

dstillery



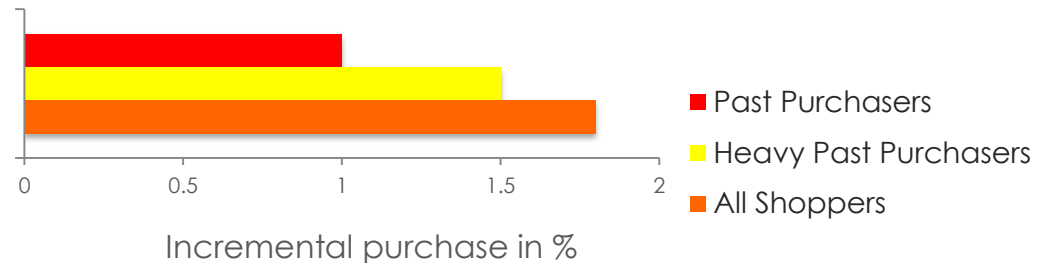
Creative Brand Management Learnings

Goal: draw insights that allow to maximize in-store sales

1. Learn if online display creatives can drive purchase of Tropicana orange juice in store.
2. Learn the impact of different creatives on in store purchase.
3. Learn which audiences are most impacted by which messaging and copy.

Summary I: Display advertisements significantly impact in-store purchase

- 1.8% increase in in-store sales for general population of shoppers.
- 1.0% increase in in-store sales for past purchasers.
- 1.5% increase in in-store sales for high past purchasers.
- Splitting past purchasers into 'heavy' and 'light' past purchasers shows that heavy past purchasers are more impacted by the campaign



Summary II: Variation between different creatives and micro-audiences

- Within the artwork, we observed an advantage of 'carafe'/'lifestyle' over 'orange' artwork. 'carafe' drove a 2.3% increase in sales.
- Slight advantage for the '100% oranges. Non-GMO' copy in the overall population (2.6% increase). For past purchasers the 'No Sugar added'. 100% oranges' copy had higher impact (1.9%), almost double the impact of the average creative.
- Splitting the population further up into micro-audiences shows that Tropicana Pure Premium Loyals are most impacted, while Loyals of competitor brands are least impacted by the campaign.
- Tropicana Loyals and 36+ moms were most impacted by the 'carafe' artwork, whereas the 'orange' artwork resonated best with Gym-goers.
- Most moms are most impacted by copy containing 'No Sugar added'. '100% Oranges. Non-GMO' had high impact on Gym-goers.
- 'Orange' artwork has the lowest impact overall, but has very high impact in fitness and health-conscious audiences.

Tropicana

Phase 1: Experimental Setup

Creative Grid

Within the grid different copy is **paired** with different artwork

This allows for an **independent** assessment of the impact of each copy and artwork

No Sugar Added.
100% Oranges.
Just Juice.

100% Oranges.
Non-GMO.
Just Juice.

No Sugar Added.
Non-GMO.
Just Juice.

Carafe + Glass(straw)



Orange + Straw



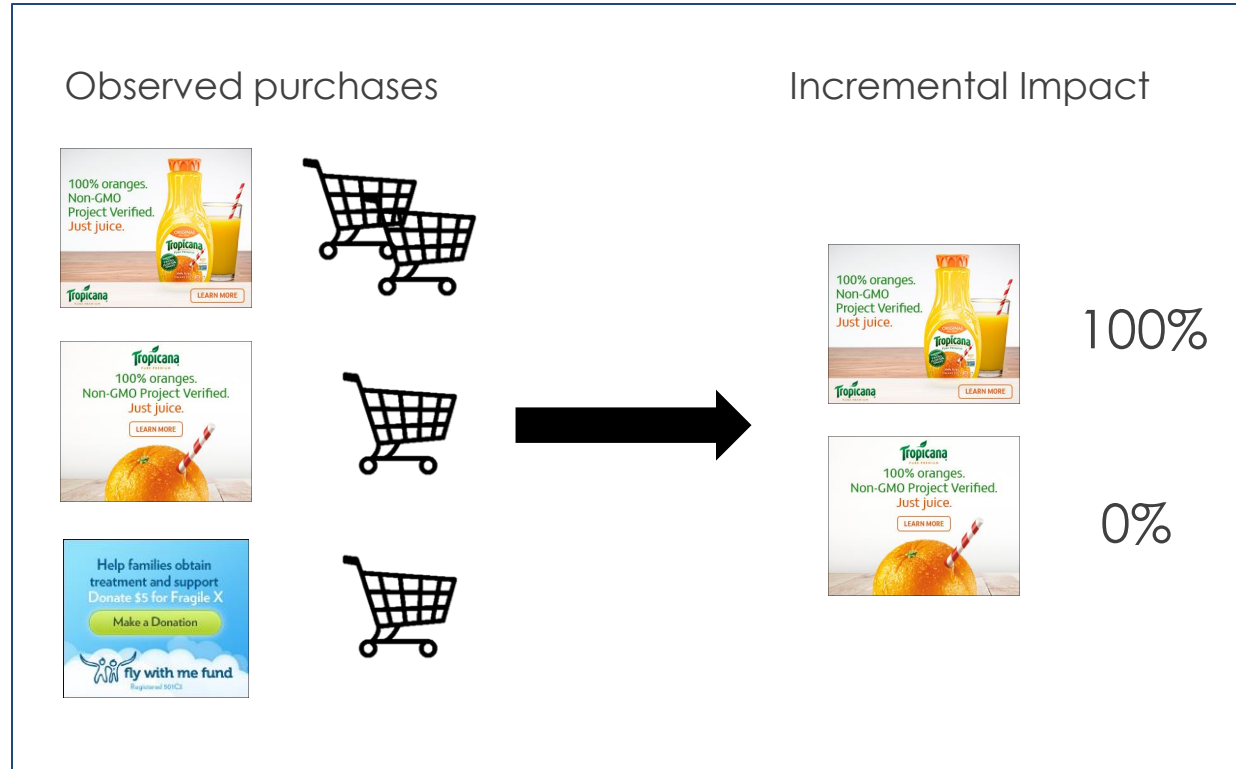
Lifestyle



Analysis: Calculate incremental impact

Incremental Impact:

What's the percentage of increase in store purchase events caused by the advertisement?



Example:

Purchase Rate With No Ad: 3.87%

Purchase Rate With Ad: 4.47%

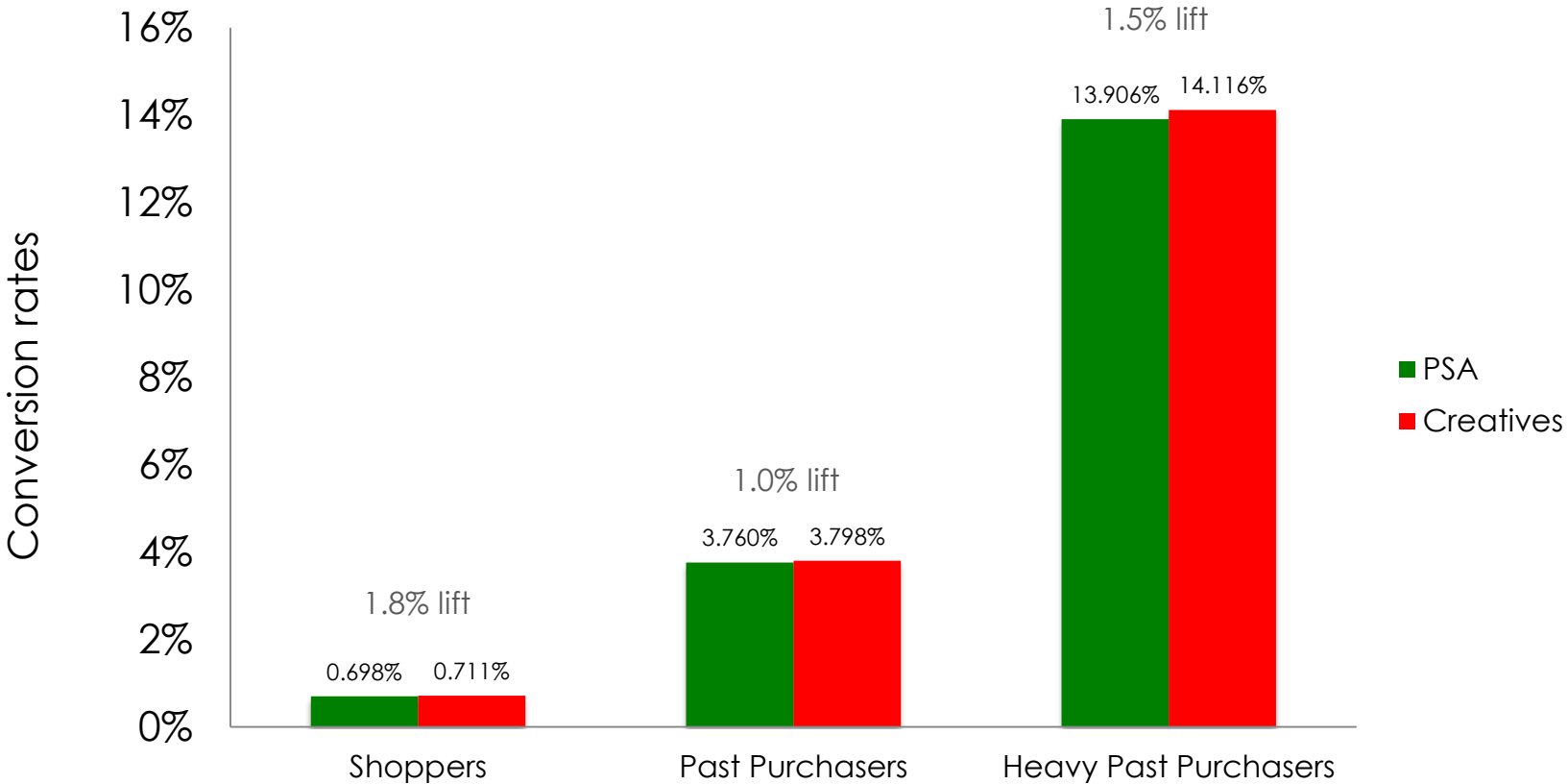
Incremental Impact: $(4.47\%/3.87\%) - 1 = 15.5\%$

