



# **DIGITAL ADVERTISING'S TRUE IMPACT ON IN-STORE SALES**

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**2017 4INFO CPG Sales Lift Benchmarks  
Reveal How Top Performers Compare**



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## WELCOME TO THE YEAR OF MEASUREMENT

**Advertisers are increasingly aware it's possible to link digital impressions to in-store purchase data. What's more, they're demanding it.**

Digital advertising must combat an atmosphere of inherent distrust driven by a lack of transparency between advertisers, agencies, trading desks and platform providers. Add in a rising number of viewability and fraud issues, as well as the growing use of ad blockers, and it's clear why it's more important than ever to connect the dots between ad impressions and in-store sales.

With shoppers consuming more digital content via mobile devices than computers (mobile accounts for 71 percent of total digital minutes<sup>1</sup> in the U.S. alone), advertisers are starting to shift their digital ad budgets accordingly. This, in turn, places a greater emphasis on proving whether campaigns are actually driving in-store sales returns that justify increased spend.

Only through closed-loop sales measurement based on in-store purchase data can advertisers truly know which campaigns are delivering an acceptable Return on Advertising Spend (ROAS). What's more, brands who insist on measuring all campaigns using closed-loop sales lift are better able to detect and manage viewability and fraud risk.

The 2017 4INFO CPG Benchmarks are based on independent measurement studies performed on 248 mobile ad campaigns across 138 different CPG brands from 2013 through 2016.

**248**

Mobile Ad Campaigns

**138**

Brands

1. ComScore



# Can you really tie digital impressions with in-store transaction data?

In a world where access to transaction data can be hard to come by and where proxy metrics — such as Store Visit lift — have become common to estimate ad effectiveness, measuring digital ad campaigns using actual in-store purchase data might seem like a pipe dream.

Fortunately, measuring all the way to the cash registers is not only possible but is being demanded by more and more advertisers, as demonstrated by the 248 measured campaigns in our 2017 CPG Sales Lift Benchmarks. So what does it take to actually pull it off?



## 1. Impression Data:

Platform running the campaign must capture every impression and a digital identifier (e.g., Mobile Ad ID, IP Address, Cookie ID) and be able to pass this data to an Identity Platform for converting the digital ID to a household ID recognized by the measurement partner, in this case Nielsen Catalina Solutions. For the Benchmarks, all campaigns were run via the 4INFO platform.

## 2. Identity Platform:

An Identity Platform is able to map the impression data to the measurement partner's proprietary household ID by mapping people to their devices and data to a home address. Identity is at the heart of 4INFO's platform, powered by our patented, deterministic Bullseye® method for mapping people to devices. For campaigns in the Benchmarks, 4INFO used its proprietary mapping without the need for involving a third-party identity platform or onboarder, as most ad platforms require.

## 3. In-store Purchase Data:

Since CPG products are sold in many stores, cooperative databases that accumulate frequent shopper data from multiple retailers are used to measure product sales. Thanks to a deep partnership between 4INFO and Nielsen Catalina Solutions, we were able to pass impression data directly mapped to their household IDs.

Measurement of campaigns by an entity outside of the ad platform enables un-biased evaluation of the campaign. All campaign measurement studies included in the 4INFO 2017 CPG Benchmarks were performed by Nielsen Catalina Solutions using transaction data.



## MEASURING SUCCESS: THE METHODOLOGY

**Our benchmarks are based on independent measurement studies conducted by Nielsen Catalina Solutions (NCS). Exposure data from the campaign is sent to NCS, with each exposure mapped to a device and a household using 4INFO's patented Bullseye® methodology.**

Sales lift measurement is based on in-store purchase data that can be attributed to specific purchases made by consumers exposed to the campaign, both over the campaign period and during an extended purchase period.

Incremental sales counts the difference between real sales among viewers of the campaign versus a control group of nearly identical households that did not see the campaign. Only by comparing sales resulting from individuals who were not exposed to mobile ads with those that were can advertisers calculate accurate sales lift.

ROAS calculates campaign net return factoring in the cost of media as compared to incremental product sales generated. It's calculated by dividing the incremental sales attributed to advertising by the cost of advertising. For example, \$200,000 in incremental sales from a campaign that cost \$100,000 would result in an ROAS of \$2.

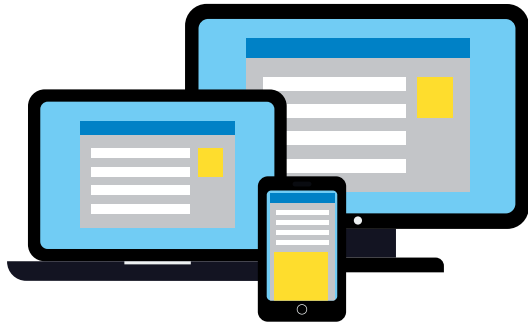
ROAS is typically the most valued metric for advertisers, since it calculates the return after accounting for the cost of media.

In addition to examining incremental sales and ROAS data, this benchmark report is designed to help advertisers understand average campaign sizes, lengths and creative approaches for comparison.

# The Methodology: Measuring In-Store Sales

Proving the value of digital campaigns and understanding what drives sales lift using true test and control measurement.

## 1. DIGITAL CAMPAIGN



## 2. BUILD CONTROL GROUP

500+ variables determine very similar unexposed control group based on target.

