

**Out of Home Advertising Effectiveness
and Return of Investment (ROI)**

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Outdoor Advertising Association of
America, Inc.

Out of Home Advertising Effectiveness and Return of Investment (ROI)

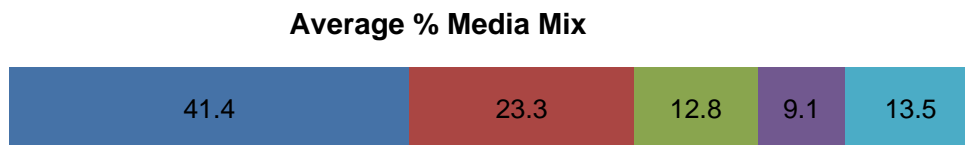
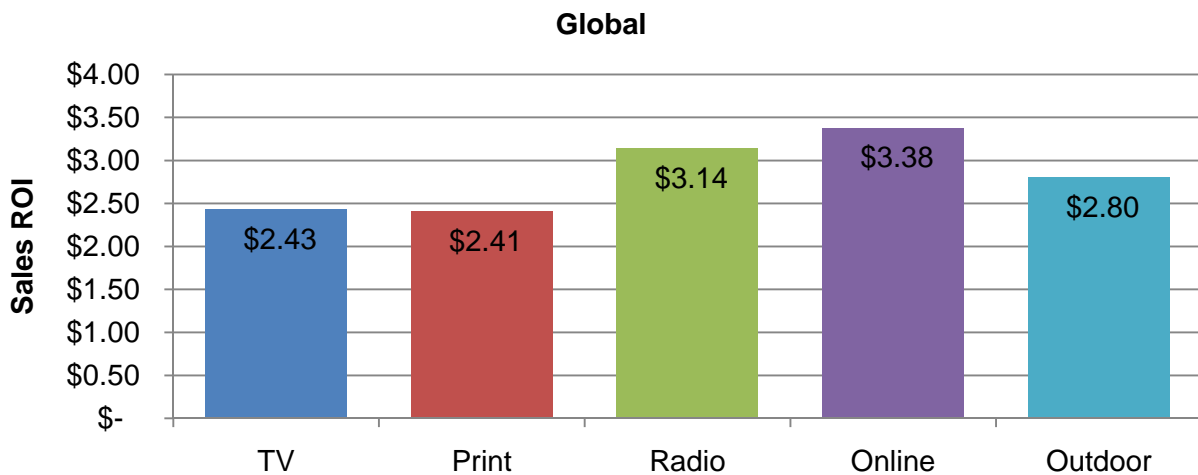
Global ROI Analysis

Over the past three years, the British media research firm BrandScience analyzed over 600 econometric case studies to gauge the impact of out of home on sales results. These case studies represent national and local campaigns from Australia, Denmark, Finland, Germany, Norway, Sweden, UK, and the United States. The information provides an international trend analysis on ROI with quantitative insights demonstrating how different media drive sales independently and in a media mix. It is a statistical analysis process which identifies and measures the inputs that have caused something to change.

The information is used to provide insights about how out of home advertising works relative to other media, independently and in synergy with other media.

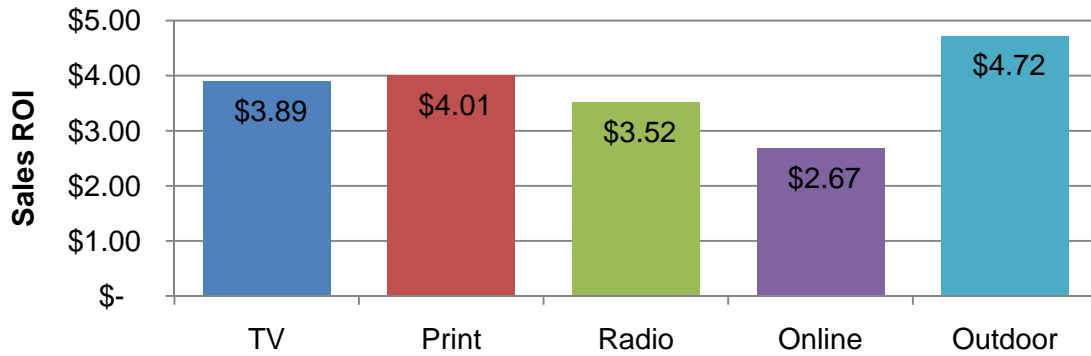
First, BrandScience identified and collected key data from the case studies. They then determined which factors are statistically significant and the magnitude of each factor's impact on sales. After analyzing these case studies, BrandScience found out of home advertising has a high return on investment (ROI) across all categories. For information on econometrics, please see Appendix I on page 12.

On a global scale, BrandScience found for each dollar spent on out of home advertising, an average of \$2.80 was received in sales. Television and print advertising have a lower ROI, yet receive a greater share of the dollars in the average media mix.

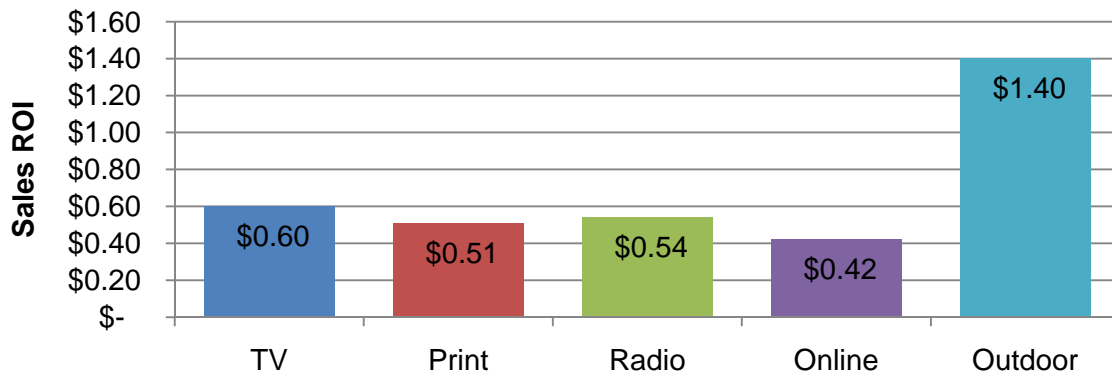


Out of home advertising has a particularly strong sales effect for telecommunications, media, retail, and travel advertisers. If production costs are taken into account, out of home advertising's ROI would be even better compared to costly media, such as TV.

