ABX Advertising Benchmark Index

Marketing Mix Model for Women's Skincare Product

The Impact of Creative Quality on Sales

BLA Bottom-Line Analytics

2023

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Executive Summary

In this analysis, we will be applying predictive modeling for a large women's skincare brand, which has been anonymized as **Brand HBA**, to determine the relative importance of three media effects. These are:

- The <u>impact and importance of media spend levels</u> over the Short-Term (<=one year).

- The <u>impact of Media Creative or Message Factors</u> according to the <u>ABX Index</u>™ scores in the Short-Term, a multi-KPI creative effectiveness metric. We will be testing the hypothesis that ABX copy test scores predict sales outcomes when used as a multiplier towards media spend.

- The <u>importance and impact of advertising Long-Term effects (LTAE),</u> if any. We will apply our proprietary methods for testing and measuring long-term ad effects, as we define them on the next slide.

BLA **Bottom-Line** *Analytics*

Model, Architecture and Data Sources

Sources of Modeling and Data

Three important sources were used for this modeling exercise:

include:
- **Bottom-Line Analytics** designed and executed the Marketing Mix Model for this study. BLA is an advanced analytics firm that provides ABX and its clients with objective, fact-based assessments and validations of their copy testing metrics.

- **Affinity Solutions** and its partner company, **Iridescent Data,** provided credit-card purchase transactions over a three-year period Big Box Stores.

- **Advertising Benchmark Index (ABX)™** data was used for ad creative effectiveness evaluation for every ad in this study. This Index is comprised of the five most important of 14 KPIs measured across all media types and variables globally. To date, 400,000+ ads have been measured.

BLA Bottom-Line *Analytics*

Bottom-Line Analytics (BLA)™ looks at and measures advertising in three distinct stages:

- **The Short-Term Effect** - When marketers advertise, there is an immediate increase in sales due to the acquisition of a new customer or an incentive to buy more from an existing customer.

- **The Long-Term Effect** - However, advertising also involves building loyalty over time, resulting in repeat sales from every acquired customer. Good advertising will build a longer-term sales momentum for brands.

- **The Impact of Ad Creative** - Finally, every ad that is run has a commercial message, and different messages affect sales differently. Measuring the impact of ad creative is an additional effect from advertising.

Defining Long-Term Ad Effects

This exercise will be a media-mix model. An important and different component of our models is a derived Long-Term Ad Effect (LTAE) variable. LTAE sales are thus defined as follows:

Long-Term Ad Effects (LTAE), *are the incremental sales generated from customers who were initially acquired via media/advertising messages, over the lifetime of that customer. These sales are attributed through repeat purchases and revenue streams generated by these customers over their lifetime with a brand. Once a customer has been acquired, LTAE reflects the value that these customers generate over their lifetime as a customer.*
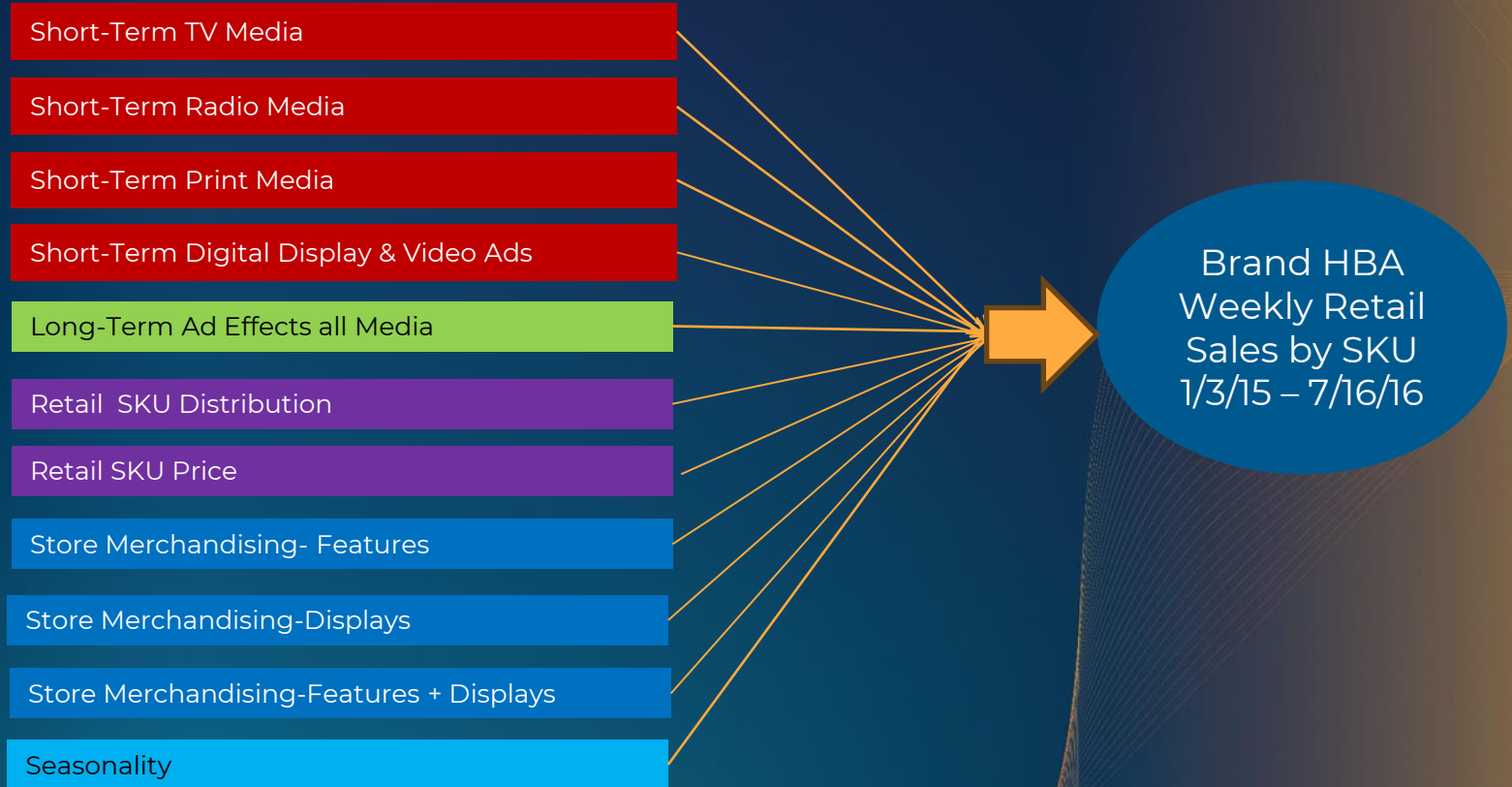
References:

Leslie A. Wood, David F. Poltrack, Measuring the Long-Term Effects Of Television Advertising, Journal of Advertising Research, June 2015

Ataman, Van Heerde, Mela, Building Brands, Marketing Science, Nov.-Dec, 2008

Ataman, Van Heerde, Mela , The Long-term Effect of Marketing Strategy on Brand Performance, Emory University Zyman Institute of Brand Science, 3 July 2006

BLA Bottom-Line *Analytics*

Model & Architecture – Brand HBA

Below reflects our inputs formulating the model for predicting Brand HBA weekly sales.