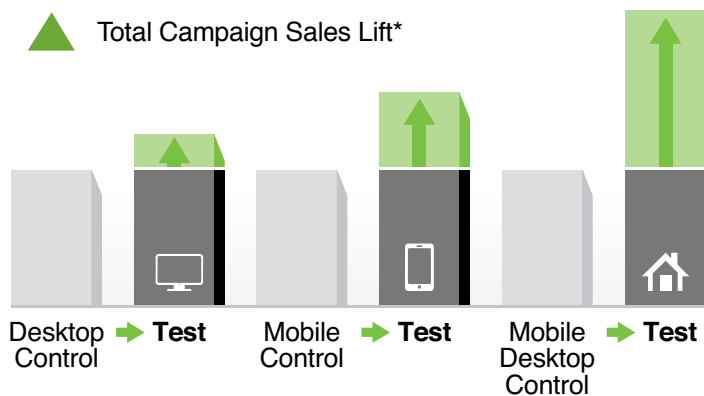


Exposed HHs [test group]



Unexposed HHs [control group]

## 3. SALES MEASURED OVER CAMPAIGN PERIOD PLUS EXTENDED PURCHASE PERIOD



\* Benchmark data reflects only the mobile portion of any cross-screen campaigns.



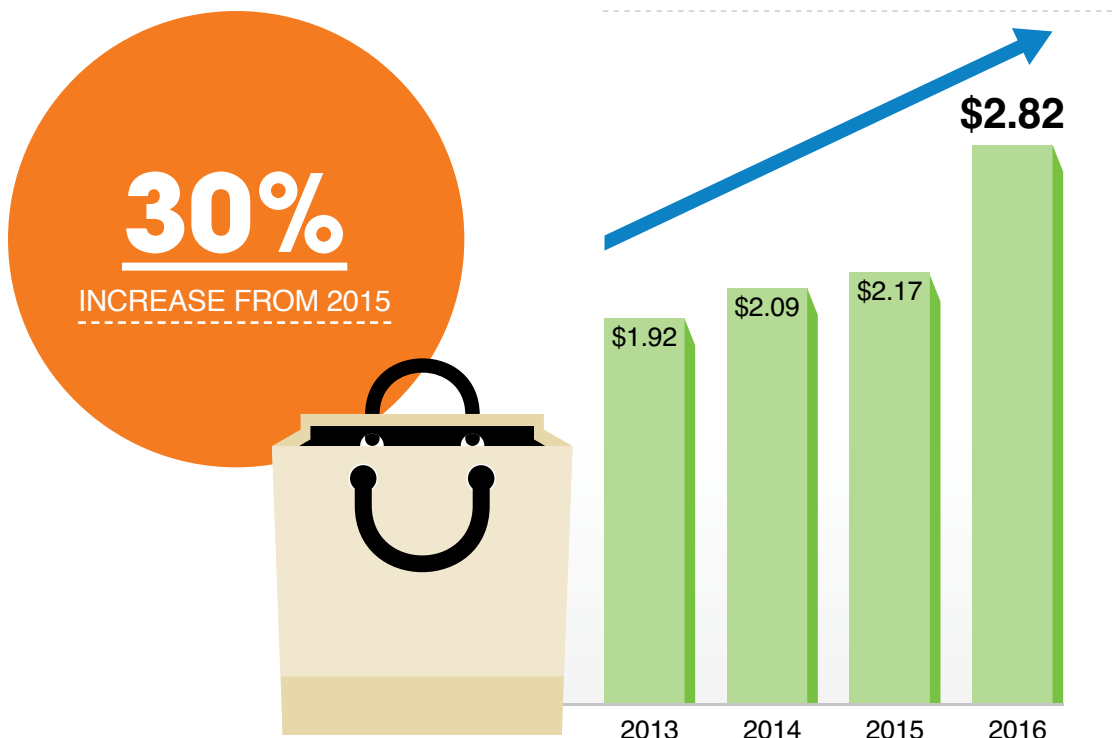


# ROAS: THE BENCHMARK OF SUCCESS

## ROAS Continues to Climb Year After Year

The 2017 4INFO CPG Benchmarks, based on campaigns that ran in 2016, show ROAS for digital ad campaigns continues on its upward trajectory. Last year represented the highest average ROAS yet recorded for both advertised items and halo effect. Average ROAS for advertised items increased 30 percent from 2015.

### AVERAGE ROAS FOR ADVERTISED ITEMS



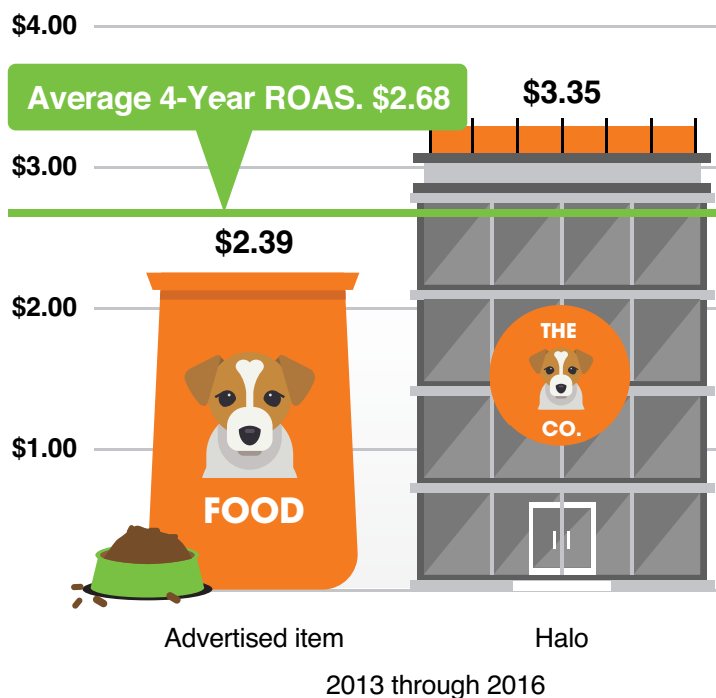
## ROAS vs. ROI

Since many factors impact overall Return on Investment (ROI), including cost of goods and other costs that are known only by the brand, 4INFO utilizes Return on Advertising Spend (ROAS) — a metric based on known data that provides consistent comparison across advertisers and categories.