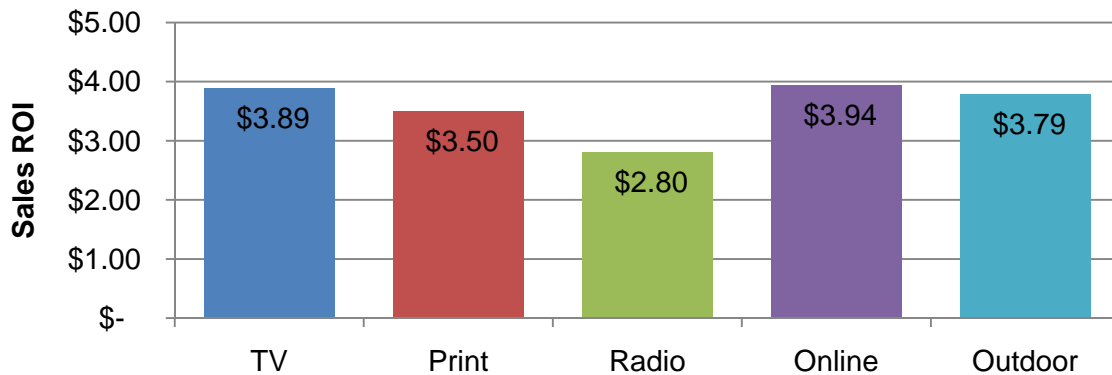
Telecom

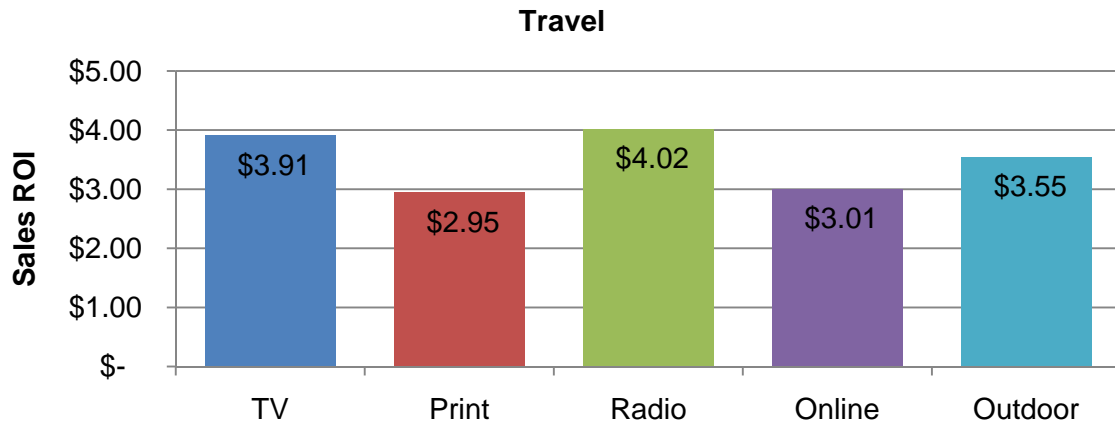


Media

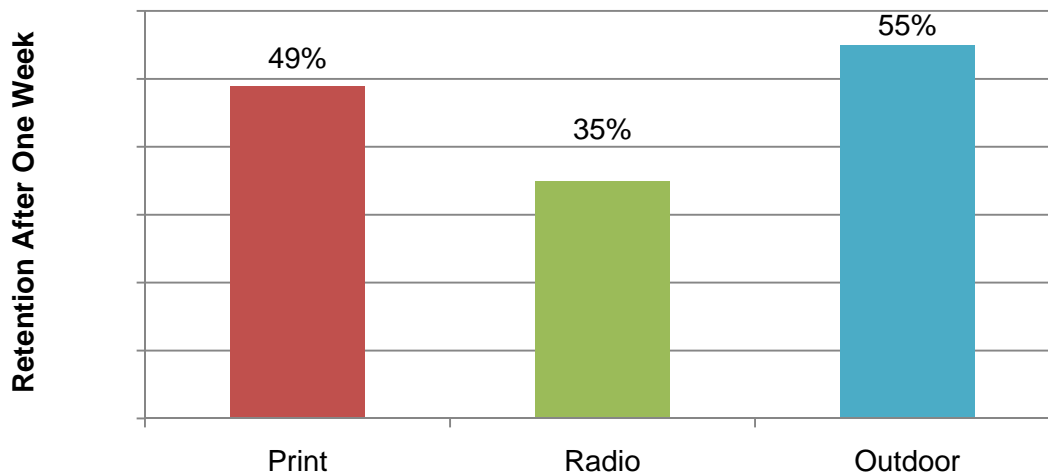


Retail





BrandScience also found for each week after an out of home campaign, there is an average of 55 percent retained, beating print and radio.



