

Toward an Understanding of How News Coverage and Advertising Impact Consumer Perceptions, Attitudes and Behavior

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Abstract

Assessment of the impact of news coverage and advertising on consumer perceptions is typically managed by different organizations within large companies, or by different advertising and media relations agencies. Consequently, very little work has been done to understand whether and how these two forms of communication interact. If we can understand how news coverage interacts with other forms of marketing communications we will be in a position to develop even more effective and efficient communications plans. The studies reported here have taken some first steps toward understanding the conditions under which news coverage interacts with advertising to impact marketplace attitudes and perceptions.

Toward an Understanding of How News Coverage and Advertising Impact Consumer Perceptions and Attitudes

Introduction

Most large companies are covered by the news media every day. These same companies very often also have advertising in the marketplace. Each of these two forms of mass communications has been studied extensively. Numerous studies (Zillman *et.al.* 1992; Gibson and Zillman 1993; Valkenburg *et.al.* 1999; Miller and Krosnick 2000; Vergeer 2000) have demonstrated that news portrayals of organizations and groups influence readers' and viewers' perceptions of the groups being covered. Advertising research (Bass & Clarke 1972; Ehrenberg 1974; Batra and Ray 1985; Aaker *et. al.* 1986; Vaughn 1986; Bharadwai *et. al.* 1993) similarly has demonstrated its ability to influence consumers' perceptions and attitudes.

There are many important differences between news and advertising, including the extent to which messages are company-controllable, the extent to which the same message will be repeated, relative credibility, etc.; and there are many theories about how each of these forms of mass communications influences readers and viewers. At the same time, little attention has been given to how these forms of communication interact to influence people's perceptions, attitudes and behaviors. There are several reasons:

- *Lack of contact between organizations.* Media relations and advertising, as corporate functions, usually are managed by different organizations. These organizations typically have little contact with one another, let alone share joint planning or research.
- *Use of outside agencies.* Many companies hire specialized agencies to create their advertisements and manage media relations. These companies are highly motivated to please their direct clients and have no incentive to look across disciplines.
- *Advertising dominates current discussions.* The *status quo*--that advertising dominates discussions of marketing communications--is supported both by advertising and, inadvertently, by public relations organizations.

Advertising has a vested interest in maintaining the *status quo* because they typically command the largest share of communications dollars. There is nothing to gain from looking for viable alternatives to advertising. Further, there is an entire supporting industry of advertising research which similarly has a

vested interest in keeping the spotlight on advertising vs. other forms of communication.

Public Relations practitioners too contribute to maintaining the *status quo*, although inadvertently. For decades PR practitioners have concentrated on their craft as if it were the only form of communications used by companies. They paid little attention to the concept of evaluation until increasing calls for accountability sparked greater interest in tools for measuring the effectiveness of media relations and of PR's contribution to achieving corporate goals. Most companies are still developing these tools and have not yet gotten to the question of how news might interact with advertising.

Understanding how news and advertising interact is important, from two perspectives. From a business management perspective, this understanding would enable a company to develop optimally-effective integrated communications plans and to allocate resources appropriately. From a theoretical perspective, there is the promise of deepening our understanding of how people integrate messages received from different forms of mass communication.

This paper is based upon research conducted in the late 1990's by AT&T's Public Relations research department under the directorship of the author. It describes how we approached investigating whether and how news coverage and advertising interact to influence people, and is presented here in the hope that others will extend this work and our understanding of this important issue.

Four studies

In the late 1990's AT&T conducted a series of four increasingly sophisticated studies to understand how news coverage and advertising contribute to consumers' attitudes and perceptions:

1. Linking media coverage to brand loyalty.
2. Linking news consumption and advertising awareness to attitude change.
3. Linking news coverage and advertising to perceptions about "slamming."
4. Attributing customer acquisitions to news coverage.

Study #1

Linking media coverage to brand loyalty.

Background

This initial study used data collected for other purposes—*i.e.*, media tracking data to understand how AT&T is portrayed in the news and survey research data to understand the effectiveness of our advertising—to look at how news and advertising interact. Our objective was to explore the possibility that news has a measurable effect on desired outcomes over and above advertising.

