INDEPENDENT STUDY CONFIRMS THAT **DECREASED TV ADVERTISING SPEND HURTS SALES**

84.51° TiVo Research Turner A+E NETWORKS

EXECUTIVE SUMMARY

It may come as no surprise that TV ad expenditures for major consumer packaged goods companies are changing. Budget allocations across media are shifting, as advertisers attempt to mirror changes in viewing behavior. The net result is that CPG brands are often spending less within TV to make funds available for digital campaigns without understanding the full effects.

For every $1 saved in TV spend, the drop in sales return was $3.

Sponsored by media companies such as A+E Networks and Turner, this study, conducted by TiVo Research and customer engagement consultancy firm, 84.51° (a wholly-owned subsidiary of The Kroger Co.), addresses the short-term effects of reducing TV spend on brand sales. The study analyzed 15 random brands that had reduced TV spending by at least 25% between 2013 and 2014.

KEY FINDINGS

- Reduced TV ad spend led to a combined $94MM loss in return for 11 of the 15 brands, accounting for 69% of the 2013 incremental sales attributed to TV advertising.
- For every dollar decline in ad spend, the 11 brands lost 3x that amount in return.
- Brands averaged a 25% weekly reach leaving 75% open to competition.
- Reduced ad spend resulted in reach and frequency declines for 11 of the 15 brands, which led to the drop in sales/ROI.

As marketers continually struggle to find the most effective advertising media, testing the effects of changes in spend is the best way to understand what advertisers lose when they cut budgets.

INTRODUCTION

TV advertising expenditures for major consumer packaged goods companies are changing. As we've seen in other industries, CPG companies are trying to plan their media buys as efficiently as possible to increase reach and eliminate waste. To do this, they are dispersing spend across more platforms, including traditional reach vehicles such as television as well as digital options including display, video, search, social, and mobile. Squeezed by private label competition and low domestic economic growth, most brands aren't able to gain incremental spend for digital media, making it necessary for them to decrease TV budgets to accommodate these new platforms. The net result is that CPG brands are often spending less on television advertising to fund digital campaigns.

In fact, The Standard Media Index estimated that overall TV advertising spend dropped 2% year-on-year in the final quarter of 2014: national broadcast spend fell 2% to $4.8 billion while ad spend on cable networks dropped 1.6% to $6.8 billion.[1]

The implications of these budget shifts have not been measured properly because many companies choose to move spend across many channels without using disciplined marketing science methods to identify optimal overall spend levels and media mixes. Now more than ever, CPG companies need to quantify the combination of effects when managing their portfolio of media dollars. Comparing TV and digital elements side-by-side on simplistic performance metrics is an ineffective measurement approach. In order to maximize ROI for one element or a combination of elements, we need to measure against sales results and ROI, both in short-term and long-term time frames.

With budgets shifting from TV to digital, networks including A+E Networks and Turner set out in partnership with TiVo Research and 84.51° to explore how changes in TV spending impacted advertising effectiveness.

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The resulting independent study evaluated what would happen when a large group of brands pulled dollars out of TV advertising. In this first stage of research, the team did not evaluate where the budgets went, but only that they left TV.

The study began by asking the following questions:

- Does reduced TV ad spend hurt brand sales?
- What do TV metrics show when they are evaluated on their own?
- Is the cost of TV advertising worth the result?

The analysis focused on the potential sales/ROI impact on brands that reduced TV spend. The results of reductions in TV budgets had clear consequences.

[1] For more information about TV advertising spend reduction, see: http://www.businessinsider.com/standard-media-index-us-tv-ad-spend-down-2-in-q4-2015-1

THE STUDY

Sponsors including A+E Networks and Turner commissioned an independent study with TiVo Research and 84.51° to understand what the potential sales impact was to 15 brands that executed a significant TV spend reduction between 2013 and 2014. Each sponsor nominated five brands known to have dropped TV spend. No sales data was used in the selection of these brands, and no changes in the list of brands were allowed. Consequently, the sample of brands was effectively random, except that they were known to have lowered TV spend.

