

---

# AI Optimization : The Future

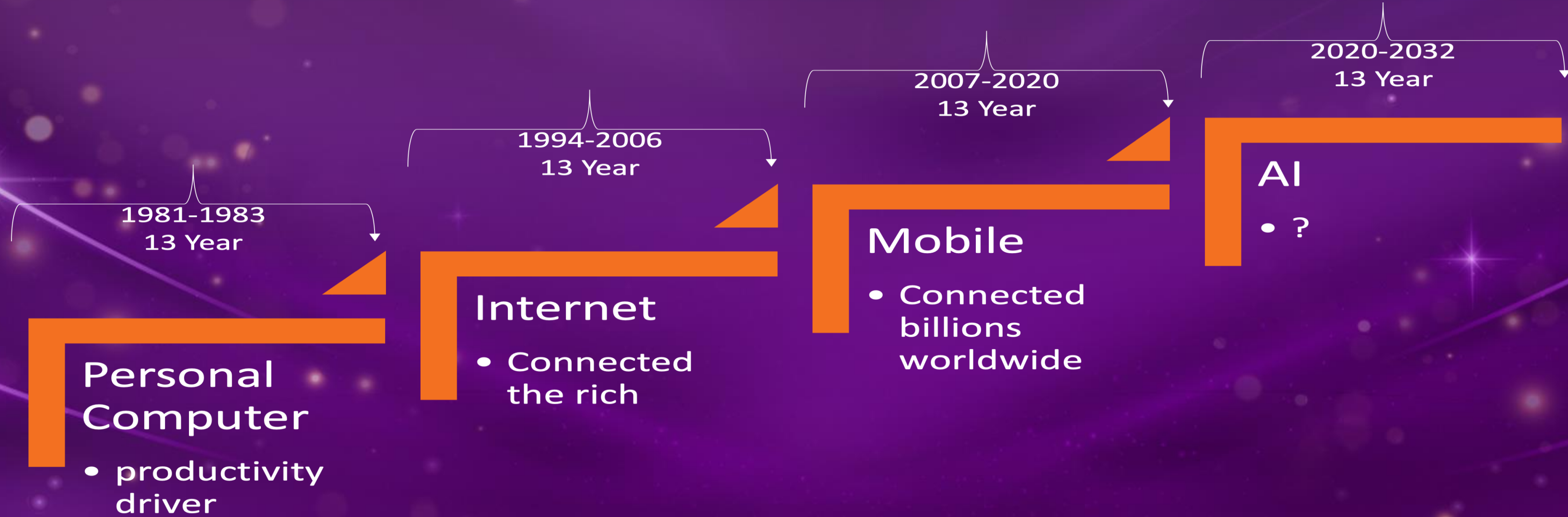
---

**Rohit Dadwal**

**CEO MMA Global APAC & Global Head of SMARTIES WW**

**LinkedIn: @rohitdadwal**

# Advances like AI come once in 13 Years

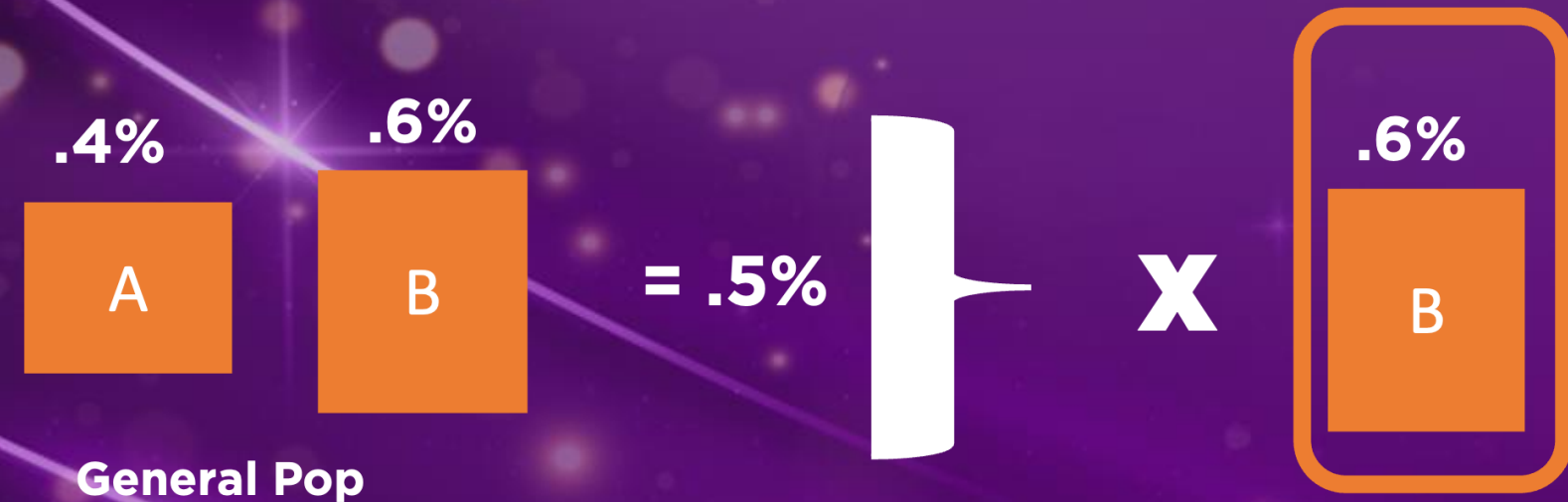


# MMA Focus

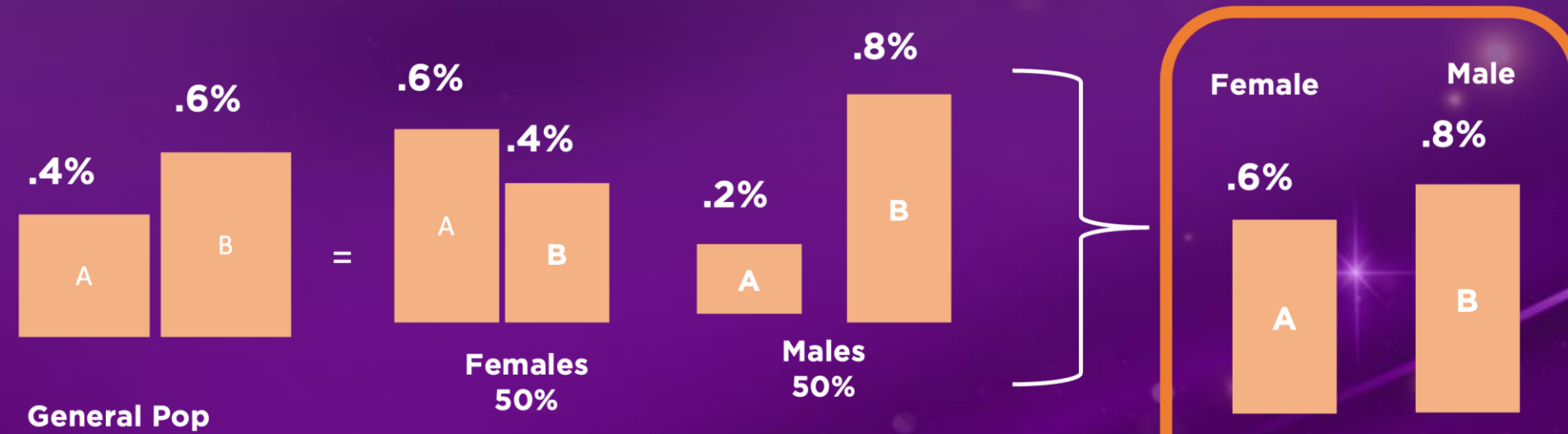




# Our approach

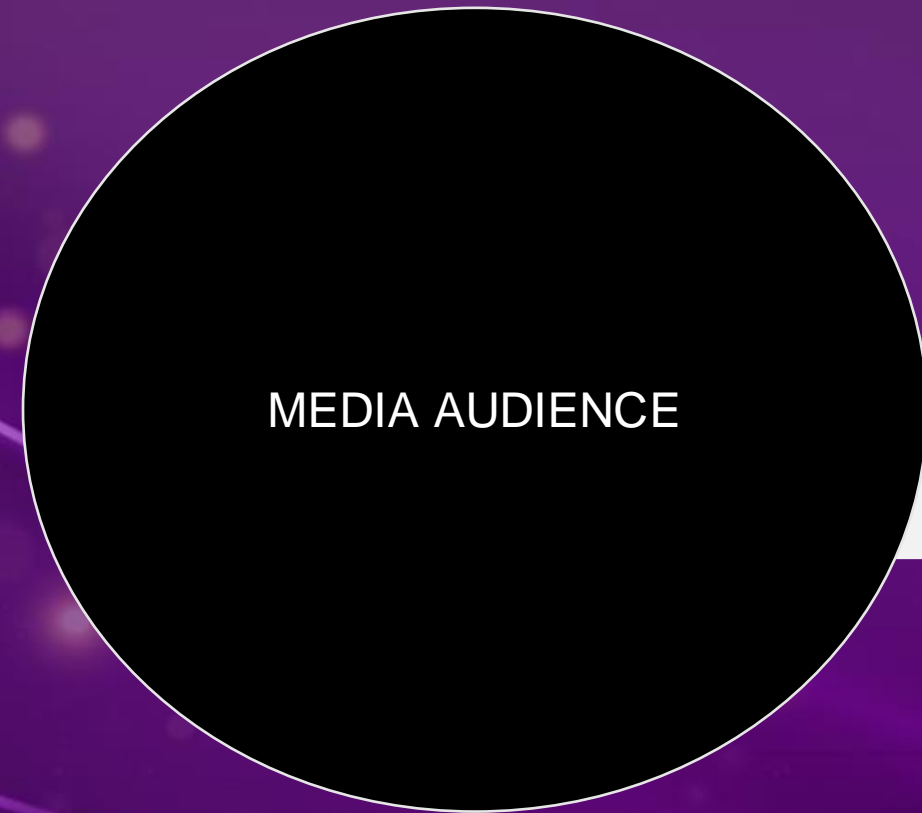


2 Versions x 1 Audience =  
20% lift



2 Versions x 2 Audiences  
40% Improvement

# TYPICAL MEDIA:CREATIVE APPROACH



(eg 18-44 HH w/Pet)



