



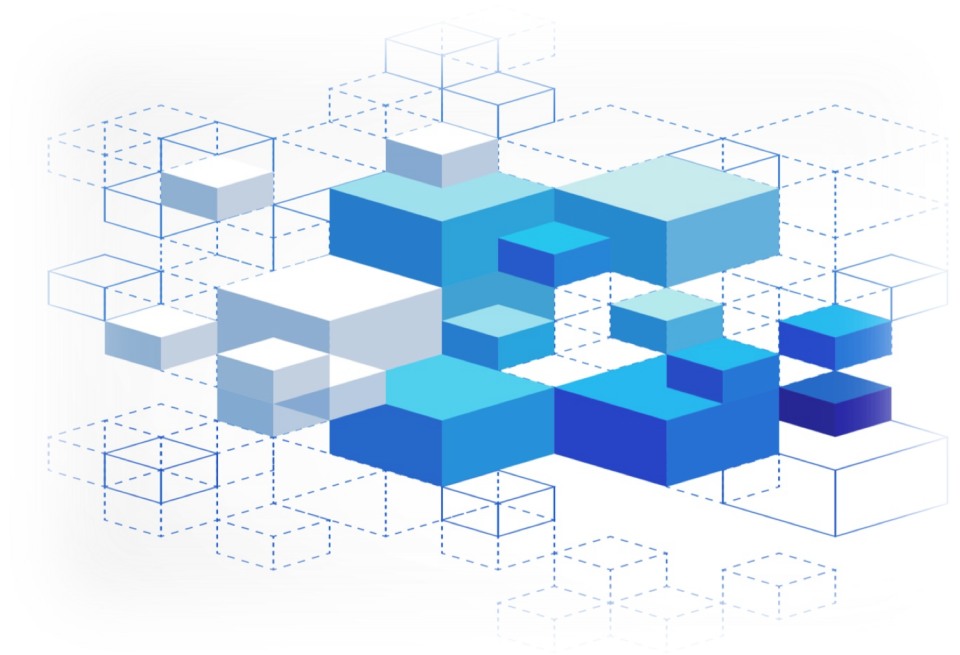
Spotlight On OOH ROI Measurement and Analytics

#GO2018OOH



What is ROI?
What is ROAS?
What Is ROO?

Aren't they all the same thing?



ROI

A Financial Metric



- $ROI = \text{Profit Contribution} / \text{Dollars Invested}$
- The components:
 - **Profit Contribution** = Incremental Sales Generated By OOH x Contribution Margin - OOH Spend
 - **Dollars Invested** = OOH spend

ROAS (Return on Ad Spend)

A Selling Metric

- Similar to ROI, but different, based on *revenue*, not *profit*

The components :

- $ROAS = \frac{\text{Incremental Sales Dollars Generated}}{\text{OOH Spend}}$

Also sometimes called RROI (Revenue Return On Investment)



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ROO (Return On Objectives)

A Non-financial Performance Metric

- Measures lift per OOH dollar for specific marketing objectives:
 - Drive retail traffic
 - Generate e-commerce, web traffic, search and social media activity
 - Increase television ratings
 - Lift awareness and other brand measures



Calculating ROI

\$1M OOH campaign

- Generated \$5M in sales
- Marketer has a 25% profit margin

To figure the campaign's ROI:

25% profit margin x \$5M sales = \$1.25M

\$1.25M – \$1M OOH spend = \$250K Profit contribution

\$0.250M/\$1M = 25% Profit Contribution

Expressed as \$1.25 returned for every \$1 invested

Bridging ROI and ROAS

Aswath Damodaran (Stern, NYU)

Date updated:	5-Jan-17	
Created by:	Aswath Damodaran, adamodar@stern.nyu.edu	
What is this data?	Profit margins (net, operating and EBITDA)	
Home Page:	http://www.damodaran.com	
Data website:	http://www.stern.nyu.edu/~adamodar/New_Home_Page/data.html	
Companies in each industry:	http://www.stern.nyu.edu/~adamodar/pc/datasets/indname.xls	
Variable definitions:	http://www.stern.nyu.edu/~adamodar/New_Home_Page/datafile/variable.htm	
		EBITDA Based
Industry Name	Number of firms	EBITDA/Sales
Auto & Truck	15	9.37%
Auto Parts	63	10.71%
Beverage (Alcoholic)	25	27.10%
Beverage (Soft)	36	22.84%
Cable TV	14	27.59%
Computers/Peripherals	55	24.42%
Drugs (Pharmaceutical)	164	30.48%
Electronics (Consumer & Office)	24	10.18%
Entertainment	79	24.85%
Food Processing	87	15.12%
Healthcare Products	254	20.33%
Hotel/Gaming	69	27.41%
Insurance (General)	19	16.54%
Insurance (Life)	22	14.37%
Insurance (Prop/Cas.)	50	14.30%

- Companies don't publish profit margins but you can find category averages online
- Net margins and operating margins by sector published each January by one of the foremost authorities in corporate valuation.
- Can be used to estimate ROI from ROAS by applying an estimate of the profit margin

http://people.stern.nyu.edu/adamodar/New_Home_Page/datacurrent.html

Bridging ROI and ROAS For A Beverage Brand

- ROAS was measured as \$5.00
 - Profit Margin = 22.84%*
- Calculation
 - $\text{ROAS} \times \text{Margin} = \$5.00 \times .2284 = \$1.14 \text{ ROI} \dots$
- Profitable!



ROI Measurement: Marketing Mix Models & Attribution

Marketing Mix Models

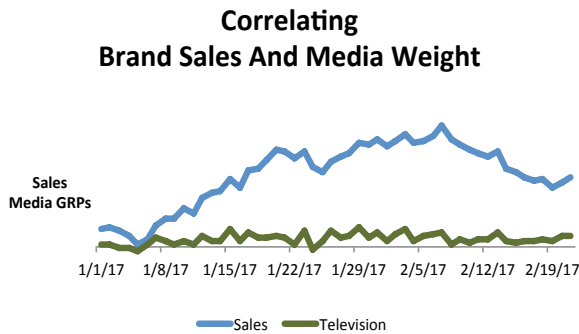
What is a model?



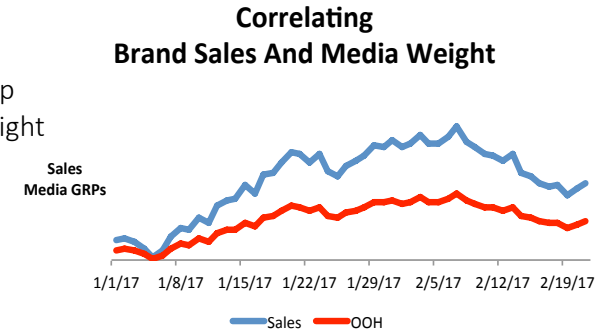
Marketing Mix Model

- A marketing mix model is a replica of the marketplace that uses granular and statistics to show how marketing and other factors affect sales