Short-Term TV Media

Short-Term Radio Media

Short-Term Print Media

Short-Term Digital Display & Video Ads

Long-Term Ad Effects all Media

Retail SKU Distribution

Retail SKU Price

Store Merchandising- Features

Store Merchandising-Displays

Store Merchandising-Features + Displays

Seasonality

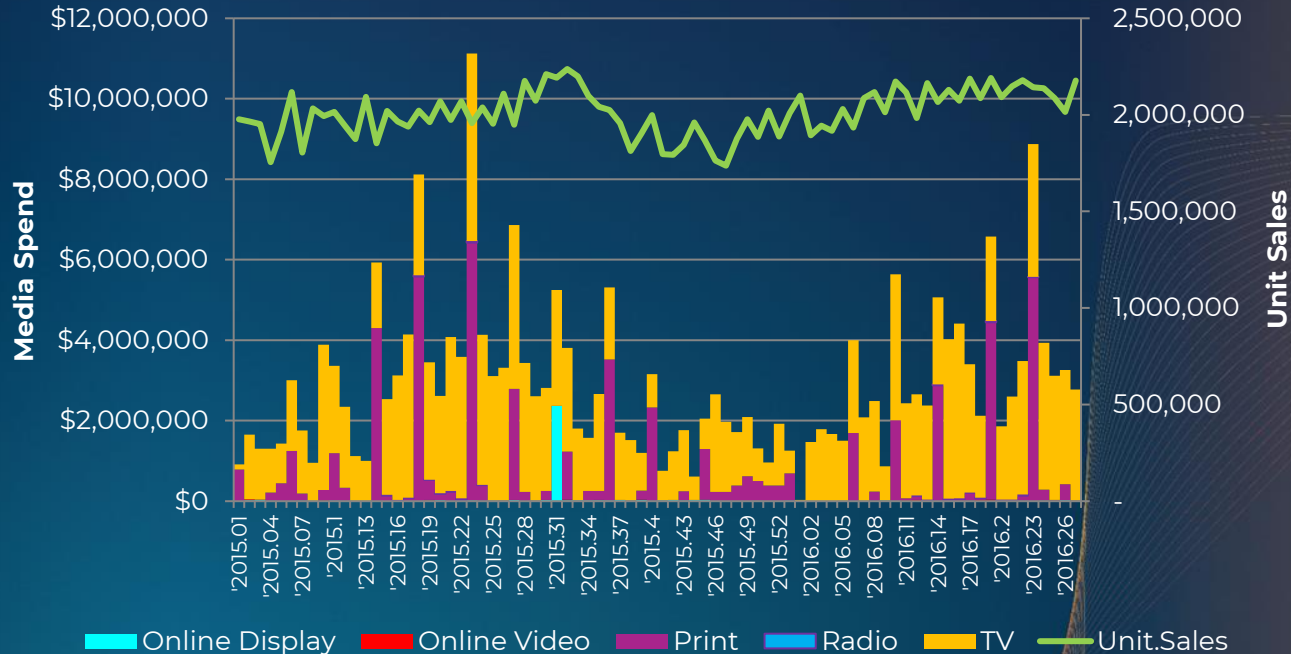Brand HBA Weekly Retail Sales by SKU 1/3/15 – 7/16/16

BLA Bottom-Line Analytics

Retail Sales and Ad Spending

For Year ending 7/16/16, Brand HBA generated $1+ Billion in revenue and 100+ million units, on $138 million of total ad spend.
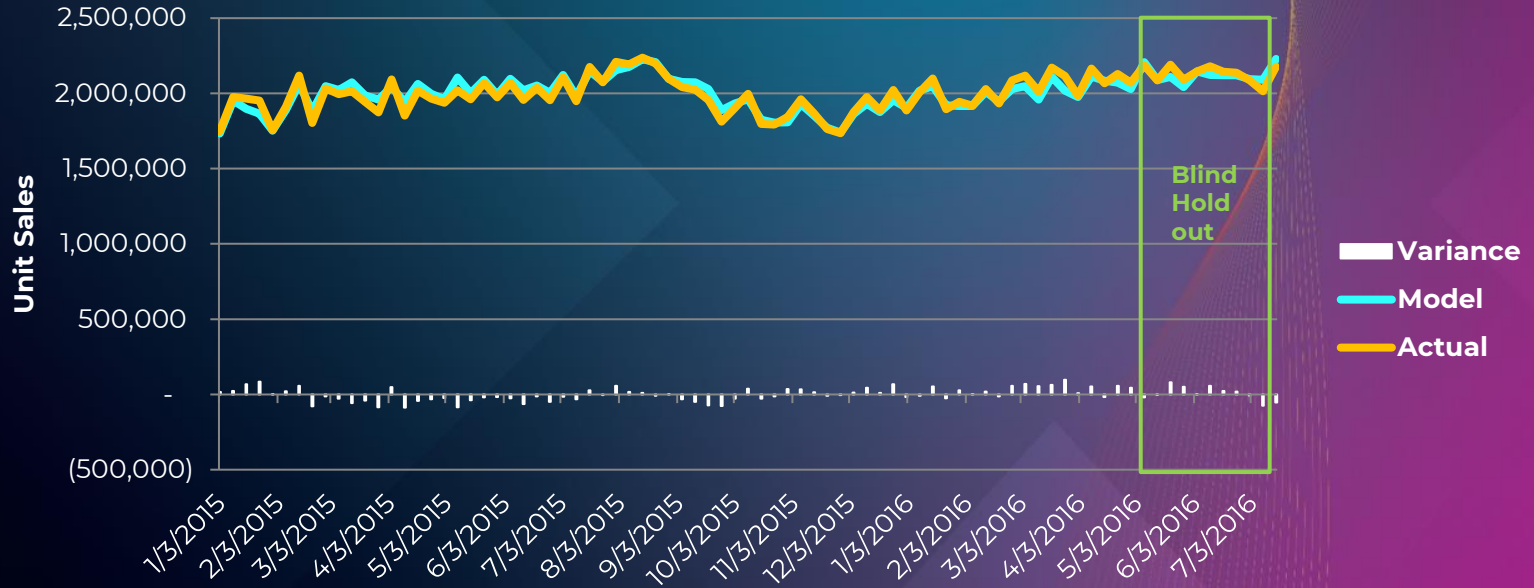