Creatives rotating in-market

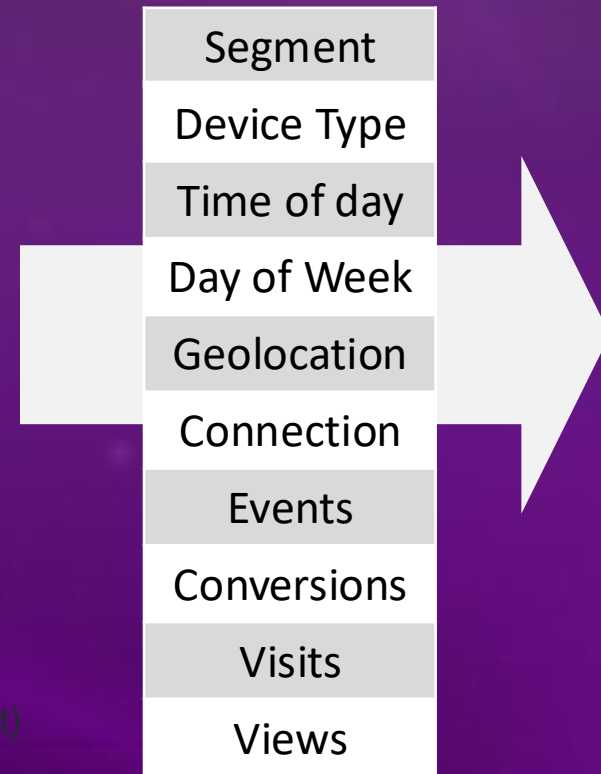


# AI GROUPS COHORTS WITHIN AUDIENCE



(eg 18-44 HH w/Pet)

DATA MODELS  
(1271 variables)



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 DEVELOPS CONTENT MODELS

We are not generative AI. This is human generated creative.

## CREATIVE AI MODELS (15-125 versions)

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

Theme:

Background:

Headline:

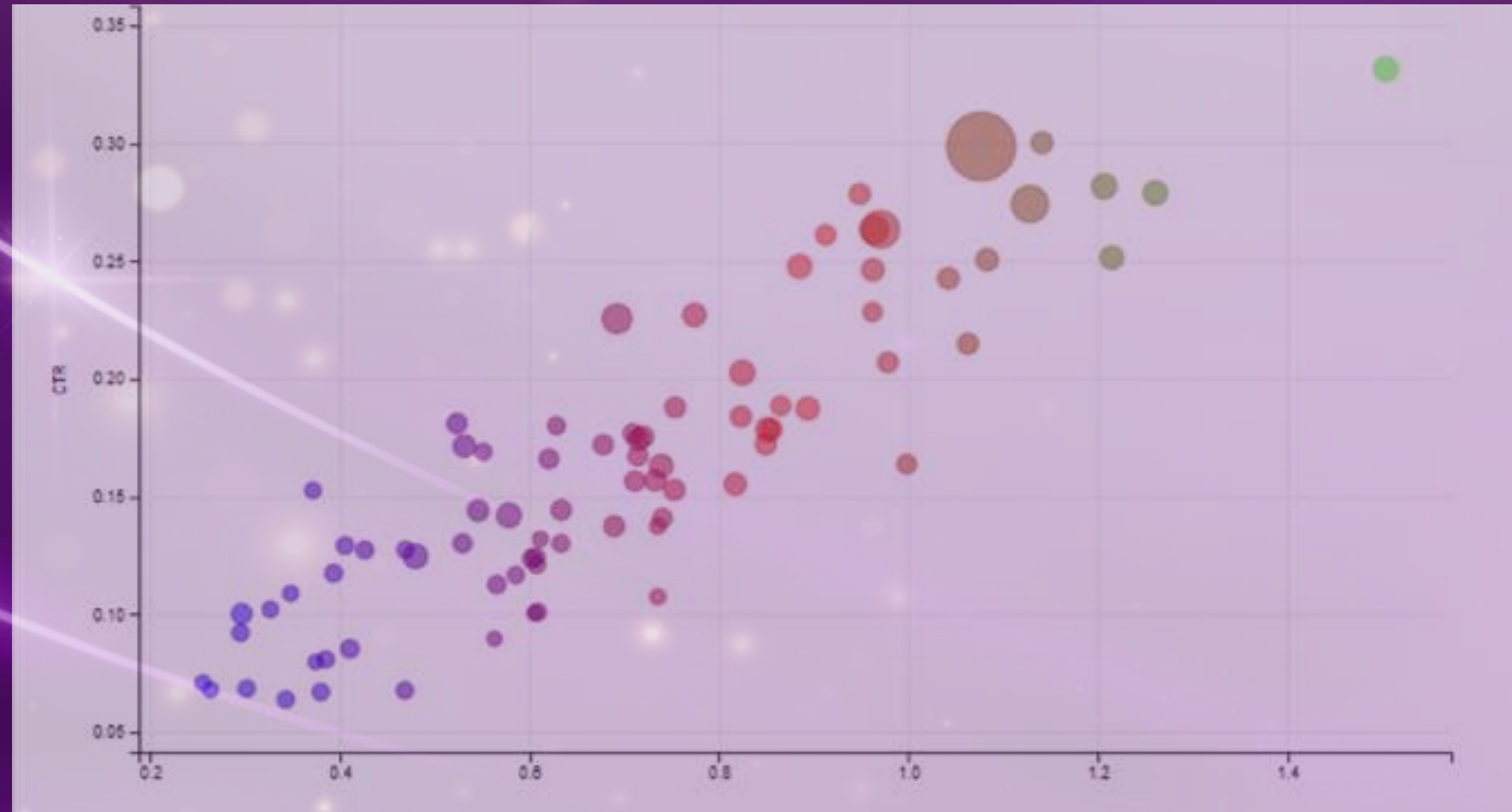
CTA:



