



# MARKETING MIX ANALYTICS FOR AFRICAN AMERICAN MARKETING

## CASE STUDY





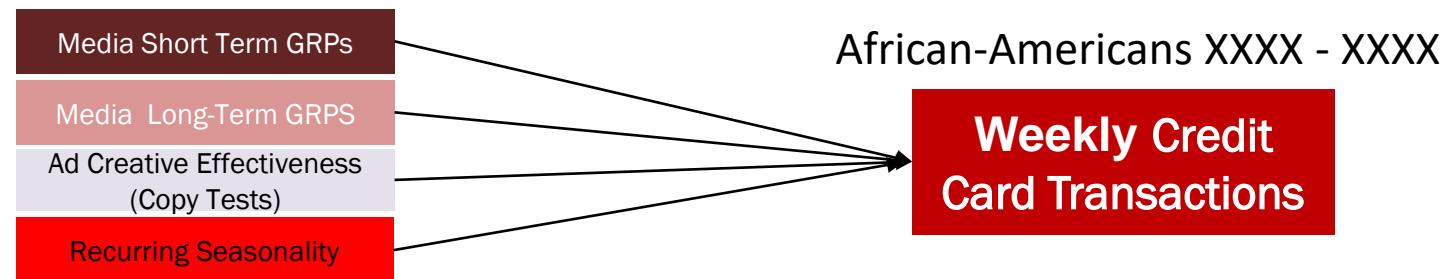
## SITUATION

- Big Box Stores Corporation's strategy is to increase its sales and market share among African Americans
- The Marketing & Research Team is interested in understanding how marketing and advertising measurement can be leveraged to attain this critical company objective.



## MODEL & ARCHITECTURE

- Bottom-Line Analytics (BLA) will construct a predictive marketing model which will measure the impact of both short-and long-term effects of Big Box Stores' advertising and the additional impact from the creative advertising message on consumer sales among African-American shoppers
- BLA believes this is breakthrough analytics because most marketing-mix models only measure the short-term effect of advertising and make no effort to measure the impact of ad creative or the long-term effect of media.

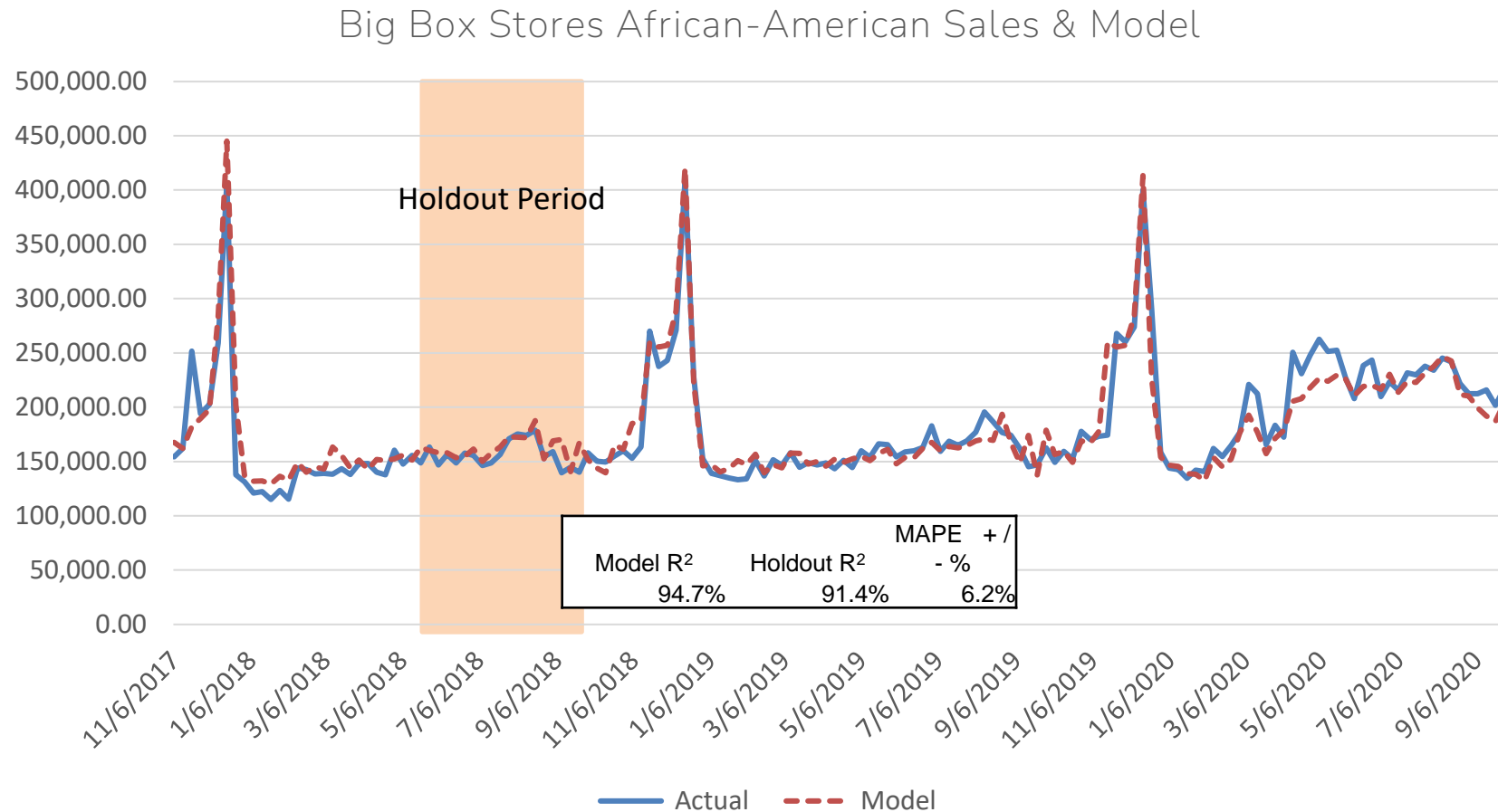


## THE TERMINOLOGY & DATA

- BLA looks at and measures advertising in three distinct stages. 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. That is called the short-term effect. However, advertising also involves building loyalty over time resulting in repeat sales from every acquired customer. This is what we call the long-term effect of advertising. 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.
- We used two important data sources for this modeling exercise.
  - Our sales data were credit-card purchase transactions & came from a company called Affinity Solutions & facilitated by its partner company Iridescent Data
  - In this model we looked at 2095 Big Box Stores' advertising copy tests from a company called Advertising Benchmark Index, who does more advertising testing than any other company.