US ROI Analysis

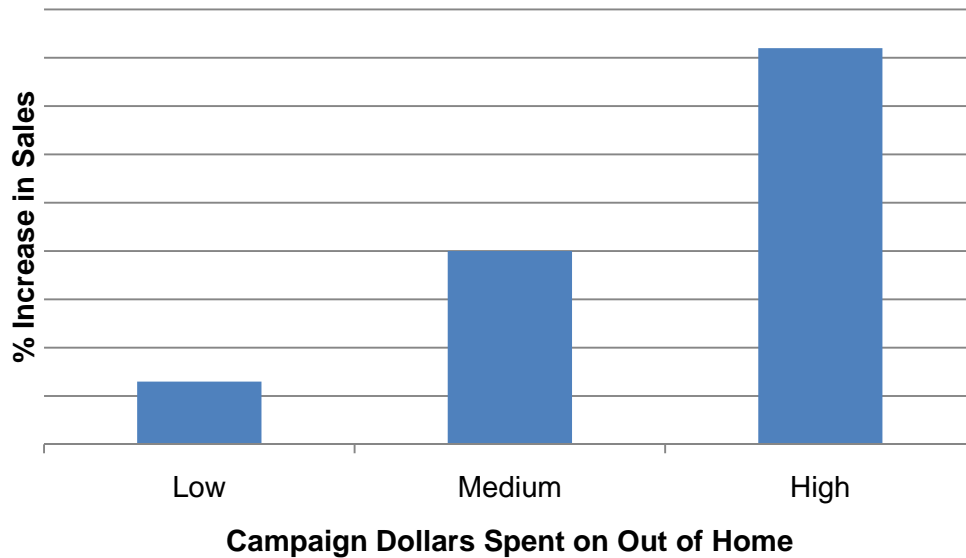
Looking specifically at the United States, BrandScience analyzed 43 case studies featuring out of home advertising from the World Advertising Research Center (WARC) database, which features campaigns entered into awards programs for effectiveness. While not all of these campaigns were award winners, they were effective -- cases featuring out of home had a higher sales effect. BrandScience also found when there is a higher proportion of out of home in the mix, effectiveness increases.

This may be due to two factors:

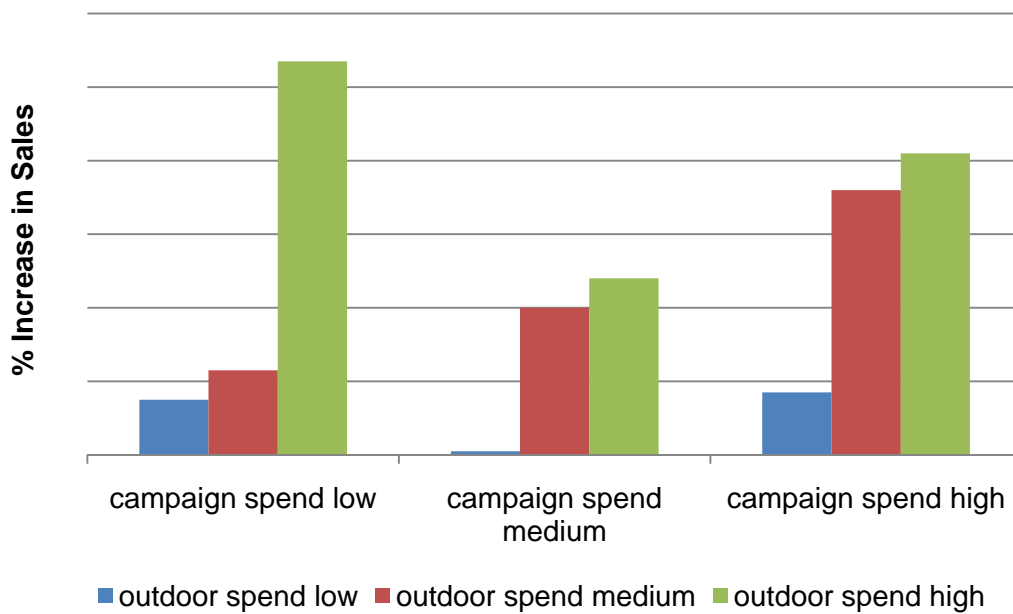
1. Out of home advertising is an effective reach medium.
2. When used in combination with other media, out of home not only extends the reach, but also reinforces an advertising message.

According to BrandScience, the percentage increase in sales triples when campaign spending on out of home advertising moves from a low amount to a medium amount. Sales more than double when a high amount is spent on out of home. BrandScience found the optimal return on investment is gained when a campaign's overall ad spend is low, but the proportion of out of home in the media mix is high.

Sales Increase By Out of Home Usage In Media Mix



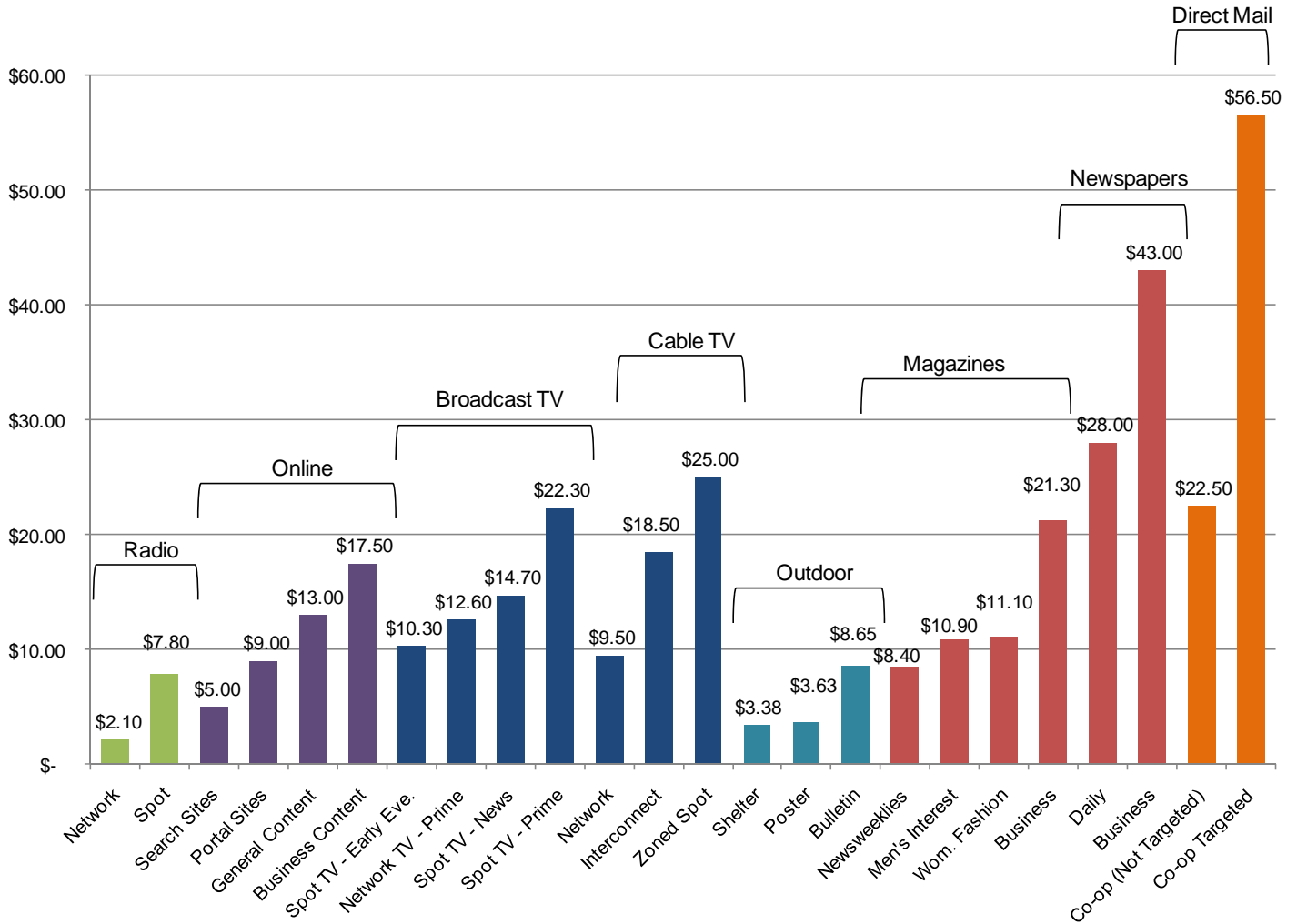
Sales Increase by Out of Home Proportion of the Media Mix