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 AD PER IMPRESSION



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



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



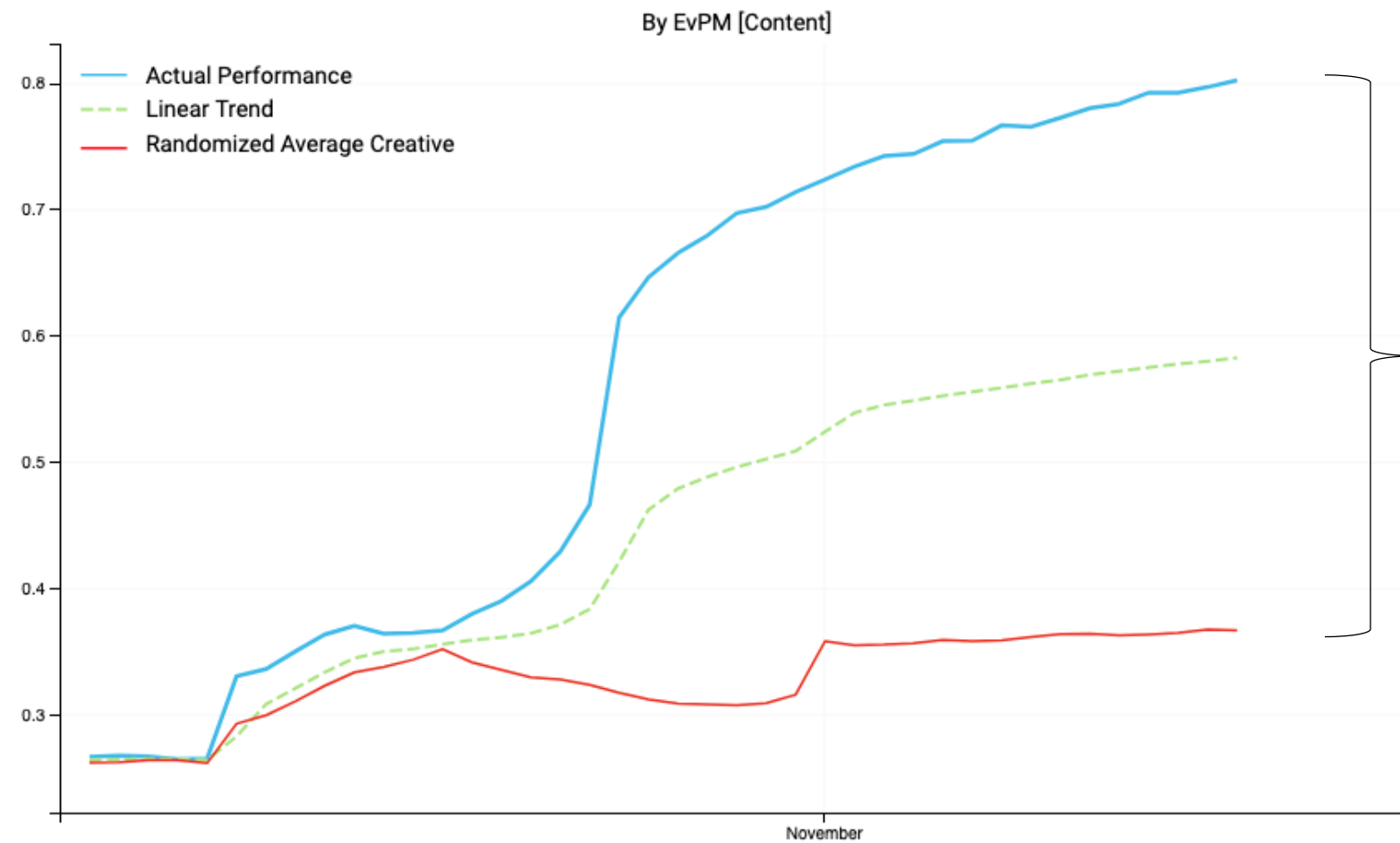
Theme 1: IMG: 1 Headline: 2 CTA: 1  
 Group 2: (MO: 5pm: Android: V13.1: LA)



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



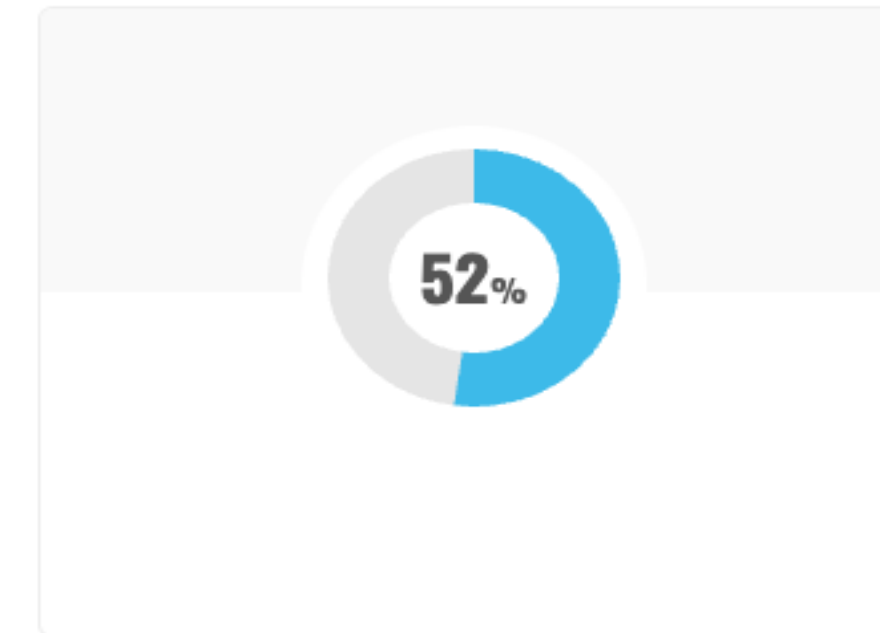
# AI IS CONSTANTLY DRIVING PERFORMANCE



68% LIFT

## Optimization Status

Show current machine-learning optimization status.



