Data Accuracy: How to Fix Programmatic's Unsolved Problem

MMA Webinar Series
November 14, 2018

Sponsored by:

MMA PURPOSE

WHO: The People We Serve

Prime Audience: *Chief Marketers*
By helping Marketers do Mobile better, everyone wins. MMA membership represents Marketers, Agency, Media and Technology Enablers from across the globe.

WHY: Our Reason for Being

Mission:To accelerate the transformation and innovation of marketing through mobile, driving business growth with closer and stronger consumer engagement.

WHAT: Our Strategic Priorities

Cultivating Inspiration
Aimed at the Chief Marketer; guiding best practices and driving innovation

Building Capability for Success
Fostering know-how and confidence within the Chief Marketer's organization

Demonstrating Measurement and Impact
Proving the effectiveness and impact of mobile through research providing tangible ROI measurement and other data

Advocacy
Working with partners and our members to protect the mobile marketing industry
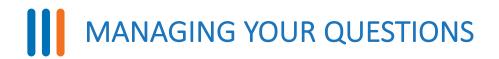
MMA IS 800+ MEMBERS STRONG GLOBALLY

MARKETERS, AGENCIES, MEDIA SELLERS, TECHNOLOGY & OPERATORS

MMA: Reshaping the Future of Marketing

SMoX Mobile ROI Research	**MATT** MARKETING ATTRIBUTION THINK TANK Marketing Attribution Think Tank	**MOSTT** MARKETING ORGANIZATION STRUCTURE THINK TANK Marketing Org Structure Think Tank to Rethink Mrktg Org	**SAVE** Brand Safety Council Marketer Brand Safety Council
Industry Working Groups Driving the Future of Marketing & Mobile	**CEO & CMO Summit** Annual Mobile Think Tank	**Guidelines & Best Practices** Viewability, Location, Native and more	**20 MMA Events in 15 Countries**
MM25 Marketer Peer Group Tackling Core Issues for Marketers	**Shared Knowledge of 800+ Members From the Entire Mobile Ecosystem Worldwide**	**SMARTIES** Awarding Best in Class Mobile Campaigns	**1,000+ Mobile Case Studies** Inspiring Creative Innovation

MANAGING YOUR QUESTIONS

Share the Insights

#MMAWeb

PRESENTER

MODERATOR

Jake Moskowitz
Head of The Emodo Institute
Emodo
Jake.Moskowitz@emodoinc.com

Leo Scullin
VP of Industry Programs
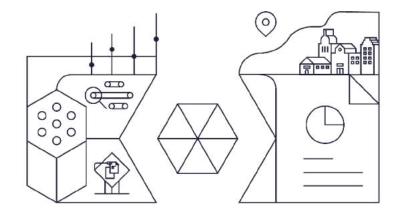Mobile Marketing Association
Leo@mmaglobal.com

MMA

Introduction

The Emodo Institute

- We focus on research, education and resolution of data concerns that challenge mobile advertising.

- We help media planners, buyers and service providers sharpen the efficacy of mobile data, so their campaigns can have a greater impact.

Introduction

JAKE MOSKOWITZ

Head of the **Emodo Institute**

Former VP Innovation @ Nielsen

Former Director of Media Innovation @ AT&T

Focused on mobile media since 2004

How do you buy targeting data?

Why do you choose certain segments?

REACH   SOURCE   EASE   PRICE   DESCRIPTION

EMODO INSTITUTE

By the End of This Presentation, You'll Know:

How serious an issue Data Accuracy is for programmatic advertisers

All the potential points of failure in the making a segment

Key questions to ask data vendors to differentiate between similar offerings

How to calculate the real value of targeting data, accounting for inaccuracies

EMODO INSTITUTE

Step 1:
Accept We Have a Problem

A Quick Game of
"The Current State"