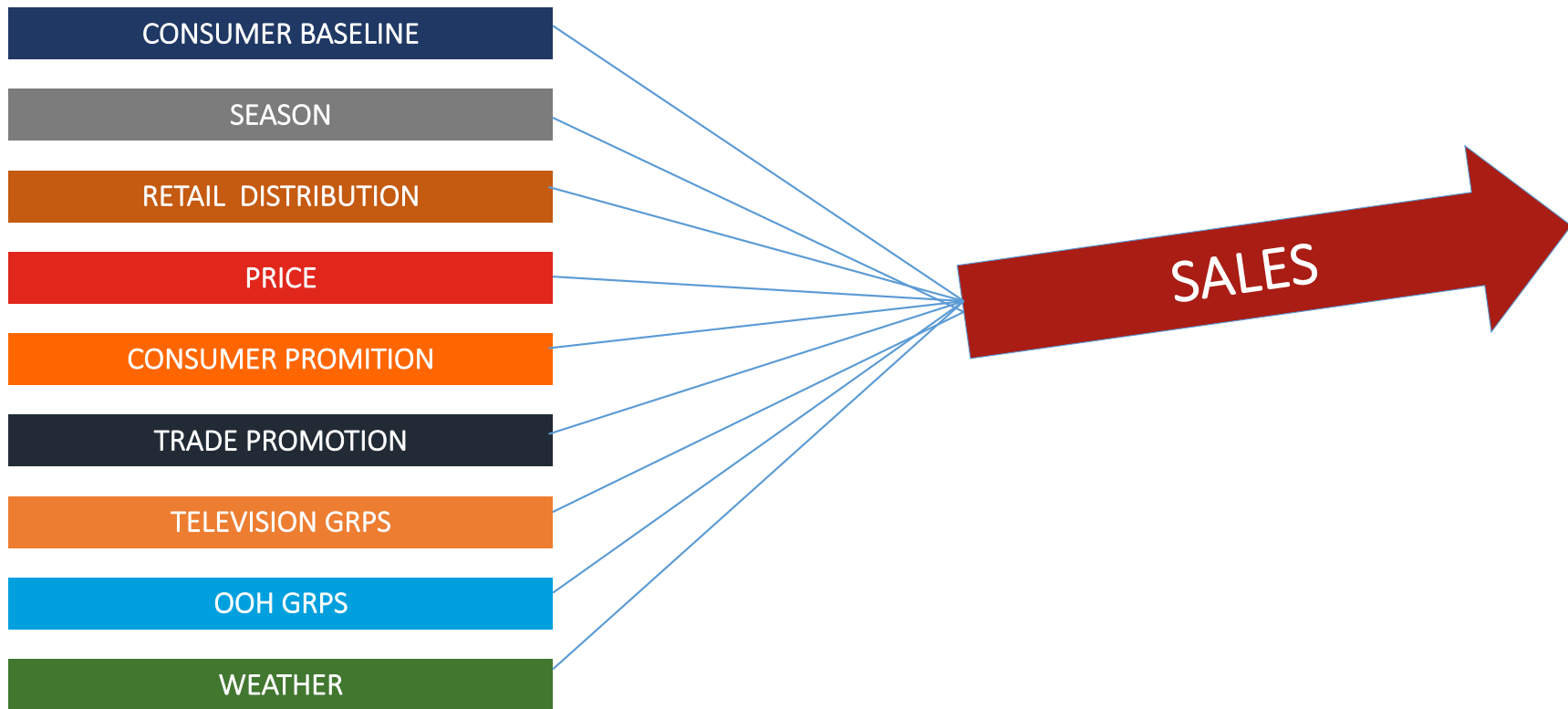
Slight relationship
between TV weight
and sales



Strong relationship
between OOH weight
and sales



All The Elements Of The Marketing and Media Mix “Explain” Weekly Sales



Where Does The Data Come From?

- Generally modelers directly access media currency data:
 - TV: Nielsen, comScore/Rentrak, other set-top box or smart TV sources
 - Digital: Nielsen, comScore, Facebook, Google, other publishers
 - Radio: Nielsen
 - Magazines: MRI
 - OOH: Geopath
- Can also be provided by planning agencies
- Sales data varies by industry
 - Retailers can have their own data (e.g., credit cards)
 - CPG companies use Nielsen or IRI, NCS and other sources of frequent shopper data
 - Consumer electronics and other categories use NPD

How Do Advertisers Use Marketing Mix Models?

National advertisers use marketing mix models to:

- Justify marketing expenditures
- Guide reallocation from less profitable to more profitable marketing elements
- Brand managers own the process and are the decision makers
 - Typically in the annual budgeting process
 - Guides marketing strategy – targeting, geography, retail channels, media, and creative
 - Guides innovation/experimentation, or rationalize staying the course

Where Are The Agencies In All This?

- Some advertisers give planning agencies direction based on the model
- Some fully share MMM results consult with them on strategy
 - And everything in between
- Some agencies provide the media data – a very important job!!
- Some do the modeling

Who Are The Major Modelers?

- CPG Research giants: Nielsen and IRI
- Ad research giants: Millward Brown and Ipsos (MMA)
- Independent analytics providers: Analytic Partners, Market Share (Neustar), Marketing Evolution, Hudson River Group
- Agency modelers: mPhasize, Annalect
- Single-Source analytics providers: NCS, TiVo Research
- Agent based modelers: ThinkVine (Ignite), Concentric
- Location data providers (Foursquare, Placed, PlaceIQ)