Brand HBA Unit Sales and Media Spend

Legend: Online Display, Online Video, Print, Radio, TV, Unit.Sales

Validating the Model

A 10% data holdout to was used to validate the model's ability to predict. Overall results were excellent.
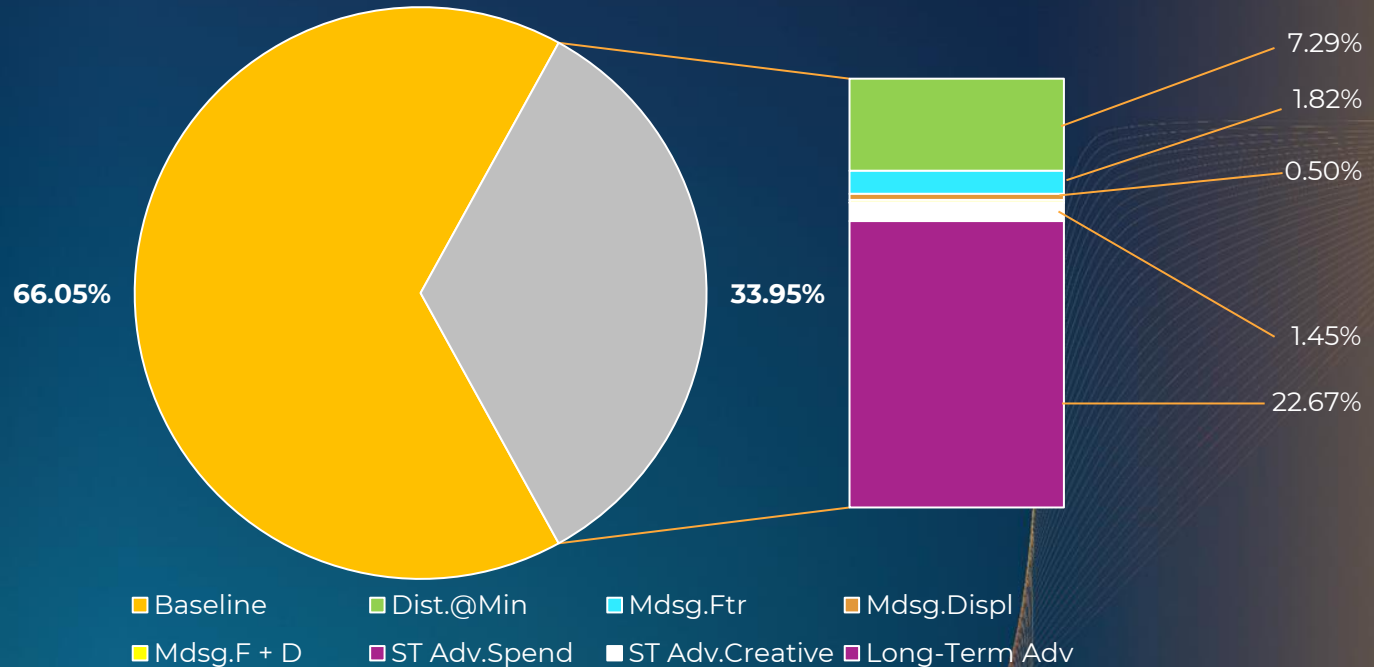to predict. .

Brand HBA Actual Sales vs. Model

Legend:
- Variance
- Model
- Actual

Y-axis: Unit Sales — 2,500,000 / 2,000,000 / 1,500,000 / 1,000,000 / 500,000 / - / (500,000)

X-axis: 1/3/2015, 2/3/2015, 3/3/2015, 4/3/2015, 5/3/2015, 6/3/2015, 7/3/2015, 8/3/2015, 9/3/2015, 10/3/2015, 11/3/2015, 12/3/2015, 1/3/2016, 2/3/2016, 3/3/2016, 4/3/2016, 5/3/2016, 6/3/2016, 7/3/2016

Blind Hold out

BLA Bottom-Line Analytics

Existing Situation

For Brand HBA, Long-Term ad effects are among the highest seen at 15X the Short-Term Media Impact.