Basically, we selected two events--one very positive for AT&T, the other very negative--and look at correlations between level of news coverage and measures of consumer loyalty and brand perceptions. We hypothesized that the heavy news coverage of the positive event would “boost” outcome measures over levels we could expect otherwise. We also hypothesized that the heavy news coverage of the negative event would “depress” outcome measures.

Methodology

Sample. We selected as our sample “high value customers”, a market segment that are heavier consumers of news, more attentive to media in general, more involved in the category (*i.e.*, above-average spending on a mix of communications services), and more price-sensitive than other consumers.

Media tracking and analysis data. AT&T maintains an ongoing system of news coverage monitoring and analysis that covers a broad range of general and specialized news media, including print, broadcast, and the Internet. This system tracks several aspects of news coverage: content, favorability/unfavorability, story length, placement, size of headlines and several other factors related to gaining and retaining attention. The system attaches to each story a circulation figure, roughly equivalent to the advertising world’s “number of impressions”.

The analyses reported here focused on general news print publications in 1997, a period for which we had both media and survey data, and used two media variables: favorability and impressions. (Subsequent analyses incorporated other variables.)

Ad.Visor advertising effectiveness data. AT&T’s Ad.Visor advertising effectiveness study is a continuous tracking survey that monitors AT&T and competitive customer loyalty, brand imagery and advertising recognition. We have developed a proprietary customer “loyalty index” that has two components, analyzed separately in this study:

- *Chip allocation*--a question that asks respondents to allocate 10 points (chips) across providers to indicate how likely they would be to choose each as their long distance service, if they were to decide today; and
- *Attribute ratings*--a small number of questions shown in previous research to correlate with consumer behavior and tap important attitudes and perceptions about AT&T and its services.

Events. Based upon our media content analysis data we selected a number of 1997 events that received heavy media attention. We identified two-week periods surrounding these events and developed bi-weekly figures summarizing the number of favorable and unfavorable articles, multiplied by their circulation. This allowed us to identify AT&T's most important positive and negative stories of 1997. We selected for analysis one positive and one negative event, both of which received far greater-than-average news coverage:

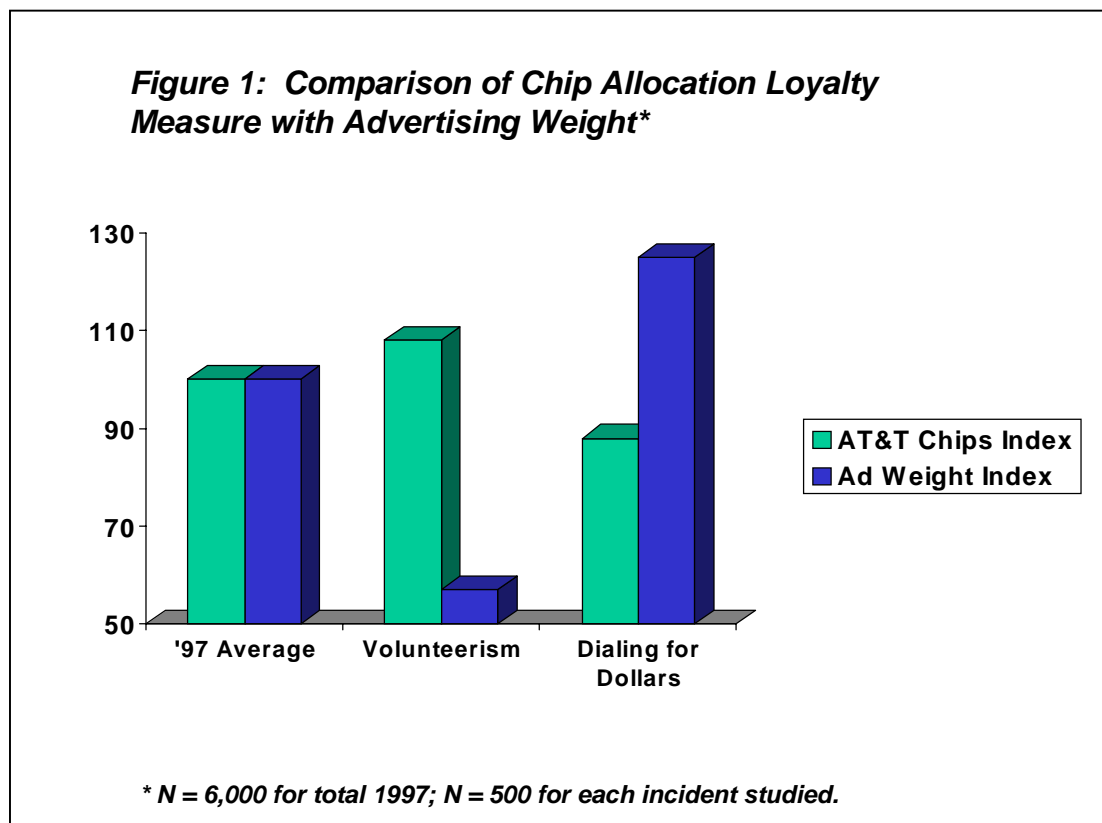
- *Positive event: President's Summit on Volunteerism.* This Philadelphia conference promoting volunteerism garnered widespread media coverage. It featured several past U.S. presidents, luminaries such as Colin Powell and business leaders including AT&T CEO Robert Allen--all on the podium simultaneously. Many public commitments were made concerning how business, government and community organizations were all going to work together to address key social issues through volunteerism. AT&T enjoyed considerable positive news coverage concerning its role in the summit, its track record on employee volunteerism, and its continuing commitment to this area.
- *Negative event: "Dialing For Dollars."* In late 1996, in response to customers' desire for easier-to-understand rates, AT&T brought to market a simplified pricing plan: One rate for all calls at all times. However, in early 1997 many negative media stories appeared citing cases where individuals had called AT&T to discuss the plan and were quoted different prices. Some stories said that if consumers were persistent they could get even better rates out of AT&T. Many of the articles gave the impression that AT&T was less than forthright with consumers. One article summarized the whole affair as "Dialing for Dollars."

