publications

<sup>†† &</sup>lt;u>SMRB</u> and <u>MRI</u> are national surveys of consumers that measure consumer purchases as well as consumer media habits. These surveys are commonly used as tools for planning media purchases by advertisers.

<sup>\*\*</sup> SRDS is a database of media rates and information that is used by advertising agencies.

<sup>§§</sup> For a fuller discussion on the topic of advertising value equivalents, the reader is directed to "A Discussion of Advertising Value Equivalency (AVE)" by Bruce Jeffries-Fox President, Jeffries-Fox Associates. This article is available on website of The Institute for Public Relations.

As in the analysis of circulation or readership, actual analysis of the content of the articles is not included in this type of study.

#### Simple Content Analysis

This is a simple or basic content analysis that classifies or codes what is written in categories that can be statistically analyzed. The codes are developed by a close textual analysis of a sample of articles. The remaining articles are analyzed based on the presence of these codes. Each article is read to determine the presence of information that is classified according to the codes. Information from the codes is then entered into a database to determine the frequency of codes or classifications of information.

This method accurately represents only what is actually written. Intended messages or specific items of information that are not included in the codes or do not appear in the articles are not included in the analysis.

Coding is commonly done using readers who have been specifically trained to perform this task. This approach is limited by the potential fallibility and inconsistency of the readers responsible for the coding. In the past few years, computerized systems have been developed to address these issues. However, these systems tend to be inflexible and often miss articles or misclassify the results. While significant advances have been made in this area, the most accurate coding is still conducted using human readers.

#### **Message Analysis**

Message analysis differs from simple or basic content analysis by centering the analysis on the presence of intended messages in articles. Key messages are developed based on communications objectives. These communications objectives are "translated" into codes that become the basis of the analysis. Articles are coded by the presence of key messages included in each article. The analytic process is similar to a simple content analysis where the codes from each article are entered into a database for statistical analysis.

### **Tonality Analysis**

Tonality is an analysis that uses a subjective assessment to determine if the content of article is either favorable or unfavorable to the person, company, organization or product discussed in the text.

There are a variety of different ways to assess tone. One of the most common is a simple classification of "positive," "neutral" or "negative." Other approaches rate each article or code on a finite scale. These scales may include a "zero to 100" scale where "zero" is completely negative and "100" is completely positive. Other options include scales with positive and negative ratings. An example is would be a scale with a rating of "-50" to "+50". In this instance, "-50" is completely negative and "+50" is completely positive. A neutral analysis would be recorded as "zero" on this scale.

This method can be applied using several different approaches. The first is an assessment of the tonality of an overall article. Other approaches assess the tone of a specific mention or code or assess the tone of a specific message that may appear in an article.

Each article is typically assessed individually and the findings can be aggregated to present an overall assessment of the tone of the media.

#### **Prominence Analysis**

This analysis takes into account six factors: the publication where the article appears, date of appearance, the overall size of the article, where in the publication it appears, the presence of photography or other artwork and the size of headlines. In a typical prominence analysis, each element is given a weight that is factored into an overall score for each article. That score determines the prominence of the article.

Certain publications (e.g., *The New York Times* or *The Wall Street Journal*) are generally rated as having higher prominence than others. This assessment is generally based on the size and perceived quality of the readership. Date of appearance can also be a factor since readership can be much higher on specific days (e.g., Sunday or Monday).

In this analysis, articles that receive higher prominence scores are given more emphasis in the analysis since it is assumed that the either the higher readership, prominence of the publication, size and placement of the article or a combination of these factors leads to higher communications effectiveness.

# **Quality of Coverage**

Quality of coverage is often based on a combination of factors. The factors typically included in this measure are tonality, prominence and inclusion of specific messages, as well as the overall volume of articles. Each of these factors is entered into a computation that generates a score for each article in the analysis. This generates a quality of coverage score. Many of these elements are highly subjective and usually are not tied to outcomes.

## **Competitive Analysis**

In addition to the analysis of an individual topic, event, brand or company, a content analysis can also be conducted comparing the performance of companies, brands, topics or events on their media coverage. This can range from comparisons of the total number of clips to the share of discussion to comparisons of the overall prominence one brand or company receives over another. This is often used as a way to assess relative performance in the media.