The current state of advertising data

3ʳᵈ party targeting data is a

$20B

industry

The current state of advertising data

EMODO
INSTITUTE

Source: IAB, 2017

130,000+

Different segments available within leading data stores

The current state of advertising data

EMODO INSTITUTE

Source: Liveramp Data Store

9%

of impressions are fraudulent

The current state of advertising data

EMODO
INSTITUTE

41%

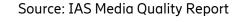## of impressions are non-viewable

The current state of advertising data

EMODO
INSTITUTE

34%

reduction in viewability issues over 2.5 years (since the industry took it seriously)

The current state of advertising data

Source: IAS Media Quality Report

45%

of location data is inaccurate

The current state of advertising data

Source: Ericsson Emodo Internal Data

EMODO
INSTITUTE

56%

of demo targeting data is inaccurate

The current state of advertising data

EMODO INSTITUTE

Source: Nielsen DAR Benchmarks, Q1 2018, M/F 10-20 year age gaps

There are

0
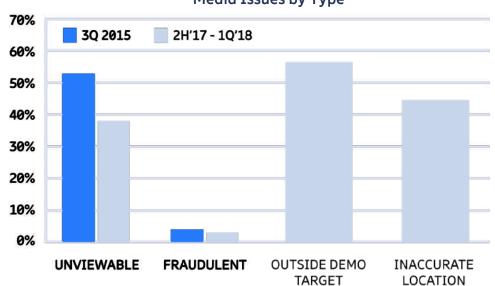
ad industry standards,
regulations or initiatives to
improve data accuracy

The current state of advertising data

EMODO INSTITUTE

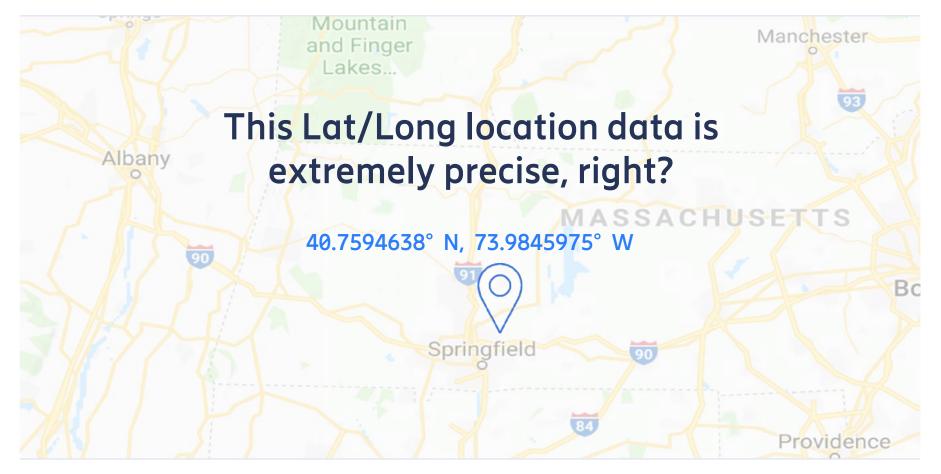# We've Done So Much Work to Eliminate Media Waste

But data accuracy is just as big a problem… if not bigger
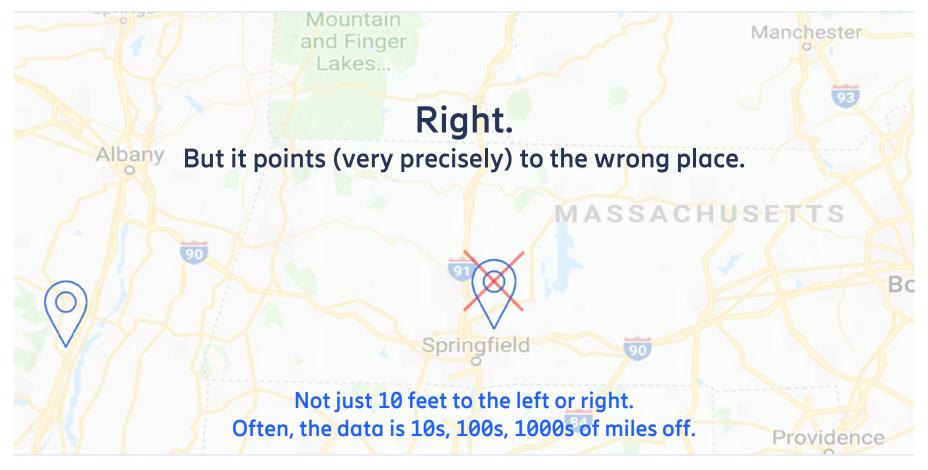
Media Issues by Type