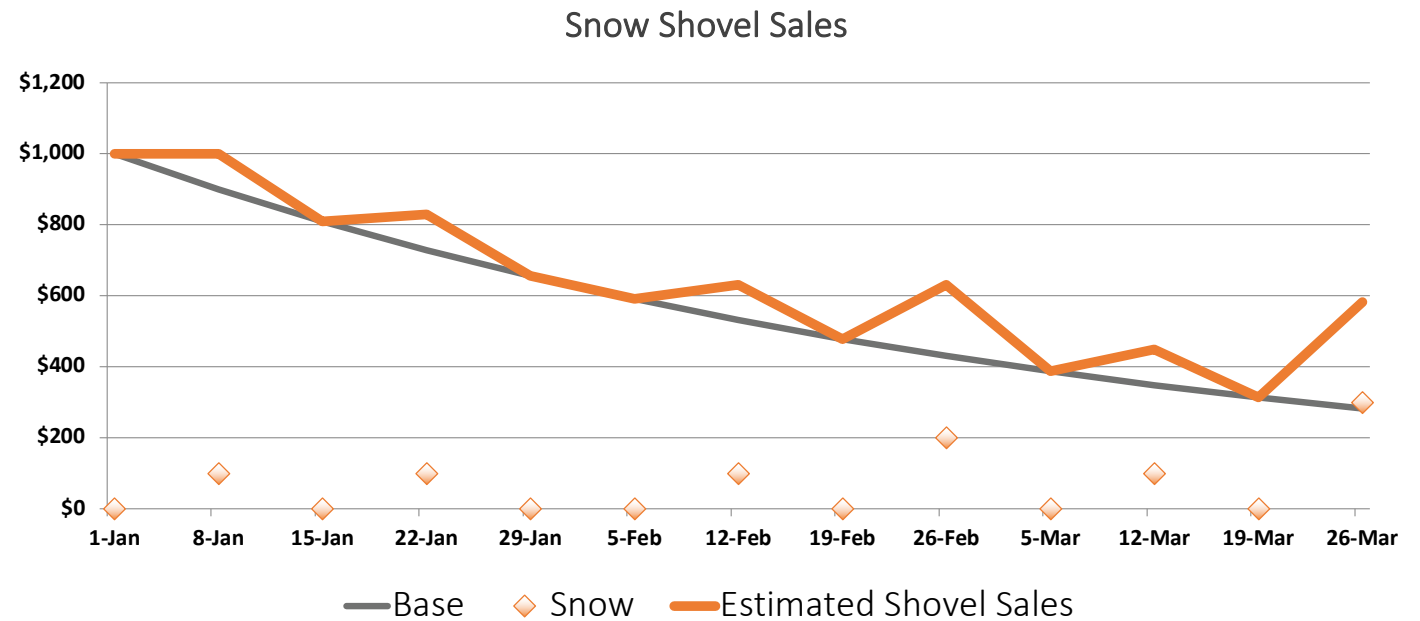


Let's Walk Through Marketing Mix Models



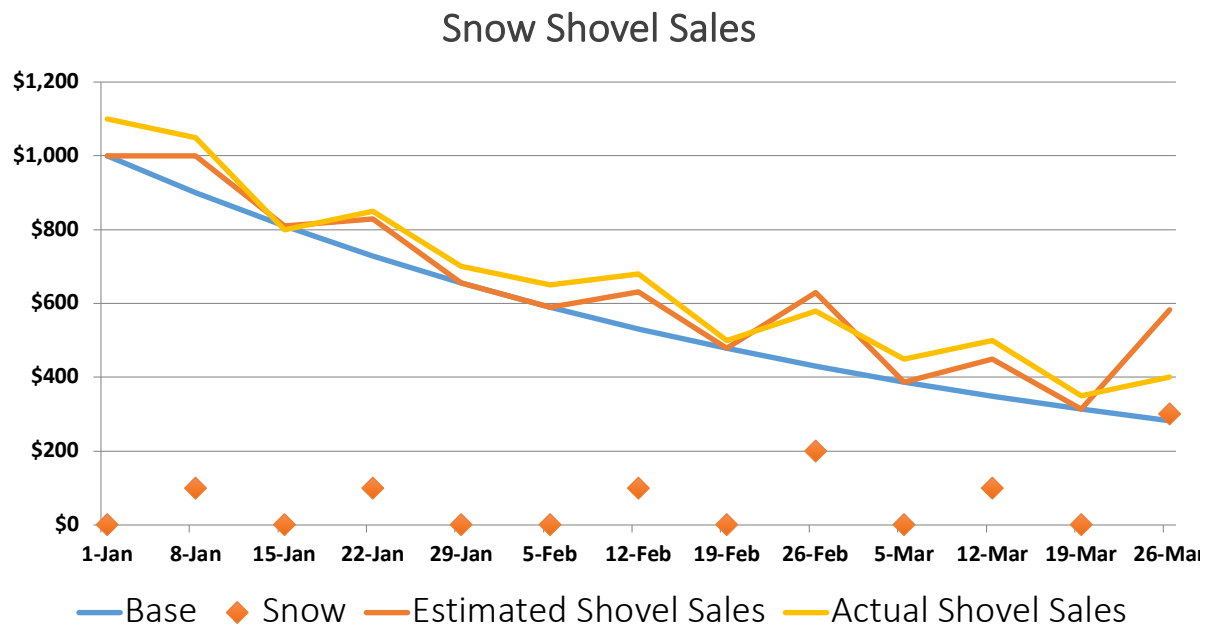
A model of snow shovel sales, January – March:

- Declines as the weather improves, but snow drives more sales



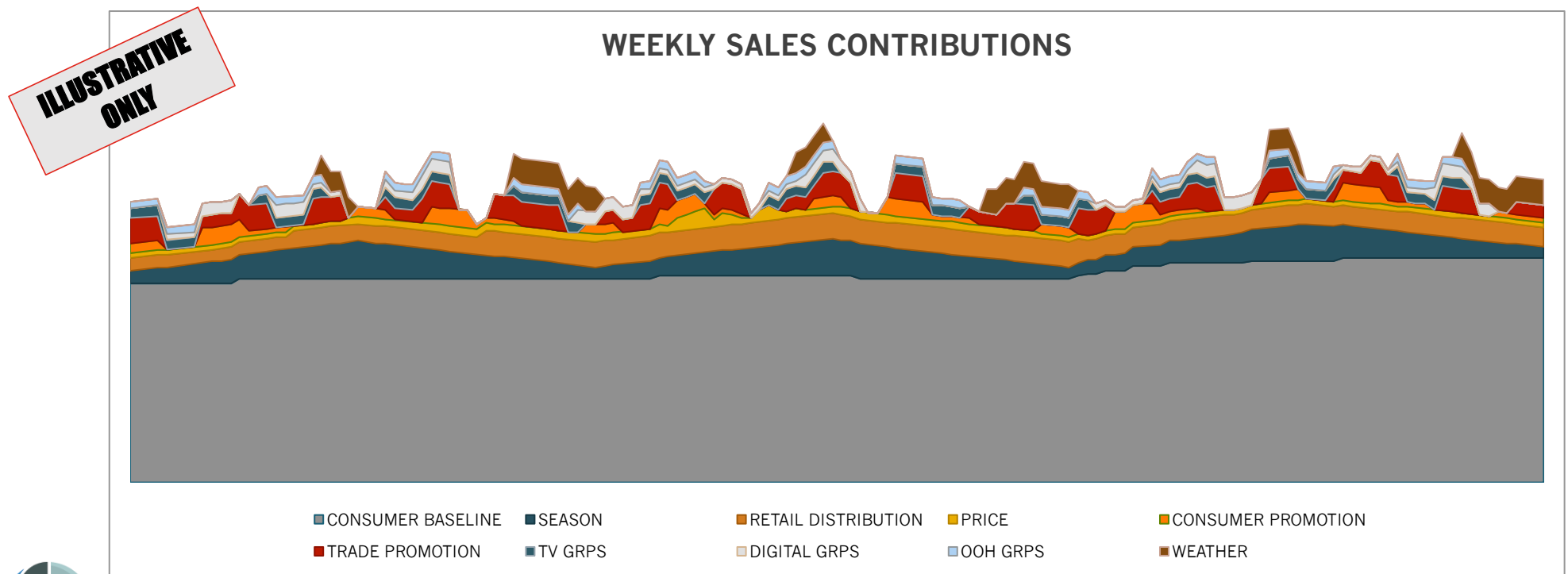
How Do We Know Our Model Is Good?

... By how well it replicates actual historical sales



What Does A Marketing Mix Model Show Us?

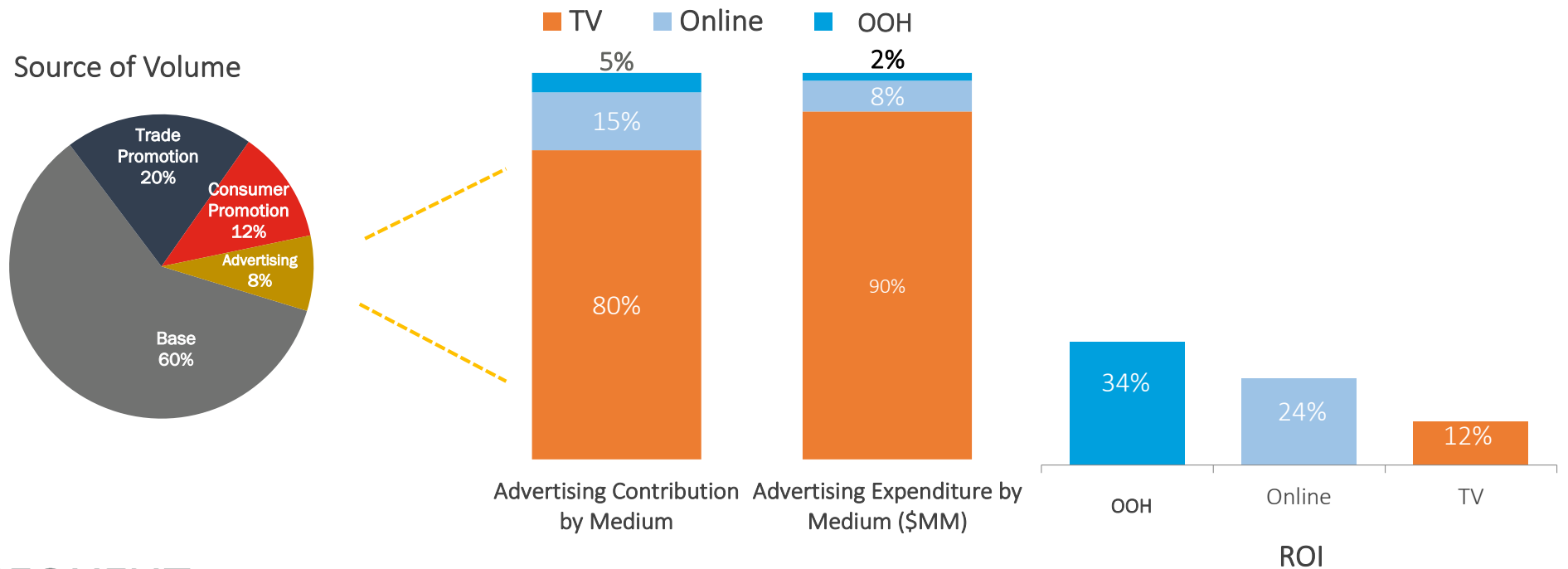
The sales contributions of each element of the mix layered on top of each other (and on top of base sales) to estimate actual sales



What Does A Marketing Mix Model Show Us?