Other variations of content analysis also exist many of which use proprietary systems and employ a combination of many of the techniques discussed.\*

#### The Challenge of Traditional Approaches to Content Analysis

As widely available and diverse as each of these methods of content analysis are, it is puzzling that public relations practitioners rarely make use of even the most rudimentary of these research methods. The only exception to this is high prevalence of clip counting

\* For in-depth discussion of the various approaches to content, the reader is directed to two key texts: Stacks, Don Winslow; *Primer of Public Relations Research* (2002) New York, Guilford Press and Broom, G. T., & Dozier, D. M. (1990). *Using research in public relations: Applications to program management*. Englewood Cliffs, NJ: Prentice-Hall.

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– a method of content analysis that is universally applied among public relations consultancies as well as among their clients.

Even when an analysis is conducted, the evaluation rarely, if ever, offers any insights more profound than the tonality of placements (e.g., positive, neutral or negative) and consequently, these analyses fail to offer diagnoses of the situation or prescribe a solution that is tied to communications objectives.

We can speculate on the reasons for this lack of acceptance of one of the most basic and rudimentary forms for measuring public relations activities. However, in this paper we will contend that the issue is not lack of interest, lack of knowledge, lack of budget or a generalized fear of measurement. Rather, it is a lack of usefulness of these basic research measures that lets them to fall in disuse and results in a general lack of measurement and evaluation by the public relations profession.

# The Fatal Flaws of Current Methods Of Content Analysis

As diverse as these methods of content analysis appear, each contains two commonly held fatal flaws. The first flaw is the absence of a basic analytic structure that determines the accuracy of coverage overall and more specifically determines the accuracy of specific messages included in the content of articles under analysis. The second flaw is the failure to link analysis to communications objectives and public relations messages.

## Flaw #1 - Not Determining Message Accuracy

The basic accuracy of messages is not generally included among any of the methods of content analysis discussed or considered. In order to understand the value of message accuracy in a public relations measurement program, it is important to understand the elements that need to be taken into consideration when conducting this type of analysis.

Message accuracy is based on an analysis of four basic elements: the inclusion of basic facts, the inclusion of misstatements about these basic facts, the inclusion of incomplete, deceptive or misleading information that biases the interpretation about basic facts and the omission of basic facts.

## Basic Facts

Basic facts are the fundamental information that is central to any communications program. These facts can be such fundamental information as a definition or description of the product or service. They can also include statements, opinions or points-of-view that can be supported and documented. Examples of opinions or points-of-view that can be considered basic facts are statements about relative value or comparative information that is used to place information in context.

#### Misstatements

Misstatements are generally understood as errors or incorrect information included in an article or publication. Misstatements typically result from incorrect data but can also in-

clude unsubstantiated opinions or points-of-view from a reporter or interviewee that states a falsehood.

## Incomplete Information

Incomplete information is a statement, opinion or point-of-view that selectively includes some information, but excludes other relevant facts. These apparently accurate statements create a misleading impression or a deception about a product or service and while factually accurate, are in actuality erroneous.

## **Omissions**

Omissions are the absence of key information that should be included in a specific article or publication. Not all basic facts can be considered omissions if they are not included in an article or publication. The key to understanding omissions is in the context of the article. The focus or subject matter of the story has to be relevant to the specific omission and the story or article will be considered incomplete unless that basic fact is included.

## Flaw #2 - Not Linking Messages to Communications Objectives

The other challenge involved in conducting effective content analysis is linking communications objectives with the actual message analysis. Typically communications objectives are directly related to the information needs dictated by a communications lifecycle. In public relations, there are two key recipients of these messages. The initial recipient is the media, who, in turn, serves as the conduit for transmitting messages to intended recipient (i.e. their readers).

#### What Is the Communications Lifecycle?

All communications have specific goals or objectives. In most cases, these goals or objectives involve having the recipient of the message take a specific action or indicate intent to take a specific action. These actions can range from making an inquiry about a product or service to voting for a particular candidate to developing a favorable image of a brand, a company, an issue or an organization.

Effective communications is a process that requires the recipient to go through four stages before a desired action takes place. These four stages of communication effects include establishing <u>awareness</u> of the brand, the category or the issue, building sufficient <u>knowledge</u> and understanding about the brand, category or issue in order to make an informed decision, creating a level of <u>interest</u> in and preference for the brand, category or issue or at least a recognition of its relevance to the message recipient and finally a change in behavior or <u>intent</u> or commitment to take a specific action based on the received messages.

Simply communicating the desire to have a message recipient take an action is unlikely to have the impact a communicator is hoping to achieve. In most cases the analysis fails to account for the stage of the communications lifecycle that needs to be addressed. For example, at the initial stage of the communications lifecycle, communicators should be measuring the proportion of messages that are strictly designed to develop awareness. At

later stages in the lifecycle, the analysis needs to shift to determine the proportion of messages that communicate knowledge, interest or intent to act.