# GM SEES 68% IMPROVEMENT USING AI BASED CREATIVE OPTIMIZATION



**+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



AI DATA SIGNALS: SEGMENTS | DMA | TIME of DAY | DAY of WEEK | DEVICE | CONNECTION



# LEVERAGING AIP FOR KROGER DRIVES SIGNIFICANT LIFT



**+259%**

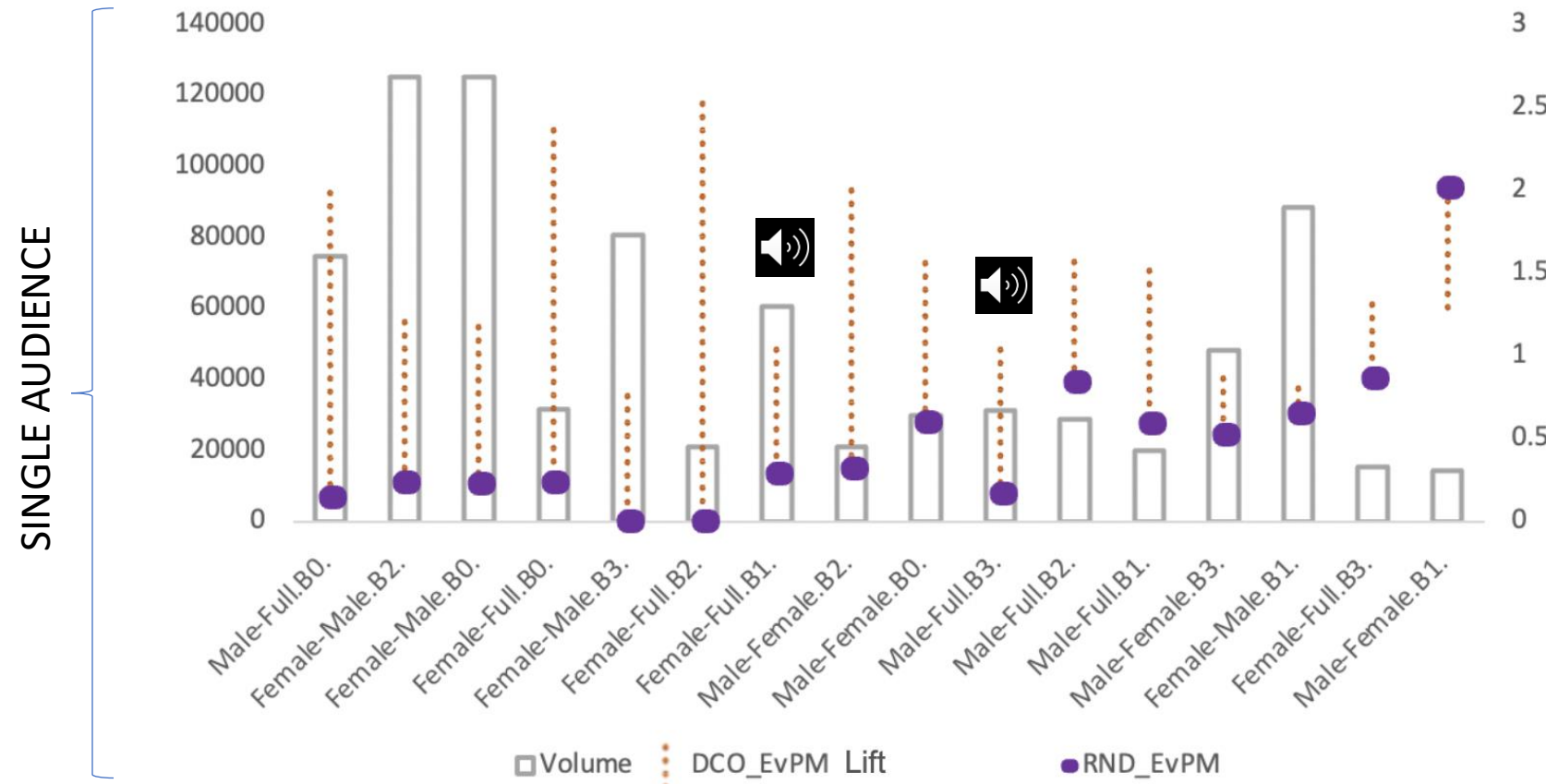
Kroger had a significant lift in their KPI via 72 creative versions and allowing the AI to optimize at the impression level.



AI MODEL SIGNALS: SEGMENTS | DMA | TIME of DAY | DAY of WEEK | DEVICE | CONNECTION

# AI DECISIONING FOR AUDIO LIFT IN PERFORMANCE FOR MONDAY.COM

Volume & Optimization, Ranked By Total Conversions



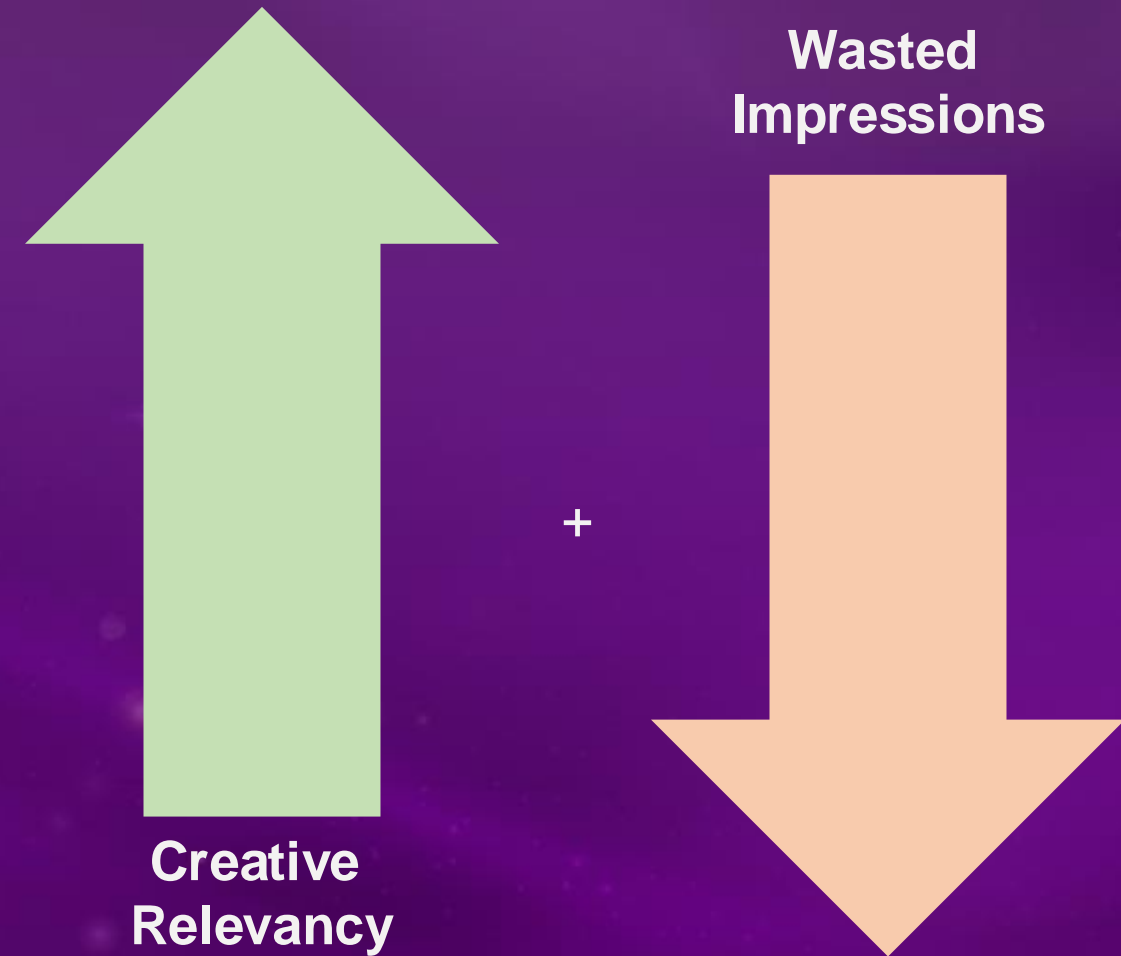
Brand: Monday.com  
 Channel: Audio  
 Creative Versions: 16  
 Audience: One Line item  
 Impressions: 815,848  
 KPI: Visit and Sign Up