Tropicana

Phase 1: Insights

Overall impact on in-store purchase

Observed Conversion Rates



Who are heavy past purchasers? Crafted audience membership

Over Index	Under Index
Broadway Fans	Sweepstakes Enthusiasts
Luxury Retail Researchers	Family Values Advocates
Luxury Travel Researchers	Budget Wireless Shoppers
Ski Enthusiasts	Plus Size Women
Coders & Developers	Intimates Shoppers
NHL Fans	Coupon Researchers
IT Professionals	Military Families
Charitable Donors	Holiday Deals Shoppers
Apple Fans	Prepaid Smartphone Shoppers
Yoga Enthusiasts	Back Pain Sufferers
Soccer Fans	Gun Rights Advocates
ISP Comparison Shoppers	Discount Home Furnishings Shoppers
Travel Researchers	Working Parents
Advertising Professionals	Bed & Bath Shoppers
Stay-at-Home Parents	Crime Prevention Advocates
College Students	Fiscal Conservatives
Left Wing Radicals	Right Wing Radicals
Sporting Goods Shoppers	Pet Owners
Student Loan Researchers	Hip Hop Fans

Who are heavy past purchasers? Web-browsing clusters

Over Index heavy > light past purchasers	Under Index light > heavy past purchasers
Local news upstate New York	Local news Carolina
Local news North Jersey	Local news Tennessee
Local news Connecticut	Local news Alabama
Local news Boston	Local news Virginia
Cable providers	Local news North Carolina
Internet/phone service providers	Local news Atlanta
Local news Chicago	African-American culture
Youth Soccer and Golf	Local news Louisiana
Local news Maine	Local news Oklahoma
Local news New York City	Country music
Local news New York City metropolitan area	Online gaming
Jewish Interests	Christian Interests
Flights and Travel	Chain restaurants and entertainment
News from Canada	Frugal cooking
Home furnishings and decoration	Local news Denver/Colorado
College websites	Discount furniture
Footwear and Sporting Goods	Right wing news
Charity and Non-Profits	Patriotic news
Business	Hunting and fishing supplies

Slight advantage of 'carafe' / 'lifestyle' over 'orange'

Incremental Impact on Purchase Based on Artwork

0.5% / 2.3%



Carafe

2.3% / 1.9%



Lifestyle

1.8% / 1.0%



Orange/Straw

heavy past purchasers % / all %

Advantage of '100GMO' overall, 'Sugar100' for past purchasers

Incremental Impact on Purchase Based on Copy

1.5% / 2.6%



100% Oranges/
Non-GMO

2.0% / 1.7%



No sugar added/
100% oranges

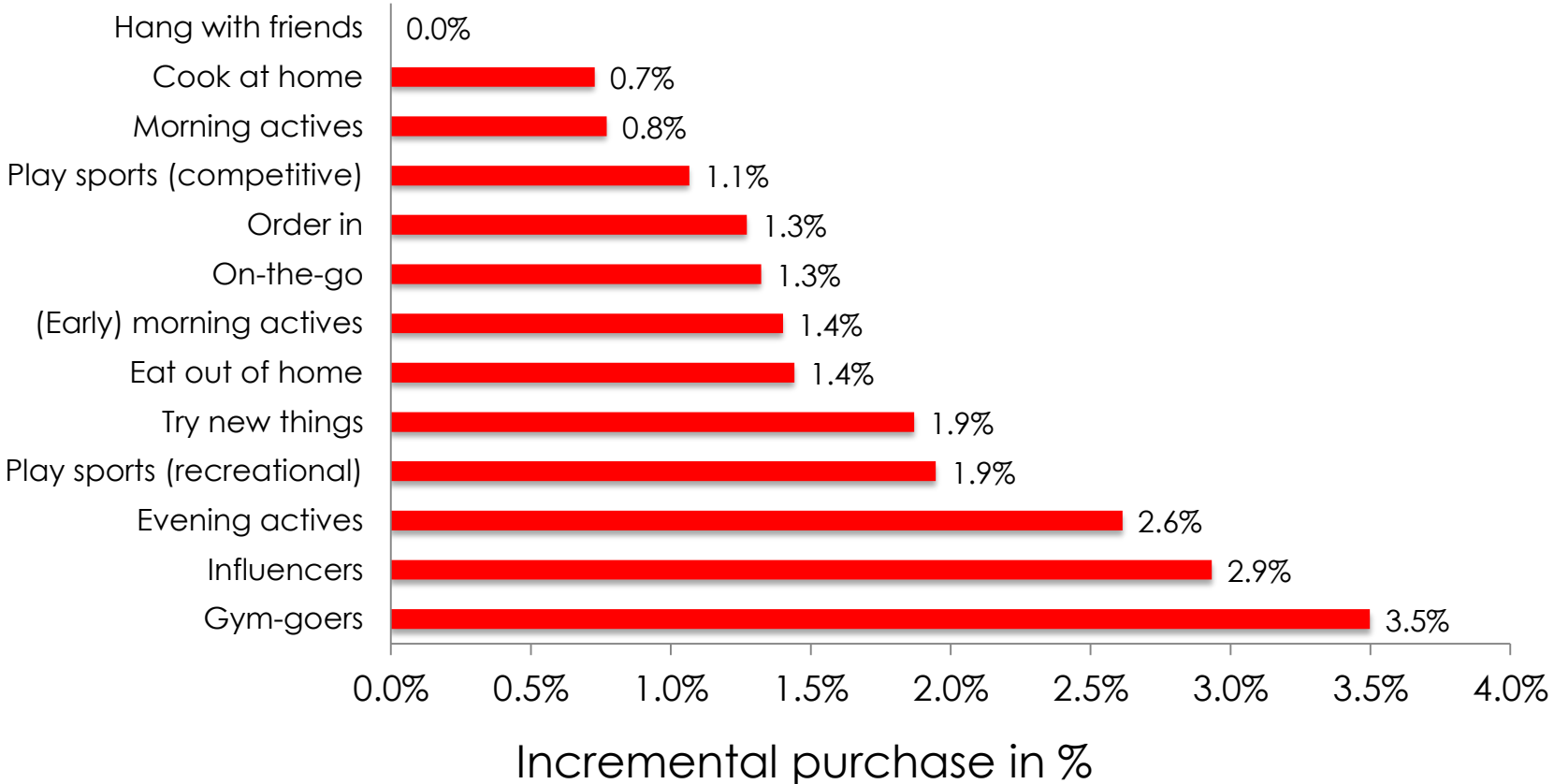
1.0% / 0.9%



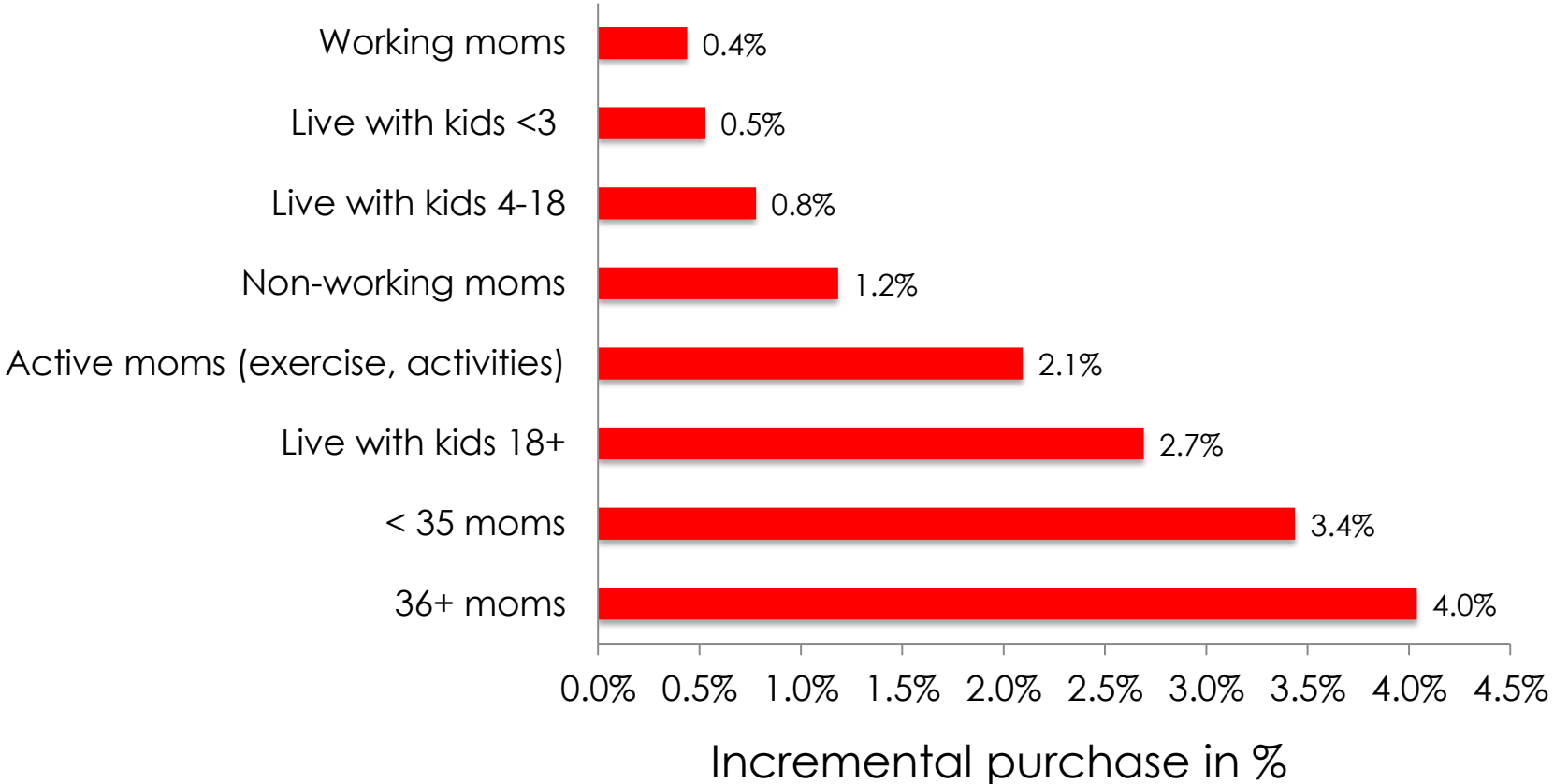
No sugar added/
Non-GMO
heavy past purchasers % / all %