When this type of analysis is applied, content analysis goes beyond a simple diagnostic of the accuracy of messages, but also expands to an integral part of the communications planning process. Not only can accuracy be measured, but this accuracy can also be directly linked to communications goals that, in turn, can be measured and evaluated among the target audiences for these messages. This analysis is particularly important when each message must be delivered through the media.

The communications lifecycle must be understood for both the media as well as from the target audience. In many cases, each of these groups can be at a different level of understanding and may have different communications needs. An example is when the media may be completely knowledgeable about a product or service, but the target audience has only marginal awareness and little or no understanding about it. In these instances, the media may make assumptions about the level of knowledge held by the target audience and not report as completely and thoroughly as they should. This can inadvertently create a gap or omission in an article that needs to be corrected. As was pointed out by Yogi Berra, "You've got to be very careful if you don't know where you're going, because you might not get there."

# A Revised Approach to Content Analysis

The discussion of theories of communications analysis can, however, often be quite different from their application and practice. Over the past two years, David Michaelson & Company has conducted a series of analyses on behalf of MetLife that explored how the two basic flaws typically present in most media analysis – not determining message accuracy and not linking messages to communications objectives – might be overcome. These efforts also explored how a modified analytic approach that takes message accuracy and communications objectives into account can be used to manage and improve communications efforts.

#### **Case Histories**

The Media Reality Check: An Analysis of Income Annuities

Anecdotally, MetLife knew that media coverage of annuities was often wrought with inaccuracies and focused almost exclusively on <u>saving for</u> retirement. This created considerable confusion among consumers about the significant risks they would face when they are <u>living in</u> retirement. With a looming retirement crisis and many Baby Boomers concerned about outliving their assets, a focus on guaranteed income during retirement is more critical than ever. In fact, more than one-quarter of Americans who reach age 65 will live into their 90s, and risk running out of money.

Income annuities, which are insurance products, are the only products that individuals can purchase to provide lifelong guaranteed income. Unfortunately, all too often income annuities were incorrectly compared in news stories -- the primary source of information about retirement portfolio-related issues for the vast majority of Americans -- to investment vehicles such as mutual funds and CDs. As a result of "apples and oranges" com-

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parisons, annuities were often thought to be inflexible and too expensive by both the personal financial media and their readers – and, therefore, have been overlooked as a critical component of a sound retirement portfolio.

As part of a national educational campaign to promote the benefits of income annuities, MetLife identified the media as a primary conduit of its messages to consumers. However, before embarking on a media relations campaign to promote the benefits of annuities to the media and an educational/marketing campaign for consumers, MetLife decided to determine the degree to which correct, incorrect and only partially correct information is included in news stories about annuities. Unlike traditional content analysis, an additional goal was the unique effort to determine the extent to which key information about income annuities was also omitted from these articles. The analysis allowed MetLife to make a connection between the extent and depth of media coverage on annuities and the consumers' understanding of the guaranteed income needed for the 20 or 30-plus years they will likely live in retirement.

This type of research is innovative because -- unlike traditional content analysis that only analyzes what is stated in each article -- a comprehensive understanding of consumer knowledge could only be assessed by understanding not only what was reported but also what was incorrectly reported, as well as what was missing in the articles overall.

The research also supported broader public relations objectives, which were to:

- Change consumers' levels of knowledge on planning for -- and living in -- retirement.
- Increase consumers' understanding about the major hazards that block them from a secure retirement: inflation, market and longevity risks.
- Raise the level of knowledge among the media on the benefits of income annuities as part of a retirement portfolio.
- Position MetLife in the national media as a thought leader on a range of retirement and savings issues and trends, with a particular emphasis on building annuity market preeminence.

There was a broad range of audiences for this research. They included the personal finance reporters who write about retirement issues and products, members of Congress and Congressional aids who sponsor or influence legislation encouraging retirement planning, and consumers who rely on the media for investment advice and retirement planning information.

The media analysis focused on all articles on income annuities that appeared in the Top 25 major market daily newspapers (*Wall Street Journal, New York Times*, etc.), personal finance publications (*Kiplinger's, Money, Smart Money*, etc.) and personal finance columns at the major business and news magazines (*Newsweek, Time, U.S. News & World Report, Fortune, Forbes, Business Week*). The initial research focused on articles that appeared in the major media from January 1, 2001 through March 31, 2003. The search yielded approximately 700 article abstracts that met initial search criteria and this was supplemented with review of select publication Web sites to ensure accuracy and completeness of the search. Based on the initial search, each article abstract was reviewed for

content to ensure relevance to analysis. One hundred ninety-six articles qualified for full review based on this first analysis, yielding 120 articles included in final analysis.