## +188%

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



# RESULTS SEE AN AVERAGE OF 103% LIFT



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

# AI VS TRADITIONAL DCO



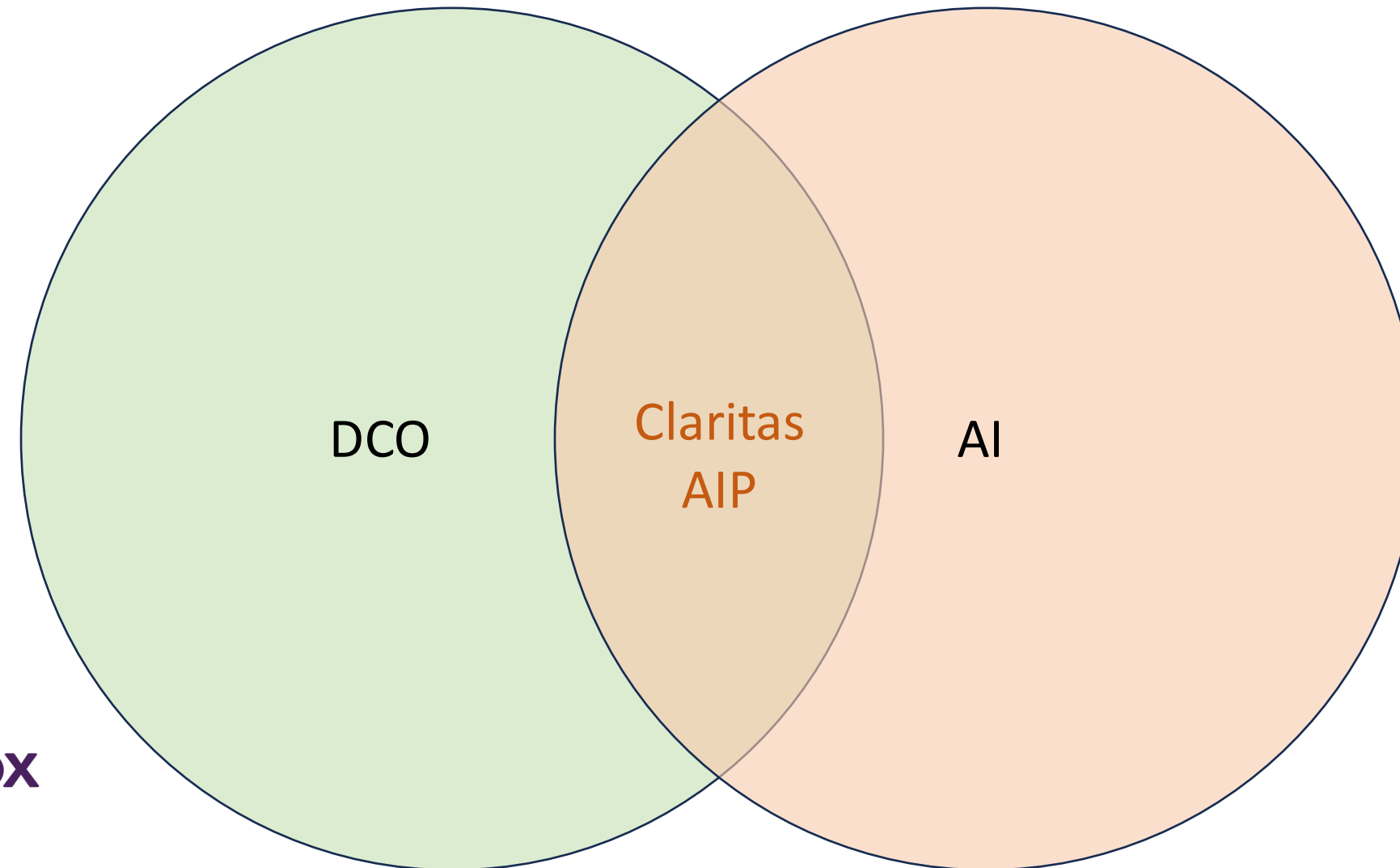
# AIP VS DCO

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



clinch

Jivox



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



# AIP VS DCO





# TRADITIONAL AD TECH USES A DECISION TREE



THURSDAY



5PM

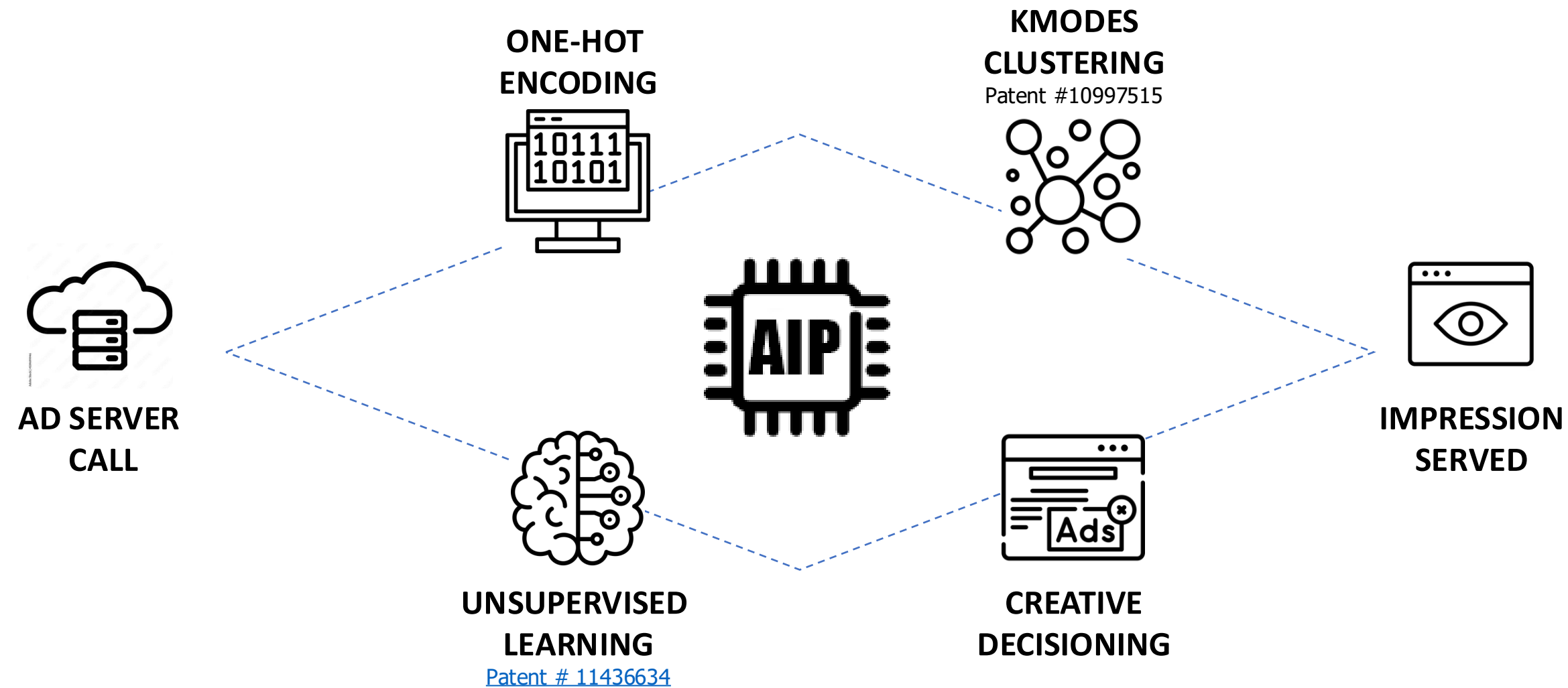
# AI MAKES A DECISION IN REAL TIME





# AI MODELING

# AI MODELING PHASES

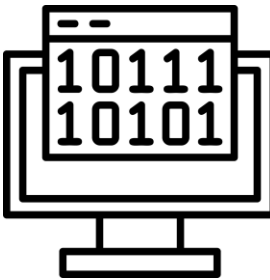




# PHASE 1: AI DATA ENCODING

**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.

DEFAULT



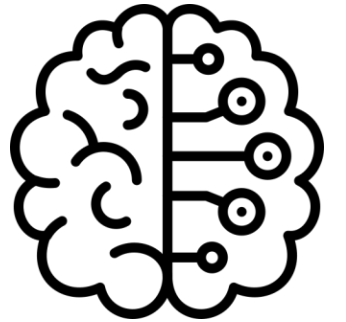
**A. Claritas Data (Identity Graph via IP)** – As a way to supercharge the AI learning capability, Claritas has its own dataset which includes 1251 variables.