## VALIDATING THE MODEL

This model explains sales well and has a good ability to predict

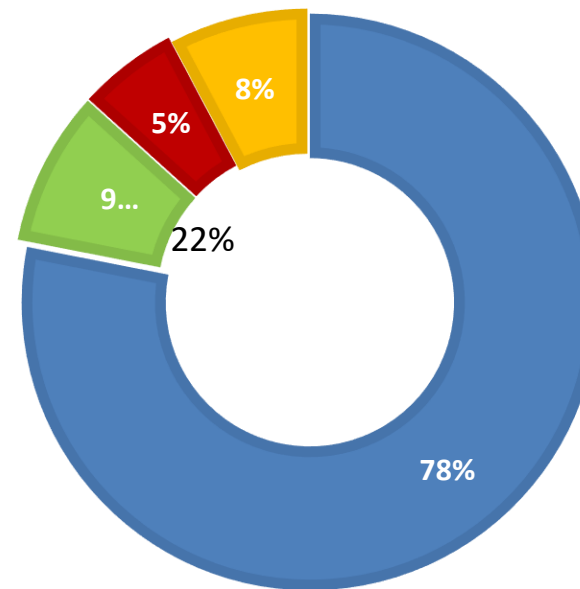




## VALUE OF MEDIA: DECOMPOSING SALES TO AFRICAN AMERICAN CUSTOMERS

22% of Sales to African-Americans is Incremental Due to Advertising: Short-Term Media Gains are most important, followed by Ad Creative & Long-Term Ad Effects

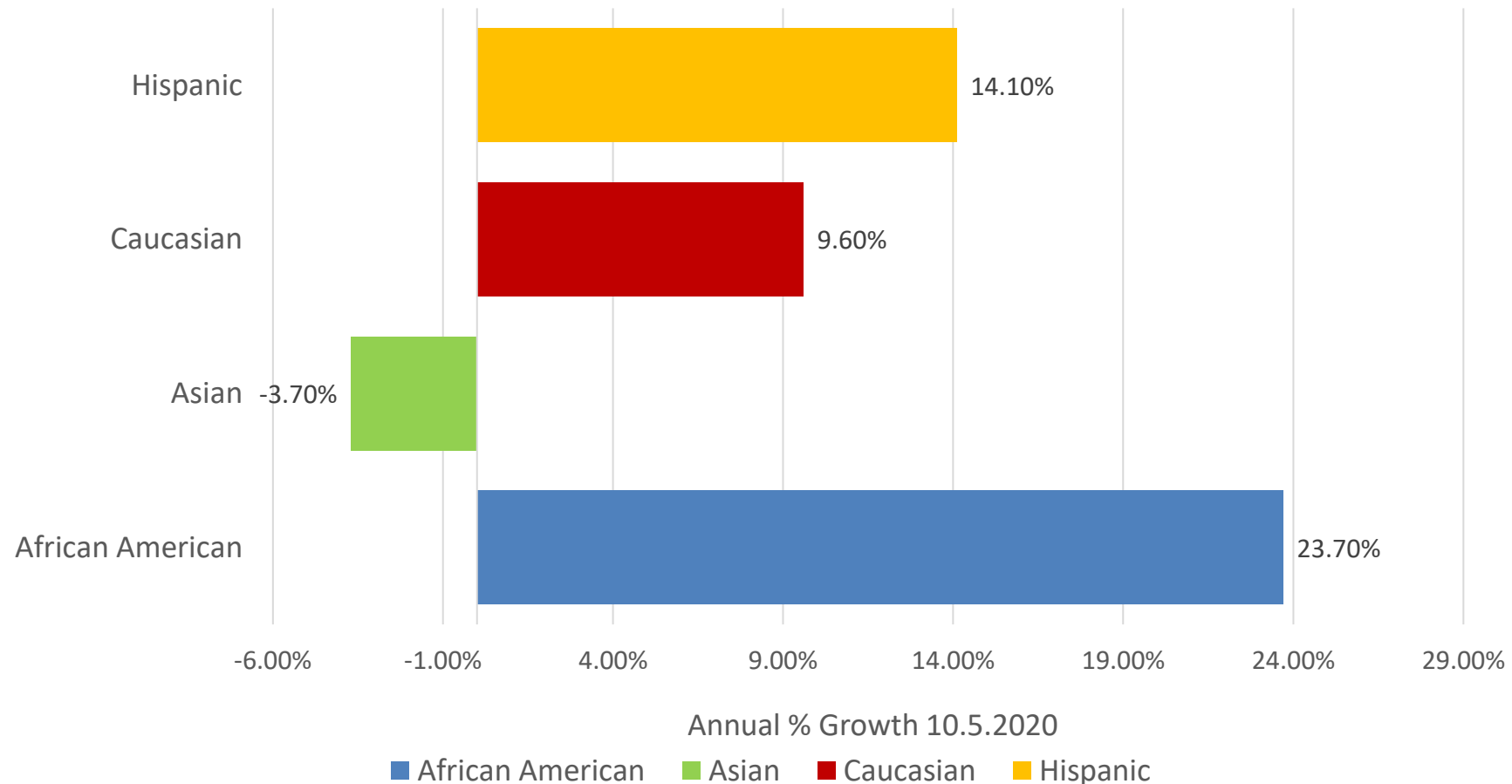
■ Base ■ Short-Term Media ■ Long-Term Media ■ Ad Creative