Sources: IAS Media Quality Reports 3Q'15 and 2H'17 for Direct Publisher Display; Nielsen DAR Benchmarks Reports 1Q'18 for M/F 16-30 years; Ericsson Emodo Verification Benchmarks 2017-18

EMODO INSTITUTE

This Lat/Long location data is extremely precise, right?

40.7594638° N, 73.9845975° W

EMODO INSTITUTE

Right.
But it points (very precisely) to the wrong place.

Not just 10 feet to the left or right.
Often, the data is 10s, 100s, 1000s of miles off.

EMODO
INSTITUTE

Step 2:
Understand Why Data
is Inaccurate

Why does this happen?

BAD SOURCES

TRADEOFFS

UNVERIFIED

EMODO
INSTITUTE
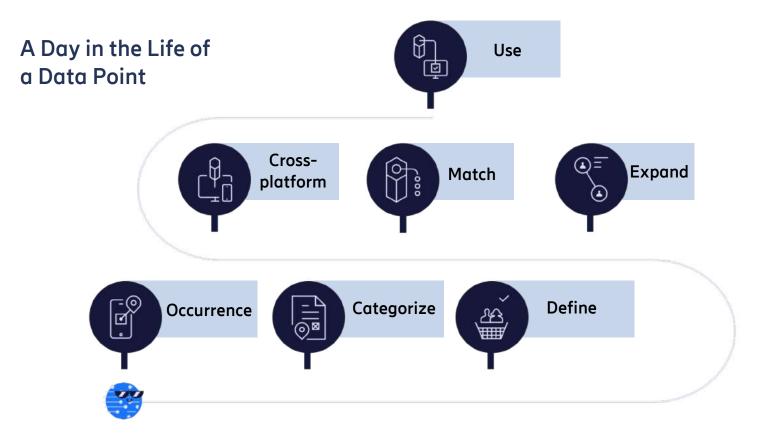
Data Science is Veiled Science

1 Competition	**4** Evolution
2 Sales Cycle	**5** Weakness
3 Accountability	**6** Perception

EMODO
INSTITUTE

A Day in the Life of
a Data Point

A Day in the Life of a Data Point

Use

Cross-platform

Match

Expand

Occurrence

Categorize

Define

EMODO INSTITUTE

So, what do we end up with?

60M devices that have visited a Hyundai dealership in the last 30 days?

More segment stuffing...

102M devices that are active members of the BP Motor Club?

NAME ˅	PROVIDER	REQUES...	RESTRI...	CPM	IOS RE... ˅	ANDRO... ˅
> Likely Auto Club Member > Allstate Motor ...				$0.75	30,000,000	34,000,000
> Likely Auto Club Member > Any				$0.75	9,800,000	11,000,000
> Likely Auto Club Member > BP Motor Club				$0.75	45,000,000	57,000,000
> Likely Auto Club Member > Car Dealer/M...				$0.75	33,000,000	35,000,000
> Likely Auto Club Member > Other Insuran...				$0.75	30,000,000	33,000,000
> Likely Country of Origin > New Domestic ...				$0.75	53,000,000	64,000,000
> Likely Country of Origin > New Domestic ...				$0.75	13,000,000	20,000,000
> Likely Country of Origin > New European ...				$0.75	58,000,000	66,000,000
> Likely Country of Origin > New Japanese ...				$0.75	68,000,000	74,000,000
> Likely Country of Origin > New Japanese ...				$0.75	41,000,000	47,000,000

EMODO INSTITUTE

And another...