**ILLUSTRATIVE
ONLY**

Sales contributions of each part of the mix are estimated and ROI is calculated

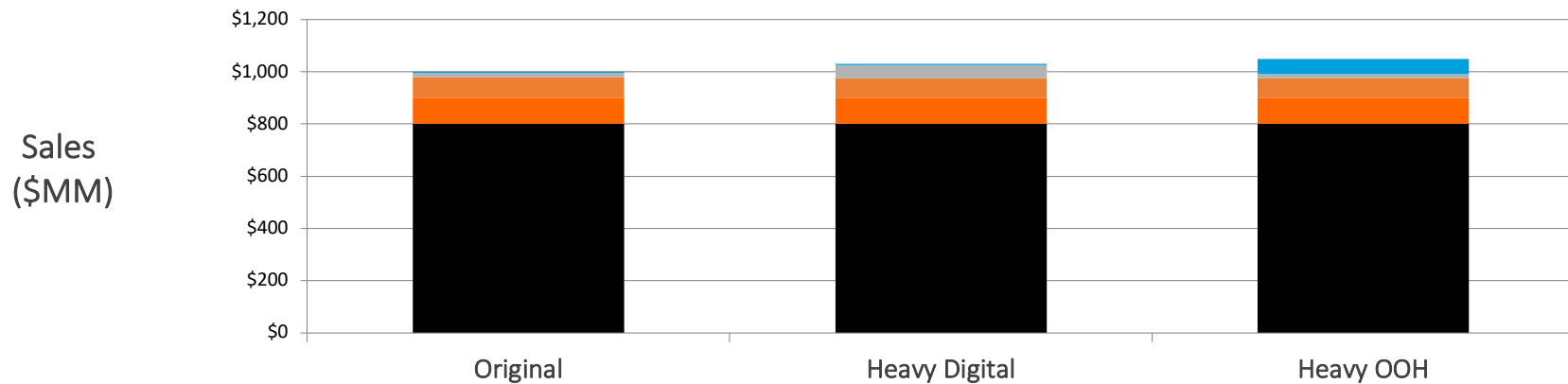


What Does A Marketing Mix Model Show Us?

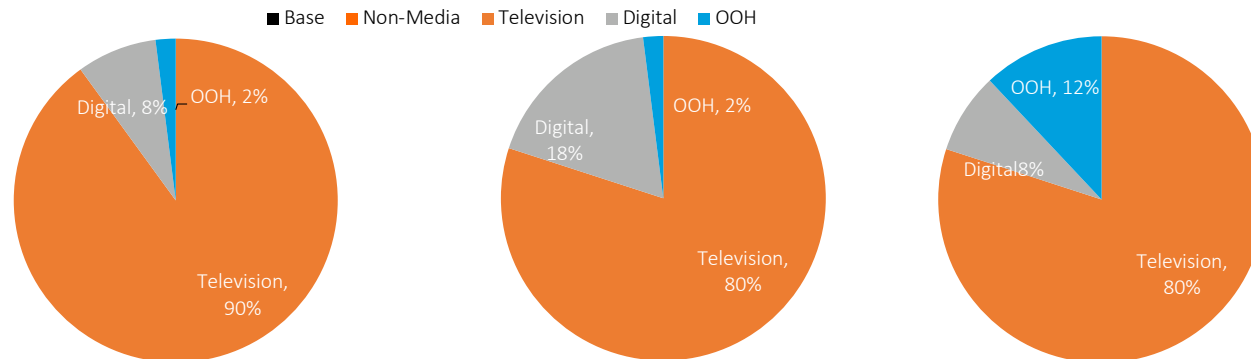
The Estimated Performance Of Alternative Budget Allocations

**ILLUSTRATIVE
ONLY**

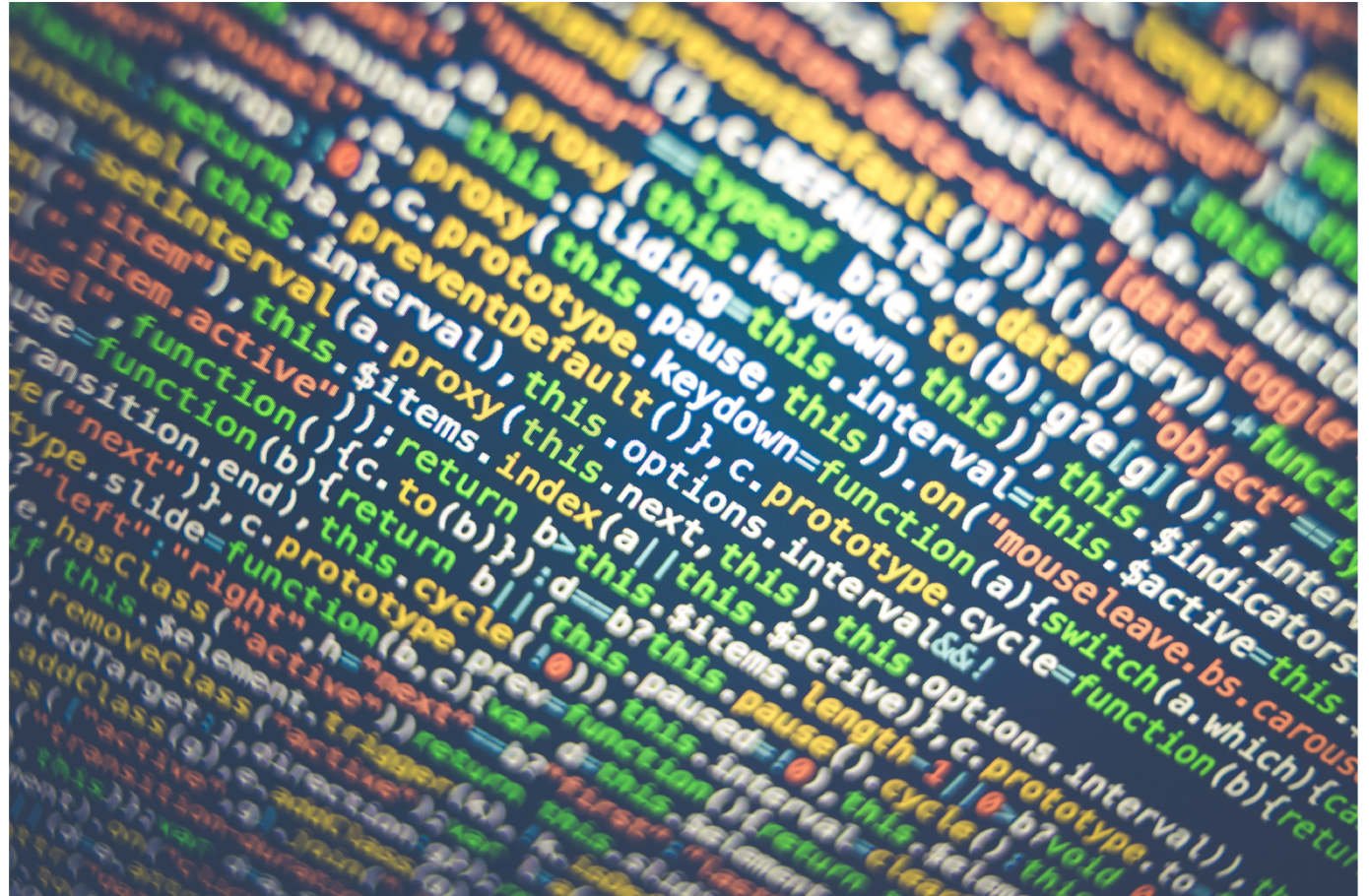
Sales, Original Plan Vs. Alternates



Budget Allocation



Attribution



Attribution Modeling

An ROO, Outcome Contribution Measure

- Credits media with conversions that occur along the consumer path to conversion
- Operates at the consumer and transaction-level model - requires identifying the same consumer wherever they're exposed -- mobile, tablet, computer, car, TV etc.
- Born of the digital media ecosystem