## BIG BOX STORES: ANNUAL GROWTH BY ETHNICITY

Across Ethnicity, African-American Customers show Stronger Growth

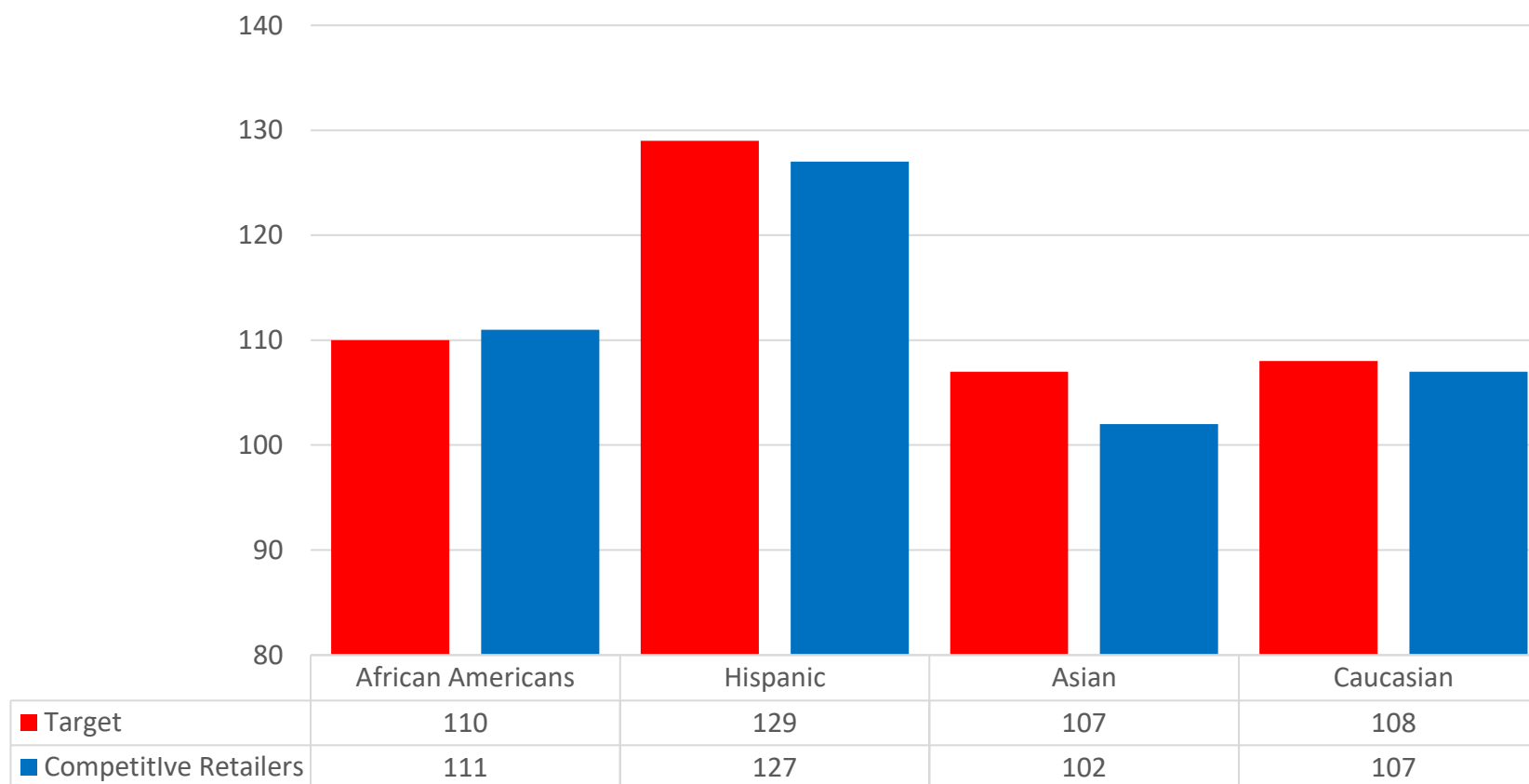






# BIG BOX STORES' ADS PERFORM AT PARITY OR BETTER AMONG KEY ETHNIC GROUPS

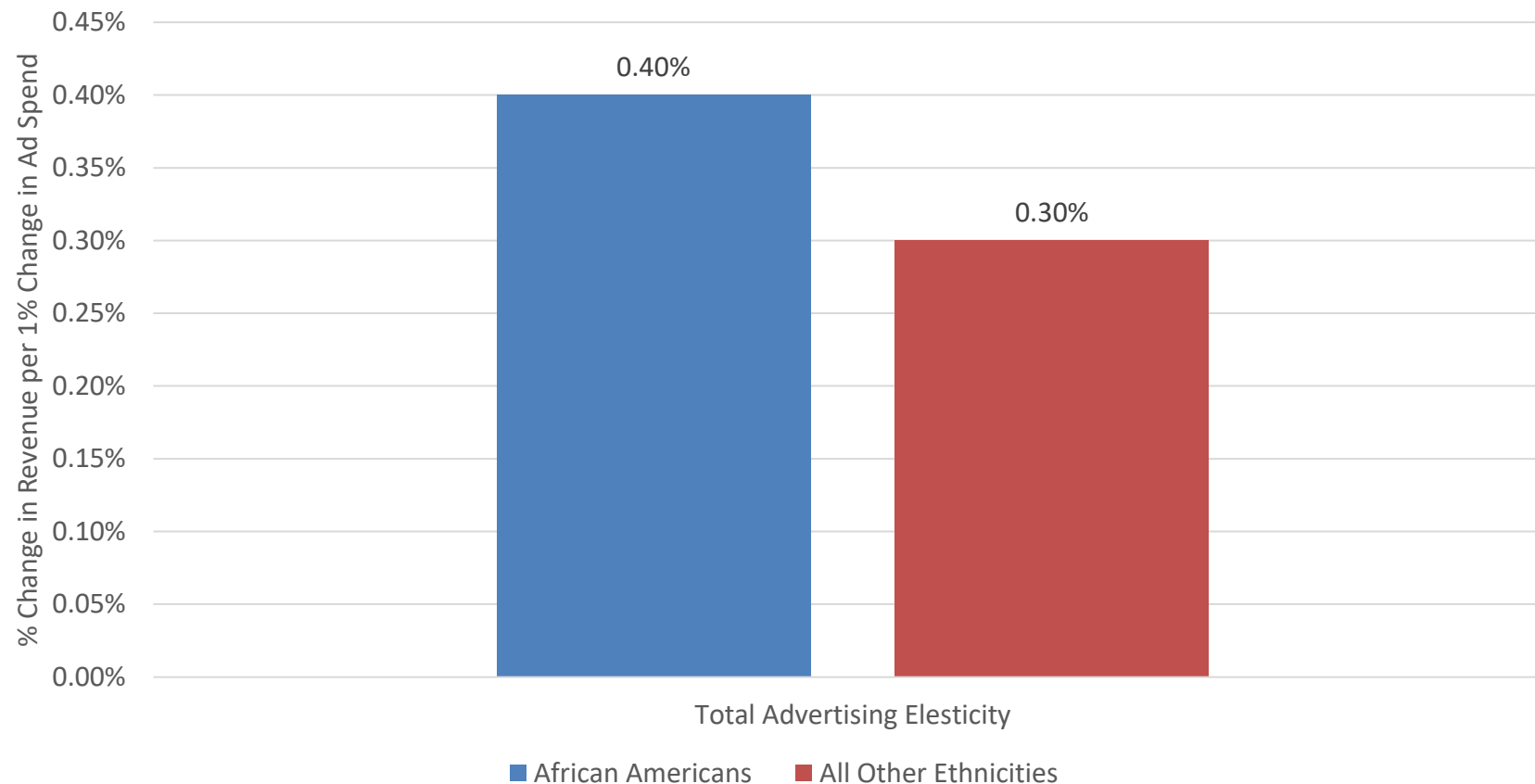
Ad Copy Effectiveness Ratings by Ethnic Group (Source ABX)