Impact by Audience

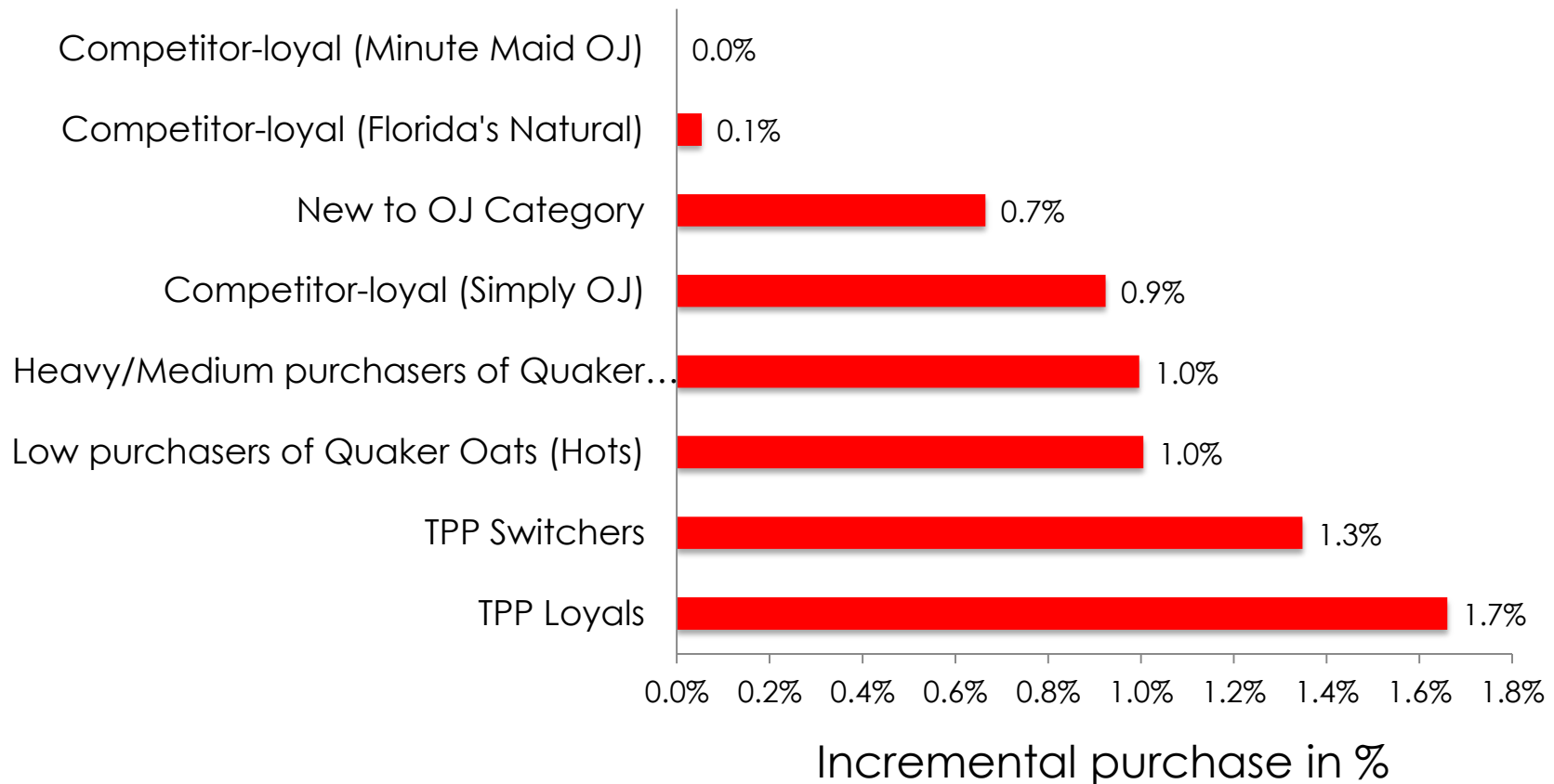
Behavior-based audiences: Highest Impact for Gym-goers



Moms audiences: Highest Impact for Mature Mothers



Purchase-based audiences: Highest Impact for Tropicana Pure Premium Loyals



Who are Tropicana Loyals?

Over Index	Under Index
Broadway Fans	Family Values Advocates
Luxury Travel Researchers	Sweepstakes Enthusiasts
Coders & Developers	Budget Wireless Shoppers
Stay-at-Home Parents	Back Pain Sufferers
Luxury Retail Researchers	Military Families
ISP Comparison Shoppers	Gun Rights Advocates
Apple Fans	Plus Size Women
Ski Enthusiasts	Holiday Deals Shoppers
NHL Fans	Coupon Researchers
Left Wing Radicals	Right Wing Radicals
Soccer Fans	Sinus Researchers
Yoga Enthusiasts	Evangelical Christians
Charitable Donors	Prepaid Smartphone Shoppers
Luxury Retail Shoppers	Bed & Bath Shoppers
Advertising Professionals	Country Music Fans
Travel Researchers	Crime Prevention Advocates
IT Professionals	Streaming Device Shoppers
Student Loan Researchers	Intimates Shoppers
College Students	Hip Hop Fans

Who are Tropicana Loyals vs. Switchers?

Over Index Loyals > Switchers	Under Index Switchers > Loyals
Local News Upstate New York	Local News North Carolina
Local News Pennsylvania	Local News Virginia
Local News New Jersey	Local News South Carolina
Local News New York City	Local News Twin Cities
Local News New York Metropolitan Area	African-American culture
Jewish Interests	Local News Tennessee
News from India	Christian interests
Local News Pittsburg	Local News Chicago
Boxing	Local News Wisconsin
Business	Local News Georgia
Hospitals and Healthcare	Frugal Moms
Internet/Phone Service Providers	Local News Oklahoma
Animal Rights	Local News Louisiana
Flight shopping	Gun Advocates
NYC region entertainment	Coupon Websites
Travel	Fishing
(Youth) sports	Local News Alabama
Finance	Local News Maine
Celebrity Gossip	Right Wing News

The most effective creative for each audience

Best artwork for purchase based audiences

	carafe	lifestyle	orange
TPP Loyals	2.1%	1.6%	1.4%
TPP Switchers	1.2%	1.9%	0.9%
Heavy/Medium purchasers of Quaker	1.6%	1.8%	0.0%
Low purchasers of Quaker	1.4%	0.9%	0.7%
Competitor-loyal (Simply OJ)	0.2%	1.5%	1.2%
New to OJ Category	0.9%	0.3%	0.9%
Competitor-loyal (Minute Maid OJ)	0.0%	1.1%	0.0%
Competitor-loyal (Florida's Natural)	0.4%	0.3%	0.0%

Tropicana Loyals
are most
impacted by the
'carafe' artwork

Best copy for purchase based audiences

	100GMO	Sugar100	SugarGMO
TPP Loyals	1.6%	1.7%	1.5%
TPP Switchers	1.6%	1.4%	1.1%
Low purchasers of Quaker	1.6%	1.1%	0.2%
Heavy/Medium purchasers Quaker	0.1%	1.3%	1.4%
Competitor-loyal (Simply OJ)	1.7%	0.0%	1.0%
New to OJ Category	0.8%	0.6%	0.4%
Competitor-loyal (Florida's Natural)	0.0%	1.6%	0.0%
Competitor-loyal (Minute Maid OJ)	0.0%	0.3%	0.0%

'100% Oranges. Non-GMO' and 'No sugar added. 100% Oranges' most impactful.

Best copy for purchase based audiences

	100% Oranges	No Sugar	Non-GMO
TPP Loyals	1.6%	1.6%	1.6%
TPP Switchers	1.5%	1.2%	1.3%
Low purchasers of Quaker	1.4%	0.6%	0.9%
Heavy/Medium purchasers of Quaker	0.7%	1.4%	0.8%
Competitor-loyal (Simply OJ)	0.8%	0.5%	1.3%
New to OJ Category	0.7%	0.5%	0.6%
Competitor-loyal (Florida's Natural)	0.8%	0.8%	0.0%
Competitor-loyal (Minute Maid OJ)	0.2%	0.2%	0.0%

'100% Oranges'
copy drives
impact in
switchers.

Best artwork for moms audiences

	carafe	lifestyle	orange
36+ moms	11.0%	1.1%	0.3%
< 35 moms	1.7%	5.2%	3.0%
Live with kids 18+	2.2%	2.9%	3.3%
Active moms (exercise, activities)	0.0%	3.0%	3.9%
Non-working moms	1.3%	1.4%	1.1%
Working moms	2.5%	0.3%	0.0%
Live with kids 4-18	0.4%	0.9%	1.1%
Live with kids < 3	0.6%	0.4%	0.6%

'carafe' artwork
clear winner for
36+ moms.

'orange' artwork
good for several
moms audiences.

Best copy for moms audiences

	100GMO	Sugar100	SugarGMO
36+ moms	4.5%	1.7%	5.6%
< 35 moms	0.4%	5.7%	4.5%
Live with kids 18+	0.9%	5.1%	1.8%
Active moms (exercise, activities)	1.1%	2.4%	2.9%
Non-working moms	0.7%	0.8%	1.8%
Live with kids < 3	0.0%	1.8%	1.4%
Live with kids 4-18	0.0%	1.1%	2.1%
Working moms	1.3%	0.0%	0.4%

'No sugar added.
100% Oranges.' and
'No sugar added.
Non-GMO' impactful
for moms.