Establishing the baseline. In order to identify any effects of news coverage over and above advertising we needed a baseline. We conducted a regression analysis on 1997 survey data using as the independent variable gross advertising points (GRPs, a measure of advertising weight—i.e., how much advertising is "out there"), and as dependent variables the outcome measures of loyalty and brand imagery (chip allocations and attribute ratings). This step confirmed that advertising weight has a significant effect on loyalty and brand perceptions, and yielded numerical relationships between amount of advertising and loyalty measures—i.e., for any level of advertising we can generate an expected level of chips or attribute ratings.

Findings

Chip allocations. Our first analysis compared expected and observed chip allocation scores—a loyalty rating—for the two events, and found significant differences in the anticipated directions.

The first columns of Figure 1 show AT&T's average chip score during all of 1997, indexed to 100, and the average advertising weight for the year, also indexed to 100.



Looking at the positive event, Volunteerism, the advertising weight was well below average. Therefore, we would expect a similarly below-average level of chip allocations. This was not the case. In fact, chip allocations were above average, suggesting that there was something else going on in the marketplace driving the chip allocations. We hypothesized that this “something else” was the extended very positive news coverage.

Looking at the negative event, Dialing for Dollars, advertising weight was higher than average, leading us to expect that chip allocations too would be higher than

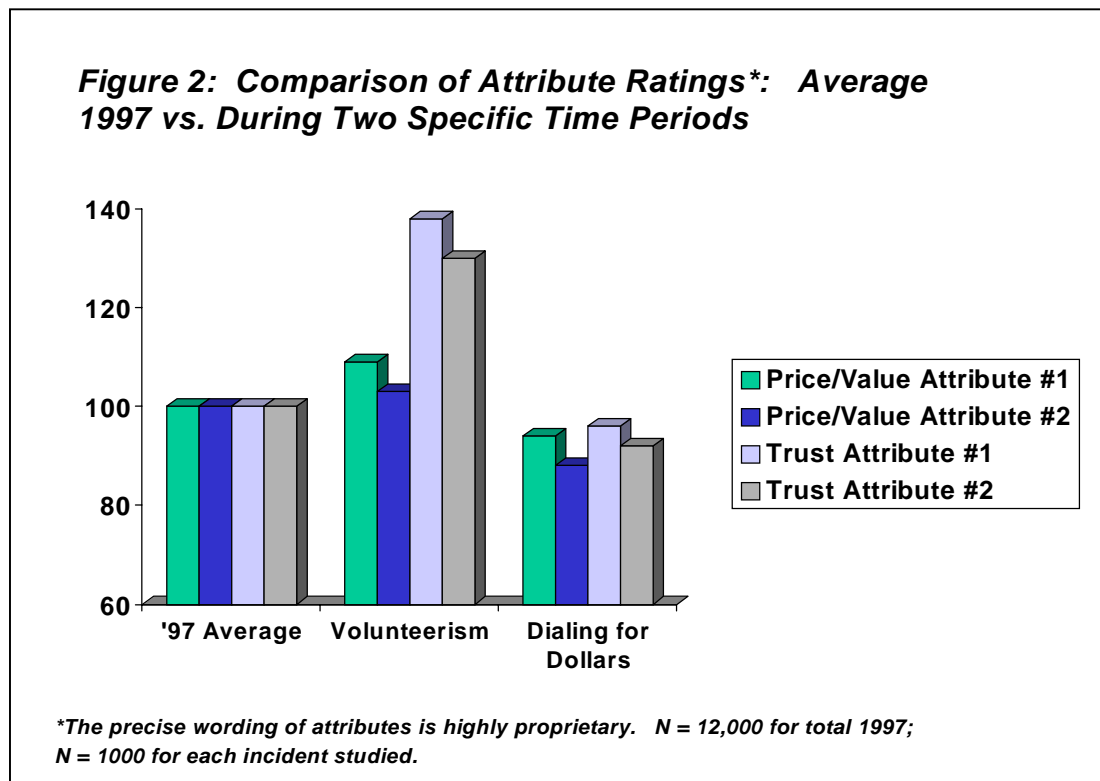
average. They were below average, again suggesting that something else was driving the chip allocations—presumably the extended very negative news coverage.

These correlations, of course, do not prove that the news coverage caused the observed loyalty ratings; but they are consistent with the hypothesis that news coverage does have an impact over and above advertising.

These patterns suggest the intriguing possibility that in a period of lighter advertising PR can compensate to support loyalty; or to venture even farther, in periods of heavy positive news coverage less advertising may be needed. The “negative” possibilities are equally provocative: First, that heavy advertising cannot compensate for bad news coverage, and so is wasted; and that heavy advertising during a time of negative publicity could make matters worse by focusing consumers’ attention on the company.

Attribute ratings. The next analysis looked at the relationship between news coverage and key attribute ratings associated with brand loyalty, adjusted for advertising weight. Two of the variables represent a price/value dimension and two cover aspects of trust.

Figure 2 shows that both trust and price/value attributes moved up significantly during the positive Volunteerism coverage, and turned down during the negative Dialing For Dollars coverage. This is consistent with the hypothesis that news has an impact independent of advertising.



Study #2

Linking news consumption and advertising awareness to attitude change.

Background

The second study focused on the possible effects of extensive positive news coverage, as experienced by AT&T in the fall of 1998. Our new Chairman was making deals that the Press and Wall Street found innovative and highly encouraging. Our stock price was soaring, nearly doubling over the last two quarters of 1998. Those who followed the news received an extremely positive portrayal of the company.

Our basic approach was to compare ratings on ten important attitudinal dimensions for heavier and lighter consumers of news. We hypothesized that people who were more exposed to this very positive news coverage would be more positive in their attitudes about AT&T than those who had less exposure.

Methodology

Sample. Again, we selected as our survey sample “high value customers”, a segment more exposed to news than other consumers.

Attitudinal and advertising awareness data. The attitudinal dimensions examined in this study were taken from our ongoing consumer tracking study, which includes a number of key attitude and perception items known to correlate with consumer behavior. Advertising awareness was also taken from our ongoing consumer tracking study.

News consumption data. We did not have media consumption questions in our ongoing consumer survey during this time period. In the spring of 1999 we re-contacted a sample of respondents whose attitude and perception data had been collected the previous fall.

The re-contact survey included a series of news consumption questions. Adding these data to respondents’ previous attitude and perception data yielded a set of data for the same individuals that included news consumption, advertising awareness, and key attitudes and perceptions.