Out of Home Proportion of the Media Mix

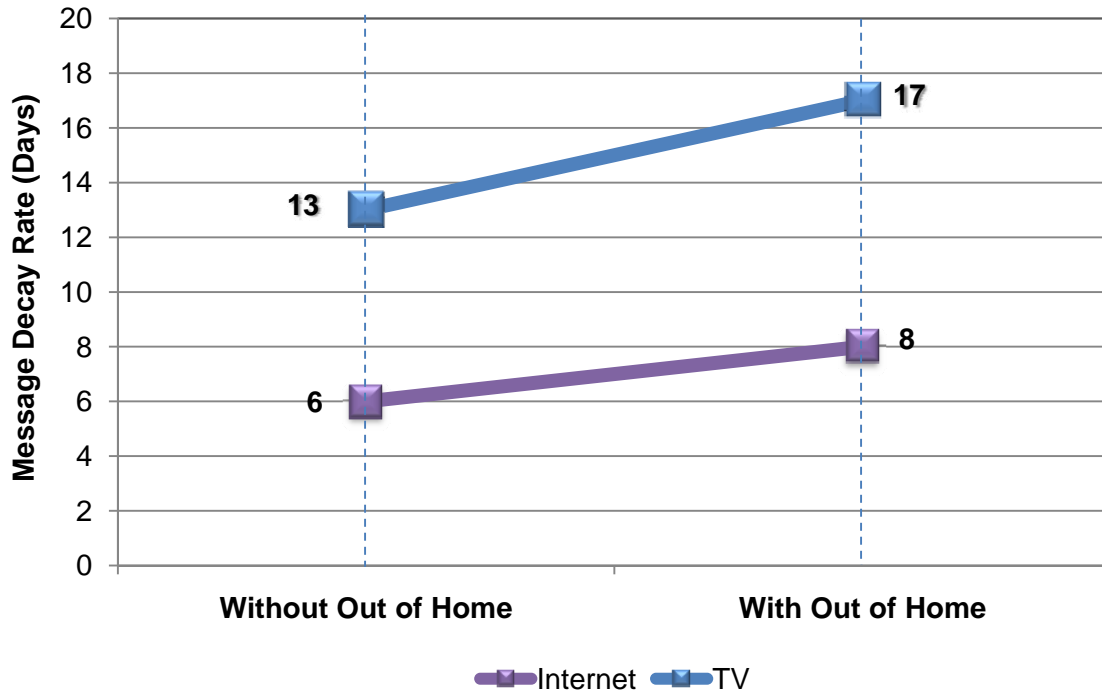
Out of home advertising lowers the cost of an advertising program. The chart below shows the relative costs of one thousand impressions (CPM) among adults 18+ for major media.

CPM Comparisons of Major Media



Source: Wells Fargo Securities, 2007-2008, Nielsen Out of Home Figures, 2011

Using out of home in combination with other media improves the decay rate, or time it takes for a person to forget a campaign's advertising message. This works particularly well for TV and online advertising. When out of home advertising is included, the retention rate increases by several days.



Not only is the campaign effective for a longer period of time, but according to the 2010 study, *How Out of Home Advertising Works*, by MarketShare Partners and Clear Channel Outdoor, out of home advertising is 47 percent more effective when online carryover is taken into account.

For example, a person sees a product advertised on a billboard, which leads them to research the product online, where the consumer is exposed to targeted online ads, and then purchases the product. While this may be attributed to Internet advertising, out of home's indirect effect should be noted.

Individual Campaign ROI Analysis

Overall, out of home media has shown to be effective in producing consistent ROI results compared to other media, both globally and nationally. Similar results are evident when considering specific brands.

BrandScience conducted a detailed ROI analysis of a prominent hotel chain.

