

# **INTELLIGENT EFFECTIVENESS**

## Measuring the ROI of AI on Optimization and Personalization

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# Consortium for AI Personalization (CAP)

## Accelerating Learning and Value from AI-Driven Personalization

### Research Objective:

- Can **impression-level AI optimization of content versions** drive significant lifts in digital media performance

### Opportunity:

- Quantify **the value of an AI-driven** delivery engine leveraging contextual data
- Derive **benchmarks and economic impact** projections across MMA Global member case studies

### Results:

- 5 brands with an average lift of 100%+ across mix of video, display, and audio campaigns on open web (Kroger, GM, ADP, Monday.com, Shell), with others in the field or planning for launch globally

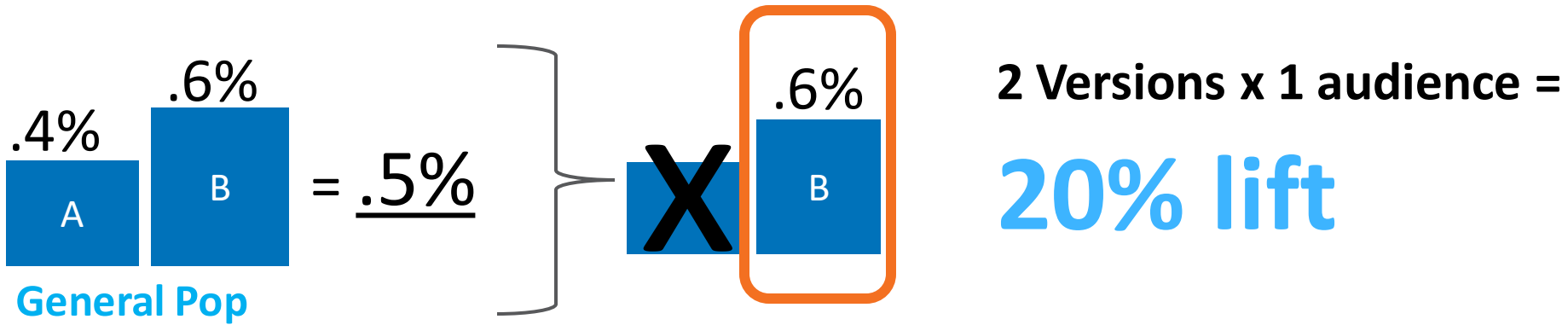
### MMA Global Value Add:

- Coaching on test design, **analysis of campaign results**, and collaboration on learning agenda to continue to evolve CAP roadmap
- Showcase case study **“on stage”** at premier MMA Global events such as Impact , Innovate etc
- Positioning your brand as a **cutting-edge company** in the industry

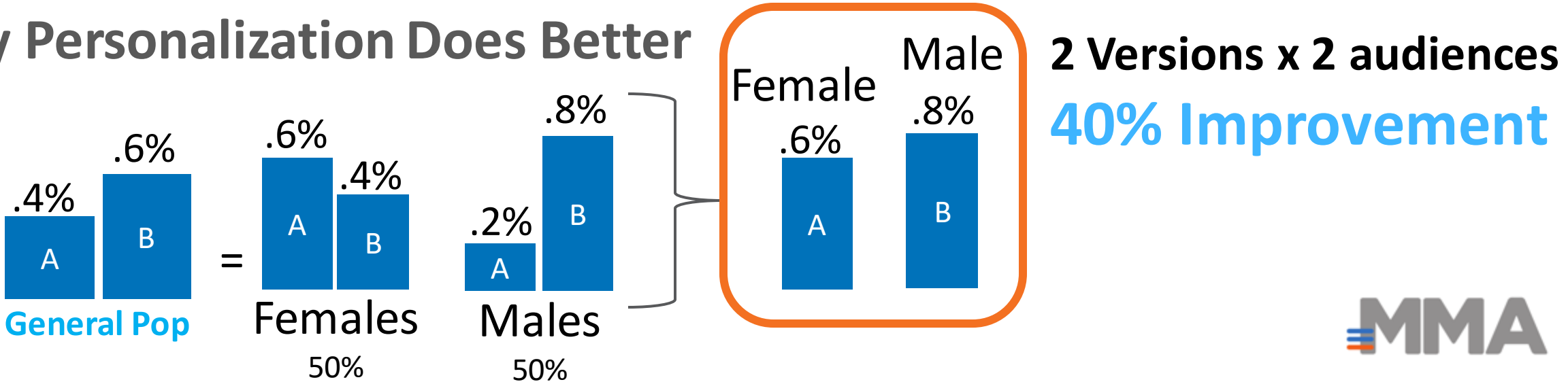
### Requirements

- In-market **paid media campaign** (open web) one-month+ in market w/40M impressions
- Content/creative **provided by brand** or agency
- MMA **recommends a tech partner** given capability fit, results and ease of execution

# || We "know" that personalization works



## Why Personalization Does Better





# The real question is how do you create rules for millions of audience combinations?

**72** Total Versions

**X**

**1,852,200**  
Audience variations

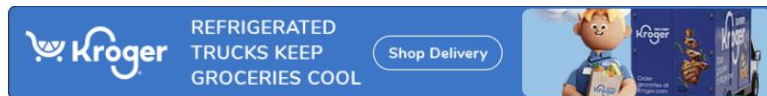
**=**

**133,358,400**

opportunities to find value in the Interactions between message & audience



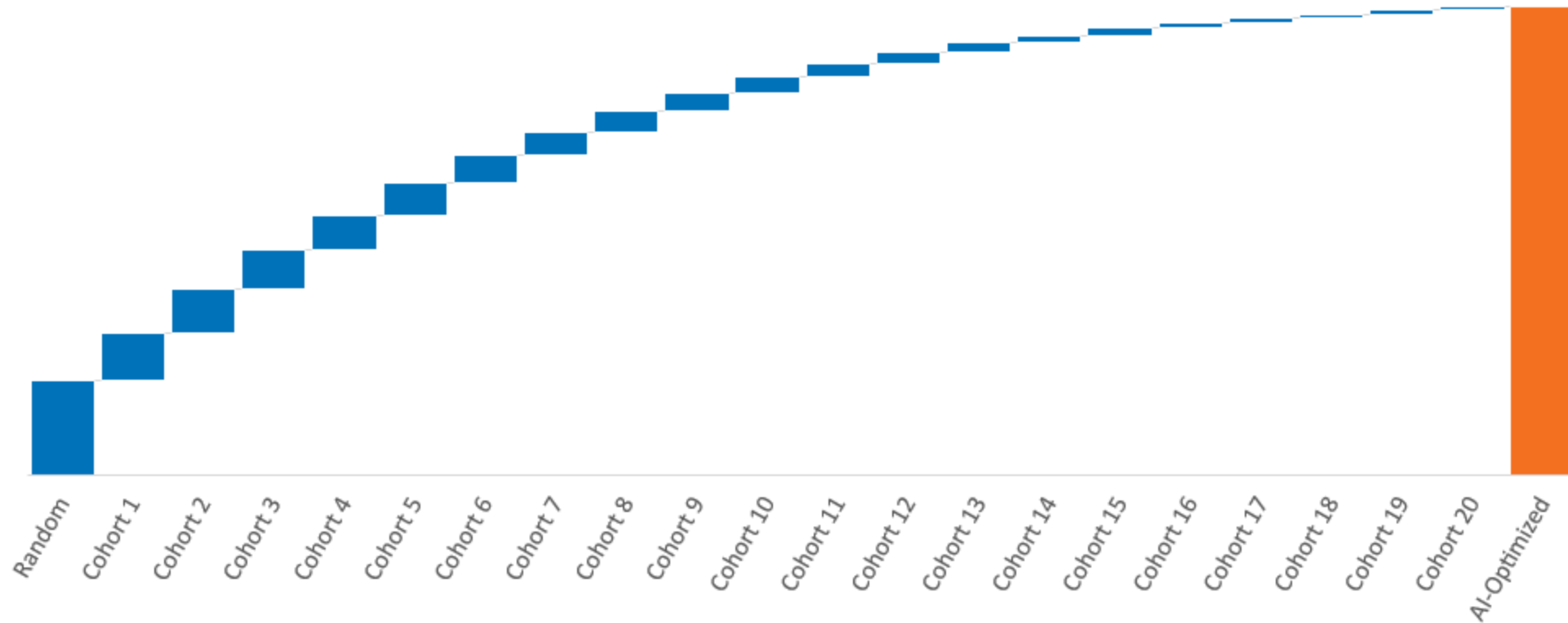
- DMA X
- Time X
- Day of Week X
- Device OS X
- Connection type X
- Segment X
- Other data signals X