## BIG BOX STORES: AFRICAN AMERICANS V. OTHER ETHNICITIES

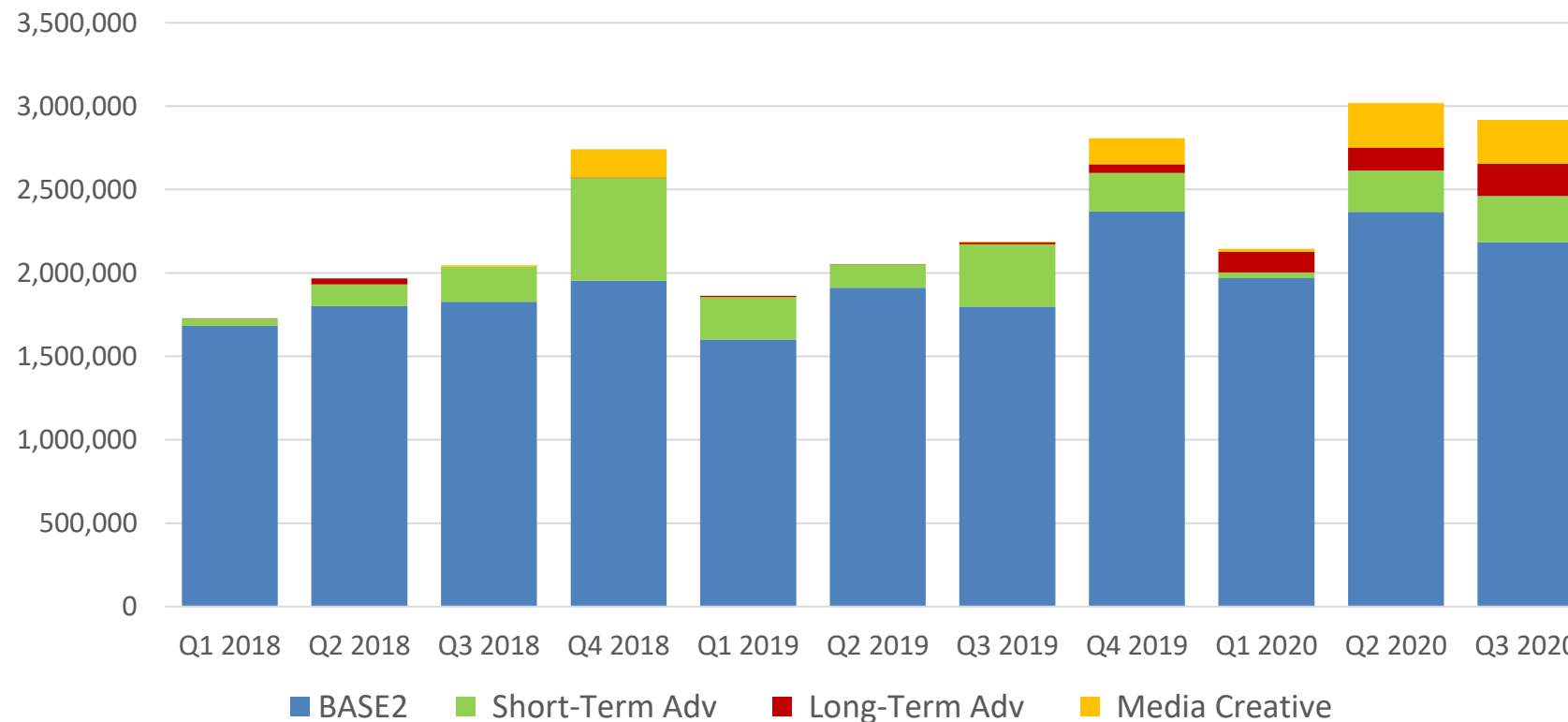
African-American Customers are more responsive to advertising than other ethnic groups



## QUARTERLY SALES DRIVERS

Over the last four Quarters, significant gains have been found due to improved advertising messaging or creative among this segment

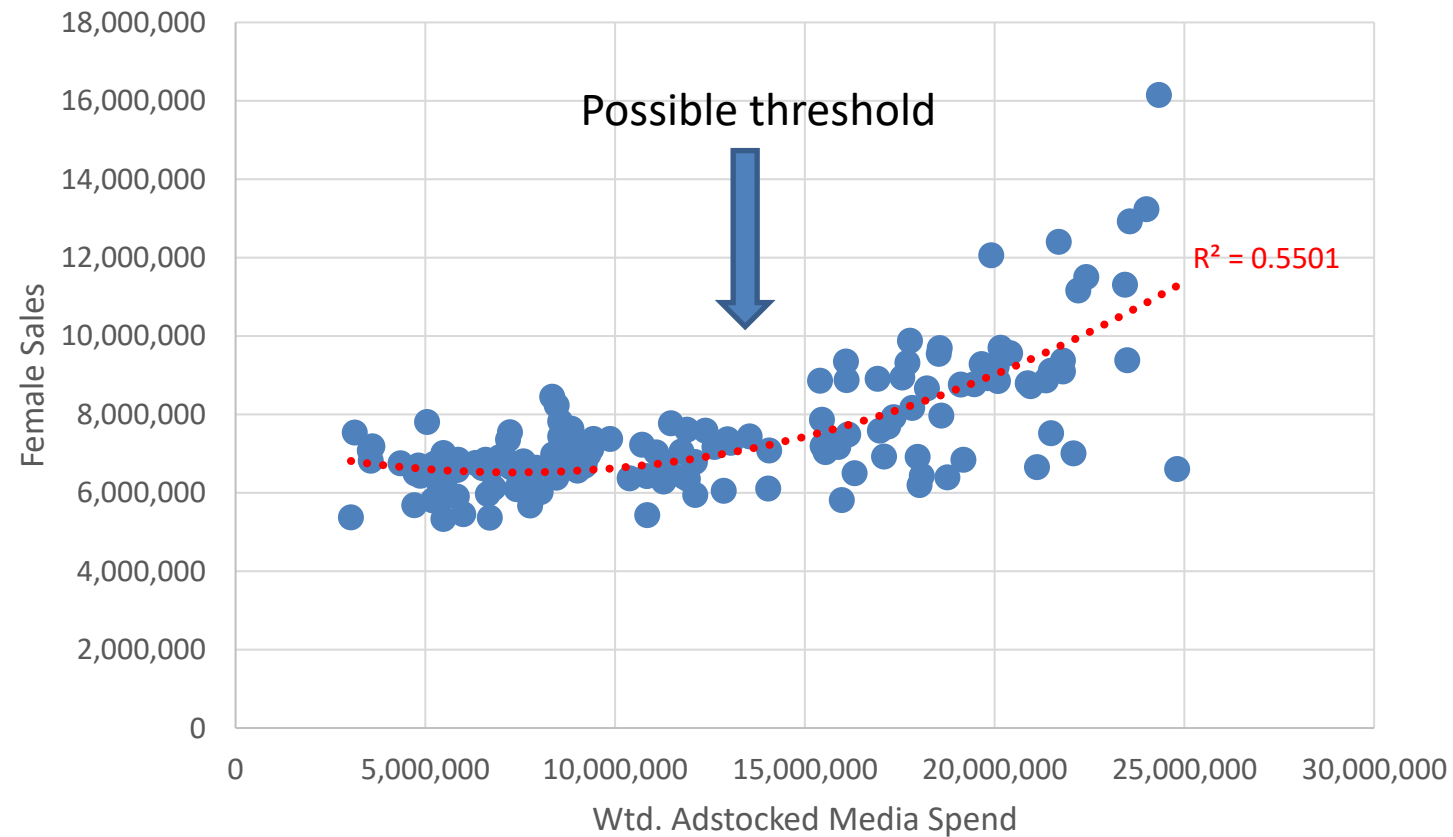
Big Box Stores African-Americans: Decomposing Sales  
by Quarter



## CORRELATING DRIVERS TO SALES

Higher ad spend does result in higher sales. There also appears to be a threshold level of weekly spend of about \$14 MM.