Methodological Differences

	MARKETING MIX MODELS	ATTRIBUTION MODELS
ORIGIN	Traditional media, originally for CPG marketers, now expanded to all types of advertisers	Digital media, evolved to include all digital – Multi-Touch Attribution (MTA), now developing to include offline media
PURPOSE	Periodic ROI measurement for strategic insights and budget allocation. Improves annual plans.	In-campaign identification of contribution to KPIs and reallocation of spending. Improves campaigns in-progress
FREQUENCY OF RESULTS	Annually, quarterly, monthly	Weekly to daily
DATA GRANULARITY	DMA, sometimes finer, by week, or day	Exposure/transaction by device or household
DATA SOURCES	Media currencies	Web traffic via server impressions, cookies, or tags
VALIDATION	Fit to historical sales data, accuracy of prediction of hold-out samples	Same as MMM, plus embedded testing
STRENGTHS	Accurate ROI estimates for all elements of the marketing mix, media and non-media	Fast, granular and highly actionable measurement of digital vehicles and creative
WEAKNESSES	Slow, macro and backwards looking; offers no guidance on tactical planning	Potential for misattribution when digital footprint is incomplete and offline media and other sales drivers are not included

Attribution Modeling For OOH

- Granularity and fast pace are earmarks of attribution modeling
 - Granular enough to identify the contribution of individual units and ads
 - Fast enough to learn and make changes in-campaign
- Some OOH companies are seizing the opportunity
 - Mobile-sourced retail traffic data and brand lift studies provide useful KPIs
 - ROO (Return On Objectives) metrics, require translation to financial value to make the business case

Location & Attribution

- Measures of traffic and impact of advertising investment
- Typically brick and mortar stores/restaurants read through Mobile, GPS, beacons and Wi-Fi data
 - Given rise to location-based KPIs, e.g., store visits, dwell time, time of day
- Exposed/unexposed test situation in an attribution window (fixed period of time)
 - Measures lift not ROI
- Accuracy and reliability challenges but many marketers are very keen on it
- Can be linked to shopper data, etc.

Location Analysis - OOH

- New data is great for retailers and other brick & mortar marketers
- Provides insights for tactical optimizations and understanding what's working and what's not
 - Formats
 - Locations
 - Creative
- Some concern that Location Attribution does not contain all media/marketing stimuli across the consumer journey
 - And other factors that drive store traffic tend not to be included



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Where Are We? What's Next?

- What is ROI, and What isn't?
- ROI Measurement
 - Marketing Mix Models
 - Attribution and Location Studies
- Up Next: Strategies For Dealing With Model Results

Six Strategies For Dealing With ROI/ROAS/Attribution Results



You're Going To Have A Conversation About This At Some Point In Your Career

- When your results are bad, your job is to ask a lot of questions ... when your results are good, your job is to get more business!
- What are you going to talk about?
 - Campaign Objectives
 - Outside Benchmarks and Norms
 - The Importance of Specific Formats
 - Creative Quality
 - OOH Data Inputs Used In The Model
 - Anything Else You Can Get Your Hands On About The Campaign

Strategy 1. Revisit the Objectives

If your model results were strong:

- Can you scale up the OOH plan? It's working!
- Are other objectives that could be met with the OOH plan?

If your model results were weak:

- Question model results in light of the media objectives
 - Was OOH's job immediate sales? – then ROI is the right KPI
 - Was it something else like driving traffic, or building awareness? - ROI may not be the right KPI
 - Did the OOH buy reflect the objectives? Target? Formats? Location? Creative?
 - Would you do something differently now?

Strategy 2. Leverage Industry ROI Norms



If your model results were strong, compared to the norm:

- You have an exceptional campaign!
- Make the case to invest more because this campaign exceeds the norm

If your model results were weak, compared to the norm:

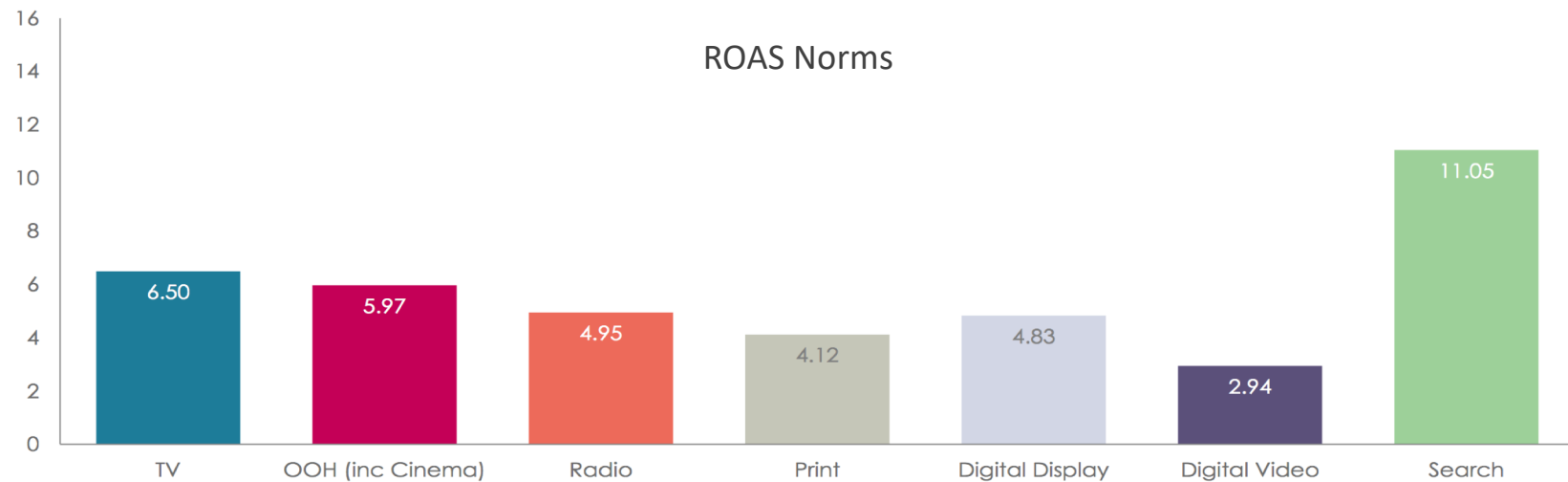
- Something is wrong and can be improved
 - You know this, because OOH usually does better!
 - Then identify the culprit

Industry ROI Norms

- Thanks to the OAAA, there are external references for comparing ROI (ROAS) results
 - Source: Benchmarking, a very reputable modeling division of Omnicom Media Group
 - UK-based, but the norms are based on US data
- How many cases were involved in the norm?
 - They are built on 20 US cases in Automotive, Consumer Electronics, Food & Drink, Retail (Non-Grocery)

How Do Your Results Compare To These 2017 Industry ROAS Benchmarks?