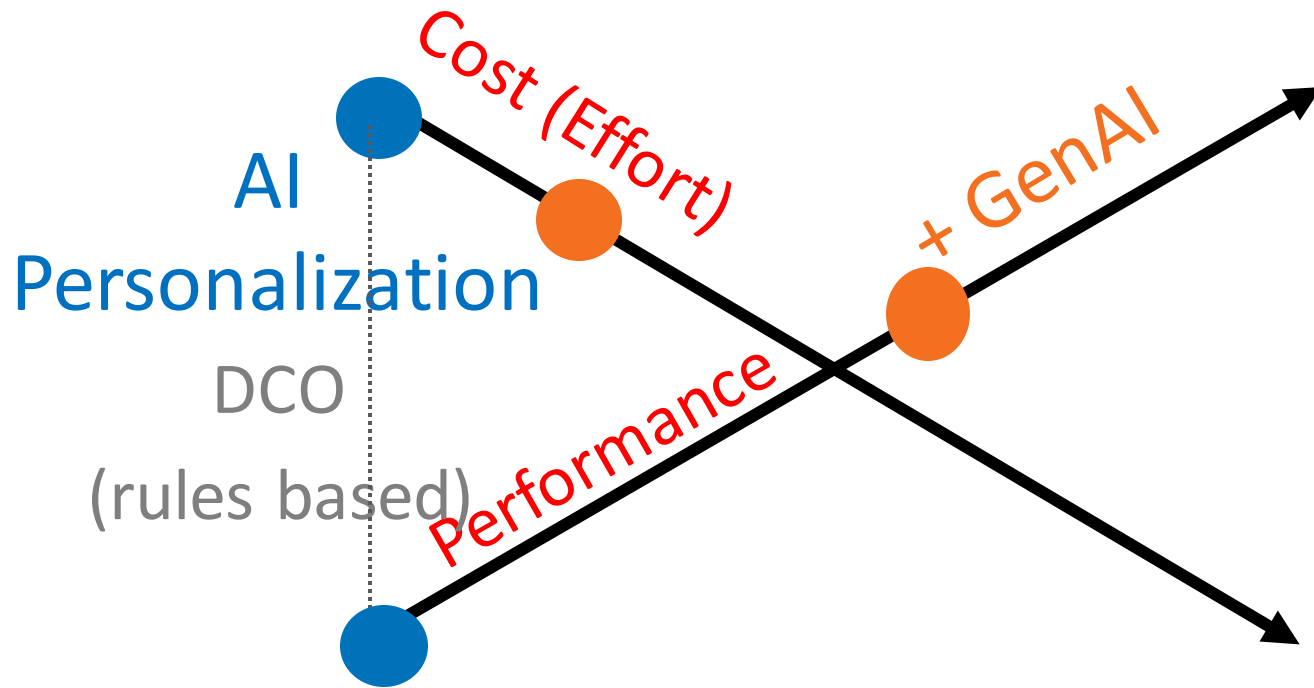
# Hypothesis is that AI allows you to harness those combinations

The result is lots of little optimizations that add up to big gains





# ... and that AI Personalization can deliver large performance gains without large costs

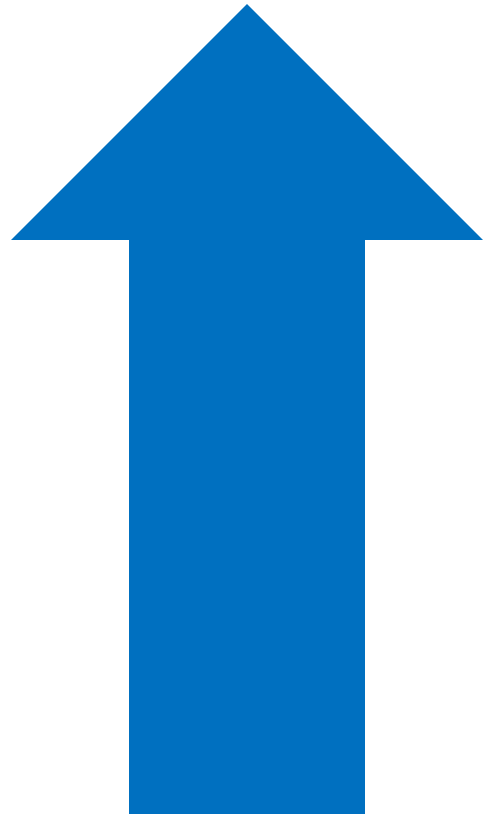


2-3x More Lift

Half the cost (effort)

400% to 600% higher ROI

# ||| Test results to date > 100% lift for digital KPIs








**Creative  
Relevancy**

**Wasted  
Impressions**



+

	<b>+259%</b> Display - Site engagements
	<b>+68%</b> Video - Site engagements
	<b>+188%</b> Audio - App Installs
	<b>+136%</b> Display - Lead Forms
	<b>+161%</b> Display - App Installs



# Display example: Kroger



+259%

Kroger had a significant lift in their KPI via 72 creative versions and allowing the AI to optimize at the impression level.



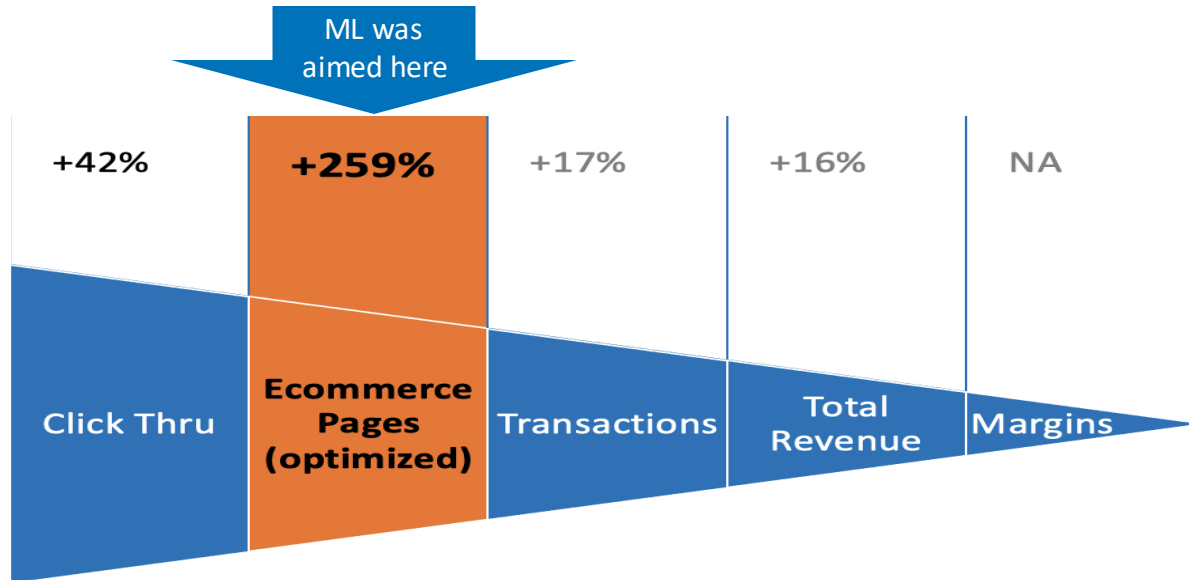




# The Upside is Big

Kroger's test resulted in a 259% increase for the target KPI over the randomized control