From the news questions we created a news consumption index, computed a score for each individual, and identified the median for the entire sample. Those above the median were classified as heavier news consumers and those below as lighter news consumers.

Findings

Heavier vs. lighter news consumers. As can be seen in Figure 3, heavier viewers gave higher ratings on all attributes than lighter viewers. In many cases these differences were significant at the 95% level. We re-ran the analysis controlling for education and income, and found a similar pattern of results.

Figure 3: AT&T Attribute ratings, by heavier and lighter news consumption.

	<u>Heavy</u> N=200	<u>Lighter</u> N=200
Value	59%	41%
Ubiquity	70	66
Prices	62	54
Innovation	65	57
Billing	48	42
Reputation	55	45
Trust	68	46
Service	54	47
Quality	75	64
Simplicity	49	36

Significantly different from "Lighter" news consumers.

These data suggest that exposure to prolonged and highly positive news coverage can positively impact consumers' attitudes toward and perceptions of a company. The fact that the findings held up when controlling for education and income further encourages us that it is indeed the news coverage that accounts for the observed differences between groups.

Interaction of news and advertising. Returning to the question of how news coverage and advertising interact, we further cut our data by those aware and unaware of our advertising. Figure 4 shows that among lighter news consumers our advertising had the expected effect; *i.e.*, those aware of the advertising gave higher ratings than those unaware of the advertising. However, this was generally not true among heavier news consumers for whom

advertising seems to have contributed little or nothing above the impact of the news coverage.

Figure 4: Attribute ratings among heavier and lighter news consumers, by those aware and unaware of AT&T advertising.

	<u>Heavier News Consumers</u>		<u>Lighter News Consumers</u>	
	N=200*		N=200	
	<u>AT&T Ad Aware</u>	<u>Not AT&T Ad Aware</u>	<u>AT&T Ad Aware</u>	<u>Not AT&T Ad Aware</u>
Value	57%	63%	45%	38%
Ubiquity	71	74	71	64
Prices	61	60	62	48
Innovation	68	59	63	52
Billing	48	48	47	38
Reputation	49	63	49	45
Trust	67	69	58	41
Service	55	55	51	45
Quality	75	75	67	61
Simplicity	49	47	41	33

Significantly different from "Lighter News Consumers" and "Not Ad Aware" group.

* N's for ad aware and unawares cannot be provided for proprietary reasons.

Study #3

Linking news coverage and advertising to perceptions about "slamming."

Background

Our third study focused on the impact of news stories about "slamming," the unscrupulous practice in which one's long distance provider is changed without one's permission.

Our ongoing media content analysis study found that during 1998 about half the many media stories dealing with slamming were positive and half were negative. This was surprising, as we had anticipated mostly negative coverage. The positive stories typically dealt with how companies who had been involved with slamming were taking steps to eliminate the practice. AT&T had received extensive of its anti-slamming initiatives.

Given the balanced coverage we hypothesized that the news coverage would not have a negative impact on attitudes.

Methodology

Sample. Again, we selected as our survey sample “high value customers” who had responded to our ongoing consumer tracking survey during the fall of 1998. This segment was more exposed to news than other consumers.

Advertising awareness data. These data were taken from the same consumer tracking survey.

Attitudinal data about slamming. We built into the re-contract survey described for Study #2 several questions about slamming, including awareness of slamming, exposure to media stories on the topic, and perceived impact of slamming stories on perceptions about the companies involved.

Findings

Awareness of slamming. About 50% of our high value segment was aware of the issue. This proportion is high but not unexpected, given that this market segment is highly involved in the category.

Impact of slamming stories. Based on the balanced media coverage, we were surprised by consumers’ reports about its impact on their attitudes. Thirty-nine percent of those who were aware of the slamming issue and had seen media coverage said that such stories had a “great deal” of negative impact on their feelings towards the companies involved; 48% said they had “some” negative impact; and only 13% said the stories had either no impact or some degree of positive impact.

Interaction of news and advertising. To understand how news coverage of slamming might be interacting with our advertising we looked at respondents who were aware vs. unaware of slamming stories (about 50% in each group) and broke them down further into those aware and unaware of our advertising. We then examined the same attribute ratings for these groups.