Ad Copy Effectiveness & Female Sales



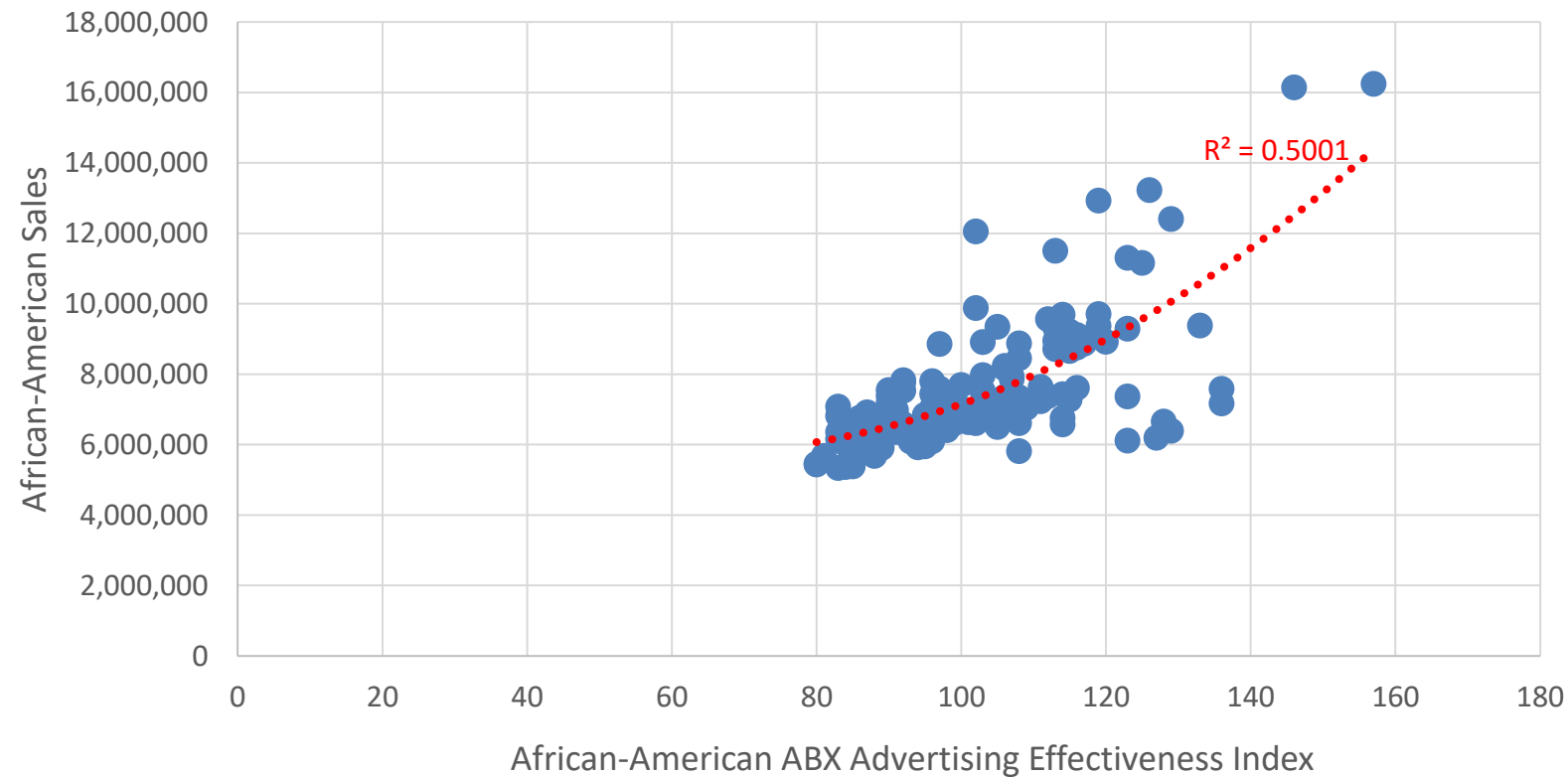




## CORRELATING DRIVERS TO SALES

Advertising Effectiveness, as measured by the ABX Index, has a significant correlation to sales

ABX Index & African-American Sales



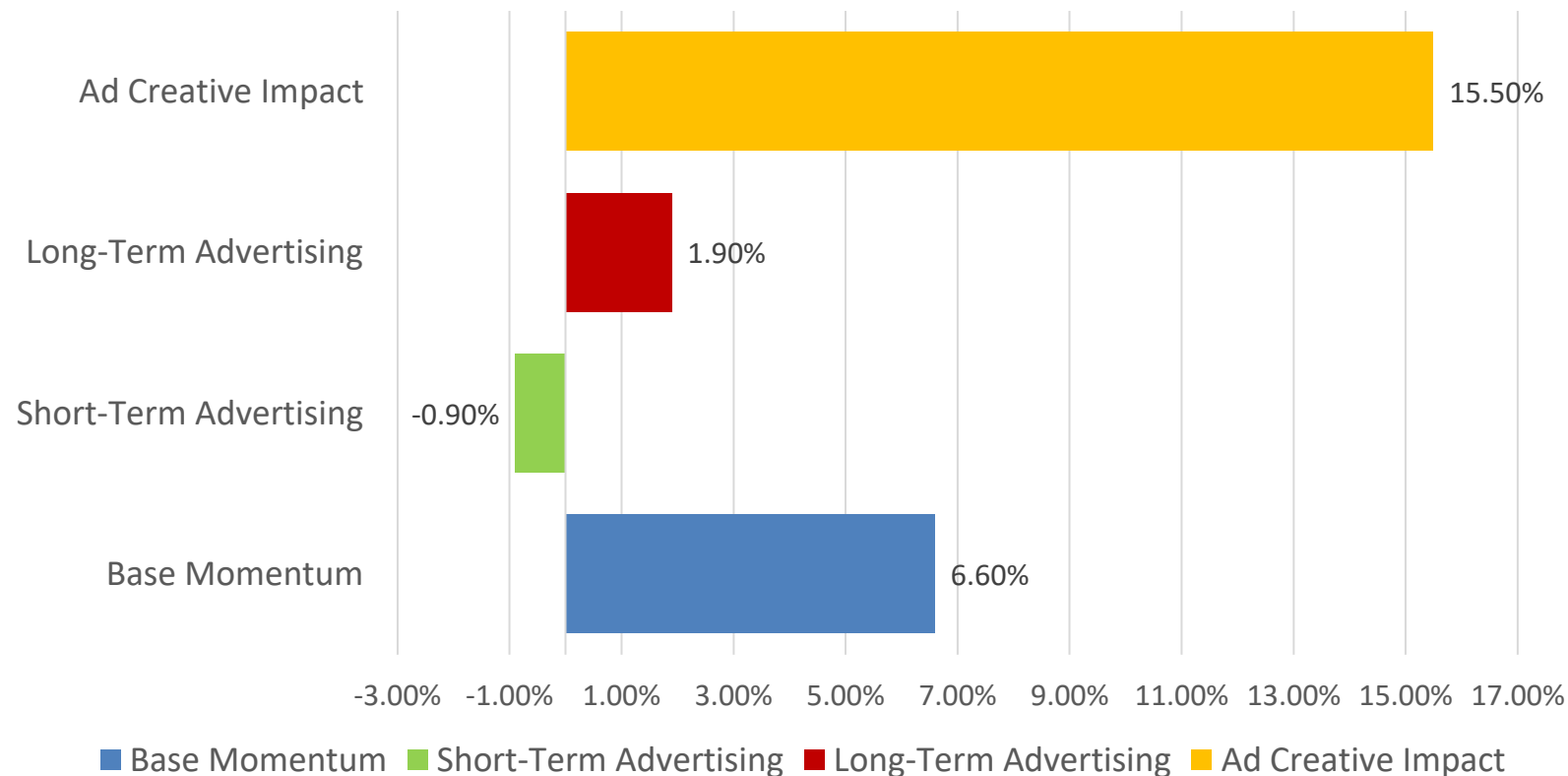
# THE 99<sup>TH</sup> PERCENTILE BIG BOX STORES ADS