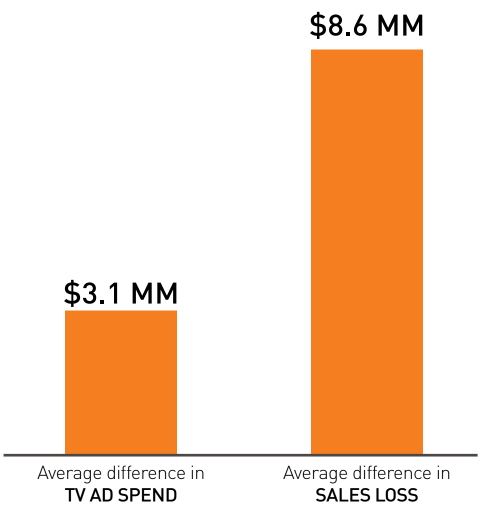
Based on the time span when each brand focused their TV spend year to year, 84.51° analyzed one or two quarter periods per brand from 2013 to 2014. The total 15 brands represented a variety of categories (beverage, snack, candy, ingredient, etc.) and had each reduced TV advertising spend anywhere from 29% to 75% from the prior year. The study analyzed how decreased TV advertising spend impacted return for campaigns year-on-year and specifically, if the reduction in spend led to reduced exposure volume (impressions, reach, frequency; overall and by key purchaser target) and sales/ROI effectiveness (controlling for price, promotion, seasonality, brand

> **The study analyzed how a decreased TV advertising spend impacted return for campaigns year over year and specifically, if the reduction in spend led to reduced exposure volume.**

FINDINGS

1 Reduced TV ad spend led to a combined $94MM loss in return for 11 of the 15 brands. This translates to a loss 69% of the incremental sales attributed to TV advertising in 2013.

2 For every dollar decline in ad spend, the 11 brands lost 3x that amount in return.



3 Brands averaged a 25% weekly reach, leaving 75% open to competition.

4 Reduced spend resulted in reach and frequency declines for 11 of the 15 brands, which led to the drop in sales/ROI.

- Average decline in household (HH) quarterly reach was 14MM (79% to 60%). All 15 brands posted quarterly reach declines.
- Average quarterly frequency fell from 11.6 to 6.8 per household. Previous TiVo Research studies have found that a frequency of three per week is typically optimal for maximizing ROI on TV spend. Three exposures per week equates to a 39.0 average frequency per quarter – drastically higher than the 6.8 average found in this study.

5 When reach and frequency were plotted individually against return, we found that both had a positive relationship with return but the R-squared values were low. An additional regression analysis was conducted to better understand the relationship each metric had on return. When both reach and frequency were included in the model (in addition to other variables), the R squared value of the model was 87%. When reach was excluded from the model, the value fell to 55%, and when frequency was excluded it dropped to 48%. Thus, based on the study inputs, frequency was found to have a stronger correlation with the drop in return.

6 On average, households were reached every 3.5 days after being exposed to the last ad from the brand. This number should ideally be under 2 days since the last ad because the short-term sales impact of TV lasts for about 48 hours after exposure.