Best copy for moms audiences

	100% Oranges	No Sugar	Non-GMO
36+ moms	3.1%	3.6%	5.0%
< 35 moms	3.1%	5.1%	2.5%
Live with kids 18+	3.0%	3.5%	1.4%
Active moms (exercise, activities)	1.8%	2.7%	2.0%
Non-working moms	0.8%	1.3%	1.3%
Live with kids < 3	0.9%	1.6%	0.7%
Live with kids 4-18	0.5%	1.6%	1.0%
Working moms	0.7%	0.2%	0.9%

Most moms are most impacted by the 'No Sugar added' copy.

Exceptions: 36+ moms, Working moms. They are most impacted by 'Non-GMO' copy.

Best artwork for behavior-based audiences

	carafe	lifestyle	orange
Gym-goers	1.2%	1.8%	7.9%
Influencers	3.6%	1.6%	4.0%
Try new things	1.1%	5.0%	0.1%
Play sports (recreational)	1.1%	3.1%	1.9%
Eat out of home	1.0%	1.7%	1.9%
On-the-go	0.4%	3.6%	0.6%
(Early) morning actives	2.2%	1.7%	0.7%
Hang with friends	0.0%	0.0%	4.3%
Order in	1.4%	2.2%	0.6%
Play sports (competitive)	2.5%	0.0%	1.1%
Cook at home	1.4%	0.0%	1.6%

'Orange' artwork had lowest overall impact.

However, 'Gym goers' and 'Hang with friends' are most impacted by the orange.

Best copy for behavior-based audiences

	100GMO	Sugar100	SugarGMO
Gym-goers	4.7%	3.0%	2.4%
Influencers	4.1%	0.6%	3.7%
Play sports (recreational)	0.0%	2.1%	3.7%
Try new things	0.0%	2.3%	2.8%
(Early) morning actives	1.3%	2.8%	0.0%
Hang with friends	0.0%	4.0%	0.0%
Eat out of home	1.0%	0.7%	2.3%
On-the-go	0.0%	1.5%	2.2%
Order in	0.9%	0.7%	1.8%
Play sports (competitive)	0.2%	0.2%	2.7%
Cook at home	0.8%	1.1%	0.0%

'100% Oranges. Non-GMO' and 'No-sugar added. Non-GMO' most impactful.

Best copy for behavior-based audiences

	100% Oranges	No Sugar	Non-GMO
Gym-goers	3.9%	2.7%	3.6%
Influencers	2.4%	2.2%	3.9%
Play sports (recreational)	1.0%	2.9%	1.8%
Try new things	1.2%	2.6%	1.4%
(Early) morning actives	2.0%	1.4%	0.7%
Hang with friends	2.0%	2.0%	0.0%
Eat out of home	0.8%	1.5%	1.7%
On-the-go	0.7%	1.8%	1.1%
Order in	0.8%	1.3%	1.3%
Play sports (competitive)	0.2%	1.5%	1.4%
Cook at home	1.0%	0.6%	0.4%

'No Sugar added' copy has moderately high impact for many audiences.

Location-based insights

Best artwork for QSRs

	carafe	lifestyle	orange
Ben & Jerry	2.0%	6.5%	4.0%
McDonald's	4.5%	4.3%	2.8%
Taco Bell	4.2%	3.7%	2.6%
Chick-Fil-A	0.5%	4.0%	2.0%
Cold Stone Creamery	3.0%	0.6%	1.8%
Boston Market	1.9%	1.5%	1.7%
Baskin Robbins	1.4%	1.8%	1.6%
Papa John's	1.7%	1.6%	1.4%
Hardee's	1.9%	1.9%	0.8%
The Coffee Bean & Tea Leaf	1.3%	0.0%	2.7%
Zaxbys	1.8%	1.6%	0.4%
Moe's Southwest Grill	0.0%	3.1%	0.7%
Pizza Hut	1.7%	1.4%	0.7%
Wendy's	0.4%	1.7%	1.4%
Dunkin' Donuts	0.1%	1.5%	1.7%
Jamba Juice	0.0%	0.3%	2.1%
Baja Fresh	1.2%	1.2%	0.0%
Burger King	1.3%	0.8%	0.1%
Peets Coffee & Tea	0.9%	0.5%	0.1%
Starbucks	0.0%	0.0%	0.1%

Overall lowest impact for 'orange' artwork, but high impact for 'Jamba Juice'/'Coffee bean' customers

Best copy for QSRs

	100% Oranges	No Sugar	Non-GMO
Ben & Jerry	3.4%	3.7%	4.4%
McDonald's	4.4%	2.9%	3.5%
Taco Bell	3.9%	2.3%	3.3%
Chick-Fil-A	1.7%	1.8%	1.8%
Boston Market	1.7%	1.5%	1.4%
Hardee's	2.2%	0.7%	1.5%
Cold Stone Creamery	2.1%	1.3%	0.8%
Baskin Robbins	1.0%	1.3%	1.9%
Papa John's	1.5%	0.6%	1.3%
Zaxbys	1.5%	0.2%	1.7%
Pizza Hut	1.4%	0.5%	1.3%
Baja Fresh	0.6%	1.4%	0.8%
Dunkin' Donuts	1.0%	0.3%	1.1%
Peets Coffee & Tea	1.2%	1.2%	0.0%
Wendy's	1.0%	0.2%	1.2%
Jamba Juice	0.0%	1.0%	1.0%
The Coffee Bean & Tea Leaf	0.7%	0.3%	0.9%
Burger King	0.7%	0.5%	0.4%
Moe's Southwest Grill	0.8%	0.3%	0.4%
Starbucks	0.0%	0.0%	0.0%

'No sugar added'
copy had lowest
impact for QSR
customers overall.

Best artwork for Gyms

	carafe	lifestyle	orange
Yoga Works	4.9%	7.1%	8.1%
MySportsClubs	3.0%	0.0%	5.4%
BlinkFitness	1.6%	1.1%	4.1%
Equinox	1.9%	0.0%	3.6%
Peloton Cycle	0.2%	2.6%	2.3%
Crunch	0.9%	1.1%	2.5%
SoulCycle	1.6%	0.0%	1.5%
Crossfit	0.3%	1.0%	1.5%
YMCA	1.0%	0.7%	0.8%
Flywheel	0.2%	0.1%	1.8%
Retro Fitness	0.0%	0.0%	1.3%
Planet Fitness	0.0%	0.0%	1.2%
Bikram Yoga Studios	0.0%	0.1%	1.0%
Gold's Gym	0.5%	0.0%	0.3%

High impact for
'orange' artwork for
all Gym customers.

Best copy for Gyms

	100% Oranges	No Sugar	Non-GMO
Yoga Works	6.0%	6.7%	6.6%
MySportsClubs	2.4%	2.4%	2.2%
BlinkFitness	2.7%	1.9%	2.0%
Peloton Cycle	1.9%	2.6%	1.7%
Crunch	1.7%	1.7%	1.2%
Equinox	1.4%	1.2%	1.8%
Crossfit	0.3%	1.2%	1.1%
YMCA	0.7%	0.8%	0.7%
SoulCycle	0.1%	0.9%	0.9%
Flywheel	0.5%	0.6%	0.6%
Planet Fitness	0.3%	0.5%	0.3%
Retro Fitness	0.1%	0.2%	0.2%
Gold's Gym	0.2%	0.2%	0.1%
Bikram Yoga Studios	0.0%	0.3%	0.3%



All copy is effective
for Gym customers.

Best creatives for Big Box Stores

	100% Oranges	No Sugar	Non-GMO
Costco	1.5%	2.2%	1.2%
Walmart	1.7%	0.0%	1.7%
Kmart	0.7%	1.4%	0.8%
Target	0.1%	0.6%	0.5%

	carafe	lifestyle	orange
Costco	2.0%	2.4%	1.0%
Kmart	1.8%	1.8%	0.2%
Walmart	1.6%	1.2%	0.2%
Target	0.6%	0.9%	0.0%

Overall low impact
for 'orange'
artwork.

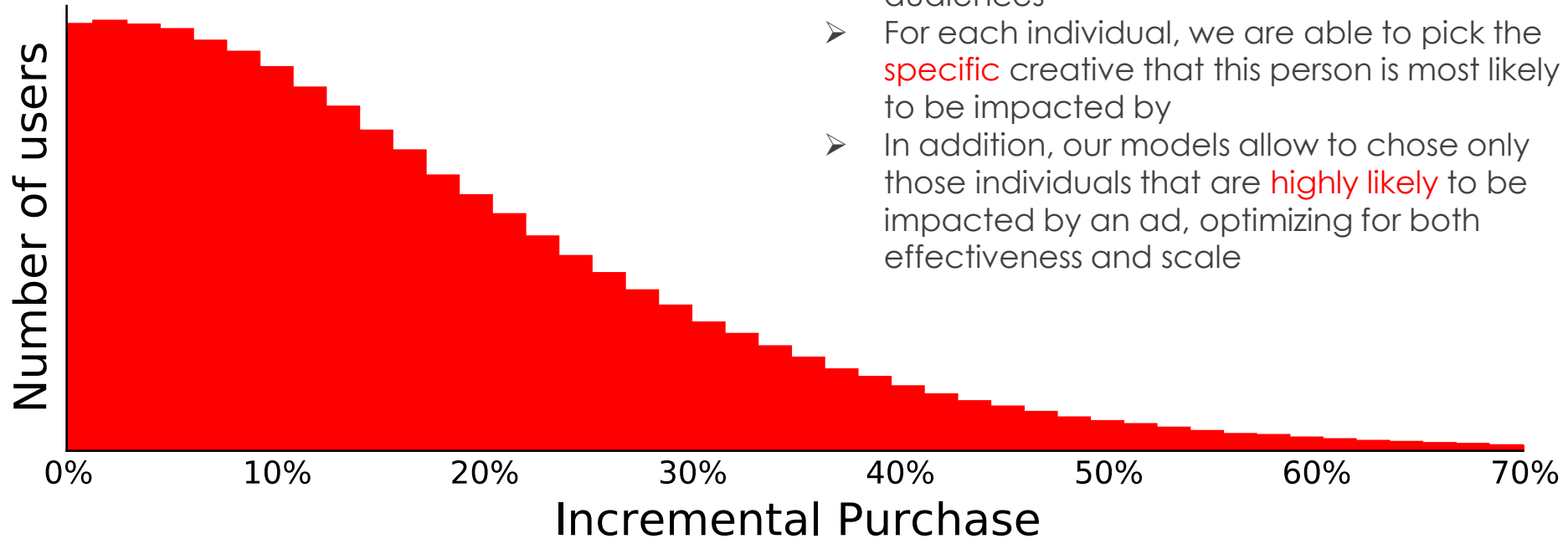
Overall summary

- Significant overall incremental impact against control condition of 1.8%
- No higher impact among past purchasers in general; higher incremental impact for 'heavy past purchasers'.
- Within sub-populations high impact on 'Tropicana Loyals' and 'Tropicana Switchers', whereas Competitor Loyals were less impacted.
- Distinct patterns distinguishing 'Tropicana Loyals' from 'Switchers' and 'light' from 'heavy' past purchasers based on geography and interests.
- Tropicana Loyals and 36+ moms were most impacted by the 'carafe' artwork, whereas the 'orange' artwork resonated best with Gym-goers.
- Most moms are most impacted by copy containing 'No Sugar added'. '100% Oranges. Non-GMO' had high impact on Gym-goers.
- 'Orange' artwork has the lowest impact overall, but has very high impact in many subpopulations.