The African-American copy effectiveness ratings in the 99<sup>th</sup> percentile for these ads, which played a key role in driving sales performance

Date Aired	Quarter	Media	Copy Score Index (Norm = 100)	Percentile	Product	Link to Ad
12/26/2018	2018.4	Television		158	99% Multiple Products	<a href="https://abx.ocucom.com/apps/MediaPlayer/1.3.5/www/?adkey=PTK-1.0-kxnRx%2FDRc%2FkhkLfjOIDkmMPaYbPek9kuqjVe3lc%3D-tbtlpZ5XMQkmTXvJL5uolw%3D%3D">https://abx.ocucom.com/apps/MediaPlayer/1.3.5/www/?adkey=PTK-1.0-kxnRx%2FDRc%2FkhkLfjOIDkmMPaYbPek9kuqjVe3lc%3D-tbtlpZ5XMQkmTXvJL5uolw%3D%3D</a>
11/1/2019	2019.4	Television		158	99% Multiple Products	<a href="https://abx.ocucom.com/apps/MediaPlayer/1.3.5/www/?adkey=PTK-1.0-dzn7N7M%2FE6l9elb69CfyjwstYyjisoYDo50HAA%3D-QnqRczf4kbw7Y65MEEhDPA%3D%3D">https://abx.ocucom.com/apps/MediaPlayer/1.3.5/www/?adkey=PTK-1.0-dzn7N7M%2FE6l9elb69CfyjwstYyjisoYDo50HAA%3D-QnqRczf4kbw7Y65MEEhDPA%3D%3D</a>
4/23/2020	2020.2	Television		168	99% Big Box Stores Image	<a href="https://abx.ocucom.com/apps/MediaPlayer/1.3.5/www/?adkey=PTK-1.0-REZxJ3gSmz52bexRKldy7NGGwxPBZlKPDcjls%3D-5bRhWX6iQpaPUS5fVR7wOQ%3D%3D">https://abx.ocucom.com/apps/MediaPlayer/1.3.5/www/?adkey=PTK-1.0-REZxJ3gSmz52bexRKldy7NGGwxPBZlKPDcjls%3D-5bRhWX6iQpaPUS5fVR7wOQ%3D%3D</a>
7/19/2020	2020.3	Radio		167	99% Beauty Aids	<a href="https://abx.ocucom.com/apps/MediaPlayer/1.3.5/www/?adkey=PTK-1.0-RiF9Evnf0rGZVCpvDoE265jLAYghesISza4YWWhA%3D-tnMsl%2FIMJyFjCZinHktBCw%3D%3D">https://abx.ocucom.com/apps/MediaPlayer/1.3.5/www/?adkey=PTK-1.0-RiF9Evnf0rGZVCpvDoE265jLAYghesISza4YWWhA%3D-tnMsl%2FIMJyFjCZinHktBCw%3D%3D</a>

## ANNUAL MARKETING VARIANCE

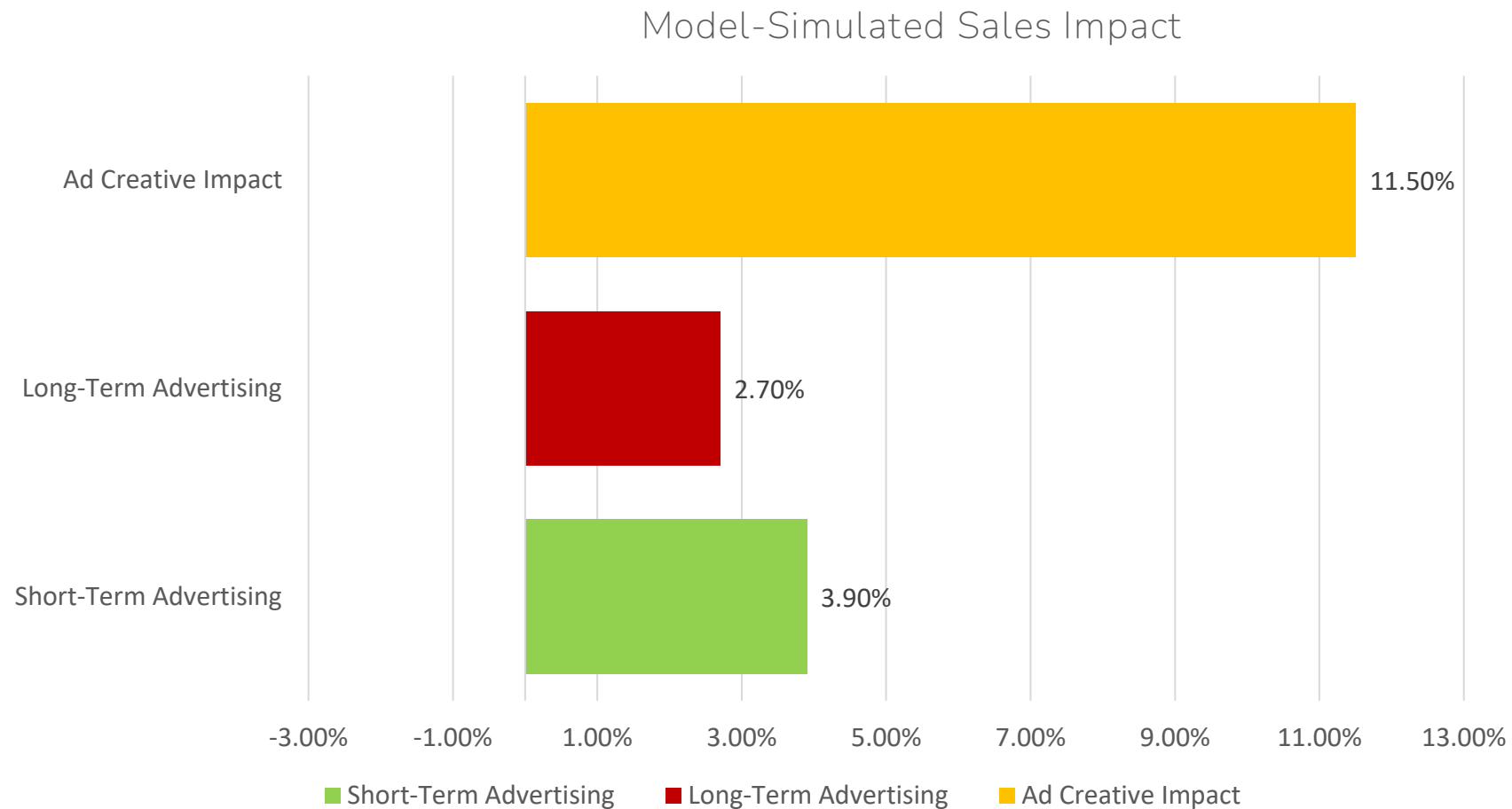
Sales to African-Americans increased about 23.1% year-over-year.. Two-Thirds of this growth came from improved ad creative. Going forward, Ad Effectiveness is a major upside opportunity among this audience.