Each article was assessed for overall content, messages and tone. Articles were reviewed and analyzed to determine which messages were correctly reported, misreported and completely overlooked. The analysis was based on codes organized around four areas: (1) basic facts about income annuities, (2) misstatements about income annuities, (3) incomplete information about income annuities, and (4) omissions of basic facts about income annuities. Codes were developed in consultation with leading industry experts, including annuity experts at MetLife, as well as through a review of the articles included in the analysis. Coding was done in the "context" of each article. For example, if the article dealt with longevity risk, codes dealing with cost issues were typically not included in the analysis. This was done to ensure balanced and fair evaluation of content.

The central finding of this research determined that three in four articles on income annuities had information gaps that need to be filled. Overall, 74 percent of all articles published from January 1, 2001, through March 31, 2003 had at least one error or omission. A typical article with errors and omissions contained up to five misstatements, incomplete truths or omissions. Performance and costs were the most common categories where errors and omissions about income annuities occurred.

Another key finding was that omissions of basic facts about income annuities were even more prevalent than the inclusion of misstatements or incomplete truths. Fifty-nine percent of articles contained a misstatement or incomplete information about income annuities. By comparison, 69 percent of articles omitted a basic fact on this subject.

The findings of the research were shared with personal finance reporters at a media event entitled "Pass or Fail: What Consumers Don't Know About Retirement Income and What the Media Has Been Telling Them." The media event was held in New York and Washington, DC, in June 2003. One of the most salient examples of the success of the research was a comment by a personal finance reporter who stated that as a result of this research the reporter was not surprised by findings that Americans did not understand the issues facing retirement planning. The reporter "always tells readers not to invest in anything they do not understand" and a lack of understanding on the part of the reporter contributed to this problem.

Over the past few years, MetLife has worked with reporters at the major media and trades, who were interested in learning more about income annuities and the tools that MetLife has launched to educate consumers about the risks they face in retirement. The media has also written extensively about MetLife's suite of income annuities for different employee lifestages, including articles in *Newsweek* and the *Wall Street Journal*, among others. MetLife's media outreach efforts were supplemented with extensive, industry-wide communications and marketing campaign. These communications focused on correcting common misperceptions about annuities and educating consumers, employers, the media and Congressional leaders about the risks that individuals face in retirement and the benefits of income annuities in providing secure retirement.

In order to evaluate MetLife's media relations efforts, MetLife conducted a follow-up analysis of how information about income annuities has been conveyed in the print media

during the period immediately following the original study. A detailed analysis was conducted on coverage of this topic in major media from January 1, 2004 through December 31, 2004. These findings were compared with results gathered from 2001 through 2003, giving a complete picture of annuity media coverage for a four-year period.

During the past four years, MetLife and the insurance industry has witnessed a "sea change" in the coverage of income annuities in major consumer media. This change is in two fundamental areas: an increase in the overall volume of reporting on the topic, as well as in the accuracy of the coverage. In 2004, more reporters covered the story and their coverage was more accurate than in previous years. On average, coverage of annuities in major consumer media increased 45 percent during 2004 and the number of articles containing errors declined to 53 percent from an average of over 60 percent during the three previous years.

Even though efforts have been successful in moving the annuities story forward, some gaps continue to exist in coverage of this product. These gaps include not only errors surrounding the costs and performance of annuities, but an increasing proportion of omissions on many of these same topics. Much of this increase in omissions can be directly attributable to the corresponding increase in coverage and the continuing need to educate the media on annuities and annuity-related issues. Nonetheless, these findings reinforce the value of making sure that the coverage of this topic is both complete and accurate.

## Case History II

The Media Reality Check: An Analysis of Long-Term Care Insurance

Similar to some of the reporting of income annuities, concern has arisen within the insurance industry that much of the reporting on long-term care and long-term care insurance has been inadequate in providing the depth and accuracy of information so Americans can make informed choices when considering this purchase.

It is projected that the average American born in 2001 will have a life expectancy of 77.2 years. This is a dramatic increase of over 50 percent since 1900\*. While Americans are living significantly longer lives, they also face additional challenges that go along with this longevity. On average, it is expected that five out of every 10 adults will eventually need long-term care to assist them with the basic activities of daily living† that most of us simply take for granted.