Getting ready for Phase 2

Individualized targeting

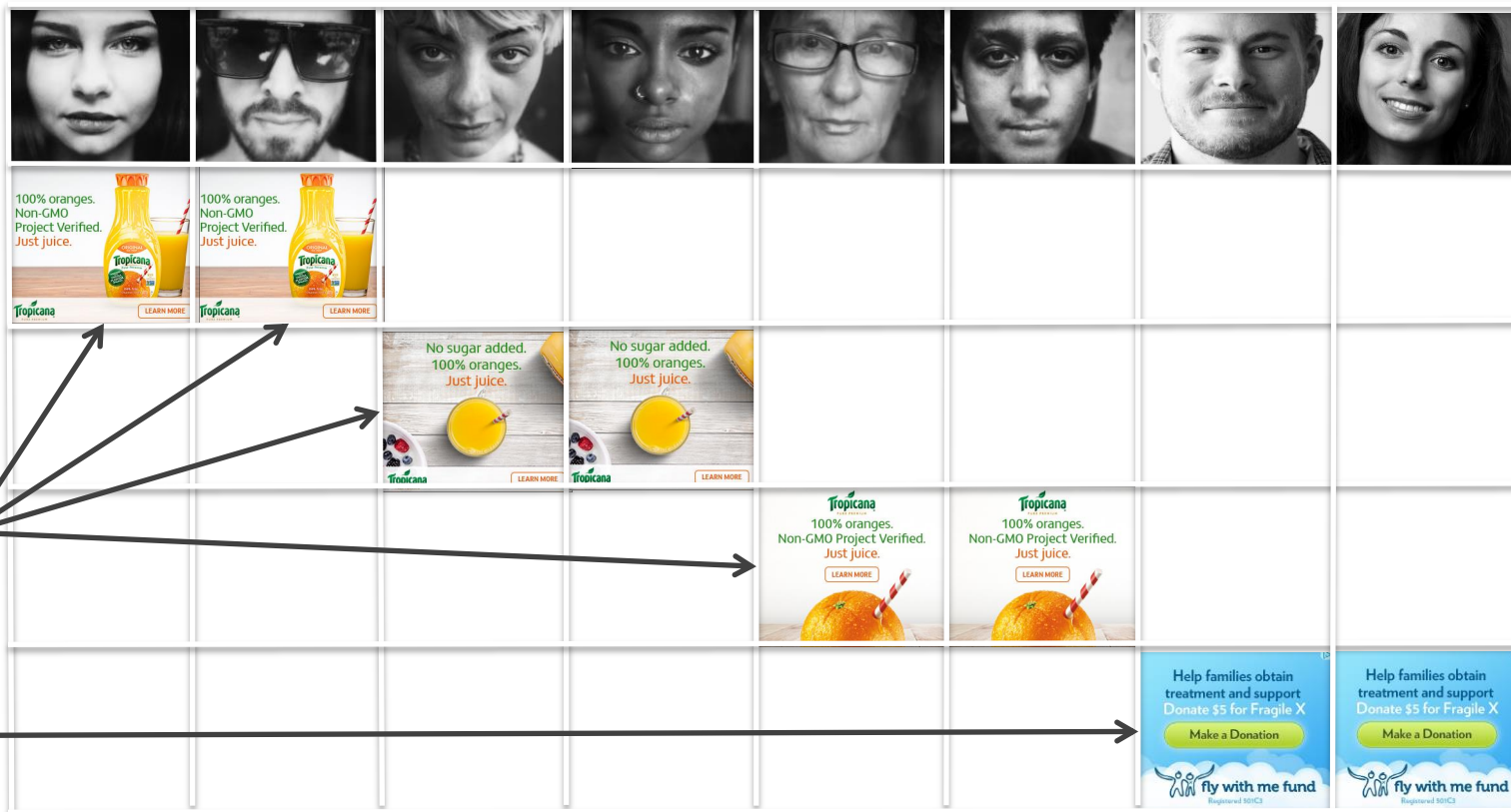
Beyond targeting micro-audiences: Individualized targeting



- Based on phase 1 data we can build individualized models based on all micro-audiences
- For each individual, we are able to pick the **specific** creative that this person is most likely to be impacted by
- In addition, our models allow to chose only those individuals that are **highly likely** to be impacted by an ad, optimizing for both effectiveness and scale

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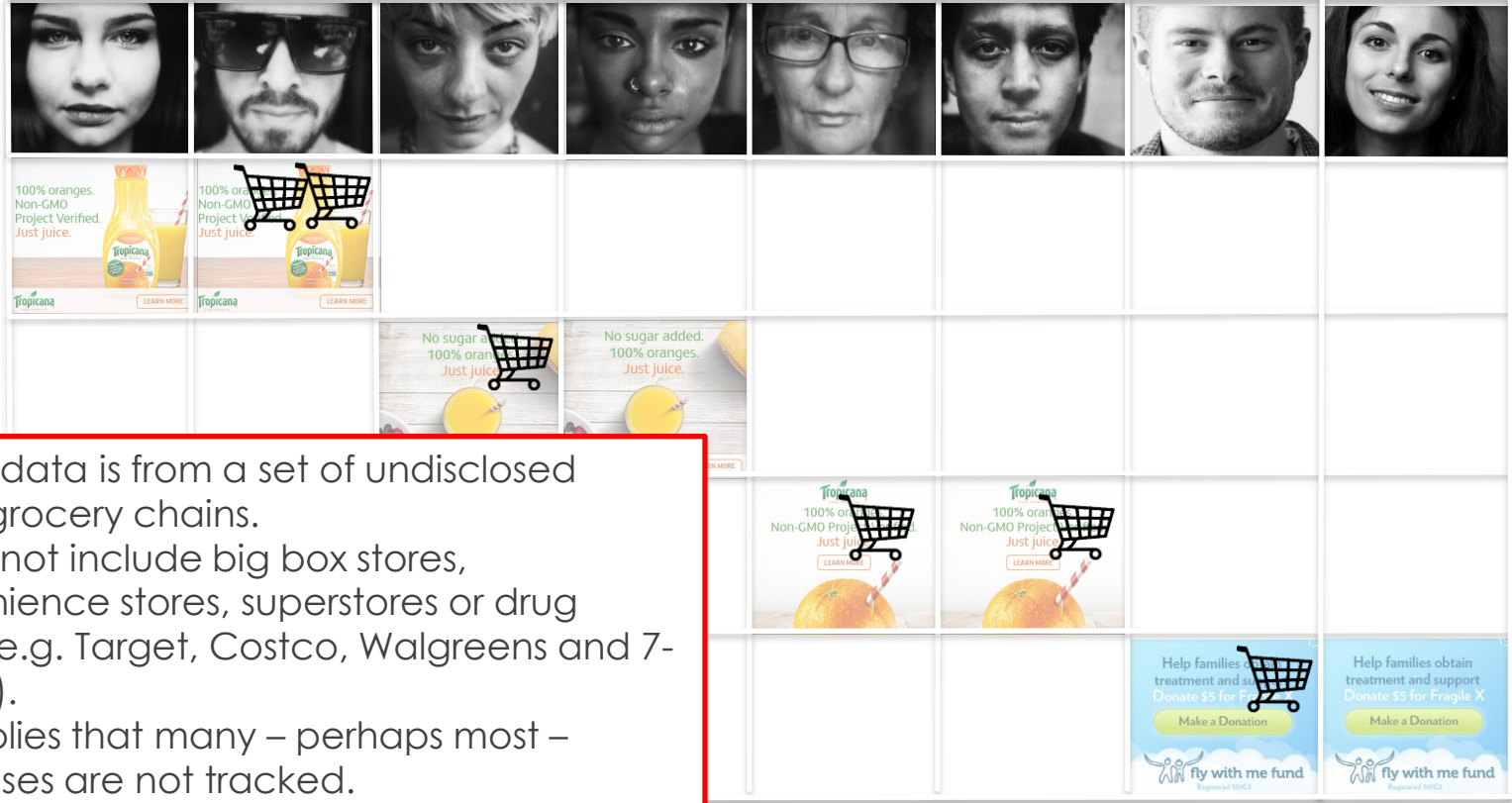
Experiment: Randomly assign creatives and PSA to individuals and run media