ROAS is based on accessible metrics that are available to agencies and service providers: incremental sales lift and cost of media. ROAS enables advertisers to compare media providers and media types using a consistent metric.

Each category and brand will need to determine what ROAS leads to an acceptable ROI for the advertiser to set a minimum allowable threshold.

### AVERAGE ROAS BY MEASUREMENT TYPE



The average ROAS over four years of measurement studies is now **\$2.68** – an increase of five percent over the previous reported average of **\$2.56**.

On average, campaigns in the 2017 4INFO CPG Benchmarks produced an ROAS of \$2.39 in terms of advertised items. For halo effect — which concerns profit for the brand as a whole — the average ROAS was \$3.35, an increase of 35 percent over 2015.

**35%**

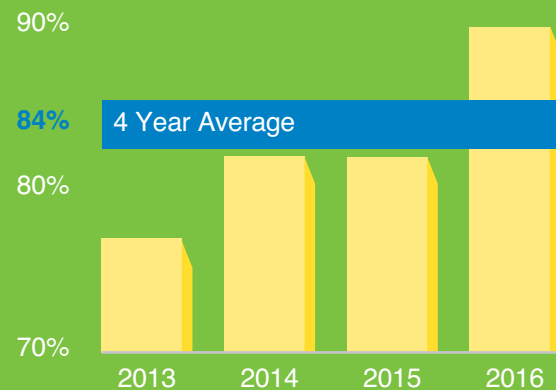
INCREASE IN HALO  
EFFECT



## Percentage of Campaigns that Produce a Positive ROAS has Grown

An impressive 84% of mobile ad campaigns measured have displayed positive ROAS for advertised items between 2013 and 2016, even as the number of campaigns continued to increase considerably year over year. Positive ROAS means that for every dollar spent on media, the campaign generated more than \$1 in incremental sales.

Over time, the percentage of campaigns showing positive ROAS has increased, with nine out of every 10 campaigns measured in 2016 producing a positive ROAS.



## When Negative ROAS is a Good Thing

Keep in mind positive ROAS is not a foregone conclusion. Anything below \$1 ROAS means more was spent on media than generated in short-term incremental sales lift.

But that's not necessarily a bad thing. Many factors affect campaign performance including creative, targeting, product price points and campaign goals. For example, a campaign with the goal of conquering another brand's customers will naturally produce lower ROAS due to the challenges inherent in getting loyal buyers to switch brands. Most brands consider both the short-term impact—which ROAS includes—plus the lifetime value from acquiring a new customer and increasing brand equity, looking beyond just the initial purchase.

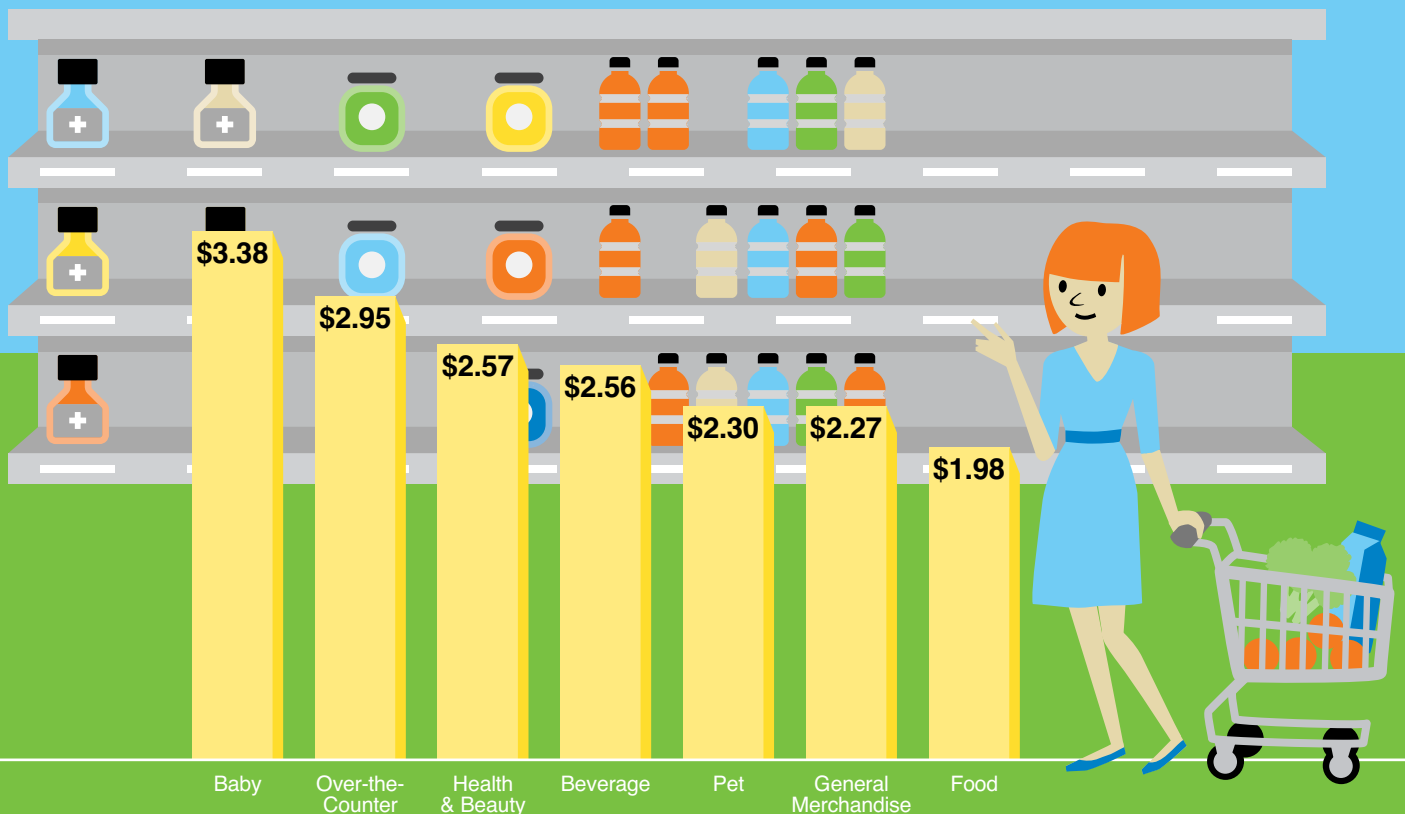
Examining campaigns that returned less than \$1 ROAS also provides a chance to spot trends in various sectors to inform future campaigns. Even under-performing ad campaigns based on short-term dollars represent an opportunity to fine-tune campaign sizes, durations and creative approaches, among other elements. More brands are embracing a test and learn approach to digital campaign success.