OOH delivers the second best RROI of traditional media, after TV



January 2017

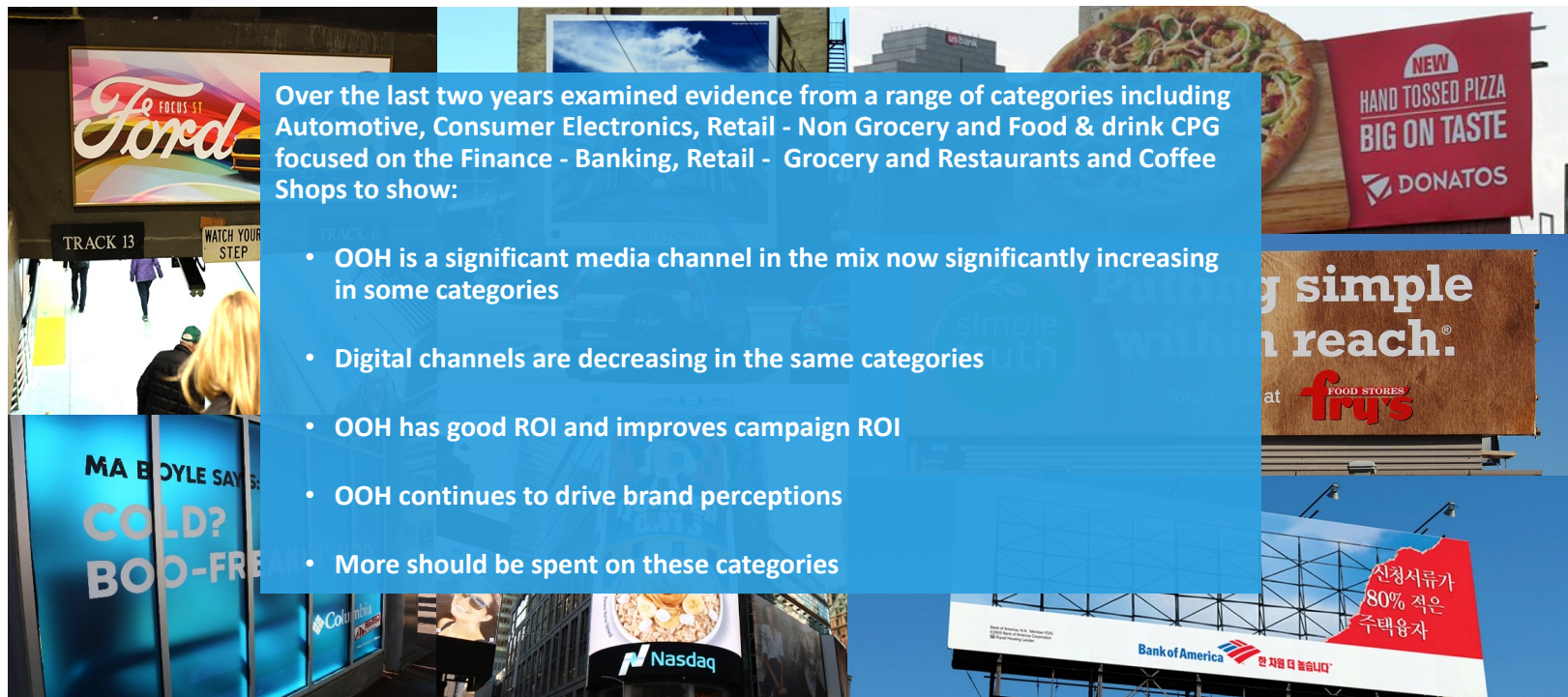
 Benchmarking

Introducing

2018 OAAA Benchmarking Study of Budget Allocation Against Advertising Objectives

Growing The Body of Evidence on the Effectiveness of OOH

Key findings from the past two years

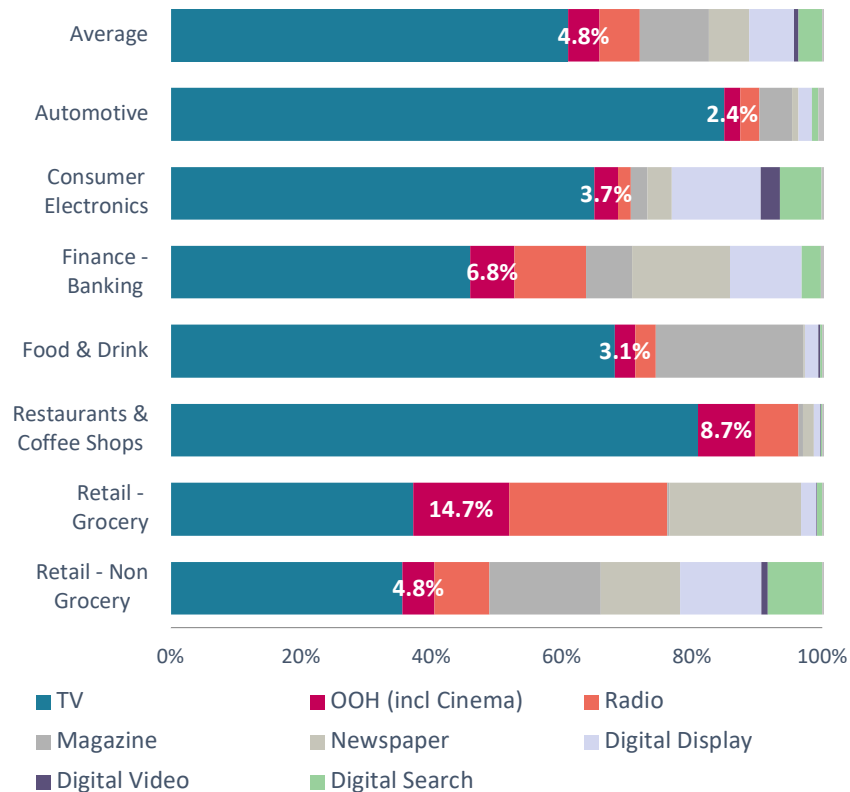


Over the last two years examined evidence from a range of categories including Automotive, Consumer Electronics, Retail - Non Grocery and Food & drink CPG focused on the Finance - Banking, Retail - Grocery and Restaurants and Coffee Shops to show:

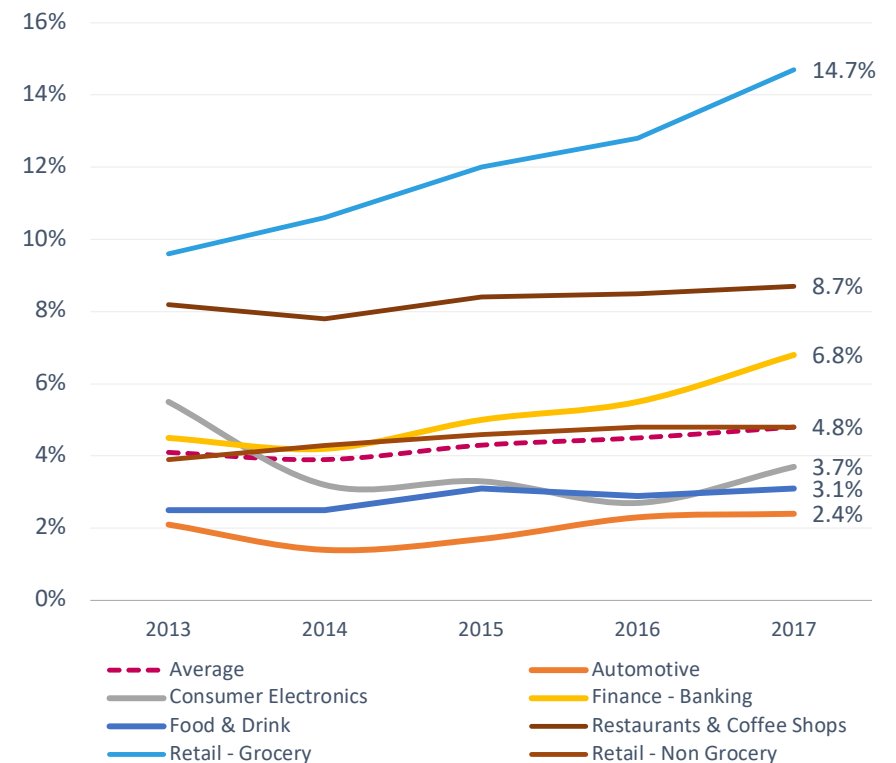
- OOH is a significant media channel in the mix now significantly increasing in some categories
- Digital channels are decreasing in the same categories
- OOH has good ROI and improves campaign ROI
- OOH continues to drive brand perceptions
- More should be spent on these categories

Mixed Levels Of Growth In OOH's Share Of Budget, Grocery Has The Fastest Growth Rate; Other Retail And Food & Drink Has Been Stable