**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.

\* Each of these options can be additive or standalone

# PHASE 2: UNSUPERVISED LEARNING



**1-2 WEEKS OF LEARNING AGAINST 10% RANDOMIZED CREATIVE (NO AI)**



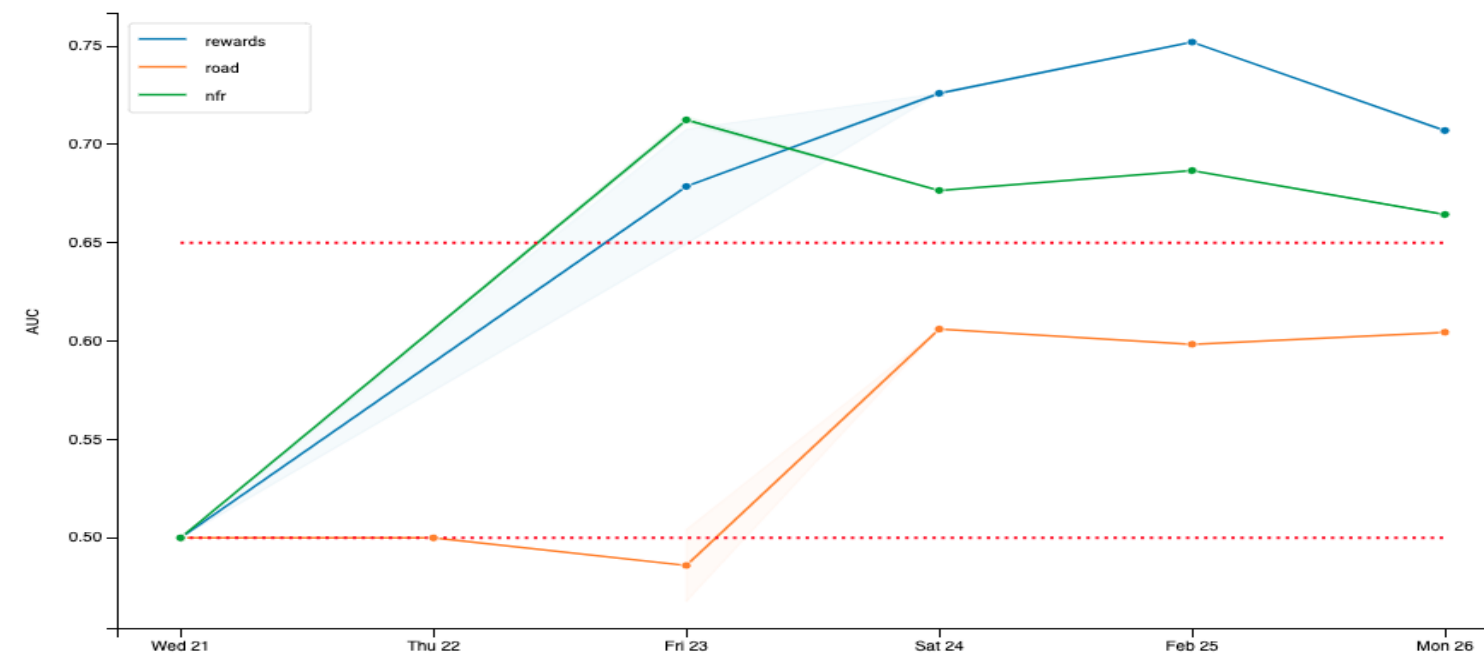
# Moving ML to AI Models

▼ nfr	0.267	●
▼ Image		
Red swoop with white...	0.267	●
▼ Headline		
Enjoy money off fuel...	0.309	●
Surprise money off f...	0.307	●
10% off Costa Expres...	0.181	●
▼ CTA		
Download Now	0.274	●
Join Shell GO+ today...	0.261	●
▼ rewards	0.247	●
▼ Image		
Dark Theme	0.278	●
▼ Headline		
Enjoy more with ever...	0.292	●
Get more out of driv...	0.290	●
Save on fuel with Sh...	0.256	●

- AI Models have been created
- AI Models still being generated

## Model AUCs Progress

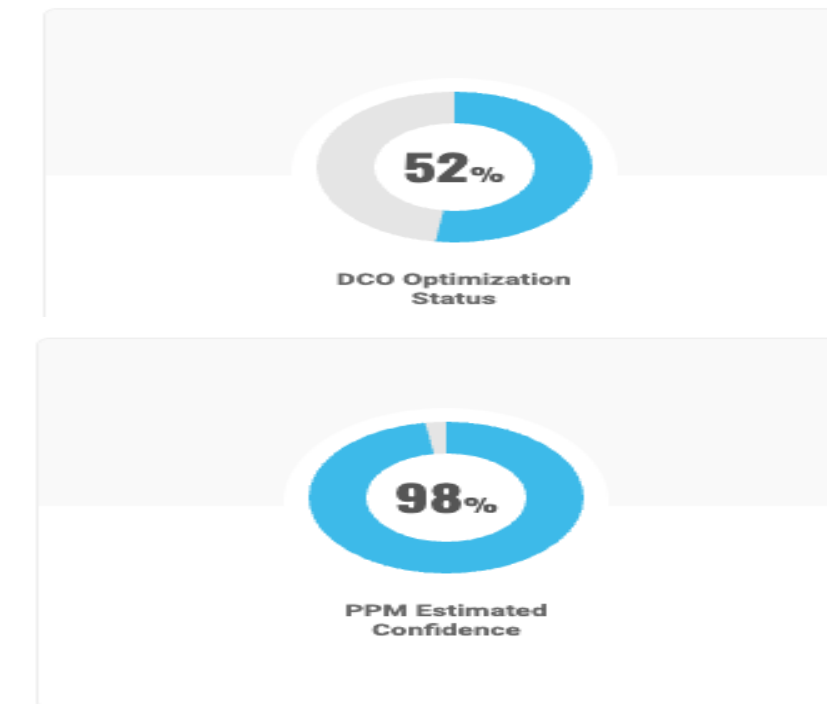
The graph below shows how the AUCs of ML models has evolved throughout the campaign.



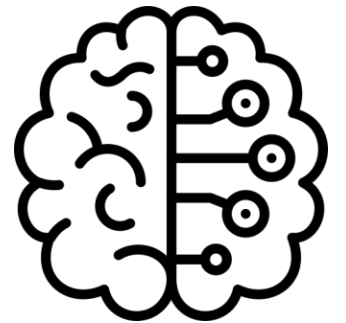
Showcasing the point of which our creative themes are strong enough to become AI models

## Optimization Status

Show current machine-learning optimization status.