Creatives

PSA

Measurement: Observe post-impression purchase via Kantar



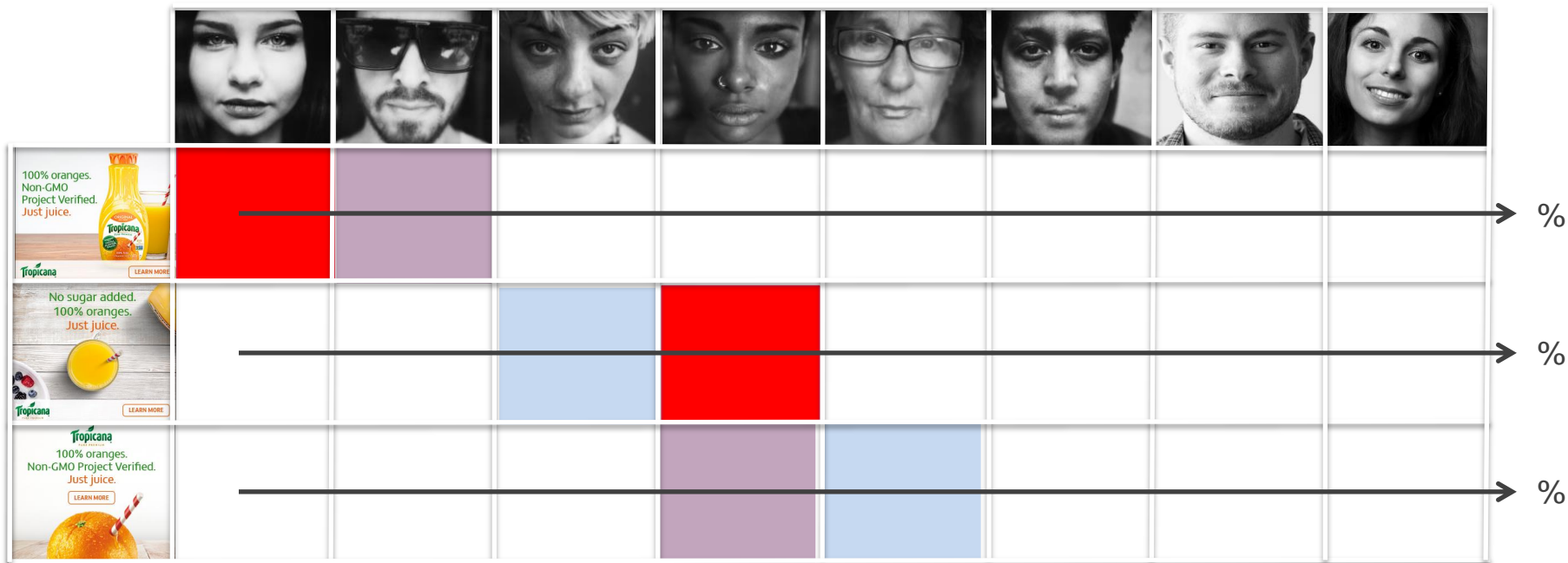
Note:

- Kantar data is from a set of undisclosed major grocery chains.
- It does not include big box stores, convenience stores, superstores or drug stores (e.g. Target, Costco, Walgreens and 7-eleven).
- This implies that many – perhaps most – purchases are not tracked.

Data pipeline: from loyalty card to cookie ID



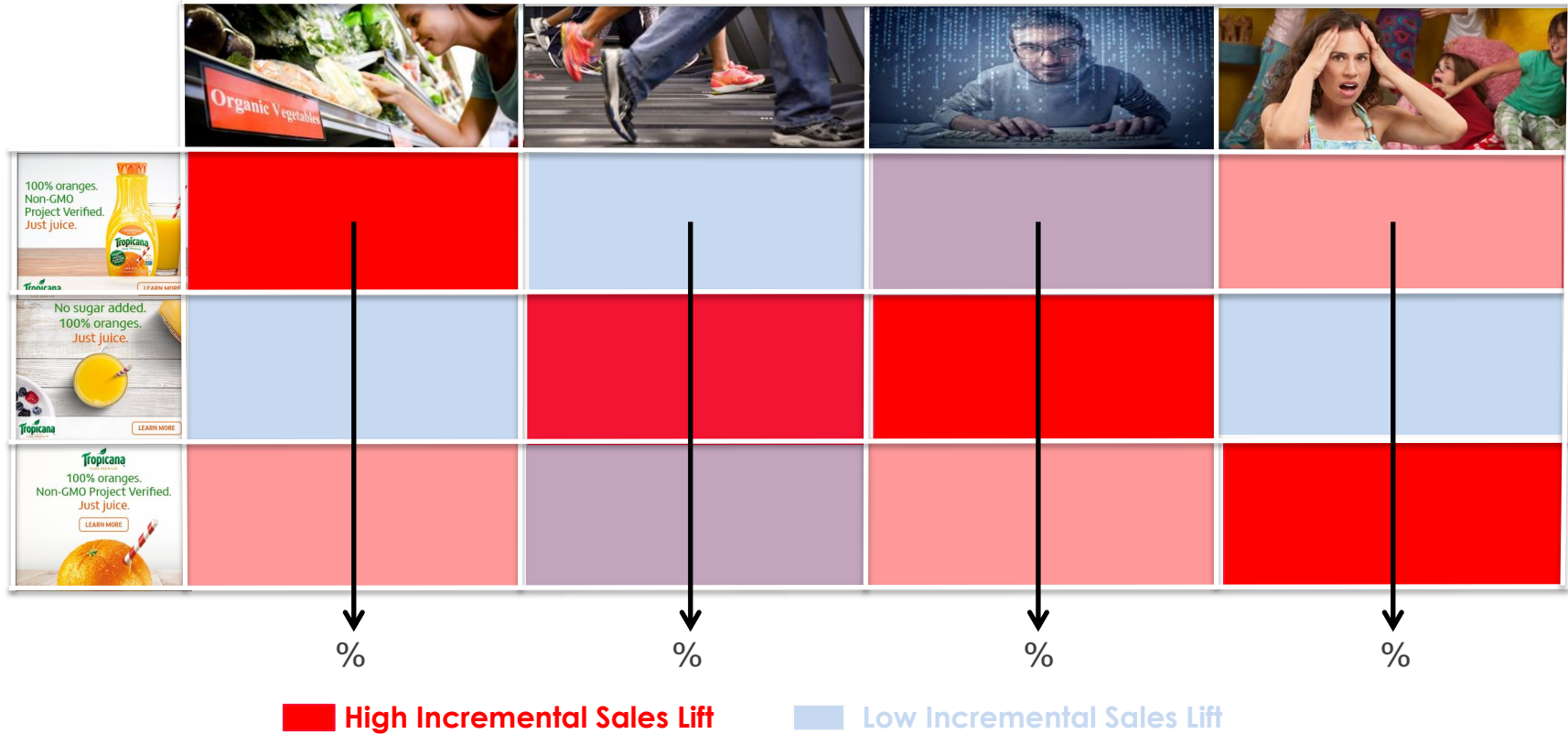
Impact by creative: Which images drove the highest increase in purchase?



■ High Incremental Sales Lift

■ Low Incremental Sales Lift

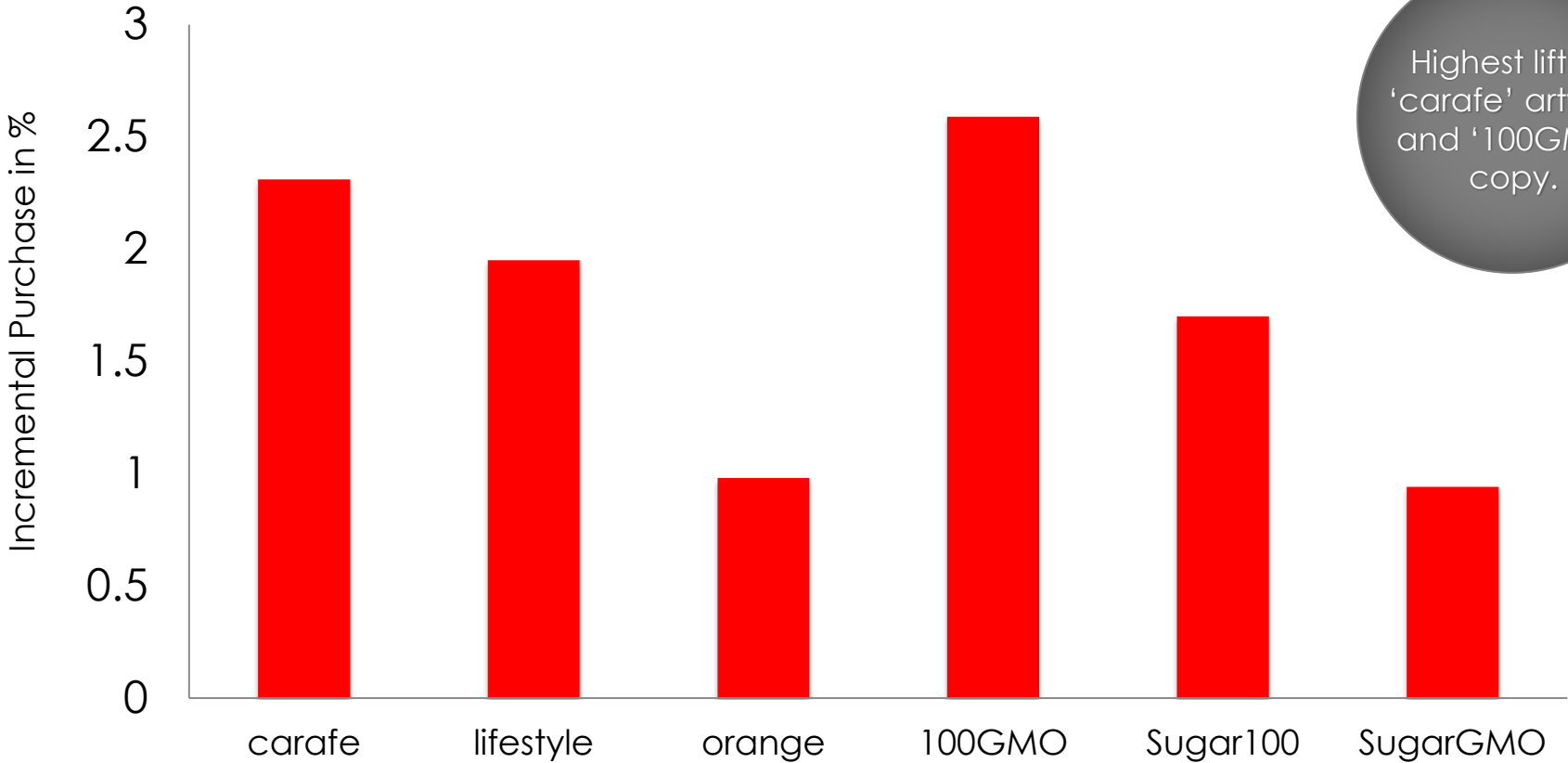
Impact by audience: Which audiences are most impacted?