## Results



## Key Learnings

- AI optimization of display ad creative can deliver even larger performance gains than expected
- Ads for newer products may be more easily impacted by this type of optimization
- Creative development requires new approaches to briefing process



# Web Form example : ADT

ADT tested AI optimization in a display campaign with 81 distinct DISPLAY variations of the creative

## Test Parameters

Brand: ADT

Product: Home alarms

Media Type: Display

Ecosystem: Open Web

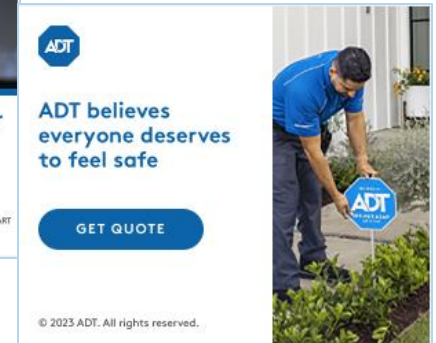
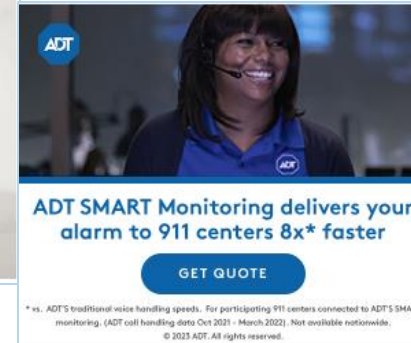
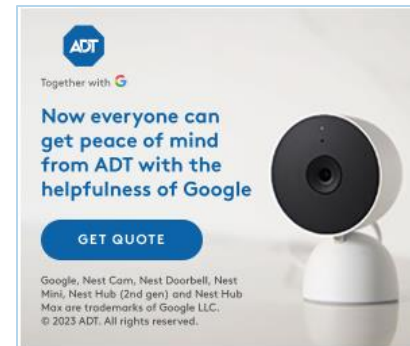
Data Provided to ML Model: DMA, Time, Day of Week, Device OS, Connection type (cable, mobile, corporate, etc.)

Optimized KPI: Webform submit

## Creative

81 Total Versions:

(3 templates x 3 images x 3 headlines x 3 CTA = 81)



# Video example: GM



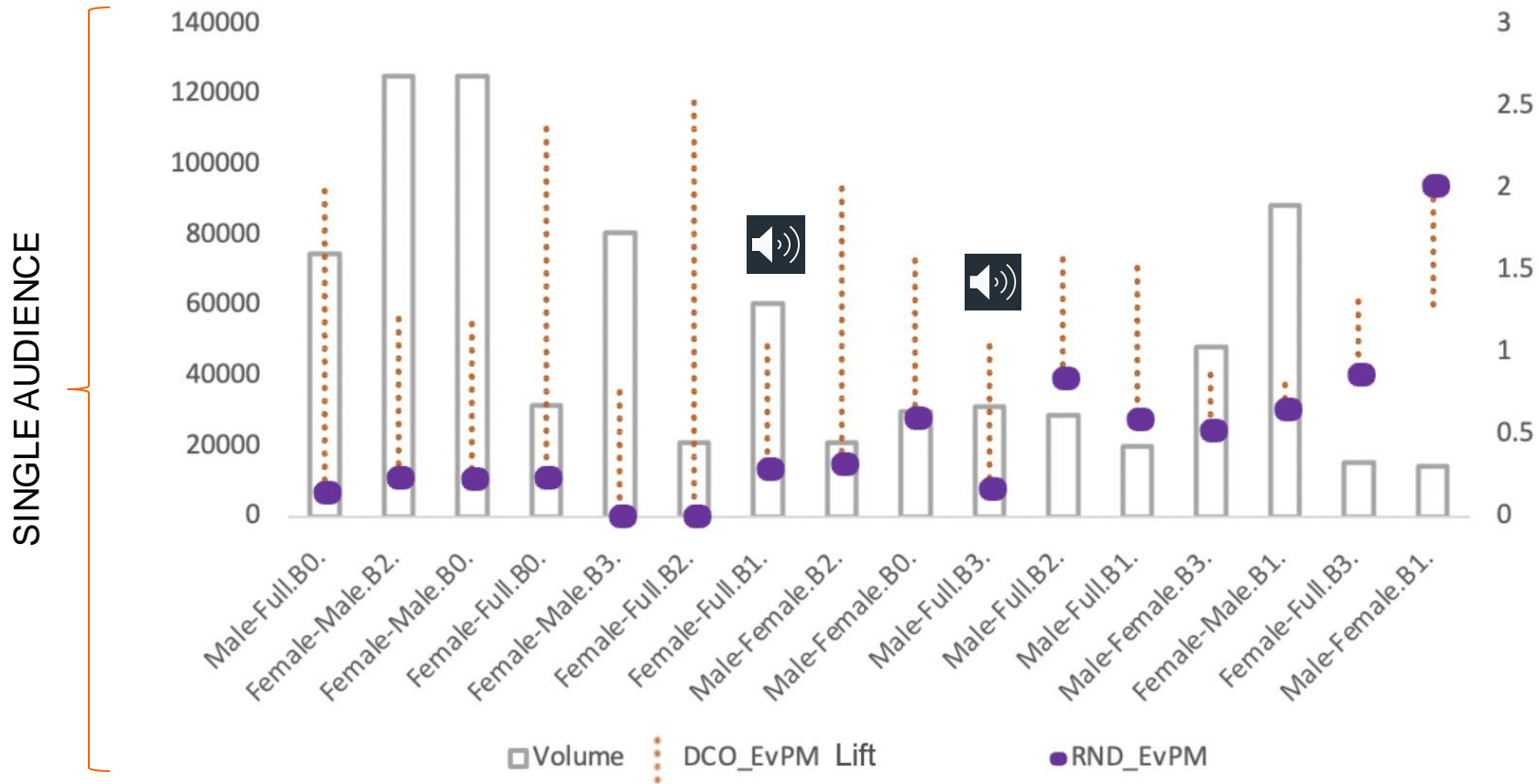
**+68%**

General Motors leveraged 15 different creative versions for our AI to optimize at the impression level to deliver a significant lift in performance KPI



# Audio example: Monday.com

Volume & Optimization, Ranked By Total Conversions



Brand: Monday.com  
 Channel: Audio  
 Creative Versions: 16  
 Audience: One Line item  
 Impressions: 815,848  
 KPI: Visit and Sign Up

# +188%

Total average lift across creative versions against randomized non-AI holdout



# What we know so far

	Kroger	ADT	GM	monday.com
Theme	Upside is BIG	Audience Matters	Creative diversity	Power of interactions
KPI Improvement	+259%	+136%	Test 1: +68% Test 2: No lift	+188%
Media Type	Display	Display	Video	Audio
KPI being optimized	Webpage visit	Web form submit	Webpage visit	Website visit & App install
# versions	72	81	15	16
Ecosystem	Open web	Open web	Open web	Open web
Data available to ML model	DMA, Time, Day of Week, Device OS, Connection type (cable, mobile, corporate, etc.)	DMA, Time, Day of Week, Device OS, Connection type (cable, mobile, corporate, etc.)	Segment (core, youth), Device OS, Connection type (cable, mobile, corporate, etc.), US geo	DMA, Time, Day of Week, Connection type (cable, mobile, corporate, etc.)