2017 media mix

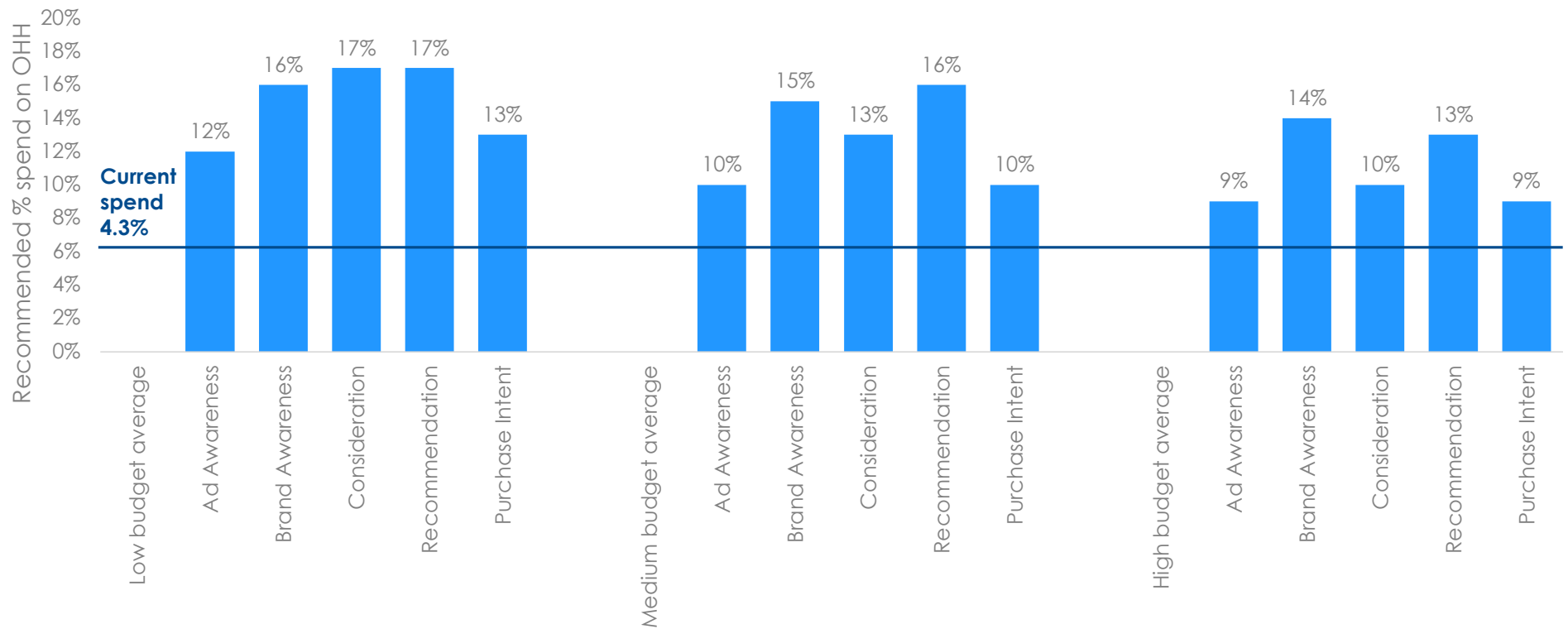


OOH % over the last 5 years



Recommended Spend on OOH

The market on average should be spending more on OOH at all budget levels



Source: **Brand Planning Tool** Automotive, Consumer Electronics, Food & Drink, Finance – Banking, Restaurants & Coffee Shops, Retail – Grocery, Retail – Non Grocery

Strategy 3. What Was Modeled? Impact Of Different Formats



OOH Formats?

OOH As A Single Medium?

Elements of the Plan to Model



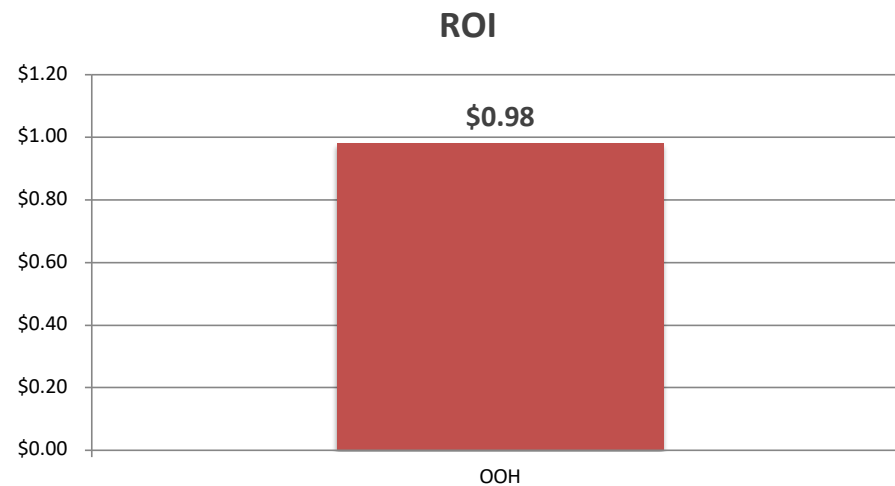
Primetime TV
Cable
Search
Display
OOH
Online Video

Here's An Example ...

If you were targeting professional women with:

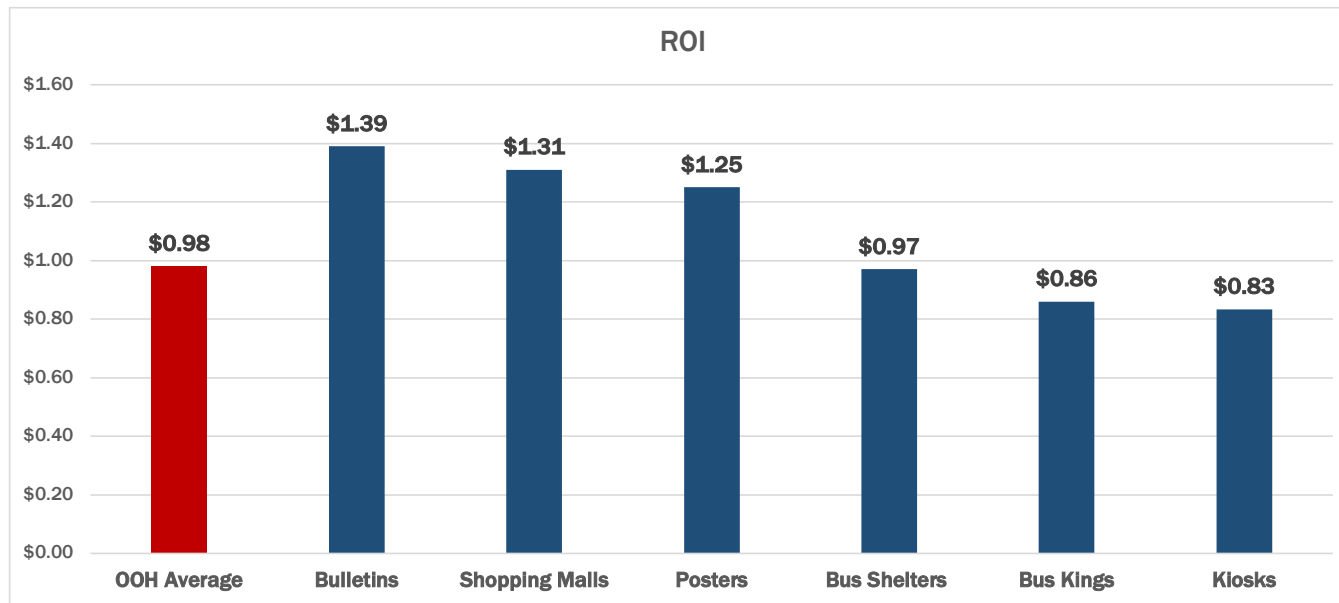


And All You Knew Was This:



OOH would be off the plan!

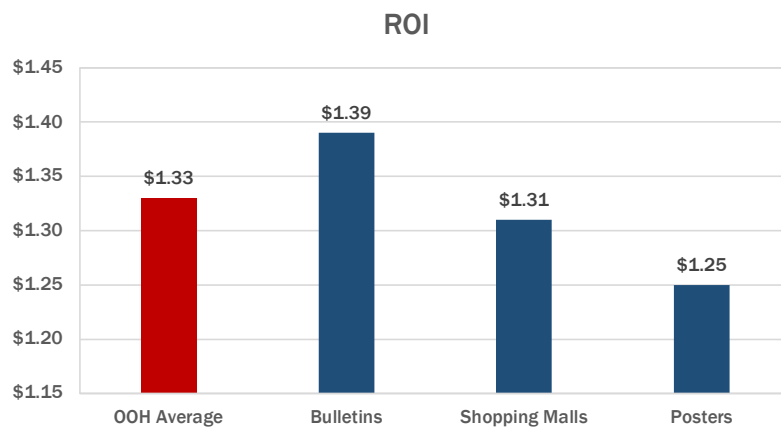
But If You Knew This ...