In Figure 5, looking first at those unaware of the slamming stories (right-hand columns), we find the expected pattern of advertising exposure being associated with higher ratings. Looking at comparable data among those who were aware of the slamming stories the expected pattern is not found: advertising exposure is not associated with higher ratings. In some cases scores were actually lower for those aware of both slamming stories and advertising, although generally not significantly.

This suggests the following interpretation: When respondents who were negatively affected by the slamming stories encountered our advertising it reminded them that this was one of those companies involved in slamming, and the usual positive impact of our advertising was undermined or reversed.

Figure 5: Attribute ratings among consumers aware and unaware of slamming stories, by those aware and unaware of AT&T advertising.

	Aware of "Slamming" Stories And Felt "Slamming" Has Some/Great Impact		Not Aware of "Slamming" Stories	
	N= 192		N= 208	
	AT&T Ad Aware	Not AT&T Ad Aware	AT&T Ad Aware	Not AT&T Ad Aware
Value	45	46	55	47
Ubiquity	60	60	73	64
Prices	42	47	65	46
Innovation	52	53	66	51
Billing	40	41	50	42
Reputation	44	52	50	49
Trust	40	49	61	50
Service	41	40	50	44
Quality	60	62	73	63
Simplicity	33	34	45	35

Significantly different from "Not aware of Slamming" and "Not Ad Aware" group

Study #4

Attributing customer acquisitions to news coverage.

Background

Our fourth and final analysis drew upon the marketing mix modeling work AT&T was pursuing in the late 1990s. One of the models we built dealt with "acquisitions;" *i.e.*, people who sign up for AT&T long distance service. The model included several marketing mix elements such as advertising and direct mail, but had not included news coverage until the PR research group became involved.