# So how do you leverage this Opportunity

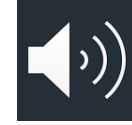


# MMA technology partner

Patented technology with best results to date

## AI Technology Overview:

- Paid media – Omni Channel
- Predictive AI creative decisioning at the impression level
- Maximizes every in-market ad variation
- Does not require a change in existing media stack
- Setup is a low lift process vs traditional DCO
- Real time performance available via dashboard
- **GENERATING AN AVERAGE OF > 100% LIFT**



Audio



Display



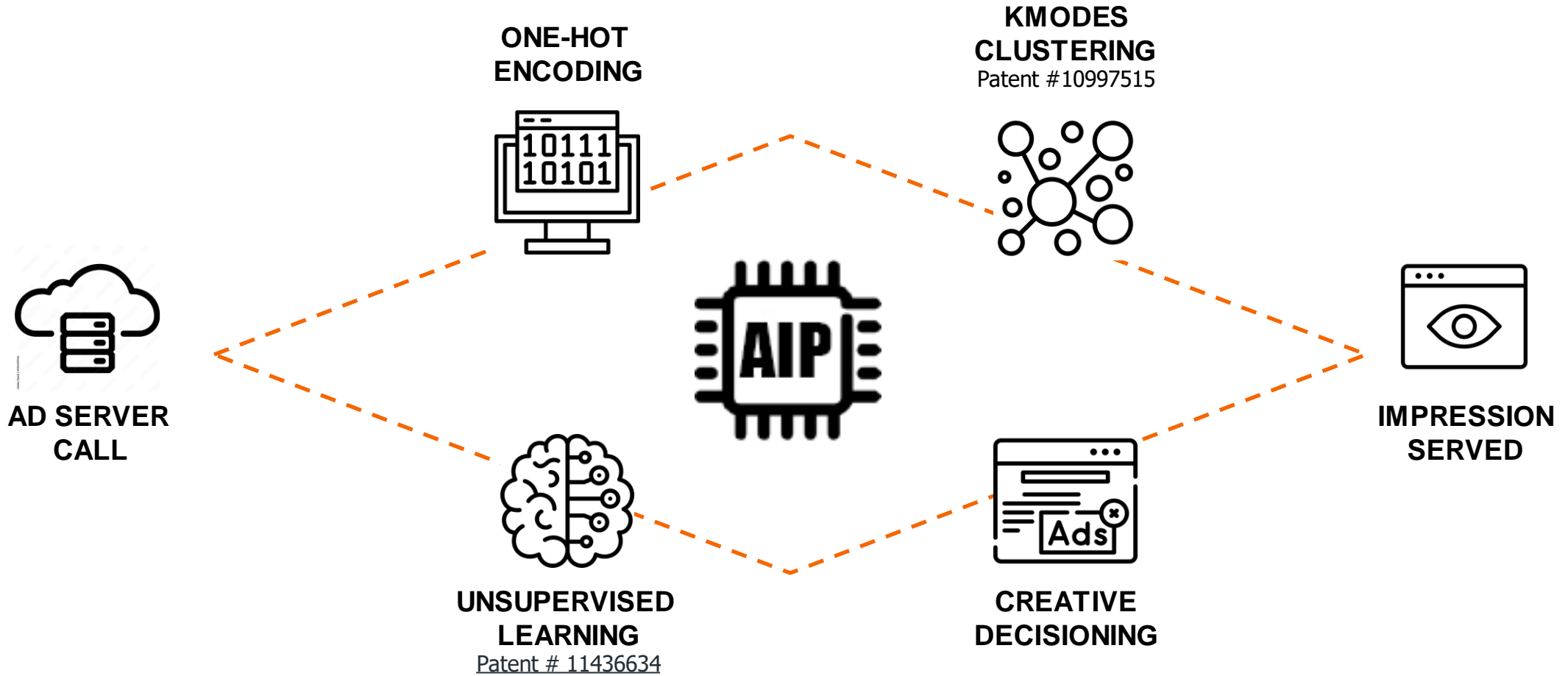
OLV/CTV





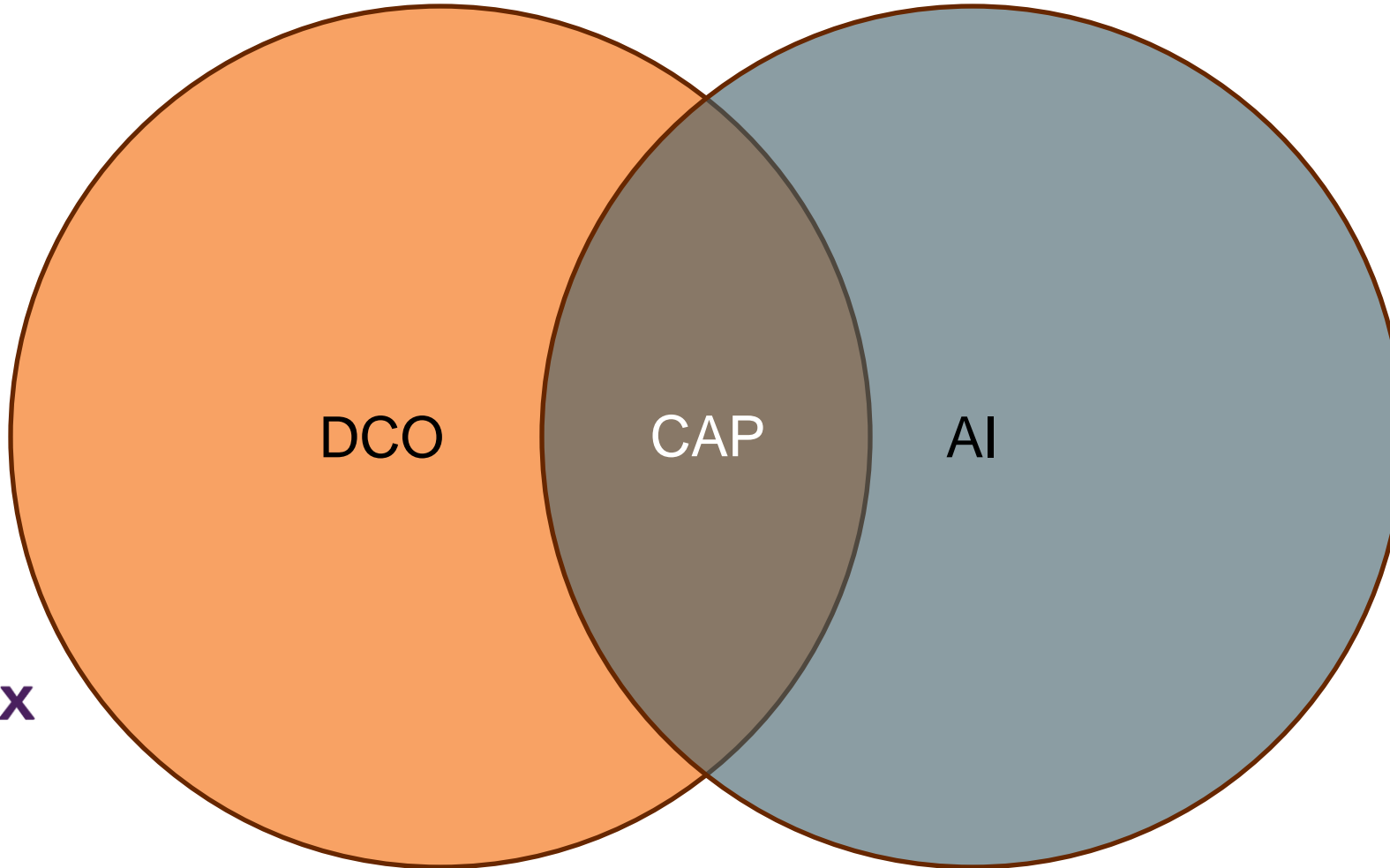
# Additional layer passing data and content