# ROAS CORRELATES TO PRODUCT PRICES ACROSS CATEGORIES

Brands operating in the baby, over-the-counter and health & beauty categories were the big winners, with an average ROAS of \$3.38, \$2.95 and \$2.57, respectively. Health & beauty is especially impressive, as this category ran relatively smaller ad campaigns, albeit over a longer time period.

However, it should be noted that categories with larger average prices for items tend to produce the highest ROAS versus categories with a low average product price, since they require fewer consumers purchasing to offset the media cost, which is generally the same, regardless of category advertised. Therefore, comparing the average ROAS for their category helps advertisers more accurately interpret their relative campaign performance.

## AVERAGE ROAS BY CATEGORY: ADVERTISED ITEM



## The Correlation Between Measuring ROAS, Viewability and Fraud

Brands who insist on measuring campaign success using closed-loop sales lift measurement are better able to manage viewability and fraud risk. When buying media on a CPM basis across multiple platforms, closed-loop measurement that takes into account both incremental sales lift and media cost, provides the apples-to-apples comparison a brand needs to uncover issues of fraudulent or otherwise non-viewable impressions. Sales lift measurement empowers the brand to objectively compare performance across platforms. So, if a platform has an unusually low ROAS compared to others running the same campaign and creative, it can point to issues of viewability or other wasted impressions.

Wasted impressions occur if targeting is poor or inaccurate. They also occur when a substantial percentage of impressions weren't viewed by a human with the potential to purchase, either as a result of viewability or fraud, which inflates media cost relative to the incremental sales generated. Having a comprehensive and consistent metric such as ROAS that can be applied across all platforms puts the power in the hands of the advertiser to know if any platforms have targeting or delivery issues.

While it won't prevent viewability issues, sales lift measurement enables the advertiser to adjust future buys and limit spend to platforms that have demonstrated an ability to effectively target and mitigate fraud. Unlike imposing high thresholds of viewability upon publishers or platforms, sales lift measurement takes the focus off of the symptom—impressions not viewed by humans—and places it on the real problem: Bots don't make purchases in a store.



# WELL-EXECUTED CAMPAIGNS CAN DOUBLE ROAS

The highest-performing campaigns in the 2017 4INFO CPG Benchmarks, based on the top 25 percent of measured campaigns, returned an average ROAS of \$5.32.

These figures indicate that when a mobile ad campaign is firing on all cylinders — featuring strong creative, precise targeting and proper campaign management — advertisers can expect nearly twice the ROAS when compared to the average benchmark of \$2.68.

Meanwhile, the lowest-performing campaigns had an average ROAS of \$0.82. While these campaigns still drove an average of \$233,000 in incremental sales, it was not enough to offset ad spend (see Page 8 for discussion of negative ROAS).

Breaking this data down based on measurement type, the top performers had an ROAS of \$4.80 for advertised items and \$6.30 for halo effect. Meanwhile, the bottom performers achieved an ROAS of \$0.71 and \$1.22 for advertised items and halo effect, respectively.

**\$5.32**

ROAS for Top 25%  
of Campaigns

## ROAS COMPARISON BY PERFORMANCE GROUP







## THE RISE OF VIDEO

### Does the incremental cost pay off in incremental sales?

Considering mobile video traffic accounted for 60 percent of total mobile data traffic during 2016<sup>2</sup>, it's easy to see why an increasing number of brands are incorporating video into their mobile ad campaigns.

However, the demand for mobile video ad inventory has grown faster than the amount of inventory available, leading to a media cost of double or more the price of standard banner ads. This naturally begs the question from advertisers: Can the incremental cost of media be offset by a higher incremental sales to avoid negatively impacting ROAS?