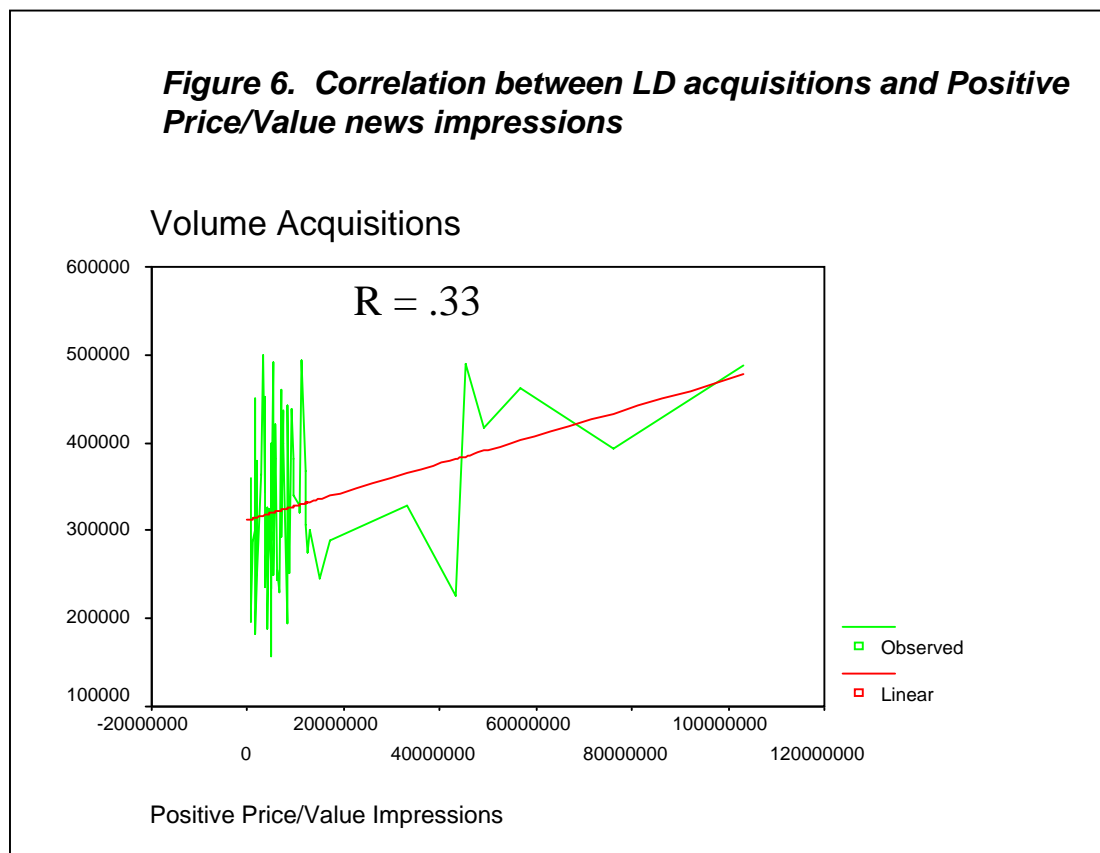
Methodology

In the fall of 1999 we added our data on news coverage to the acquisitions model. For the analysis reported here weekly news coverage data was input for the time period of June 1998 through May 1999. We broke down the news coverage data

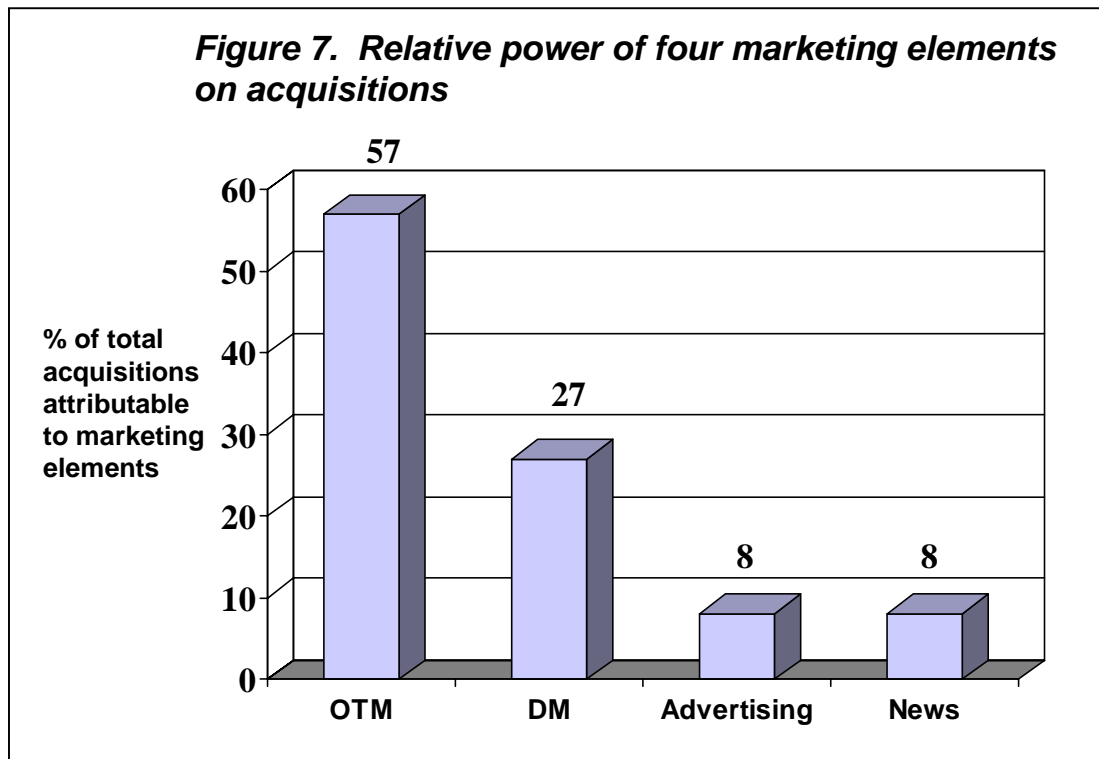
by topic--e.g., price/value stories, management stories, product/service stories--and input each of these data streams to the model as well.

Findings

The strongest correlation noted was an R of .33 between acquisitions and positive price/value news story impressions. (See Figure 6.)



Percent of acquisitions attributable to news. Our model also allowed us to compare the relative “power” of each marketing effort in effecting acquisitions. Our analysis included outbound telemarketing, direct mail, advertising and positive price/value news coverage. While all of these efforts together show a strong positive correlation with acquisitions, the correlation was not perfect because the nature of the offers AT&T was making played a very large role. Still, we were able to calculate the number of acquisitions accounted for by each of the four marketing elements. Setting the total acquisitions accounted for by all four elements at 100%, Figure 7 shows the relative power of each element.