No change in media buying as part of test campaign



# More content versions than DCO and easier to execute

- Rules Driven
- Trigger Based
- Leverages Cookies
- Integrates Feeds
- Algorithmic
- Highly complex setup

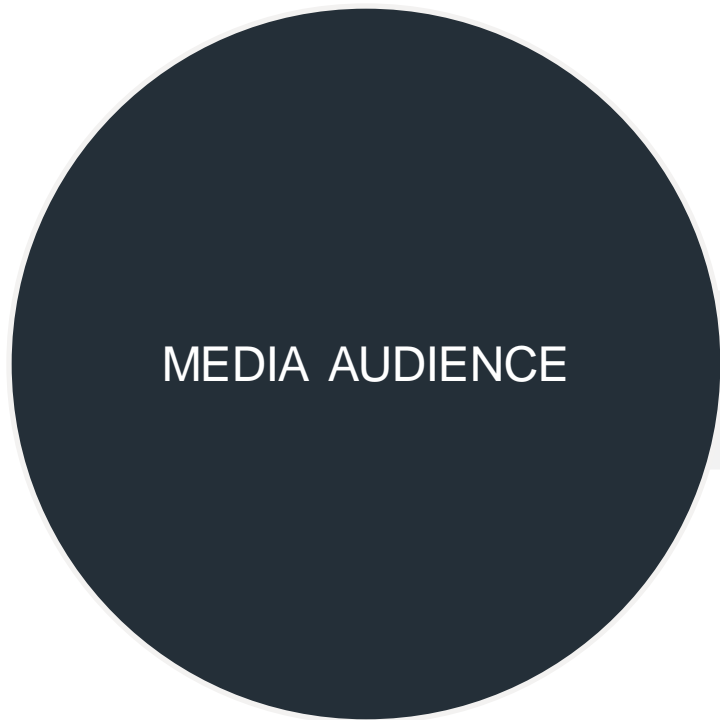


- Fully Autonomous
- Hope AI makes the right decision
- Difficult to pull back
- Production automated
- Very little human intervention



# AI groups cohorts within an audience

Optimize matching of content versions to audience clusters



(eg 18-44 HH w/Pet)

## DATA MODELS (1271 variables)

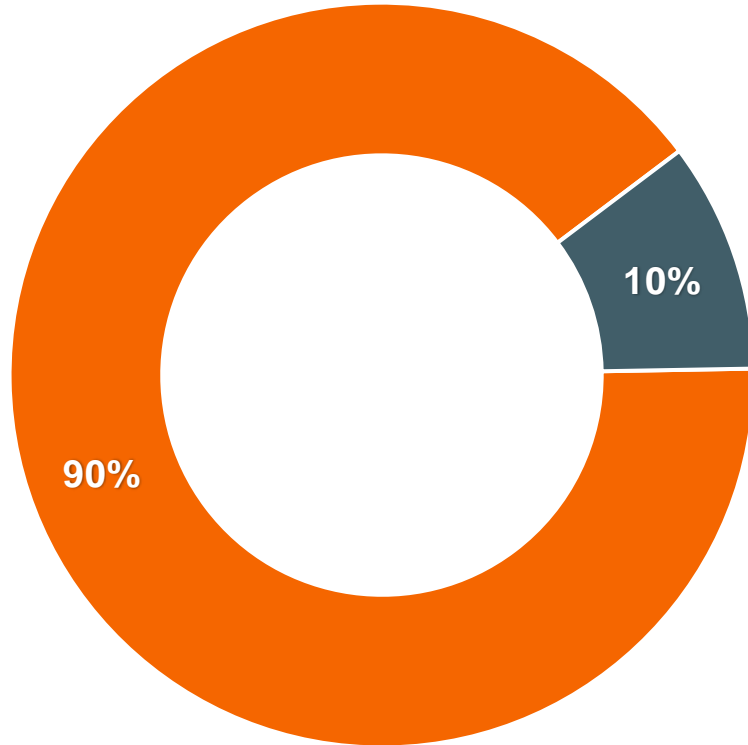
- Segment
- Device Type
- Time of day
- Day of Week
- Geolocation
- Connection
- Events
- Conversions
- Visits
- Views



- Group 1: (TH: 12pm: iOS: V3.1: Austin)
- Group 2: (MO: 5pm: Android: V13.1: Chicago)
- Group 3: (SU: 6am: MAC: v10.1: NYC)

# AI is constantly driving performance

Learning vs. 10% control with randomized delivery of content versions (AI turned off)



- 10% of the impression served will receive a randomly generated creative, effectively turning the AI machine learning and optimization OFF.
- This will ease setup process, but also showcase the lift that AI machine learning and optimization drives against a rotation of creatives
- The same creative variations will be used in both the holdout cell and the AI optimized cell

# Modular approach to content versions

Humans still involved, but less 30 days to launch

## CREATIVE AI MODELS (15-125 versions)

- THEME
- LAYOUT
- MESSAGING
- ANIMATION
- IMAGERY
- CALL TO ACTION
- SCRIPTS
- VOICEOVER
- LENGTH
- SCENES

Theme	<input type="text" value="safety_assist"/>	<input type="button" value="↻"/>
Background	<input type="text" value="Image 2"/>	
Headline	<input type="text" value="Confidence comes standard with Chevy Safe"/>	
CTA	<input type="text" value="Explore Trailblazer"/>	

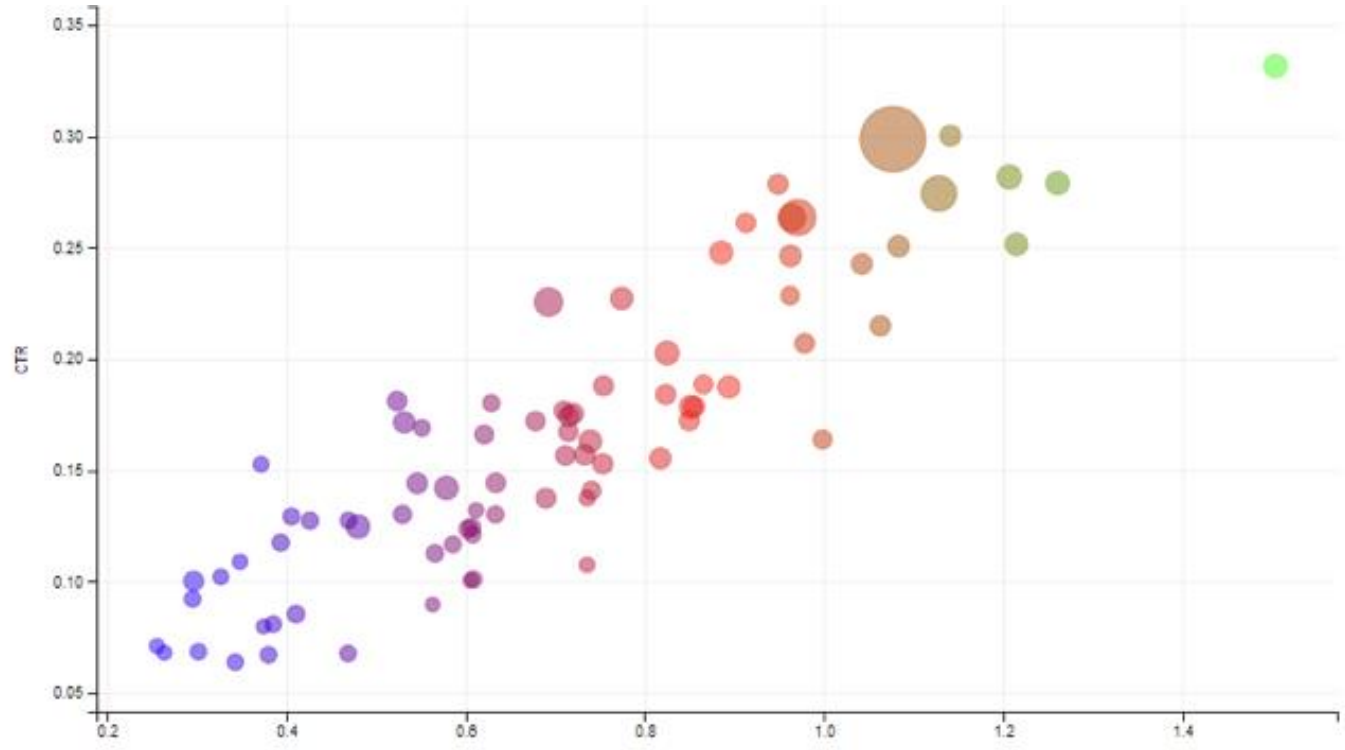


Theme 1: IMG: 2 Headline: 1 CTA: 3  
Theme 2: IMG: 1 Headline: 2 CTA: 1  
Theme 1: IMG: 3 Headline: 3 CTA: 2