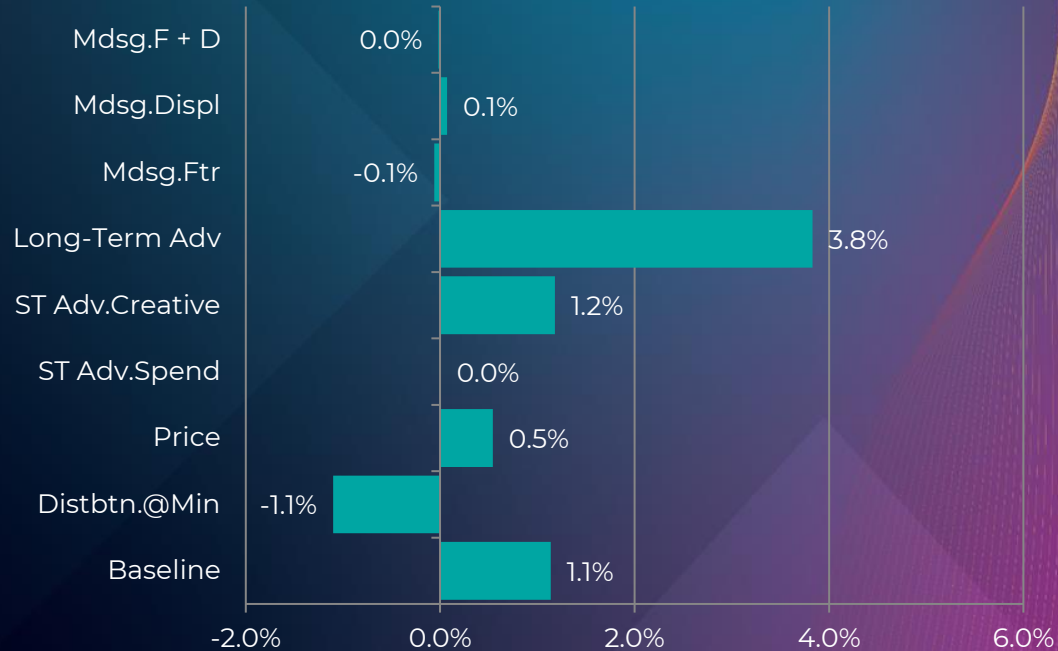**Incremental Contributions to Total Brand HBA Sales**

66.05%   33.95%

7.29%
1.82%
0.50%
1.45%
22.67%

Legend:
- Baseline
- Dist.@Min
- Mdsg.Ftr
- Mdsg.Displ
- Mdsg.F + D
- ST Adv.Spend
- ST Adv.Creative
- Long-Term Adv

BLA Bottom-Line *Analytics*

Performance shows Brand HBA gaining sales of +5.6%. Most of this growth can be ascribed to better ad creative and stronger Long-Term ad effects

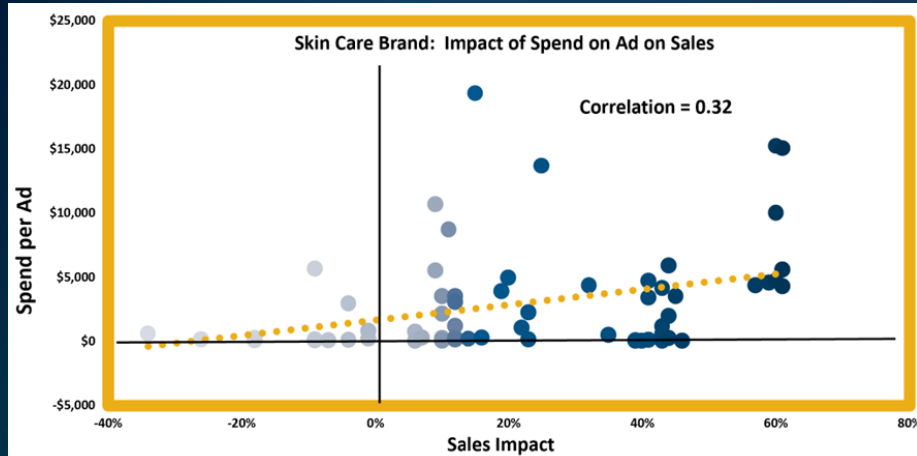### Variance Between Brand HBA's Current Quarter and Prior 12 Months

Category	Value
Mdsg.F + D	0.0%
Mdsg.Displ	0.1%
Mdsg.Ftr	-0.1%
Long-Term Adv	3.8%
ST Adv.Creative	1.2%
ST Adv.Spend	0.0%
Price	0.5%
Distbtn.@Min	-1.1%
Baseline	1.1%