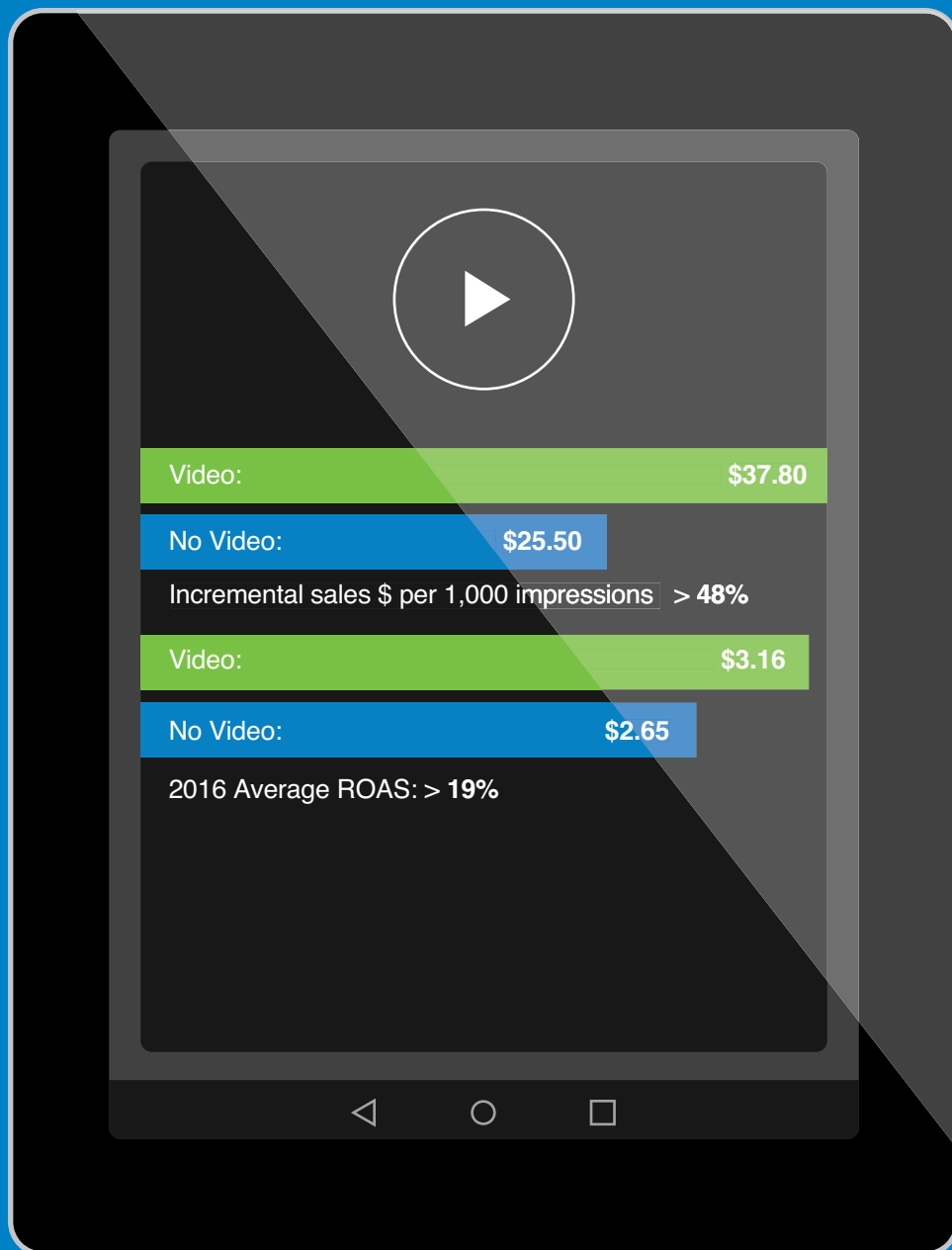
Analyzing campaigns conducted in 2016, nearly 30 percent of campaigns ran video in addition to other formats. Fortunately, the data showed video ad sales lift is much greater, to the point that it is able to more than offset the increased cost of media.