Overall Optimization status in relation to statistical significance of data



# PHASE 3: CREATIVE DECISIONING



THEME

LAYOUT

MESSAGING

ANIMATION

IMAGERY

CALL TO ACTION

SCRIPTS

VOICEOVER

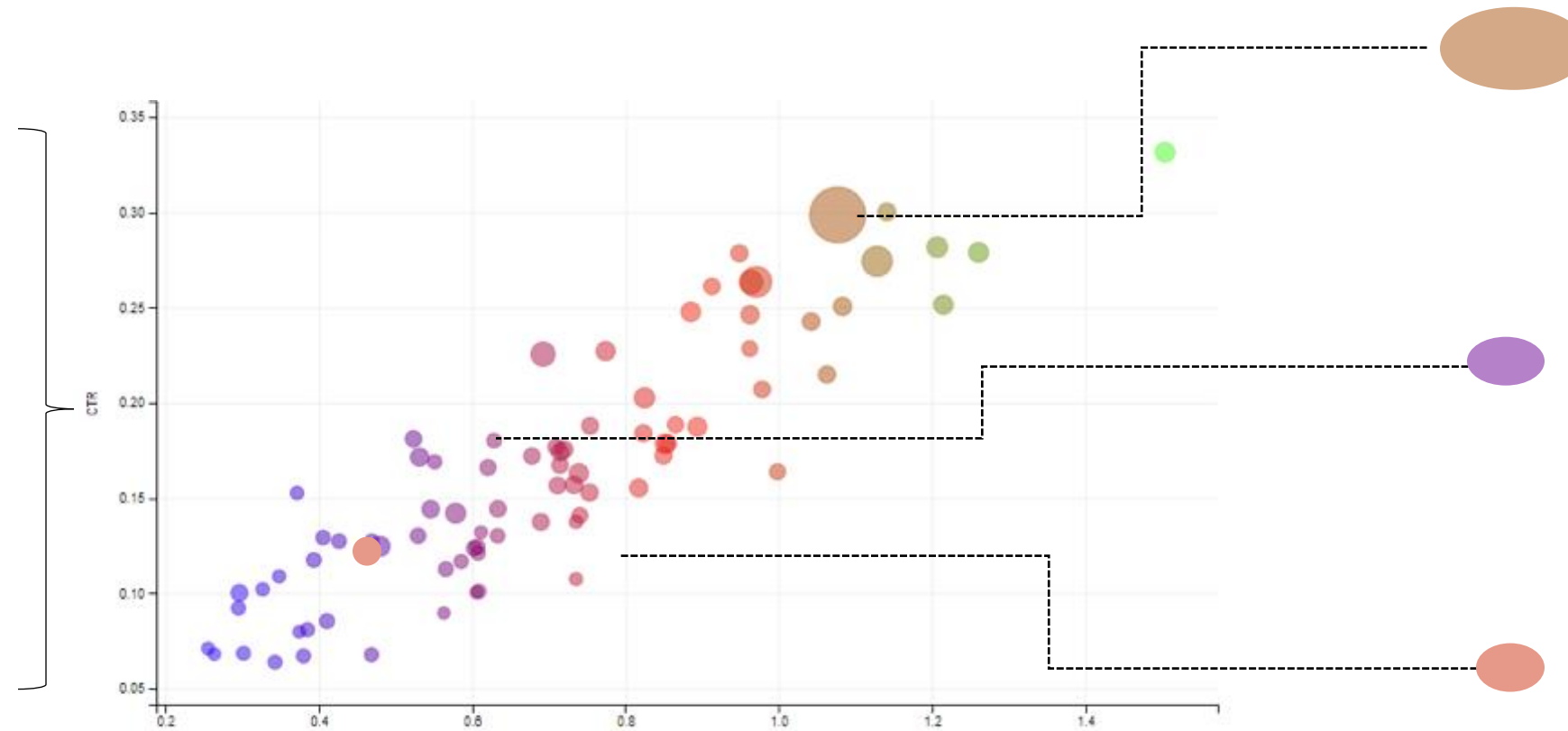
LENGTH

SCENES

# PHASE 3: K-MODES CLUSTERING (EARNING)

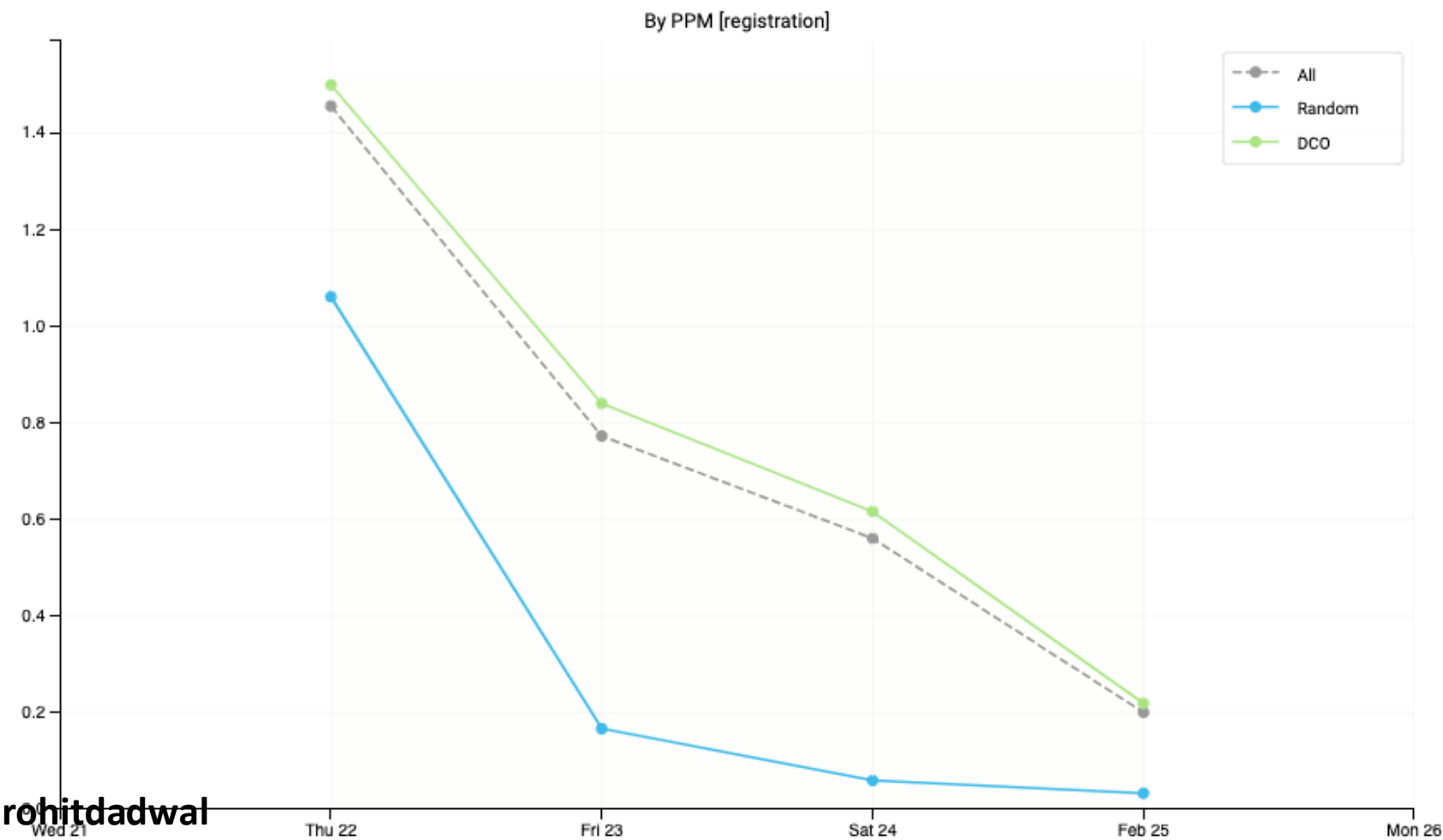
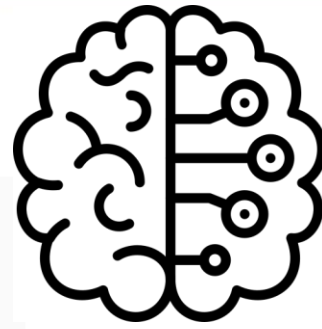
## MODELING DATA