BLA Bottom-Line *Analytics*

Correlations Between Ad Effectiveness and Sales
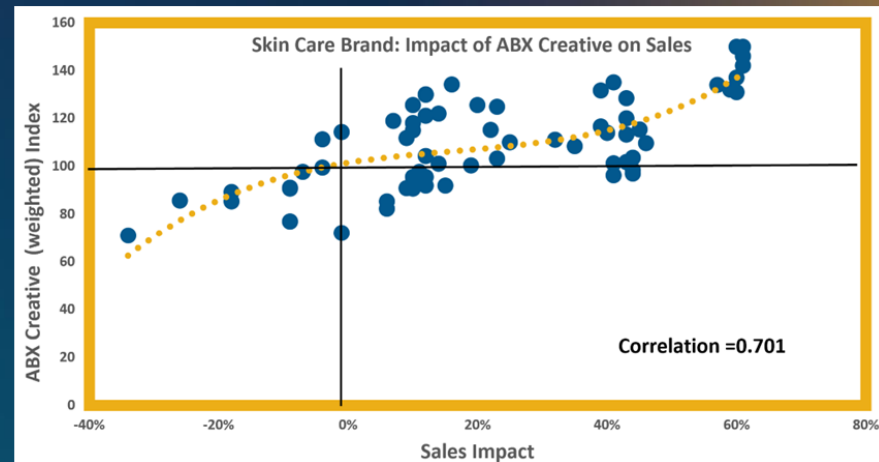
Moving Forward and Executive Recommendations

Creative and Long-Term Ad Effects

Improving Ad Creative has also helped boost the large sales gain from Long-Term Ad Effects.

Brand HBA Sales Due-to Ad Creative & Long-Term Ad Effects

Correlation = 70%

Legend: — Long-Term Adv — ST Adv.Creative

Left axis: Long-Term Ad Effects Contribution — $200,000 to $550,000
Right axis: Ad Creative Contribution — -$10,000 to $150,000
X-axis: 1/3/2015 through 7/3/2016

BLA Bottom-Line Analytics
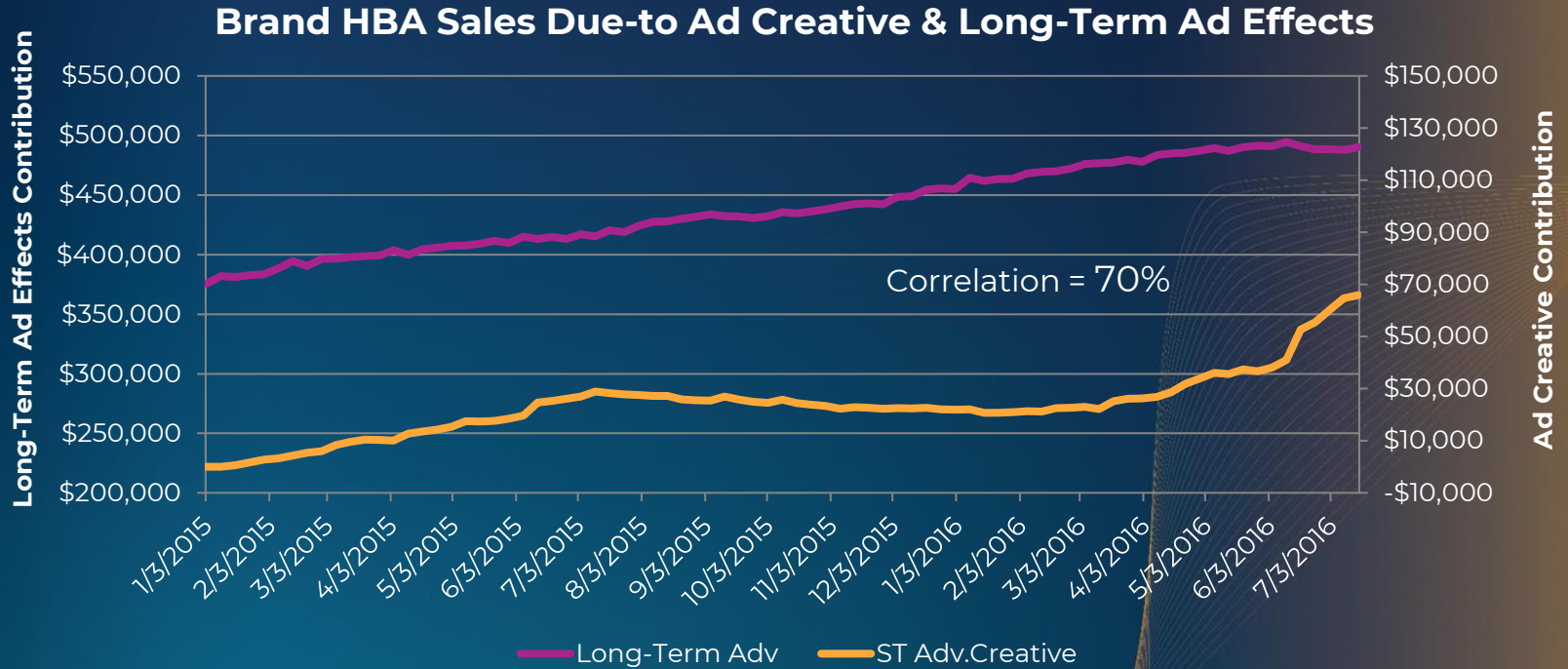
Value of Media: Decomposing Sales for Millennials