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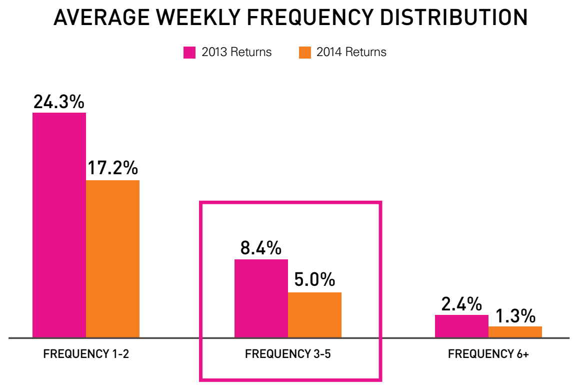
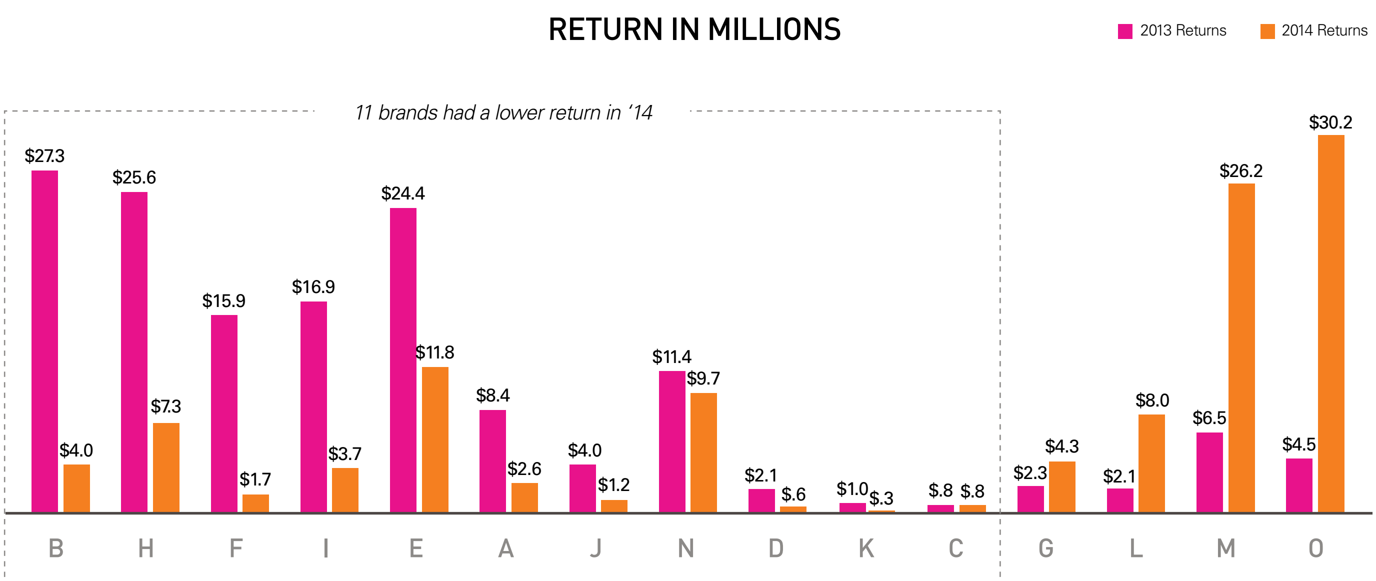
7 On average, these brands reached less than 7% of their purchasers in the optimal 3-5 weekly frequency range, leaving 93% of their markets open to predation. This number was low to begin with in 2013 (8.4%), but declined further in 2014 as a result of reduced TV spend.

8 Increases in Total Return, for the four brands that saw them, could have been a result of precision targeting, creative, food trends, share of spend, etc. Two of the brands that cut TV spend and increased sales did so amongst an even greater decline in TV spend from their competitors. The other two brands shifted TV spend to increase their key purchaser target indices through buying highly targeted networks. These and other factors could have offset the impact from their decline in total TV spend.

9 This study did not control for changes in media outside the TV environment. Data from a leading source of competitive ad spend shows that there was an insubstantial amount of spending in other media by the 15 brands studied, with the exception of one brand that spent about $2 million in print. Consequently, there is no reason to believe that other media spend would have made any difference in this analysis or its conclusions.





IMPLICATIONS

Cutting TV budgets may seem like an easy way to save money, but as this study shows, brands stand to lose more in sales than they stand to gain in media savings. Accordingly, maintaining a significant level of weekly effective reach is a key driver of ROI, and brands need to keep those factors in mind as they consider budget allocations. Based on the findings of this research, CPG companies can explore several tactics to optimize campaigns:

- Elevate frequency and maximize reach against ROI-driving purchaser targets.
- Disperse the buy across more networks and day parts to control diminishing returns.
- Shift dollars to specific programs to deliver the highest reach of the right purchaser target.

Sponsors including A+E Networks and Turner have pledged to work with advertisers and agencies to optimize purchaser target index whether in a program-specific or rotation buy.