# AI matches the right content version per impression

Predictive model based on low latency KPI



Theme 1: IMG: 2 Headline: 1 CTA: 3  
Group 1: (TH: 12pm:iOS: V3.1: Austin)



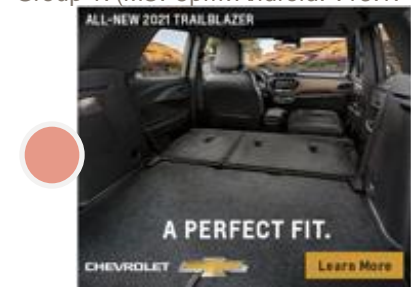
Theme 1: IMG: 2 Headline: 1 CTA: 2  
Group 3: (SU: 6am:MAC: v10.1: NYC)



Theme 2: IMG: 2 Headline: 1 CTA: 1  
Group 1: (MO: 5pm:Android: V13.1: Chicago)



Theme 1: IMG: 1 Headline: 2 CTA: 1  
Group 2: (MO: 5pm:Android: V13.1: LA)



Theme 3: IMG: 2 Headline: 1 CTA: 3  
Group 3: (MO: 5pm:Android: V13.1: Chicago)



Theme 2: IMG: 2 Headline: 3 CTA: 2



# Model needs a minimum volume of impressions to learn

40M+ impressions enough for one month campaign with ~75 versions

$$\sim 75 \text{ VARIATIONS} = \frac{40\text{M Impressions}}{\text{Month}} \times \text{KPI}$$

More impressions and creative variation will lead to more machine learning



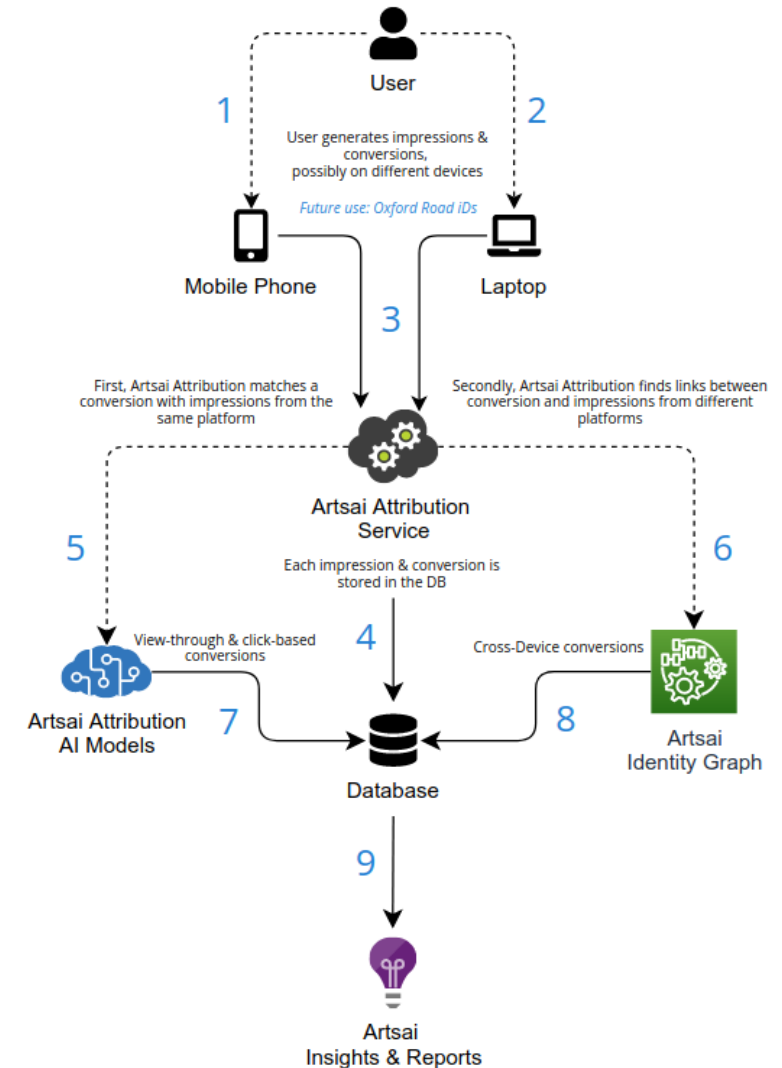


# || PII not required, contextual data is enough to start

**NON PII (Meta data via JS Snippet)** – Agnostic data that the advertiser is currently leveraging in their BAU media buying such as time of day, device, weather, DMA, etc.

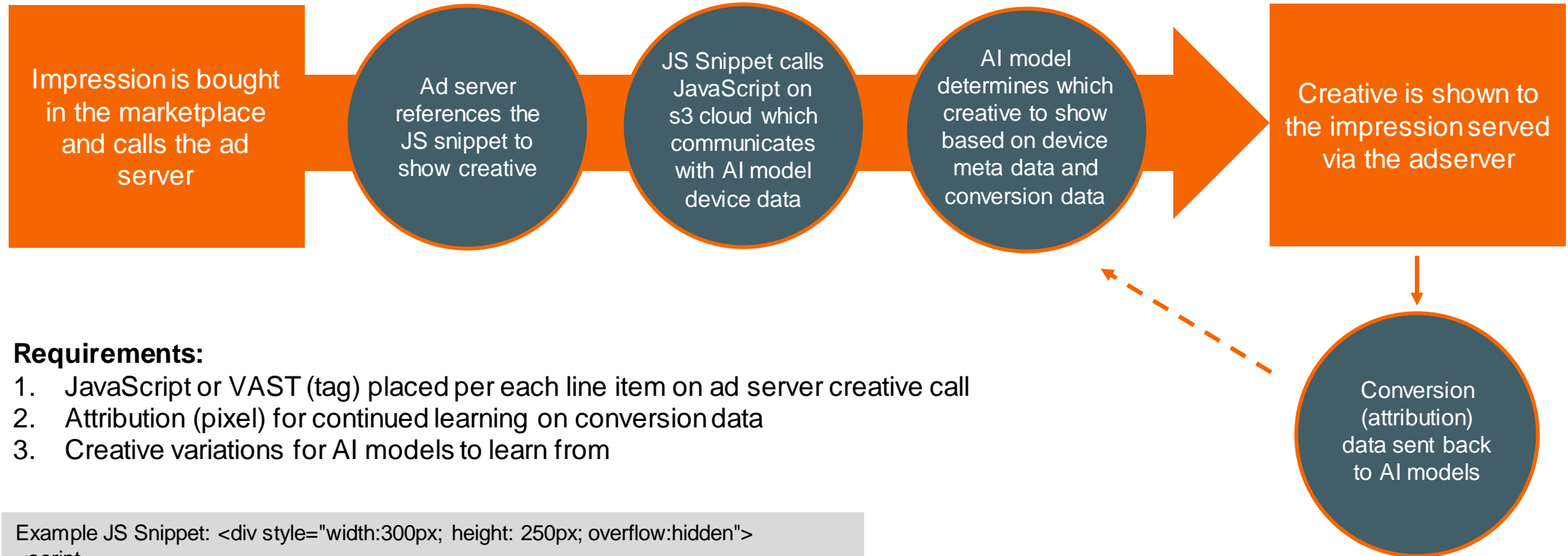
- A. **Tech Provider Data (Identity Graph via IP)** – As a way to supercharge the AI learning capability, Claritas has its own dataset which includes 1251 variables.
- B. **1st Party (Pass data at ad call)** – Advertiser owned data that would be encoded before the AI receives it for privacy concerns.
- C. **Attribution data (Claritas pixel, pixel-less, or 3<sup>rd</sup> party)** – Events that fire based on the KPI chosen for campaign, to deliver back to AI models to learn and decision off.