There is a direct link between ABX Scores and Revenue.

Brand HBA & ABX Incremental Dollars in Millions

Chart: Incremental Retail $ Mil. (y-axis) vs ABX Female Call-to-Action Score (x-axis)

ABX Female Call-to-Action Score	Incremental Dollars Million
50	(6.3)
60	(5.1)
70	(3.8)
80	(2.6)
90	(1.3)
100	-
110	1.1
120	2.4
130	3.6
140	4.8
150	6.1
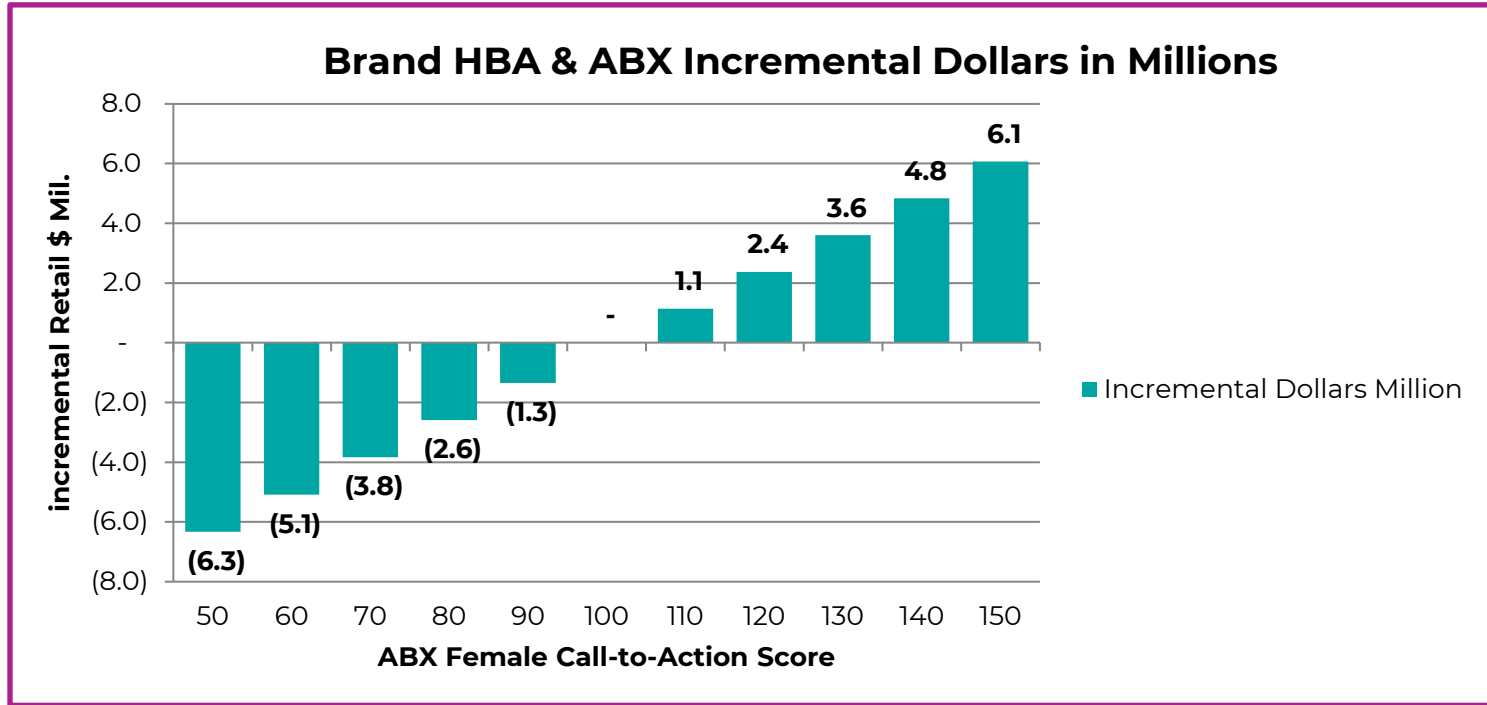
The financials of advertising dramatically change
from -$100K to 2 .7 million dollars!