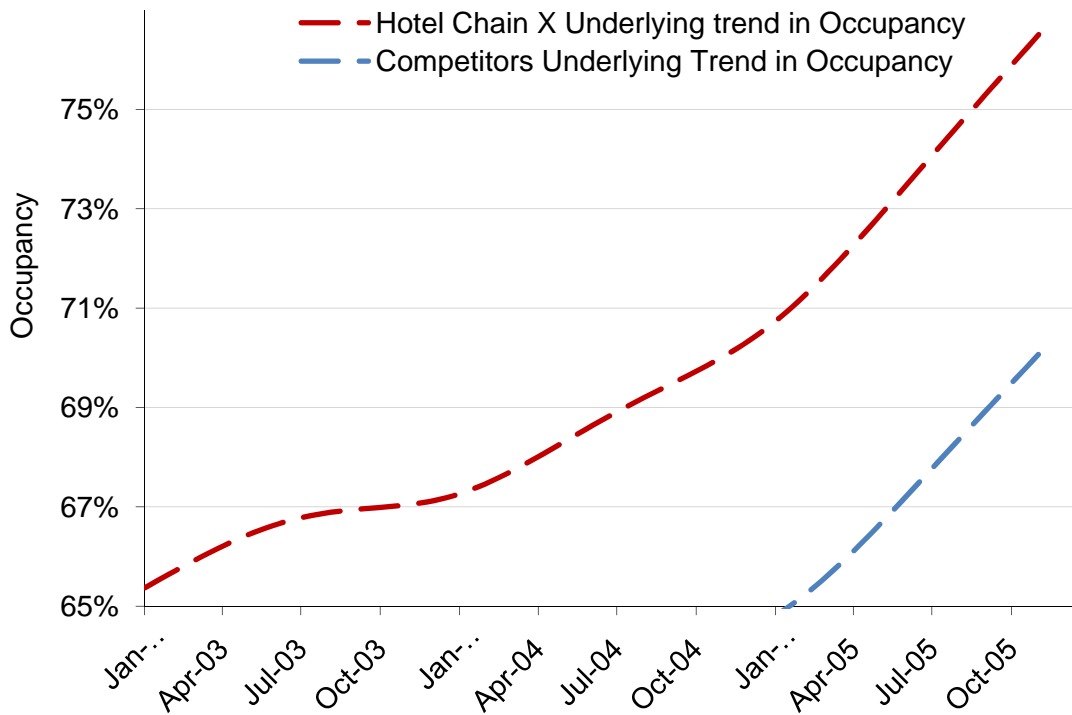
- Hotel Chain X was a successful brand with an expanding portfolio of properties which advertised across a range of media.
- At the end of 2005, Hotel Chain X saw that the hotel industry as a whole had enjoyed significant growth since 2003 and Hotel Chain X's sales performance had been comparable to the overall market.
- In view of this, there was a perceived need to assess the effectiveness of the marketing activity Hotel Chain X had undertaken to ensure that it had made a contribution to sales.
- Three key performance indicators were chosen and statistical models were built to estimate the effects of marketing activity:
 - Occupancy – the % of hotel rooms in use
 - ADR – the average daily rate charged for hotel rooms

To quantify the impact of marketing, statistical models were built to estimate the effect on the individual performance indicators of different marketing activities. These models work by relating the change in an influencing factor – such as television advertising, out of home advertising, or improvements to the hotels themselves - to the change in the measured indicator, while taking into account all other influencing factors. See Appendix I on page 12 for a detailed explanation of the modeling.

The models analyzed multiple variables to look at the relationships over time as opposed to cross-sectional, which would typically look at the relationship across markets. All effectiveness findings/ROI figures developed were estimated from model coefficients that were statistically significant at a 95 percent confidence level.

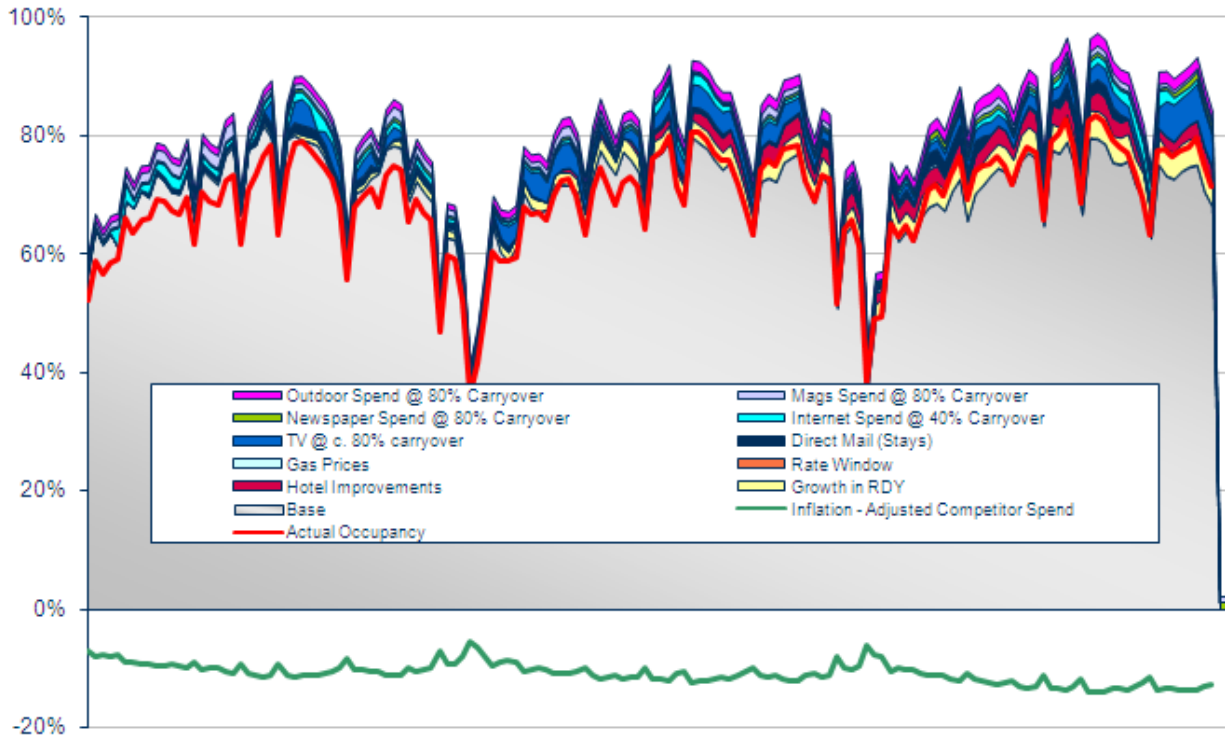
Over the period, Hotel Chain X improved its occupancy rate significantly over its competitors, although those competitors were engaged in the same types of activity as Hotel Chain X during this period. The occupancy model demonstrates the extent to which marketing activity enabled Hotel Chain X's performance in this competitive environment.