Creative by audience insights : are all audiences impacted highest by the same creative?

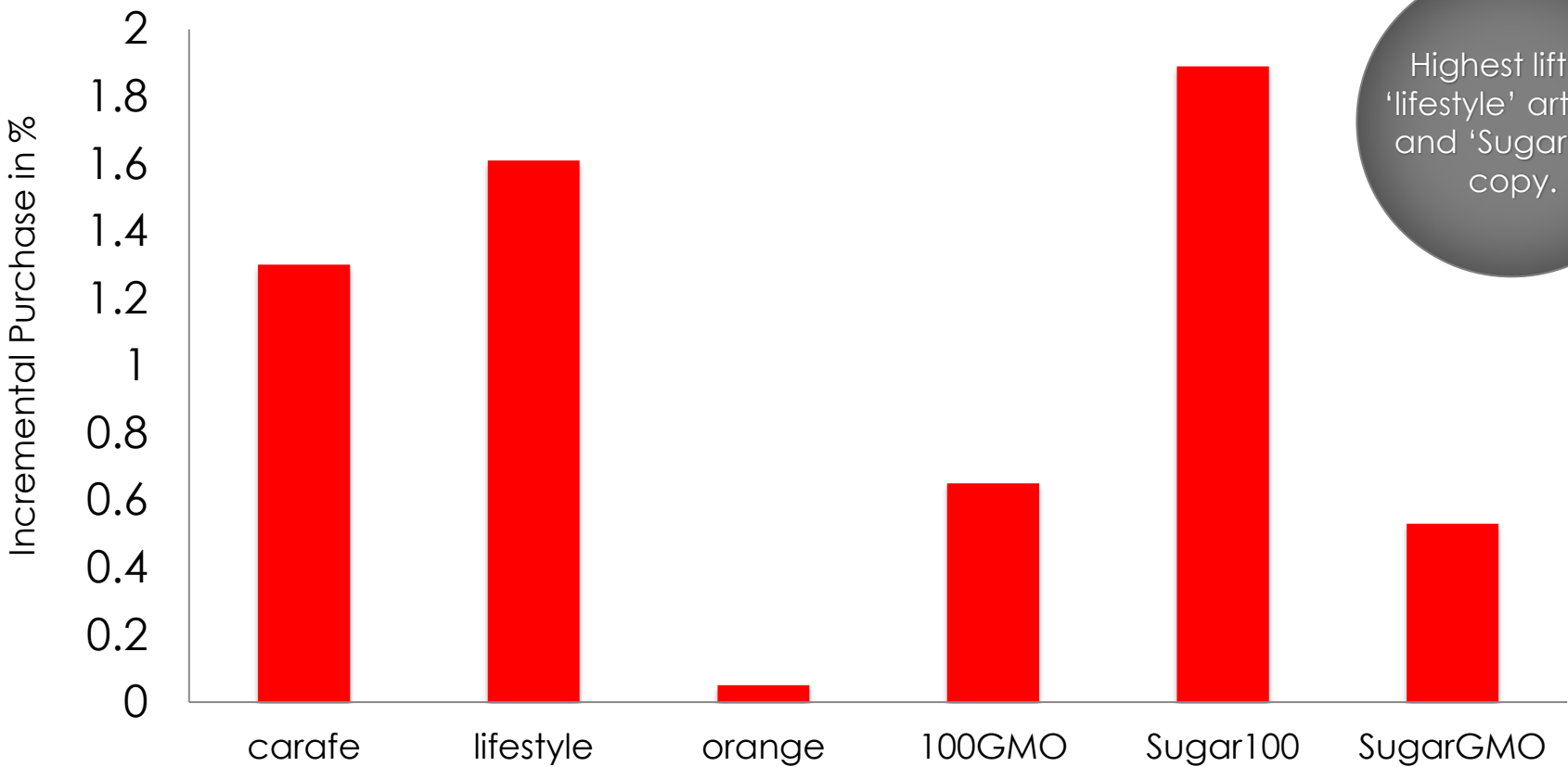


Incremental Purchase: All Customers



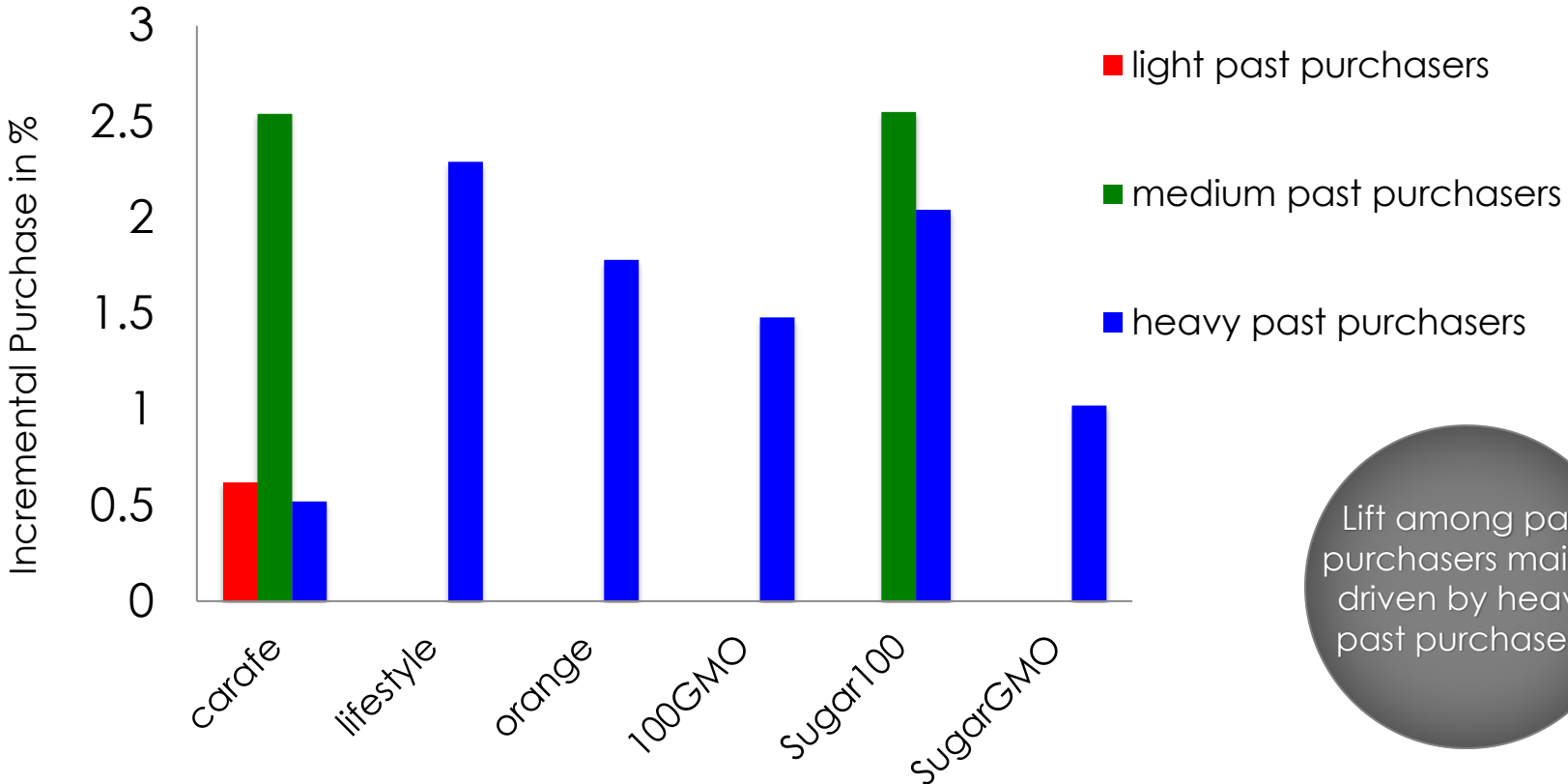
Highest lift for 'carafe' artwork and '100GMO' copy.