DEFAULT



# Tags and pixel integrations

All activity happens on the client device



## Requirements:

1. JavaScript or VAST (tag) placed per each line item on ad server creative call
2. Attribution (pixel) for continued learning on conversion data
3. Creative variations for AI models to learn from

```
Example JS Snippet: <div style="width:300px; height: 250px; overflow:hidden">
<script
src="https://media.accelerator.ibm.com/ibm_campaigns/twc/300x250/test/web_test_tag.js
?nature=dfp&cb=${REQUESTID}&ctp=${CLICKURLENC}&consumer_id="></script>
</div>
```

# Simple set up across 3 parallel tracks

**MEDIA**

**1**

*Finalize media plan inclusive of KPI's, flight dates, channel mix, impression volumes, audiences, segments, DSP, publishers.*

*Integration: JavaScript or VAST tag*

**CREATIVE**

**2**

*Consult on template design and content variations based on media plan and volume.*

*Integration: HTML5 and/or Audio and/or Video files*

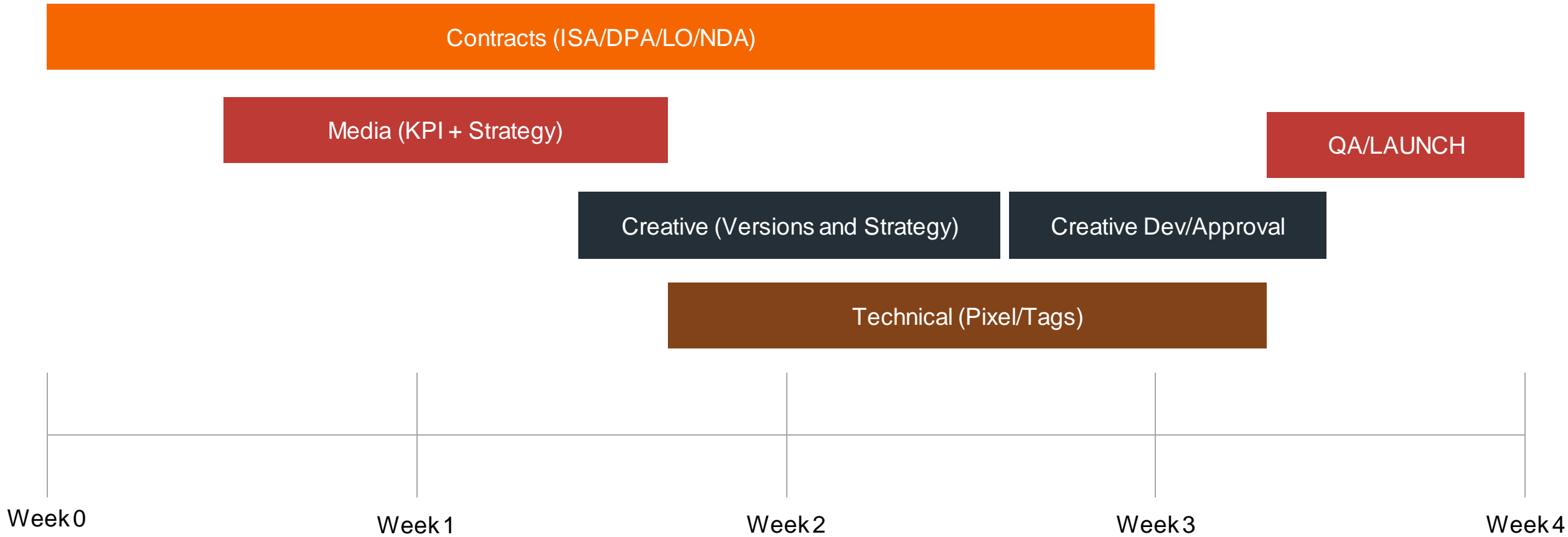
**TECH**

**3**

*Full dashboard access to review creative, QA, performance and insights*

*Integration: Measurement*

# 30 days to launch



# Real-time dashboards during campaign

## Real Time Campaign Data

**Campaigns**

New campaign Actions

Active Inactive All Search All advertisers Last 7 Days

On page: 10 Total campaigns: 1

ID	Title	Status	Impressions Viewable / Measurable	Clicks Rate	Installs Rate Total	Visitors Rate	Conversions Rate	Select event Rate Total	Flight dates
14998	Shell GO AIP Advertiser: Shell AIP Pixel: Shell GO AIP	⊙	2,064,491 0% / 100%	1,895 0.09%	361 0.17	-	115 0.06	115 0.06	-
165067	300x250 Tag	⊙	364,709 0% / 100%	224 0.06%	11 0.03	-	2 0.01	2 0.01	
165668	320x50 Tag	⊙	1,699,782 0% / 100%	1,671 0.1%	350 0.21	-	113 0.07	113 0.07	

**Shell GO AIP** Show more

**Campaign Overview**

Advertiser: Shell AIP Flight dates: - Aggregated: -  
 Pixel: Shell GO AIP (88aaf06b-c73d-4ba5-91ed-058161ba7657) Lookback for CT conversions: 1 Month Lookback for VT conversions: 7 Days

Today | 7 days | Month | Lifetime | Feb 14, 2024 - Feb 20, 2024 Change

**Top of Funnel Metrics**

2,064,491 Impressions 344,082 per day	419,027 Reach	4.9 Frequency
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**Conversion Metrics**

0.09% Click rate 1,895	0.175 permille Install Rate 361	0.000 Visitor Rate 0	0.056 permille Conversion Rate 115	0.056 permille Event Rate 115
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## Creative Performance and Insights

**Overview**

Campaign Details

Performance Trends

**Key Learning**

- Ad Creatives
  - Top Performing Creative Variations
  - Creative Variation Performance
- Audience Analysis
  - Top Performing Predictive Targets
  - Predictive Targets Performance
  - Weather Trigger Performance
  - Publisher Segment Performance
- Frequency Capping Overview
- Creative Optimization
  - Optimization Features
  - Average Feature Importance
  - Creative Optimization Penetration