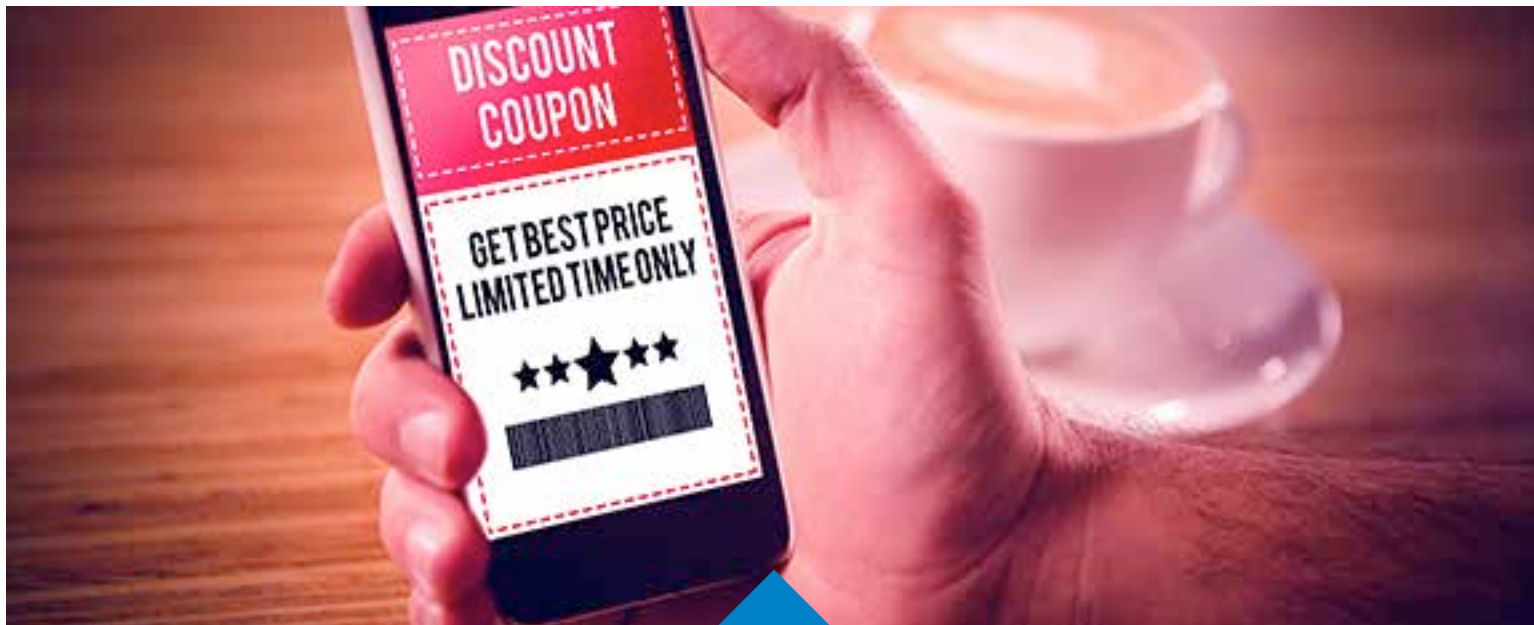
In fact, the ROAS for ad campaigns featuring video was 19 percent higher, meaning inclusion of video more than pays for itself, and advertisers shouldn't be deterred in choosing this format.



## Video campaigns do Payoff

Despite CPMs averaging 25 percent more, campaigns that include some video ad units outperform non-video campaigns by nearly 50 percent.





## AD CONTENT IS A MAJOR FACTOR IN CAMPAIGN PERFORMANCE

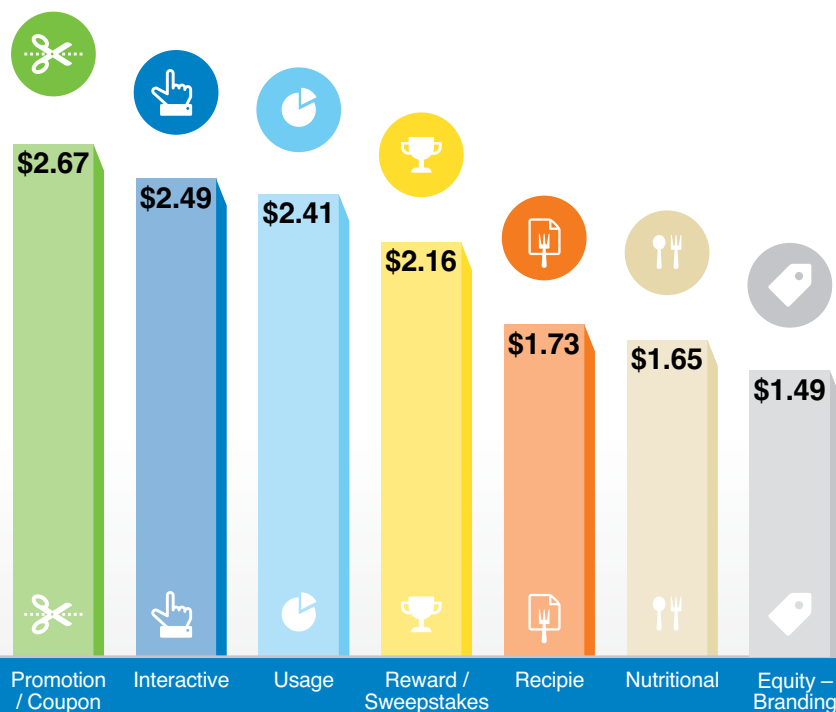
**Campaigns that feature either a promotion or coupon outperformed other ad content by as much as 80 percent.**

Not surprisingly, campaigns with ads intended to drive brand awareness or incorporate educational elements, such as a recipe or nutritional information, produced lower ROAS than other ad content.

It's important for brands and agencies to recognize, however, that all ad content, including the branding campaigns, still had a positive ROAS — and to not dismiss their value. This is especially true when it comes to campaign testing.



## ROAS BY AD CONTENT



### Promotion / Coupon:

Ads featuring promotions or coupons.

### Interactive:

Ads featuring a link for more information, a video or anything that requires viewing or an action to be performed.

### Usage:

Ads featuring a depiction of how to use a product or a product's capabilities.

### Reward / Sweepstakes:

Ads featuring rewards or sweepstakes, or links to rewards or sweepstakes.

### Recipes:

Ads featuring recipes or links to recipes.

### Nutritional:

Ads featuring nutritional facts or discussion of product ingredients.

### Equity – Branding:

Ads with no specific call to action, and predominantly featuring the brand.