Brand HBA Annual Ad Net Returns

$2,720

$3,000
$2,500
$2,000
$1,500
$1,000
$500
$0
($500)

($100)

Short-Term Effect Only   With Long-Term Effects
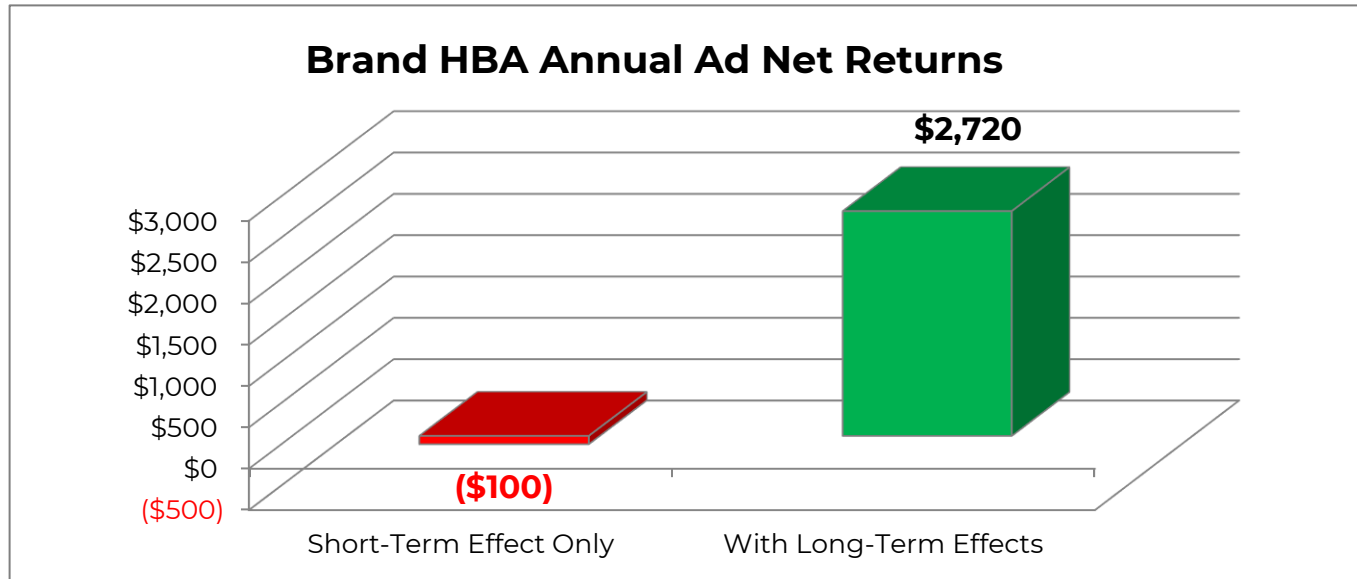
Executive Recommendations

- Long-Term Ad Effects (LTAE) are the key to positive ROI on advertising spending. For Brand HBA, this is among the highest LTAE found and equates to about 23% of annual sales; and it was 15X the short-term ad effect.

- Brand HBA's current retail sales growth is quite strong, with over +5.6% gain versus the prior year. The only negative for Brand HBA for the quarter was declining distribution and SKU availability.

- Along with stronger ad creative, the LTAE was a major driver of quarterly growth versus the prior year. In the case of Brand HBA, improved ad creative was a major driver of improved LTAE.

- There is a significant correlation between ABX Female Call-to-Action scores and the sales lifts from individual ads. The impact of the ABX Index scores represents a proxy measure for ad creative quality and is a far more significant driver of sales than spending levels behind each ad.

- The very high returns on Brand HBA suggests under-investing. Increasing ad spend as well as continually improving creative, will enhance the progress made so far.

- Pre-testing and/or continual in-market testing through systems such as the **ABX Creative Feedback Loop**™ can further ensure advertising success.

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ABX Advertising Benchmark Index

Bottom-Line Analytics BLA

Let us give you the creative insights no one else can deliver.

Contact us today

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