The results of this study should give brands pause before cutting TV budgets: moving money out of TV advertising clearly results in negative sales impact. TV advertising still has a strong influence on ROI, but all media needs to be evaluated in a broad context against sales and ROI to create the optimal mix.

Comprehensive ROI analyses such as this conducted by TiVo Research and 84.51° is the best way to ensure media allocations will yield the best sales results.

METHODOLOGY

The TiVo Research study, in partnership with 84.51°, was based on a combined data stream of 84.51°'s in- store sales data for over 62MM households with TiVo Research's viewing data for more than 2.3MM households. Both data panels are anonymized and then combined to create a matched panel of over 500K households with both TV exposure and purchase data, providing a single source view of the consumer. The two panels are matched via Experian, which connects both sets of anonymized data from 84.51° and TiVo on the backend, allowing 84.51° to run the analysis.

For this particular study, 84.51° analyzed the consumer activity using a household response methodology to attribute brand purchases to TV exposures. 84.51° considers the platform on which each household was exposed, the number of times each household was exposed to the ad, and combines the market exposure with purchase history to provide a rich data set that allows for an assessment of how TV advertising impacts brand shopper behavior.

To determine the impact of the marketing elements, the purchase act is separated into two parts:

Logistic model: Did you buy the product more often? Was my product or the competitor product chosen? How did exposure to my marketing influence the decision?

E.g., Normally the HH only buys the brand one out of four visits to the category. Exposure to TV advertising makes this 50/50.

Linear model: How much of my product was purchased? Did the TV advertising impact the amount placed in the shopping basket?

E.g., The shopper usually buys two containers of yogurt, but when promoted they bought 10 containers. The impact of each marketing activity is quantified.

The impact of the TV marketing is quantified using statistical modeling that controls for price, displays, and discounts and is then combined back together to assess net sales impact. This methodology does not account for changes in advertising outside of TV (digital, print, etc.).

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Total dollar return is driven by both ad performance and reach. Increased return per exposed household or households reached can drive higher dollar return. Total dollar return is determined by calculating the following:

Total $ Return = Return per Exposed HH x Reach x Market Factor

The market factor is determined by dividing the total spend of category buyers across the total market by the category buyer spend per household within Kroger's continuous panel. 84.51° has an average market factor across all grocery categories of 2.9, and many of the top categories are under 2, making the data relevant to the national marketplace.

84.51° makes the use of trusted, transparent and precise data sets a priority. Having the largest first-party grocery data panel available and the ability to leverage third-party panel data to understand the total market helps to diversify this particular data set. Results for both the grocery channel and the total market are provided to enable clients' complete visibility.

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ABOUT TIVO RESEARCH

TiVo Research and Analytics, Inc., a wholly-owned subsidiary of TiVo Inc. (NASDAQ: TIVO), is a leading cross media research, measurement and analytics company that provides nationally representative single-source data linked to purchases made at the household level. Advertisers, agencies and television networks utilize the company's solutions to improve advertising targeting, accountability and return on media investment. Partnerships with multi-service operators and proprietary TiVo set-top-box data enables TiVo Research to provide research based on a representative panel of more than 2.3MM households. The web-based Media TRAnalytics® and TV Health Ratings platforms match the TV and online advertising that households actually receive with the products that the same households actually buy, enabling clients to find "The Right Audience®" while providing an unmatched level of transparency, measurement, media planning/selling and improved ROI. More information at www.tivoresearch.com.

WE BELIEVE IN MAKING **PEOPLE'S LIVES EASIER**

84.51° believes in making people's lives easier and helping companies create sustainable growth by putting the customer at the center of everything. 84.51° works with some of the world's leading CPG manufacturers and partners to help activate and measure retailer and national media. Using a sophisticated suite of tools, insights, and technology, 84.51° creates a complete view of customer behavior over time. By helping clients activate on the most granular verified shopping behavior and measure across retail and national media channels for single and cross-channel accountability, 84.51° reduces the degrees of separation between customers and media. 84.51° is a wholly owned subsidiary of The Kroger Co. For more information, please visit us at **www.8451.com**.