## INCREMENTAL SALES VARIES AS MUCH AS 50 PERCENT ACROSS CATEGORIES

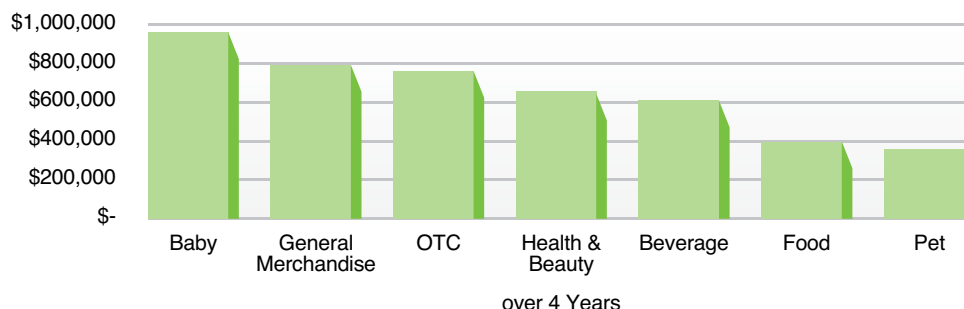
**Campaigns in the 2017 4INFO CPG Benchmarks brought in a cumulative average of \$715,800 in incremental sales per campaign. The highest performing campaigns generated a whopping \$3,000,000 or more for the advertised item.**

Focusing specifically on incremental sales for advertised items, the baby, general merchandise and over-the-counter categories saw the largest returns. The baby category came close to an average of \$1 million in incremental sales, followed by general merchandise with approximately \$800,000 in incremental sales and over-the-counter just shy of \$800,000 in incremental sales on average.

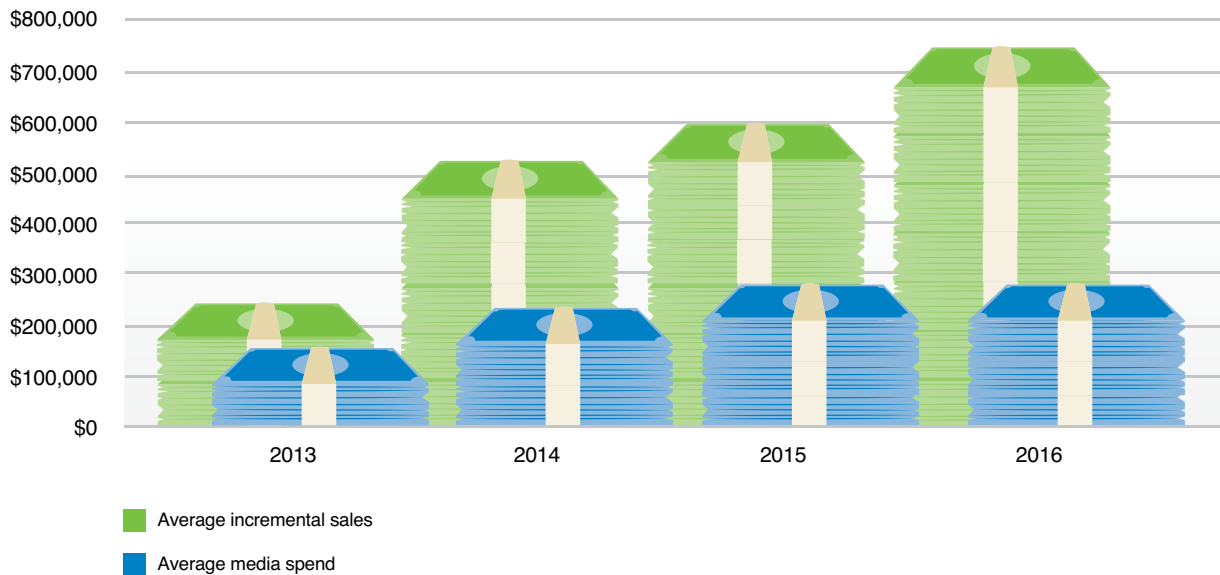
Campaigns in the 2017 4INFO CPG Benchmarks generated a collective \$253 million in incremental sales lift for the advertised brands. Including unmeasured campaigns, we conservatively estimate more than \$330 million in incremental sales was generated for CPG brands by 4INFO since 2013.

Incremental sales have continued to rise year-over-year. This is not necessarily due to increased media spend. In fact, one of the primary factors has been the ability to reach suitable audiences with appropriate messaging — reach grew by 51 percent from 2015 to 2016 alone.

### AVERAGE INCREMENTAL SALES



## SALES IMPACT OUTPACED MEDIA SPEND GROWTH



## Store Visits vs. Sales Lift

A popular method of measuring “real world” advertising impact in mobile advertising is to estimate sales lift from store visits based either on location data generated from their mobile devices or as determined by a panel app being used on participants’ smartphones. Some platforms even promote it as being equally effective as measuring actual in-store sales, and since it’s easier to come by than in-store purchase data, its usage has grown in popularity.

Measuring actual in-store sales provides a far more accurate read of campaign performance. Challenges in accurately measuring store visits and purchases can produce inaccurate campaign reads. This is especially true for CPG, given the average grocery store has more than 30,000 UPC’s and a consumer only purchases a few on each visit. Consumers also purchase certain products more frequently than others and make on average six visits per month to a grocery store, so the advertiser can’t assume the advertised product was purchased on each trip.

Advertisers may use store visits to get early campaign reads, since those are often available within 24 hours of the campaign starting and are updated continuously throughout the campaign.