## DRIVER SENSITIVITY: % SALES IMPACT FROM 50% IMPROVEMENT

Going forward, improving Ad Creative Effectiveness is a major upside opportunity among African-American customers



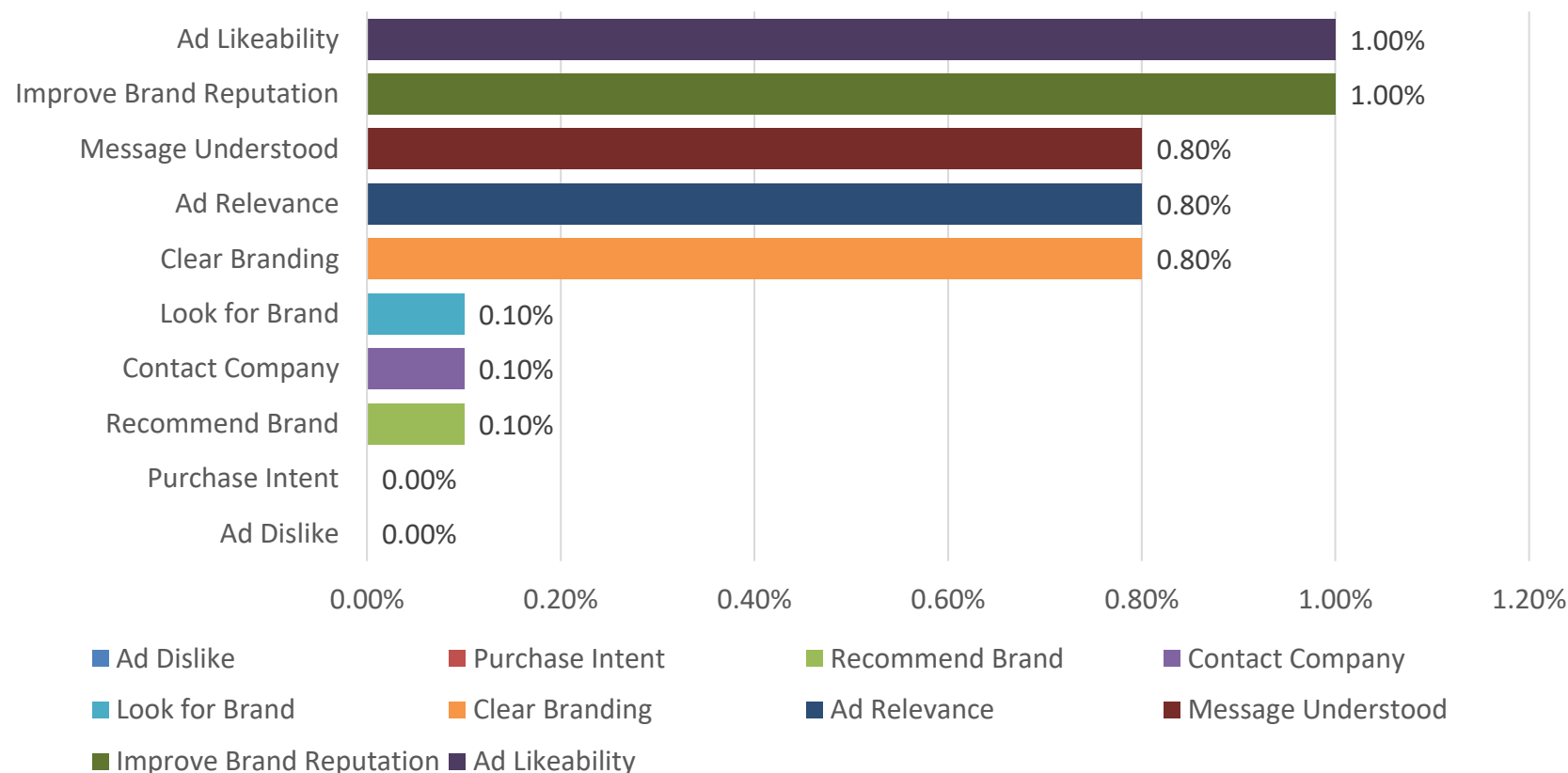
# TEN BEST BIG BOX STORES ADS

These are the Ten most effective Big Box Stores ads rated by African Americans. All video ads had African-Americans but the ads were multi-ethnic with other ethnicities.