You could see what worked and what didn't work
for this campaign and this target audience

If The Modelers Broke Out OOH Types ...

You could change the plan:



And deliver a winning ROI!



If The Modelers Broke Out OOH Formats ...

And your model results were strong:

- Ask for more money to develop and run more of the OOH formats that worked, or expand to similar formats

If your model results were weak:

- If some parts worked better than others, recommend a reallocation or a new plan to optimize effectiveness -- a second chance, or at least a test
- Either way have a dialogue -- what formats worked and what didn't?

If The Modeler Didn't Break Out OOH Types ...

- You can do this on judgment – you are the OOH expert!
- Point out that some elements might have underperformed and dragged down the average for the entire medium
- Hypothesize a better allocation, based on judgment, or other data if you have it
- Recommend a test and learn
- Encourage the client to model OOH more discretely in the future

Strategy 4. Assess The Creative



The only true way to understand performance is by looking at creative separately from media

- 2/3 – 3/4 of campaign performance depends upon the creative
- OOH's creative impact is strong!
 - Big, bold, immersive storytelling and contextual relevance
- If creative was broken out in the model, you can use those facts
- If it wasn't, you can use your judgment – you are the OOH expert!
 - And OAAA has resources for you

Strategy 4. Assess The Creative

If your model results were strong:

- Suggest how the creative strategy could evolve and recommend a larger budget to keep the momentum

If your model result were weak:

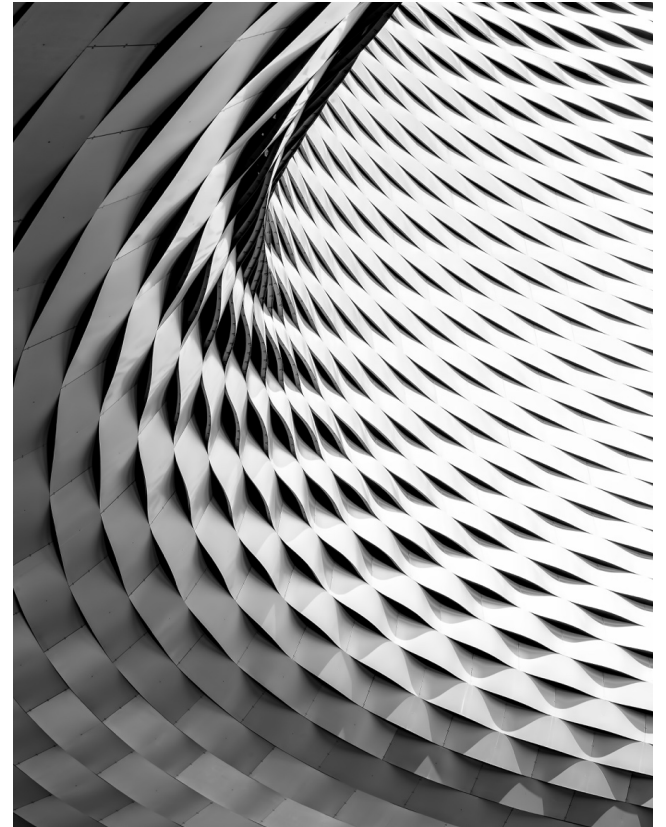
- Suggest ways the campaign could be improved
- Recommend a test and learn with improved creative
- Either way: have a dialogue about the quality of the OOH creative
 - How does the creative rate relative to everything the industry knows about best practices in OOH creative?

OAAA Creative Tools

- Testing Tool
 - Visualize what the creative looks like on a billboard, bus shelter, wall, or other common OOH formats
 - Includes digital billboards, subway posters and dioramas, train car cards, airport screens, mall kiosks
- Creative Guidelines
 - Evaluate creative with common sense and professional experience
 - Is it well branded? Does it communicate the main message, etc. Does it have the big idea?

Strategy 5. Question the OOH Data Inputs

- Marketing mix models and attribution require accurate, as-ran, highly disaggregated, accurate data
 - Individual units with format and creative execution info, posting and take-down dates, latitude and longitude with audience data by week (or finer)
- Any significant inaccuracies in the data modelers use --
REDUCES THE OOH ROI ESTIMATE!
- If your model results were weak – the OOH data inputs could be at fault
 - **Ask what data was used**
 - If it does not meet industry standards, you can request the model be rerun with the right data!



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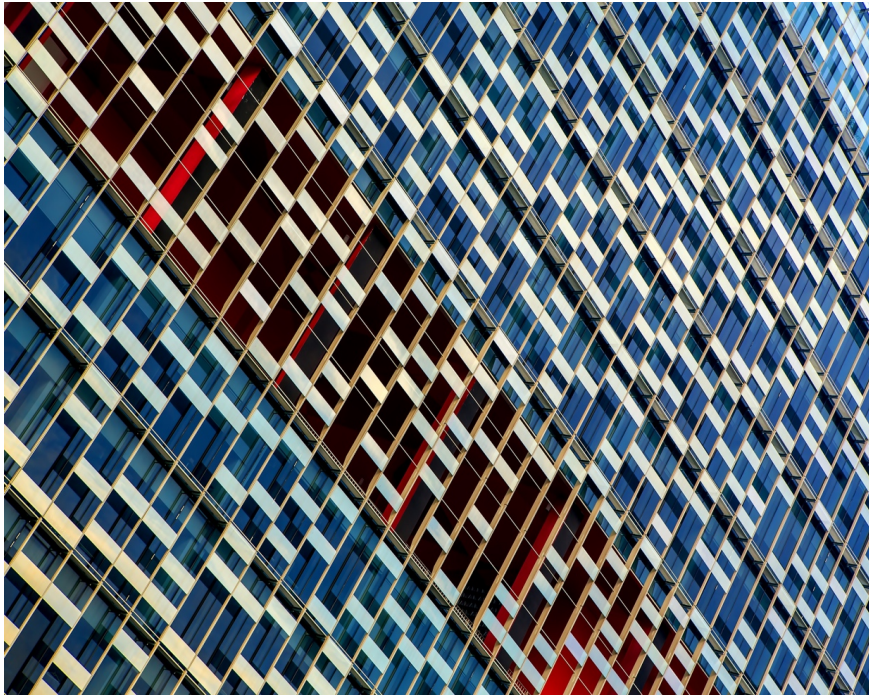
Using The Right OOH Data Inputs Matter!

OOH Media Data Checklist For Marketing Mix Models		
	Right Answers!	Wrong Answers!!!
METRIC:	GRPs or Impressions	Dollars
PERIODS:	Weekly (or finer)	Months, Quarters, Total Campaign
GEOGRAPHY:	DMAs (or finer, if at all possible)	Regions, National
STATUS:	Actuals, as ran	Planned, as bought
MEDIA:	Individual Formats	Total OOH Campaign
CREATIVE:	Individual creative executions (or at minimum, each campaign)	Total OOH Campaign

Getting Better Data for Modeling OOH

- The industry is investing to provide the data businesses require -- modelers need to be made aware of and given easy access to detailed campaign inventory data linked to Geopath data
- Geopath is developing granular data that will improve modeling:
 - By hour of day, day of week
 - Hyper local – block groups
 - More demos – Census Bureau and MRI
 - Roadside, Street Furniture, Pedestrian, Transit

Strategy 6. Bring In Other Data About The Campaign



- Do you have evidence that the campaign may have succeeded in other ways?
 - Store traffic generation
 - Web traffic generation
 - Brand awareness lift
- Bring it to light!
 - The purpose is to provide a counter-argument or context for the results
 - It will not be as comprehensive and accurate as the brands MMM, but it establishes facts
 - And maybe a second chance!

Recap

6 Strategies For Dealing With ROI Results

- Address Campaign Objectives
- Look at Outside Benchmarks and Norms
- Highlight The Importance of Specific Formats
- Look at Creative Quality
- Know What OOH Data Inputs Were Used In The Model
- Find Corroborating Information About The Campaign

Thank You!