128M likely Millstone coffee drinkers?

|	NAME	PROVIDER	REQUES...	RESTRI...	CPM	IOS RE...	ANDRO...
☐	CPG > Beverage > Likely Coffee Brand > Hills Brothers ...				$1.00	57,000,000	78,000,000
☐	CPG > Beverage > Likely Coffee Brand > Keurig Coffee				$1.00	41,000,000	48,000,000
☐	CPG > Beverage > Likely Coffee Brand > Luzianne Coffee				$1.00	13,000,000	16,000,000
☐	CPG > Beverage > Likely Coffee Brand > Millstone Coffee				$1.00	56,000,000	72,000,000
☐	CPG > Beverage > Likely Coffee Brand > Peets Coffee				$1.00	63,000,000	69,000,000
☐	CPG > Beverage > Likely Coffee Brand > Starbucks Cof...				$1.00	19,000,000	18,000,000
☐	CPG > Beverage > Likely Juice/Non-Carbonated Bever...				$1.00	56,000,000	71,000,000
☐	CPG > Beverage > Likely Juice/Non-Carbonated Bever...				$1.00	52,000,000	71,000,000
☐	CPG > Beverage > Likely Juice/Non-Carbonated Bever...				$1.00	34,000,000	42,000,000
☐	CPG > Beverage > Likely Juice/Non-Carbonated Bever...				$1.00	50,000,000	60,000,000

EMODO INSTITUTE
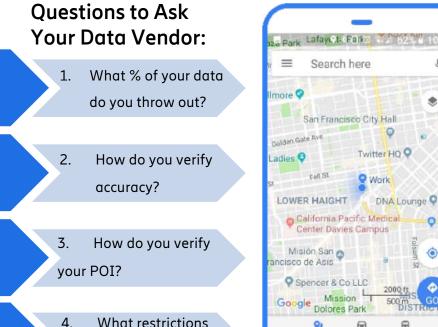
Step 3:
Ask Your Data Vendors Revealing Questions

What Could Go Wrong?

Bad Data Sources:

1. **Tech problems:** Data captured isn't correct because technology failed, such as "last known location"

2. **Low quality data:** Data that isn't persistently collected, honestly provided, adequately scalable, etc.

3. **Categorizations are wrong**: store definitions are wrong or too liberal; irresponsible assumptions about meaning

4. **Privacy restrictions:** no use of deterministic data due to privacy concerns (only modeled data used)

Questions to Ask Your Data Vendor:

1. What % of your data do you throw out?

2. How do you verify accuracy?

3. How do you verify your POI?

4. What restrictions on use of deterministic?

What Could Go Wrong?

Data Trade-Offs:

1. **Optimizing scale at the cost of accuracy:** Lookalike model extrapolation ratio is high

2. **Data loss** due to low match rates

3. **Inaccurate cross-device** due to probabilistic methods, or incorrect assignment of a person within a household

4. **Use of wrong segments** (accidental or purposeful) such as to increase scale or deliver in full

Questions to Ask Your Data Vendor:

1. What % are modeled?

2. What's your match rate to x?

3. What % are running on source platform?

4. Exactly which segments were used?

EMODO INSTITUTE
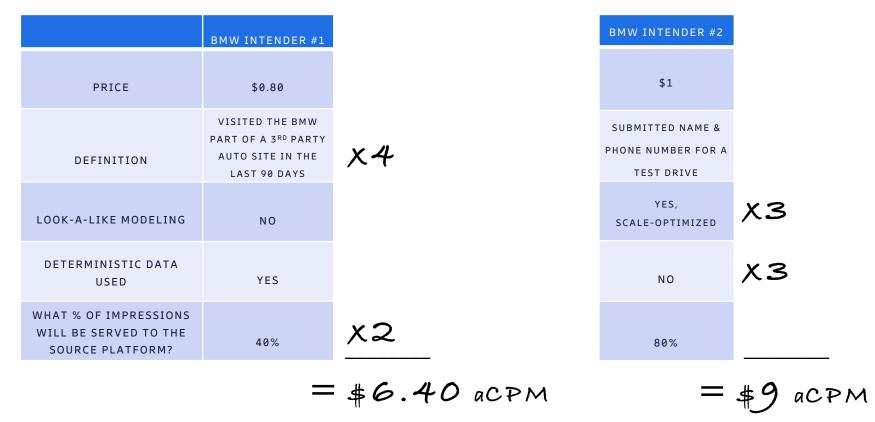
Step 4:
Calculate the Cost
of Bad Data

Step 4: **Calculate Your "aCPM"**

Inaccurate data is a primary cause of wasted impressions.