Title	Date First Run	Medium	ABX Index	Length-Size	Product	Play URL	Channel	Composite Score	Clear Brand	Reputation	Relevant	Like	Look For	Purchase	Recommend
Because, Halloween	9/19/2020	Digital Video	153	30	Supermarket/Super center	<a href="https://abx.ocucom.com/apps/MediaPlayer/1.3.5/www/?adkey=PTK-1.0-uGXG7ZJlRPy8h2hdMq%2BxYc4knmxTYLVy39%2FY%3D-1NdcKstarFPAocFW88IQ%3D%3D">https://abx.ocucom.com/apps/MediaPlayer/1.3.5/www/?adkey=PTK-1.0-uGXG7ZJlRPy8h2hdMq%2BxYc4knmxTYLVy39%2FY%3D-1NdcKstarFPAocFW88IQ%3D%3D</a>		272	111	282	137	189	281	482	424
(TEXT) AS PART OF OUR BIGGEST RELIEF EFFORT EVER	4/23/2020	TV	168	30	Big Box Stores Image	<a href="https://abx.ocucom.com/apps/MediaPlayer/1.3.5/www/?adkey=PTK-1.0-REZxJ3gSmz52bexRKldy7NGGwxPBYzKPDciys%3D-98BwVX8DapFUS4VVR7wQQL%3D%3D">https://abx.ocucom.com/apps/MediaPlayer/1.3.5/www/?adkey=PTK-1.0-REZxJ3gSmz52bexRKldy7NGGwxPBYzKPDciys%3D-98BwVX8DapFUS4VVR7wQQL%3D%3D</a>	KTTLA	266	111	392	185	206	227	391	348
(TEXT) JAM SESSION WELCOME	11/24/2018	TV	142	30	Multiple Products	<a href="https://abx.ocucom.com/apps/MediaPlayer/1.3.5/www/?adkey=PTK-1.0-EMXUHMhHouKOM1rgelAVG95HygObvWnWpKG8wR9%3D-Cse44pD20d6tjUdIC2Z%2FA%3D%3D">https://abx.ocucom.com/apps/MediaPlayer/1.3.5/www/?adkey=PTK-1.0-EMXUHMhHouKOM1rgelAVG95HygObvWnWpKG8wR9%3D-Cse44pD20d6tjUdIC2Z%2FA%3D%3D</a>	CBS	221	103	245	161	193	125	387	332
SAVE ON LAST MINUTE GIFTS WITH	12/25/2019	TV	134	30	Multiple Products	<a href="https://abx.ocucom.com/apps/MediaPlayer/1.3.5/www/?adkey=PTK-1.0-evsSocT%2BmZQW9kUTRqUJq4yK5mRgs4TtZUB9%3D-ic%2FzYc68H0EsbSEa0a2w%3D%3D">https://abx.ocucom.com/apps/MediaPlayer/1.3.5/www/?adkey=PTK-1.0-evsSocT%2BmZQW9kUTRqUJq4yK5mRgs4TtZUB9%3D-ic%2FzYc68H0EsbSEa0a2w%3D%3D</a>	WGN America	204	83	253	163	230	144	333	223
BOGO 50% OFF	10/7/2019	Digital Display	152	300x600	Shoes	<a href="https://abx.ocucom.com/apps/MediaPlayer/1.3.5/www/?adkey=PTK-1.0-%2BIAK1cray%2FqVD7A71wYzQPTYc4wGJibCzM%3D-REXQv%2B%2F4BOABsn7RE3G%3D%3D">https://abx.ocucom.com/apps/MediaPlayer/1.3.5/www/?adkey=PTK-1.0-%2BIAK1cray%2FqVD7A71wYzQPTYc4wGJibCzM%3D-REXQv%2B%2F4BOABsn7RE3G%3D%3D</a>	Yahoo!	197	100	331	150	186	232	201	181
GOOD AND GATHER IS MADE FOR MEALTIME OUR OWN	4/15/2020	TV	142	15	Food & Beverage	<a href="https://abx.ocucom.com/apps/MediaPlayer/1.3.5/www/?adkey=PTK-1.0-zqG5KUny%2FhyMT51oid46dMONY6GTbB93Df%3D-852TBJR2YdKwFgQBuaSu%3D%3D">https://abx.ocucom.com/apps/MediaPlayer/1.3.5/www/?adkey=PTK-1.0-zqG5KUny%2FhyMT51oid46dMONY6GTbB93Df%3D-852TBJR2YdKwFgQBuaSu%3D%3D</a>	CBS	191	98	262	144	172	252	217	194
SHOP SCHOOL SUPPLIES FOR YOUR LITTLE LEARNERS	7/26/2020	Digital Display	125	300x250	Multiple Products	<a href="https://abx.ocucom.com/apps/MediaPlayer/1.3.5/www/?adkey=PTK-1.0-crmr0PzNMuHHSKkm%2BnmHw1FbJehN%2FdrLToCand0%3D-%2BvUUsmld%2FYZKsv7uQ%3D%3D">https://abx.ocucom.com/apps/MediaPlayer/1.3.5/www/?adkey=PTK-1.0-crmr0PzNMuHHSKkm%2BnmHw1FbJehN%2FdrLToCand0%3D-%2BvUUsmld%2FYZKsv7uQ%3D%3D</a>	Yahoo! Sports	188	111	128	123	170	282	216	287
FREE \$5 Big Box Stores GIFT CARD WHEN YOU SPEND \$20 ON	6/22/2020	Digital Display	143	300x250	Skincare	<a href="https://abx.ocucom.com/apps/MediaPlayer/1.3.5/www/?adkey=PTK-1.0-V%2FT1FJEhNtn2aGivnzYZJBef000Bo7Oqh25uE%3D-gsXDRP4wPz0h1vJBQqID%3D%3D">https://abx.ocucom.com/apps/MediaPlayer/1.3.5/www/?adkey=PTK-1.0-V%2FT1FJEhNtn2aGivnzYZJBef000Bo7Oqh25uE%3D-gsXDRP4wPz0h1vJBQqID%3D%3D</a>	Yahoo! Finance	174	111	242	184	192	141	243	108
FREE \$5 Big Box Stores GIFT CARD WHEN YOU SPEND \$20 ON	8/10/2020	Digital Display	151	300x250	Skincare	<a href="https://abx.ocucom.com/apps/MediaPlayer/1.3.5/www/?adkey=PTK-1.0-%2BIAK1cray%2FqVD7A71wYzQPTYc4wGJibCzM%3D-REXQv%2B%2F4BOABsn7RE3G%3D%3D">https://abx.ocucom.com/apps/MediaPlayer/1.3.5/www/?adkey=PTK-1.0-%2BIAK1cray%2FqVD7A71wYzQPTYc4wGJibCzM%3D-REXQv%2B%2F4BOABsn7RE3G%3D%3D</a>	Yahoo!	161	95	273	157	145	0	92	367
3/\$10.50 SALE ON PEPSI & MTN DEW 12-PK ITEMS	1/6/2020	Digital Display	130	300x250	Food & Beverage	<a href="https://abx.ocucom.com/apps/MediaPlayer/1.3.5/www/?adkey=PTK-1.0-w4G%2BbCUYY53v2lxodRtp6cf180rMQ75k%3D-P9z6768seFD48YQXoYXq%3D%3D">https://abx.ocucom.com/apps/MediaPlayer/1.3.5/www/?adkey=PTK-1.0-w4G%2BbCUYY53v2lxodRtp6cf180rMQ75k%3D-P9z6768seFD48YQXoYXq%3D%3D</a>	Other Sites	123	83	270	124	131	144	111	0

## CRITERIA FOR MOST EFFECTIVE ADS

These are the Criteria which were most aligned with highly effective ads to African American customers





# WHAT'S NEXT FOR BIG BOX STORES?

Major Depart. Store shows a -5.6% sales decline in XXXX. In depth analysis reveals that:

- The Covid Lockdown cost the retailer about -3.4% % in sales. Even in the absence of this likely one-time event, Genesis' overall sales still under-perform. While growth returned at a strong rate following this Lockdown, we are not sure that this growth will be sustainable
- Like other retailers, Major Dept. Store focuses a lot of its marketing toward Major Depart. Stores' Millennials 18-24. While year-over-year sales improved among this group by 6%, this growth was insufficient to overcome the sales declines in other older age segments. Major Dept. Store is thus faced with the difficult task of accelerating growth among Millennials and returning the other age groups to positive growth
- While Major Dept. Stores' Ad Creative has improved in the current year, it still has more to go before it recharges growth across all groups. Evidence shows that the Boomer age segment, which is the largest by volume, does not respond well to Major Dept. Stores' ad messaging.
- When evaluating Major Dept. Stores' advertising, we see room for improvement of its messaging. While Major Dept. Store has done a great job in driving growth among Millennial's, its media message does not appear to show relevance among other key age groups, especially Boomers. Major Dept. Store needs to resolve this to grow its overall business.

## Contact Information

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