Hotel Chain X Vs Competitors Occupancy Rates

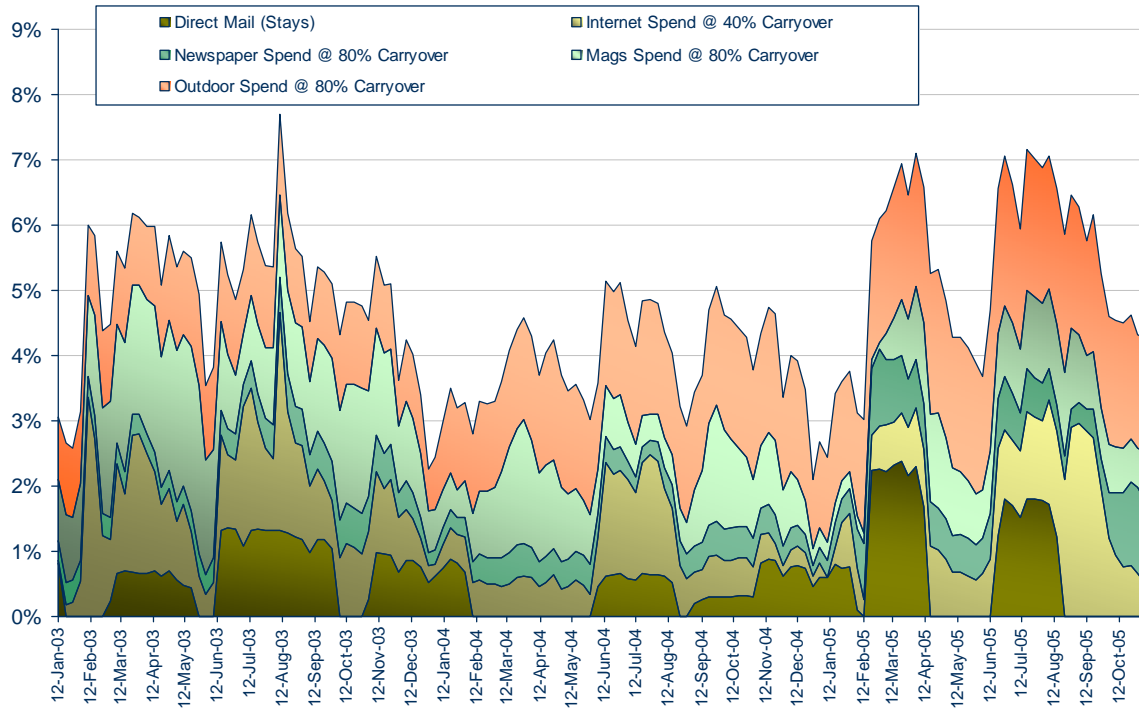


The base level in grey represents trends, seasonal effects and occupancy that would happen without pricing, or marketing fluctuations. This is the occupancy level that would have been achieved without any marketing activity. The green line at the bottom represents the negative effect of competitor activity.

The colored lines at the top of the chart show the effects of controllable variables – marketing, pricing, distribution, hotel changes, etc. Within these trends, the pink line at the top shows the contribution out of home advertising made to Hotel Chain X's occupancy levels.

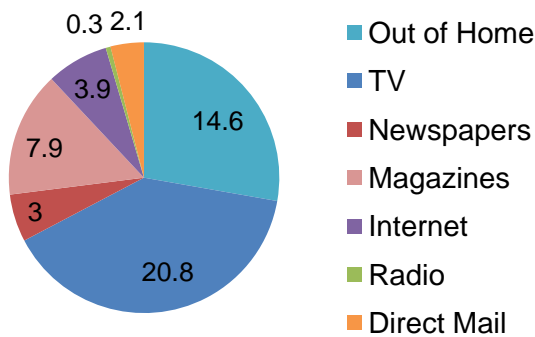


The contribution made by different media to occupancy levels varies by media format. Compared to the other media used, the impact of out of home, represented by the thick, orange area at the top of the graph, is large.

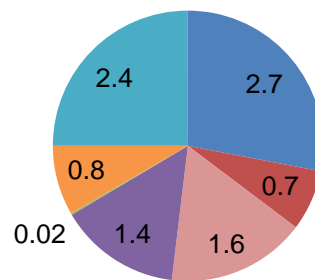


Marketing was estimated to have driven an increase in occupancy of nearly 10 percent with a quarter contributed by out of home advertising.

Media Spend



Media Effect



As might be expected, marketing has less of an effect on room price (ADR) than on occupancy levels. The estimated total contribution was less than 2 percent with over half attributed to out of home.

If increasing room price – in effect persuading people to trade up, or buy at peak times, is the goal – out of home and Internet should be increased at the expense of magazines, newspapers and radio.