## AD DELIVERY SUMMARY

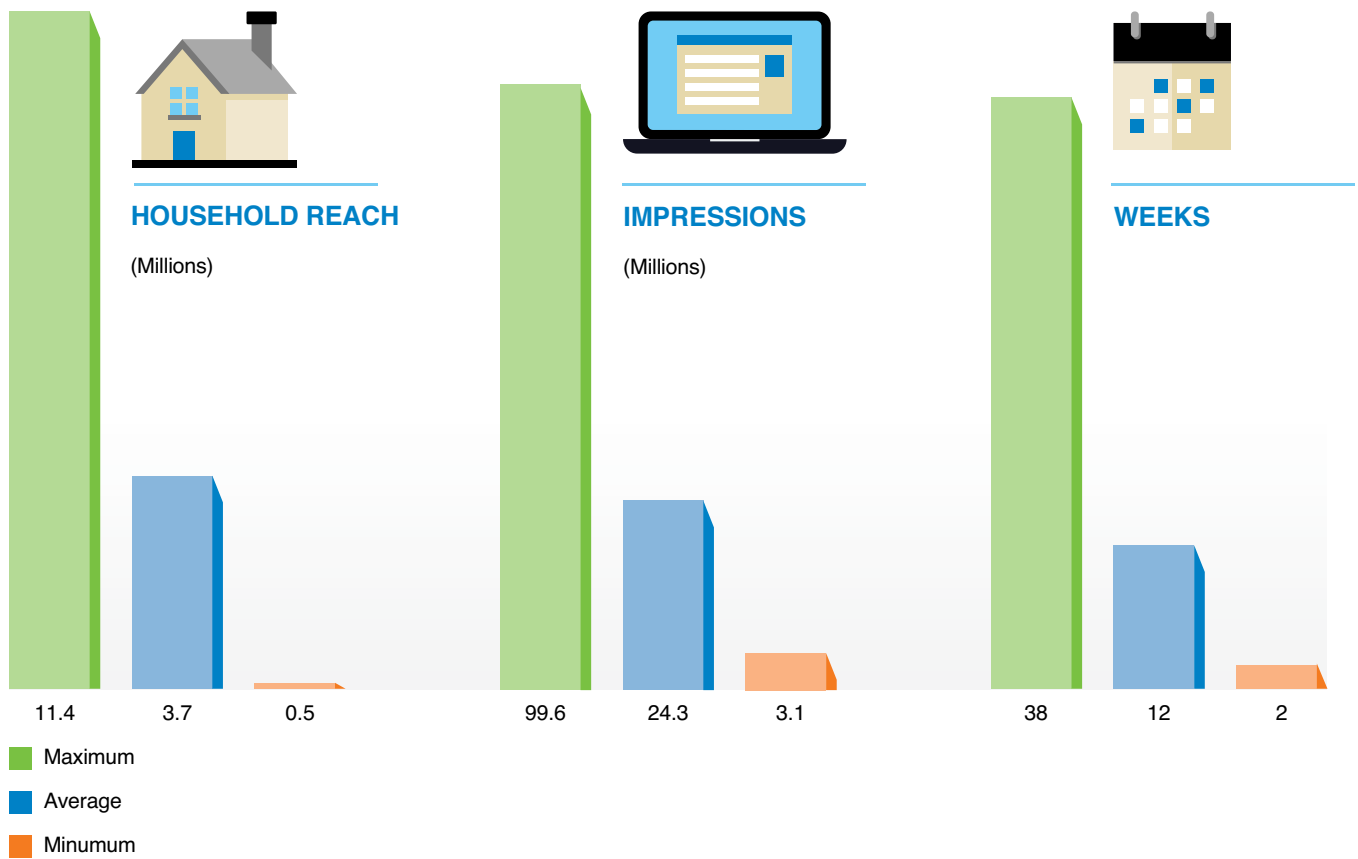
**Average campaign size for the 2017 4INFO CPG Benchmarks was 24 million impressions, with the largest campaign achieving 100 million impressions while the lowest delivered just 3.1 million.**

General merchandise brands ran campaigns with the highest average number of impressions (26.9 million). Meanwhile, brands in the pet category ran campaigns with the lowest (20.2 million).

The average campaign reached 3.7 million households, a strong reach number considering almost all of the campaigns involved purchase-based targeting. The largest campaign reached more than 11 million households, while the smallest reached just half-a-million households.

Campaign lengths ranged from two to 38 weeks, with an average length of 12 weeks. Brands in the health & beauty category had the highest average campaign lengths at 14.1 weeks. Beverage brands had the lowest average number at 10.4 weeks.

## AD DELIVERY SUMMARY







## MEANING IN MEASUREMENT

**While numbers differed across categories, measurement types and creative approaches, the primary trend was evident — Mobile ad campaigns are reaching an increasing number of consumers and generating ever-higher returns.**

The vast majority of brands running ad campaigns are seeing incremental sales that pays for their investments, both in terms of specific items and their brand offerings as a whole. Additionally, more brands are entering the ad space in an attempt to capture market share.

If you wish to compete, it's more essential than ever to let accurate measurement and industry benchmarks guide your ad strategy. You shouldn't be in the dark about whether your digital campaigns are translating to offline sales.

Engage your audience with confidence and prove your profit with precision. Anything less isn't enough.



Ready. Aim. Measure.

4INFO is an identity and engagement solutions company. Born in mobile, 4INFO's platform features the patented Bullseye ID® — a persistent match key that maps all connected devices in a household to valuable consumer data for marketing insights, targeting and measurement. With industry-leading accuracy, reach and scale, 4INFO's platform has been proven effective by more than 450 independent measurement studies. Hundreds of brands have relied on 4INFO, including eight of the top 10 CPG companies, six of the 10 largest retailers, seven of the top 10 financial services companies, the five largest auto manufacturers and six of the top 10 pharmaceutical companies. 4INFO is headquartered in San Mateo, Calif., with offices in New York, Chicago and Detroit. For more, visit [4INFO.com](http://4INFO.com)