**Overview**

**Campaign Details** 10/05/2020 - 12/31/2020

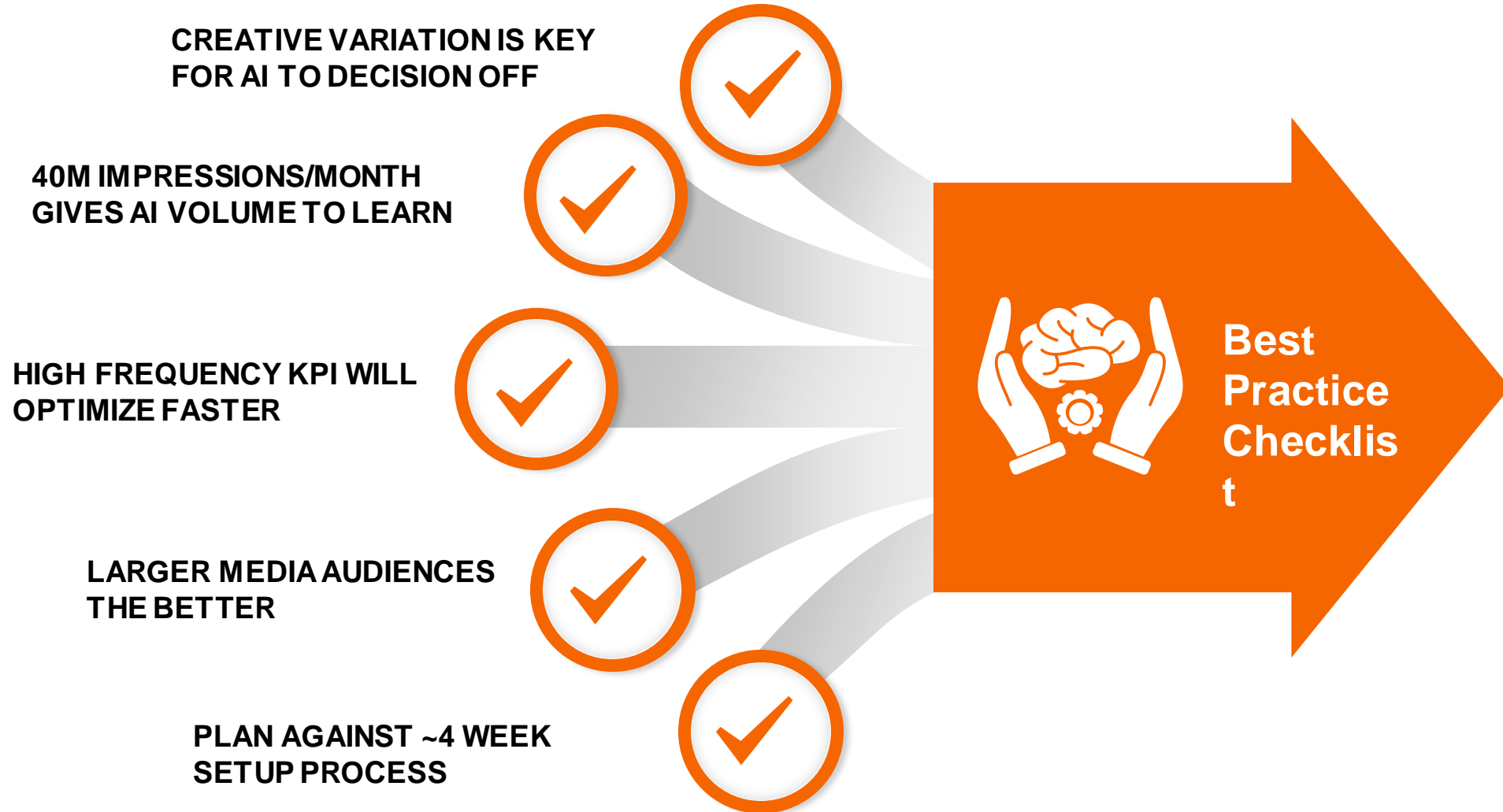
3,168,287 Impressions	0.20% Click rate	6,246 Clicks
2,538 Contacts	0.801 E/PM	
2,184,954 Reach	1.4 Average Frequency	

**Performance Trends**

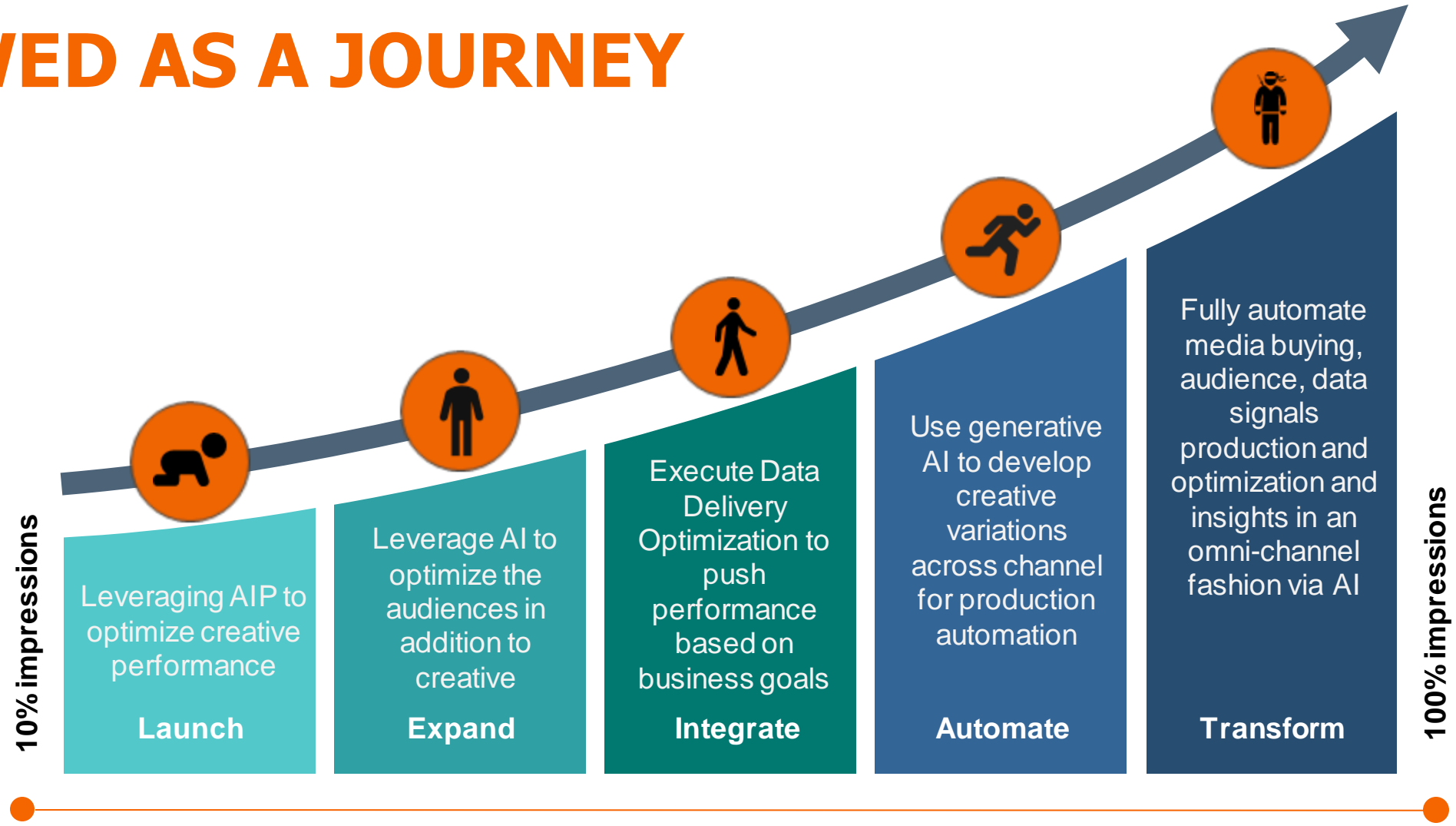
The chart of campaign performance for different time intervals including Cumulative, Weekly and Daily.

[Click Here for Demo](#)

# Getting the best results



# LEVERAGING AI SHOULD BE VIEWED AS A JOURNEY





# How you can get involved



Connect with MMA subject experts to explore how CAP can boost your campaign ROI by 100%+



Pick an ad campaign (audio, video, or display) with 40M+ impressions on the open web



Select the right KPI that the AI can use to optimize against (e.g., digital KPI, branding KPI, offline purchase or visit frequency)



Get the right people from your creative, media and agency team involved – 30 days to launch once we align on the right campaign and KPIs

**INTERESTED IN LEARNING MORE?**



**SCAN ME**

**We need more case studies!  
Use the QR code & MMA will follow-up after  
the event.**

**Join the Consortium & deploy AI Personalization**