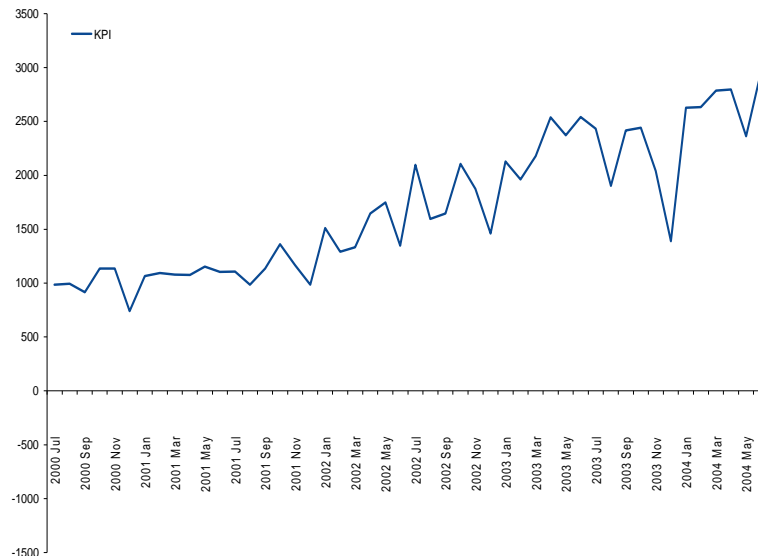
	Spend (\$M)	% Contribution	ADR Effectiveness index
Out of Home	14.6	0.9	202
TV	20.8	0.1	160
Newspapers	3	0	0
Magazines	7.9	0.2	83
Internet	3.9	0.3	252
Radio	0.3	-	55
Direct Mail	2.1	0.1	156
Total	52.46	1.6	100

Appendix I

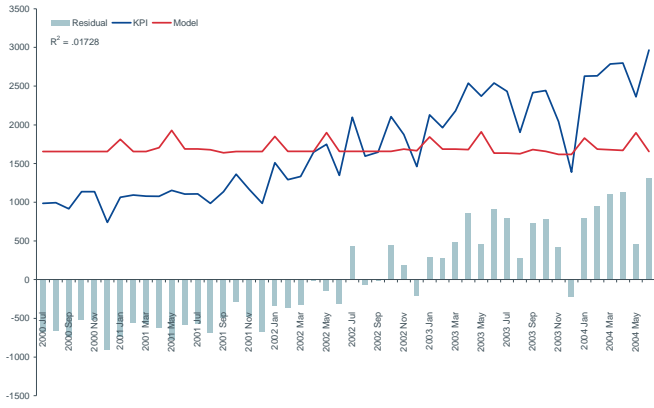
Econometrics involves evaluating data on all potential drivers of sales. Once the contributing factors are identified, they are assigned a weight to determine the amount each factor contributes. Once the mix is known, past volume is explainable and future volume is predictable



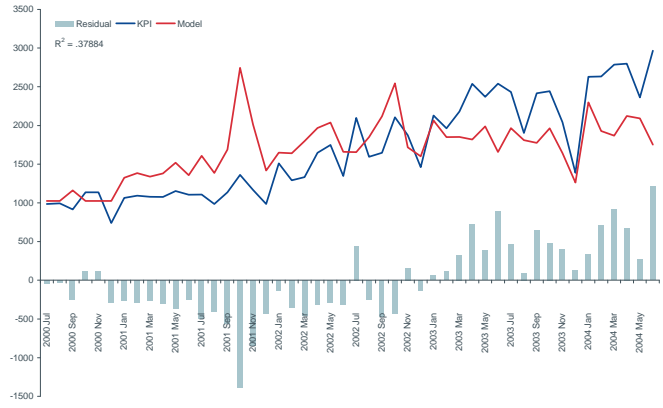
For example, in trying to explain volume sales of a brand, why does the line go up some weeks vs. other weeks?



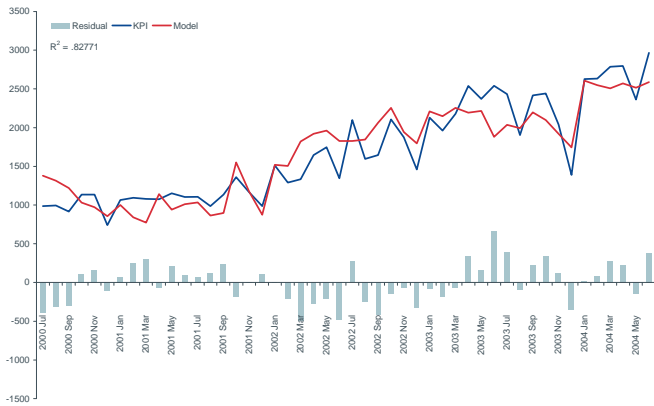
First, seasonal events are accounted for. Then, print media, out of home advertising, TV, and other factors.



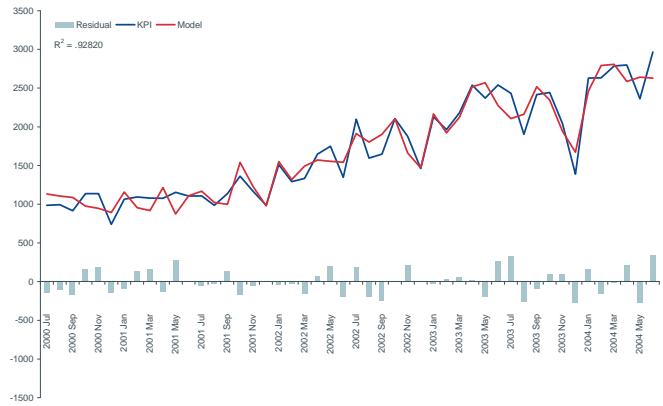
Seasonal events account for a portion of sales fluctuations.



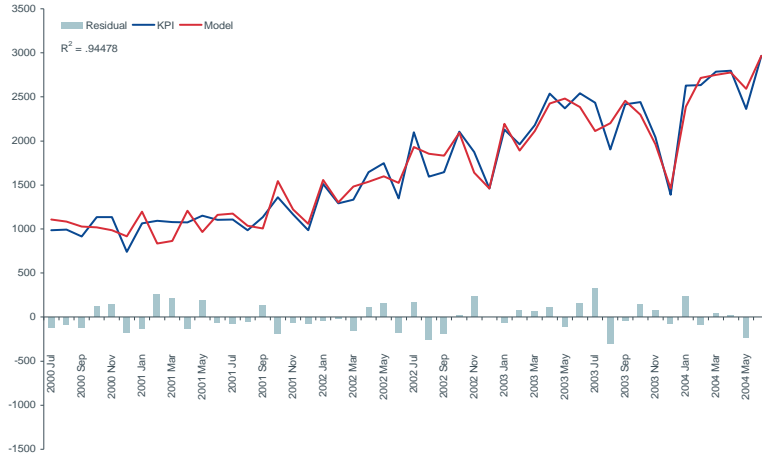
Accounting for print advertising brings the model closer to actual sales.