This long-term care often requires more than simply the assistance and aid of a family member. Most Americans who need long-term care often require the services of a nursing home, assisted-living facility or an adult daycare center. These services are costly and in many instances can quickly drain all the available assets and resources of those needing this care and their families. Oftentimes, those needing care are forced to use all their resources, forgo necessary care or significantly diminish their standards-of-living.

<sup>†</sup> These activities include bathing, dressing, eating, toileting, transferring (moving in and out of a bed or chair), and continence.

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<sup>\*</sup> Source: National Center for Health Statistics, National Vital Statistics Reports, vol. 52, no. 3, Sept. 18, 2003

Today, long-term care insurance offers an alternative for individuals who may need long-term care in the future. This insurance offers a mechanism that pays for this care while preserving individual and family assets.

In the summer of 2004, before launching a proactive long-term care media strategy, the MetLife Mature Market Institute commissioned an in depth analysis of the recent coverage of long-term care insurance to determine the overall accuracy of this reporting. The objectives of this research were to evaluate the coverage of long-term care insurance and related issues in the major consumer media by determining:

- Overall accuracy of coverage
- Misstatements, if any, included in the coverage
- Presence of basic facts about long-term care insurance
- Omission of these basic facts

Just as in the annuities studies, this analysis found that six in every seven articles on long-term care insurance have gaps that need to be filled. Even more importantly, the basic definitions of long-term care and long-term care insurance as well as the benefits associated with these products are the most common categories where misstatements or omissions occurred. Thirty-eight percent of errors were the omission of the basic definitions associated with long-term care and long-term care insurance. One in four (27%) errors or omissions were about the benefits (financial as well as lifestyle) associated with long-term care insurance.

#### **Conclusions and Discussion**

The lessons learned from these cases are remarkably simple. In order for content analysis to function as a useful tool, it has to be applied in direct relation to the communications goals and objectives that the content analysis is tracking. While this seems to be a simple and obvious conclusion, the challenge is that these linkages are rarely made and when they are made, they typically only go part way in meeting this goal.

Typically even when content analysis delves deeply into published materials, these analyses fail to assume that erroneous reporting can be the primary barrier to achieving a program's communications goals. As a result, most content analysis tends to concentrate on tonality of an article rather than the fundamental correctness of the reporting. This concentration on tonality, consequently, fails to provide the information that is necessary to implement a corrective strategy with media, which can in turn result in an increase in accurate and appropriately positioned messages.

The recent cases involving research on behalf of MetLife are some of the few examples where a concentration on the accuracy of coverage has been applied in content analysis and, as the results demonstrate, implementing the findings from the initial analysis can create measurable improvements in both the quality and accuracy of the coverage as well as the overall volume.

As these cases showed, between 60 percent and 85 percent of articles on the key issues of concern to MetLife included an error in reporting, a misrepresentation of key information or an omission of basic information that should have appeared in the contexts of the articles in question. By concentrating media relations efforts on those reporters and publica-

tions where these errors and omission in reporting occurred, the eventual result was a significant decline in the proportion of articles with either errors or omissions as well as an overall increase in the number of articles by 45 percent on the issue at hand. While tonality was not a part of this analysis, the overall effect was that reporting on the issues was much more favorable and more in line with MetLife's media relations goals.

The key conclusion drawn from these studies is that shifting the analysis to determining the accuracy of reporting can offer significant benefits that are not available when only tonality is considered. However, this approach has some significant limitations, particularly in comparison with more traditional forms of content analysis.

The primary factors that limits the application of this form of content analysis are the need for in-depth knowledge of the issues in order to determine both erroneous and omitted messages as well as the skill level required to code each article not only for the presence of correct and incorrect messages, but also to determine when basic messages should have been included. This latter factor is particularly critical since it requires that the reader understand the full context of the article in order to code accurately. To date, artificial intelligence systems do not have the capacity to make these determinations. Consequently, high skilled human coders are required to perform these assessments.

However, human coders need to be rigorously trained and supervised in order to analyze the content both correctly and consistently. In addition, it is highly desirable for these coders to have an intimate knowledge of the issues at hand in order to correctly identify errors in reporting as well as omissions of basic information that should have been included in the article. Without this training and skill sets, the findings from this research will be highly unreliable and inconsistent.

As a result, the costs for this type of analysis are much higher than other forms of analysis. However, the return in a significantly improved quality of media relations as a result of this approach strongly justifies the investment, particularly on the types of products and issues discussed in the case histories on which the article is based. The end result: The overall results demonstrate substantially higher return than using other methods of content analysis specifically because the analysis concentrates on tying the objectives of the media relations to the content analysis.

The views expressed are solely those of the authors and are not necessarily shared by MetLife.

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