Much of the pattern shown in Figure 7 was very familiar to AT&T's marketing people. OTM was found to be the most powerful approach (57%), followed by DM (27%) and then advertising (8%). But the analysis also showed, for the first time, that news coverage plays a role in acquisitions, and that in this case news appears to have the same level of impact as advertising.

Conclusions and Implications

These studies represent first steps toward understanding the conditions under which news coverage interacts with advertising to impact marketplace perceptions, attitudes and behaviors. The data available to us do not permit drawing conclusions as to causality; however, the overall pattern of our findings indicates that both advertising and news coverage are impacting consumers.

Our conclusions are:

- ❖ Overall, advertising and news coverage each has its own impact on consumers, and these impacts interact to influence perceptions, attitudes and behaviors.

- ❖ The news environment modulates the impact of the advertising:
 - In times of “normal” news coverage – *i.e.*, mostly positive with some negative-- news and advertising work together, and incremental advertising has a positive impact on attitudes.
 - In times of widespread and extremely positive news coverage, the incremental positive impact of advertising is much less than in normal times.
 - In times of widespread and extremely negative news coverage, incremental advertising does not have a positive incremental impact, and may even have a negative effect.
- ❖ News coverage can have a substantial impact on consumers, on a par with advertising.

If these conclusions are correct, they have two significant implications:

1. Management of both media relations and advertising would benefit from closer communication. Such communication would make it possible to turn up or down advertising in relation to the current extent and quality of unpaid news coverage. This could save a company money and deliver more powerful marketing communications.
2. News coverage can substantially impact the huge investment a company makes in various forms of paid marketing communications. Therefore, expert management of media relations is of critical importance to protect and leverage this investment.

More work is needed to investigate the combined impact of news and advertising. We need to extend studies like those reported here to other industries to see if the same relationships hold. We need more rigorous studies specifically designed to investigate these issues.

If we are to have truly integrated marketing communications plans, we need to bring together the worlds of public relations—particularly media relations-- and advertising. Messages from both worlds combine in the minds of consumers. It is time that we started to understand how this works.

References

Aaker, D., Stayman, D., and Hagerty, M., "Warmth in advertising: Measurement, impact and sequence effects," *Journal of Consumer Research*, 12 (March), 365-81, 1986.

Bass, F., and Clarke, D., "Testing Distributed Lag Models of Advertising Effects," *Journal of Marketing Research*, 9 (August), 298-308, 1972.

Batra, R., and Ray, M., "How Advertising works at contact," in Psychological Processes and Advertising Effects, Linda F. Alwitt and Andrew A Mitchell, eds. Hillsdale, NJ: Lawrence Erlbaum Associates, 13-44, 1985.

Bharadwaj, S., Varadarjan P., and Fahy, J., "Sustainable competitive advantage in service industries: A conceptual model and research proposition," *Journal of Marketing*, 57 (October), 83-99, 1993.

Ehrenberg, Al, "Repetitive advertising and the consumer," *Journal of Advertising Research*, 14 (April), 25-34, 1974.

Gibson, R., and Zillmann D., "The impact of quotation in news reports on Issue perception," *Journalism Quarterly*, 70 (Winter 1993); 793-800.

Miller, J., and Krosnick, J., "News media impact on the ingredients of presidential evaluations: Politically knowledgeable citizens are guided by a trusted source," *American Journal of Political Science*, Vol. 44, No. 2, April 2000, pps. 295-309.

Valkenburg, P., Semetiko, H., and DeVreese, C., "The Effects of News Frames on Readers' Thoughts and Recall", *Communication Research*, Vol 26, No. 5, pps 550-569, Sage Publications, 1999.

Vaughn, R., "How advertising works: A planning model," *Journal of Advertising Research*, 20 (October/November), 27-33, 1986.

Vergeer, M., "Exposure to Newspapers and Attitudes toward Ethnic Minorities: A longitudinal analysis," *The Howard Journal of Communications*, 11:127-143, 2000.

Zillmann, D., Perkins, J., and Sundar S., "Impression-formation effects of printed news varying in descriptive precision and exemplification," *Medienpsychologie*, 3, 168-185, 1992.