- The aCPM adjusts cost for lost value from data inaccuracy

- Applies the accuracy rate to the original CPM to calculate cost of only the accurate impressions.

- Example: If CPM is $3.00 and data is 50% accurate, the aCPM would actually be $6.00

- Taking steps to improve accuracy can significantly reduce aCPM

EMODO INSTITUTE

Team Exercise: **Calculate an aCPM**

	BMW INTENDER #1		
PRICE	$0.80		
DEFINITION	VISITED THE BMW PART OF A 3RD PARTY AUTO SITE IN THE LAST 90 DAYS	X4	
LOOK-A-LIKE MODELING	NO		
DETERMINISTIC DATA USED	YES		
WHAT % OF IMPRESSIONS WILL BE SERVED TO THE SOURCE PLATFORM?	40%	X2	

$$= \$6.40 \; aCPM$$

BMW INTENDER #2	
$1	
SUBMITTED NAME & PHONE NUMBER FOR A TEST DRIVE	
YES, SCALE-OPTIMIZED	X3
NO	X3
80%	

$$= \$9 \; aCPM$$

4 Crucial Steps to Better Data

1. **Prioritize**: Establish data accuracy as a top priority — equal to media quality

2. **Be Aware**: Keep in mind what goes on behind the curtain and how those steps can affect the accuracy of data segments

3. **Ask**: Seek deeper answers to revealing vendor questions

4. **Calculate**: Assess the value of data options by doing a simple aCPM calculation

EMODO INSTITUTE

Q & A

Presenter

Moderator

Jake Moskowitz
Head of The Emodo Institute
Emodo
Jake.Moskowitz@emodoinc.com

Leo Scullin
VP of Industry Programs
Mobile Marketing Association
Leo@mmaglobal.com

#ShapeTheFuture
because the future of mobile is the future of business

UPCOMING MMA WEBINAR SERIES

2019 MMA EVENTS

Impact NY
New York City
March 5 – 6, 2018

CEO & CMO Summit
Sonoma, CA
July 21 – 23, 2019
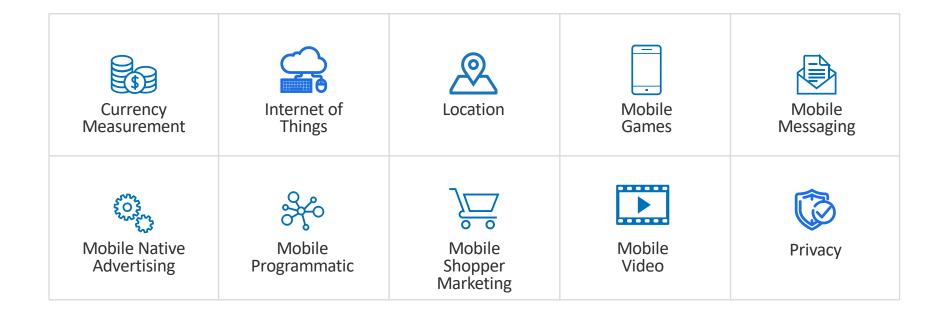
www.mmaglobal.com/webinars

http://www.mmaglobal.com/events

MMA PROGRAMS & INITIATIVES

Currency Measurement	Internet of Things	Location	Mobile Games	Mobile Messaging
Mobile Native Advertising	Mobile Programmatic	Mobile Shopper Marketing	Mobile Video	Privacy

Thank you!