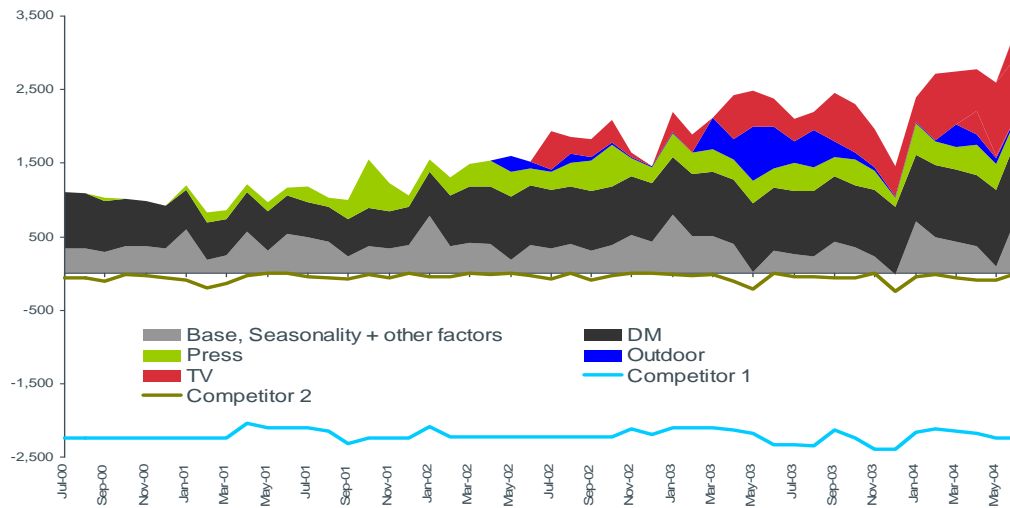
Adding out of home advertising to the model creates an even better fit.



With TV, the model is almost complete.



Finally, other factors are taken into account.



The equation can now be used to break out sales by contributing factors.

Appendix II

BrandScience used the WARC (World Advertising Research Center) database case study section for the US study. OMG has a subscription to this database and can precisely analyze information, but not circulate any direct content.

BrandScience filtered the WARC database to case studies in the US that contained a reference to billboard, poster or out of home. These case studies, generally around 1,000 words in length, were then examined to verify that the references referred to the case itself rather than to comparative cases, and to see what data they contained.

There were more than 100 case studies in the original list for review, but BrandScience narrowed the final list to around 50 case studies which were right in terms of geography, featured out of home, and also crucially provided some hard metrics on both spend and results. However, one of these proved to be a duplicate of the results from part of another case study (Altoids) and six others gave results which BrandScience could not factor into the final model, generally because they were attitudinal measures, not sales measures. They were Allstate Corp., Budweiser, FCUK, Holiday Inn, National Thoroughbred Racing Association and Volkswagen.

BrandScience recognizes that by selection of the WARC database the study was initiated with a basis of campaigns likely to be high achievers (though achievers in general, not because of them medium). The cases were not all award winners, but award entrants. However, the database provides hard information on spend and result.

BrandScience lacks a “base” figure, actually two base figures:

- The average sales effect of a campaign not using out of home, in the WARC database of case studies.
- The average sales effect of a campaign, not an award entrant. To adjust for this factor, an academic meta-analysis by Sethuraman and Tellis (1991) was cited which found the average advertising elasticity to be 0.109

BrandScience analyzed the following brands and campaigns in the United States from data in the WARC database. The campaigns span a 30 year time period, and all feature out of home at varying levels.

Apple – Silhouette
Apple – Think Different
Lego – Bionicles
California Milk – Happy Cows
Altoids – Curiously Strong
Carlo Rossi – Jug Simple
Coca-Cola – Beautiful People
Coca-Cola – Zero Taste Similarity
DHL – Competition. Bad for Them. Great for You.
ESPN – Monday Night Football: Is it Monday yet?
Gap – For Every Generation
Gap – Khakis
H&R Block – Worried About Bill
Heineken – It's All About the Beer
Ikea – Unböring
Infiniti G35 – All Wheel Drive Launch
Holiday Inn – Rejuvenation
Las Vegas Convention & Visitors Authority – Vegas Stories Campaign
Levis – 501 Reasons
Levis Dockers – Nice Pants
McDonald's – I'm Lovin' It
Mercedes Benz – Unlike Any Other
Mercedes Benz – Corporate Branding
MINI Cooper – Zug. The Other MINI
Mitsubishi – Wake Up and Drive
Montana Meth Project – Not Even Once
Napster – It's Coming Back
Nissan – Enjoy the Ride
Palace Sports & Entertainment: Detroit Pistons – Going' to Work. Every Night
Partnership for a Healthy Mississippi – Question It
Peace Corps – Life is Calling. How Far Will You Go?
PepsiCo – The Not-So-Vanilla Vanilla
Rock the Vote – Yes/No Ballot Box
Saab – Born from Jets
Schick-Wilkinson Sword – Shaving Made Simple
Master foods – Snickers Marathon. The Energy You Crave
Kellogg's – Special K Kick-Star Diet Plan
Sprint Nextel – Done
Tourism New Zealand – 100% Pure New Zealand
Toyota – Who Could Ask for Anything More
TV Guide – On the Inside
Wachovia – Uncommon Wisdom
Wrigley's Orbit – No Matter What