Incremental Purchase: Past Purchasers



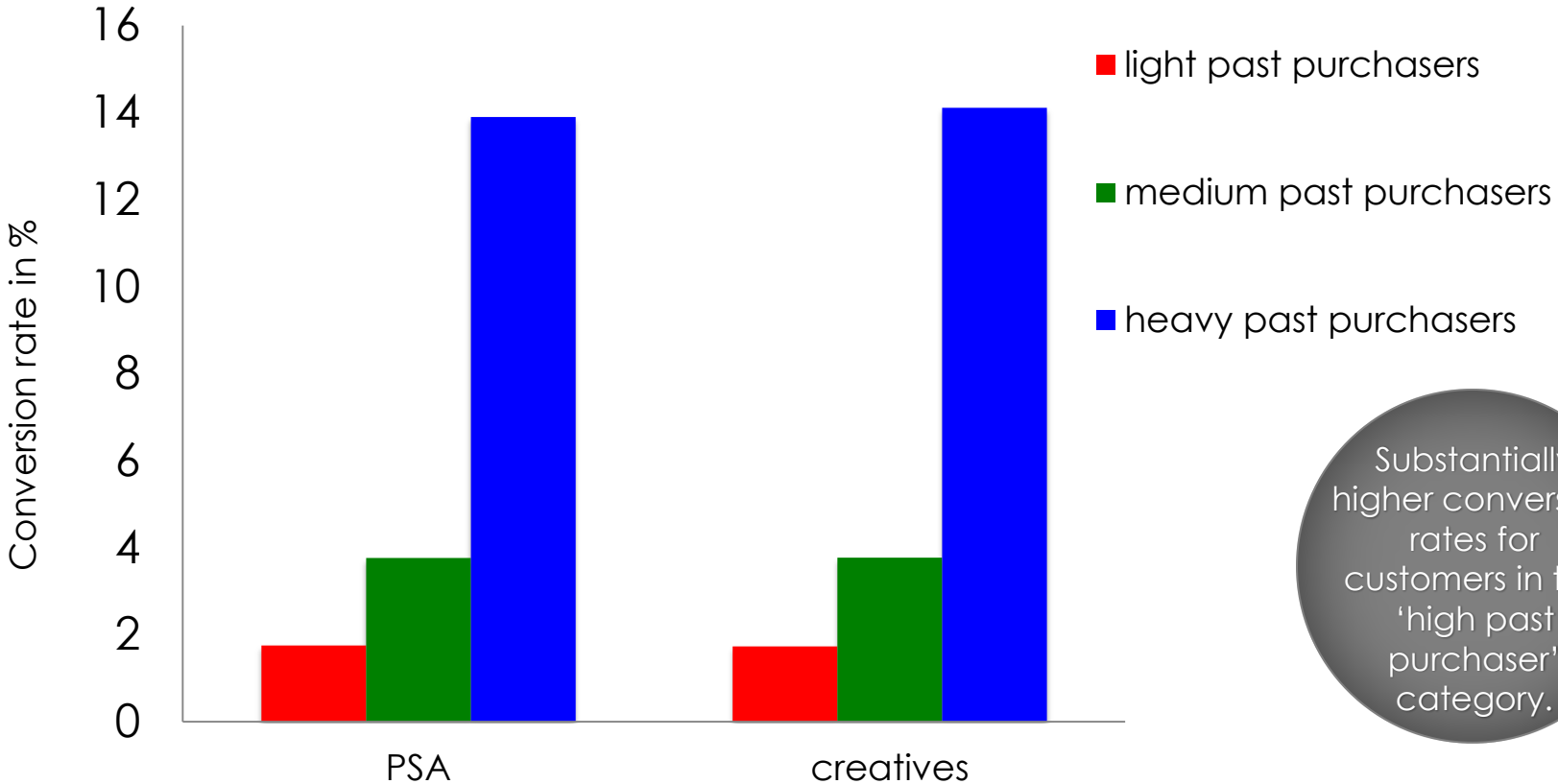
Highest lift for 'lifestyle' artwork and 'Sugar100' copy.

Incremental Purchase: Past Purchasers



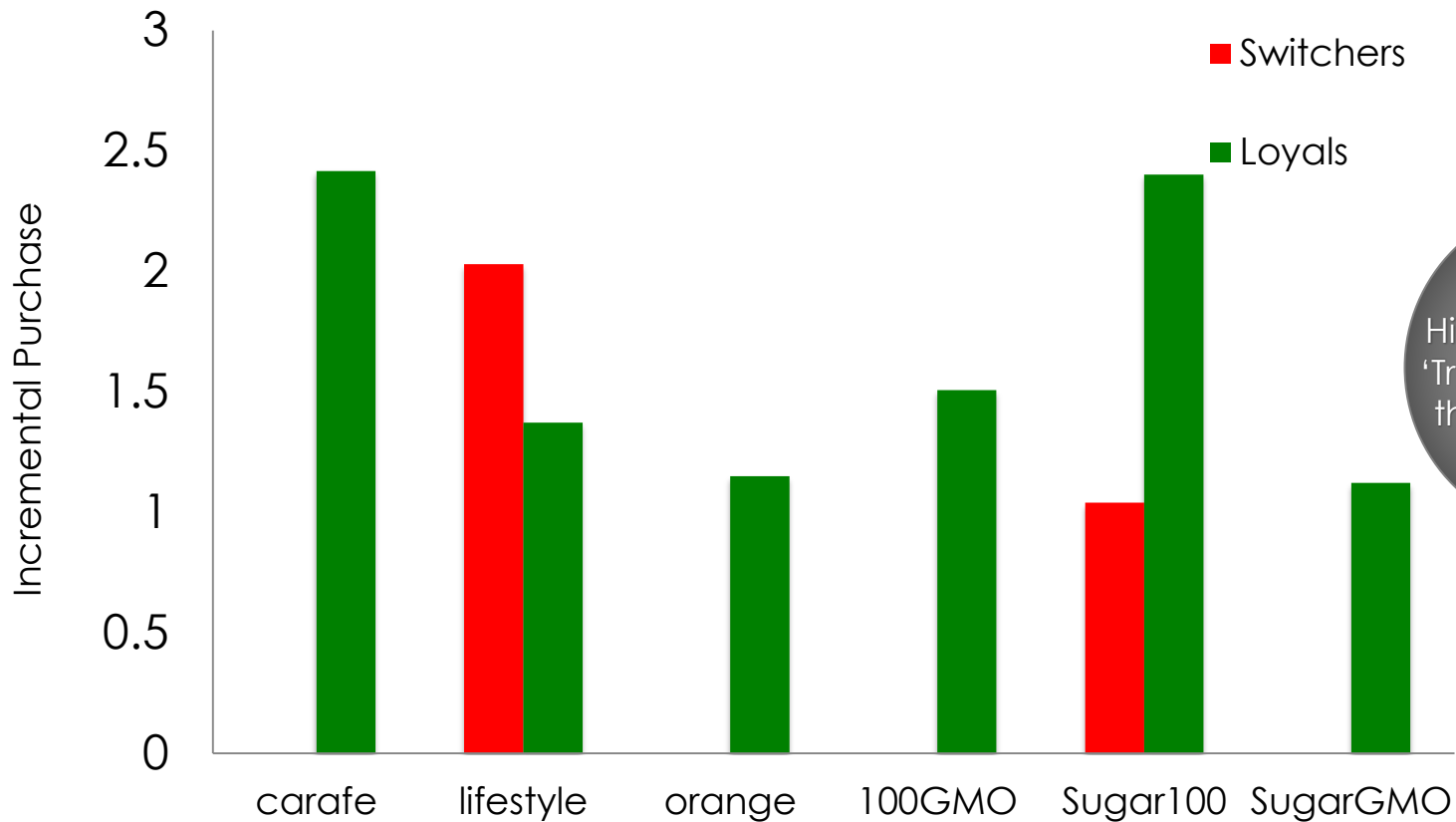
Lift among past purchasers mainly driven by heavy past purchasers.

Conversion rate past purchasers

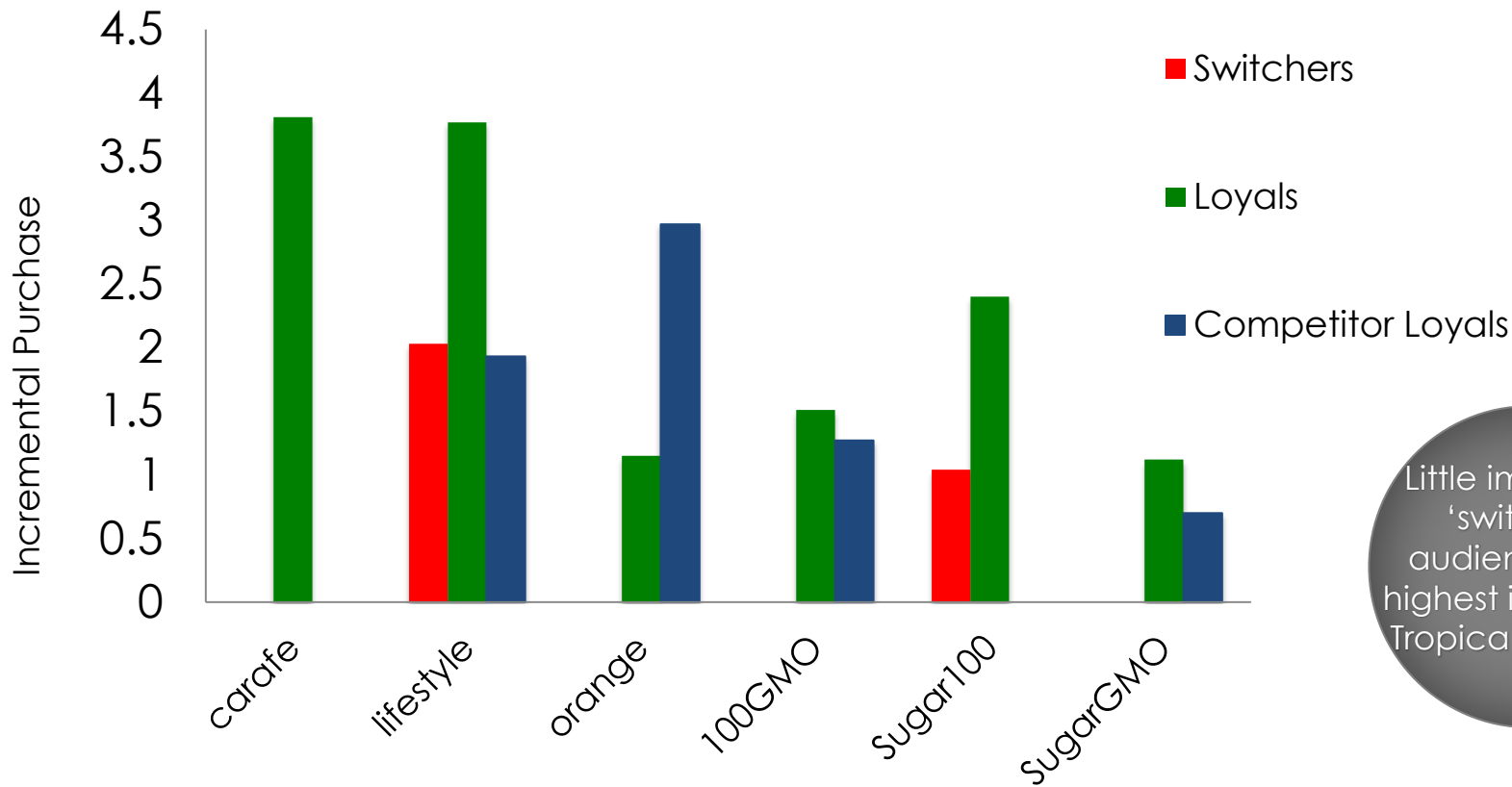


Substantially higher conversion rates for customers in the 'high past purchaser' category.

Incremental Purchase: Shopper Audiences



Incremental Purchase: Shopper Audiences



Little impact for 'switchers' audience, and highest impact for Tropicana Loyals.