Theme	Segment
Layout	Device Type
Messaging	Time of day
Animation	Day of Week
Imagery	Geolocation
CTA	Connection
Scripts	Events
Voiceover	Conversions
Length	Visits
Scenes	Views





# LIFT AND PREDICTIVE PERFORMANCE



**139.47%**

Performance Gain

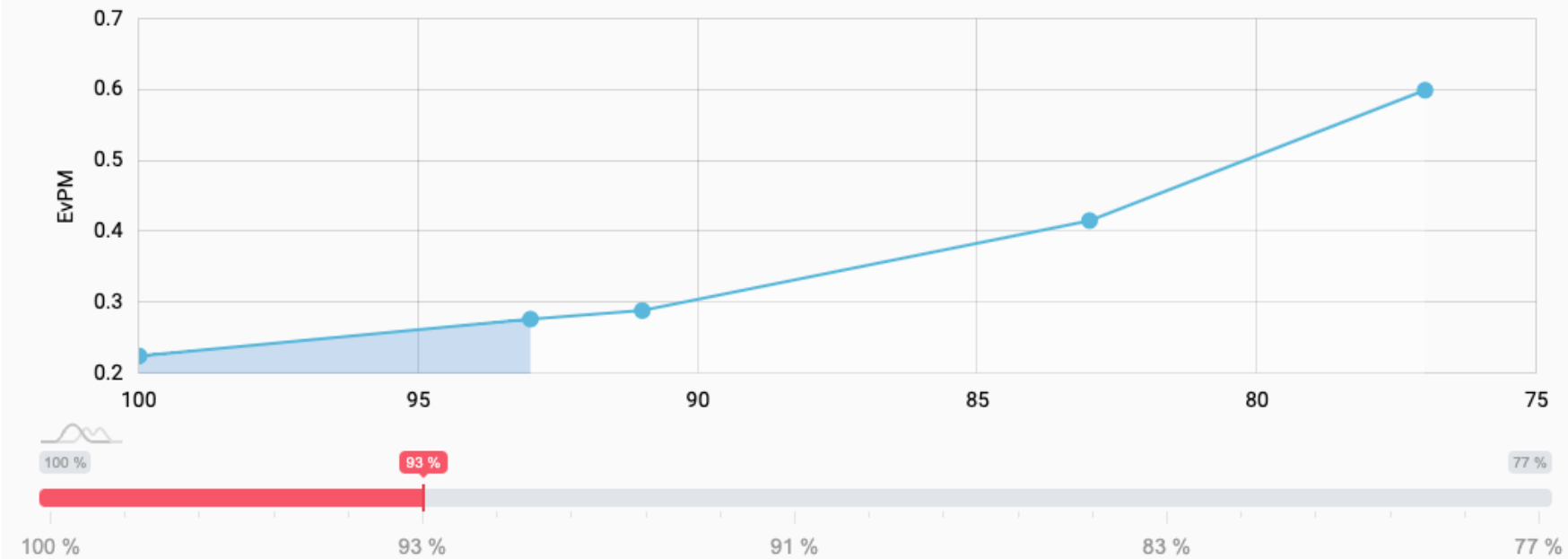
### Predictive Targets

Shows predicted performance after targeting. Please move the slider to choose targeted volume.

**23%**   
Predicted Performance Gain

**0.277**  
Predicted EvPM after targeting

**93%**  
Targeted Volume



# PHASE 4: AI CREATIVE DECISIONING



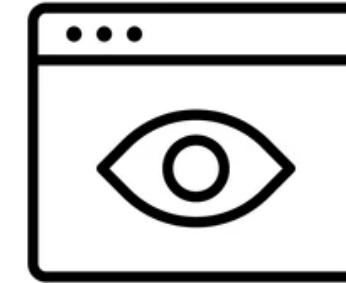
AD SERVER  
CALL



Set the course for success  
in a post-pandemic world.

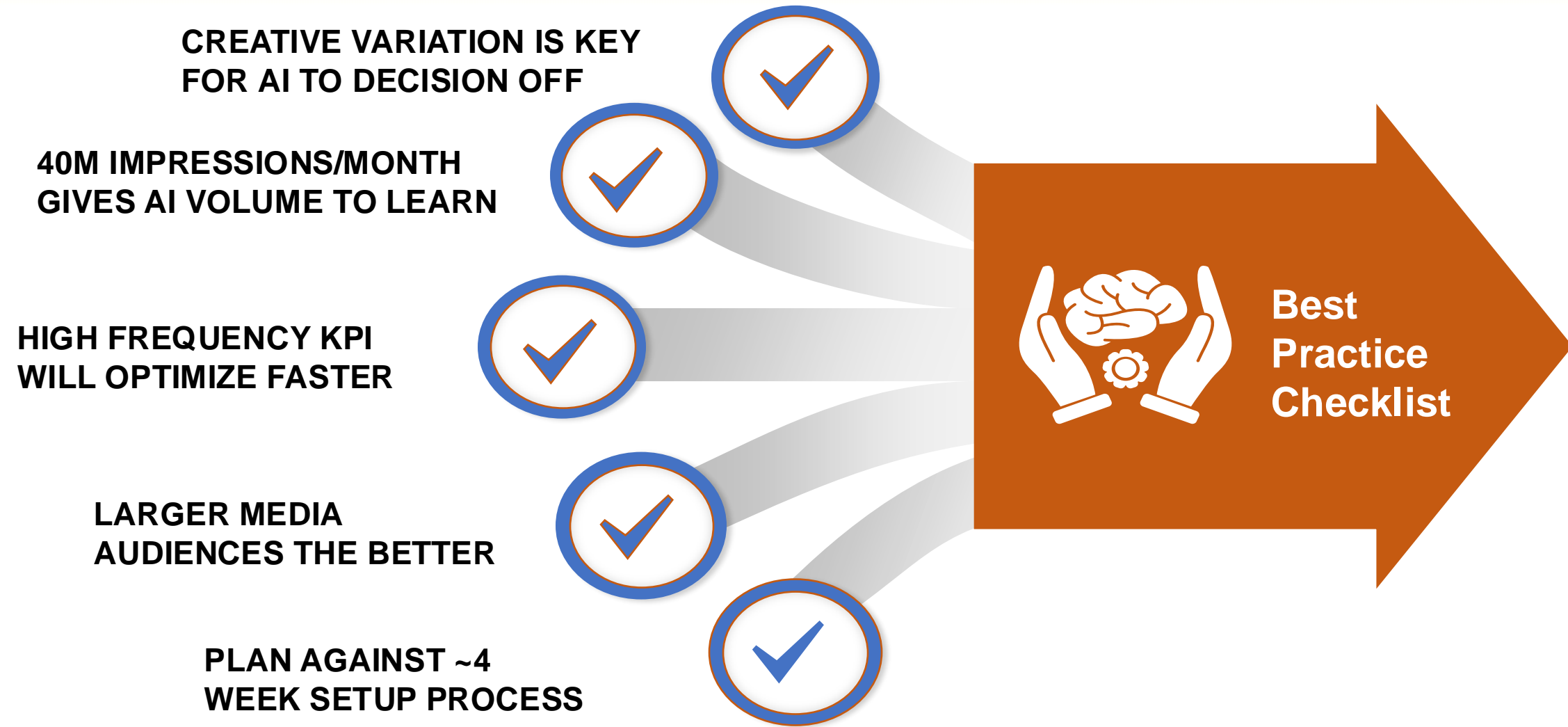
TRAVELERS

Grow Your  
Business



IMPRESSION  
SERVED

# AI MAKES A DECISION IN REAL TIME





# Model needs a minimum volume of impressions to learn

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

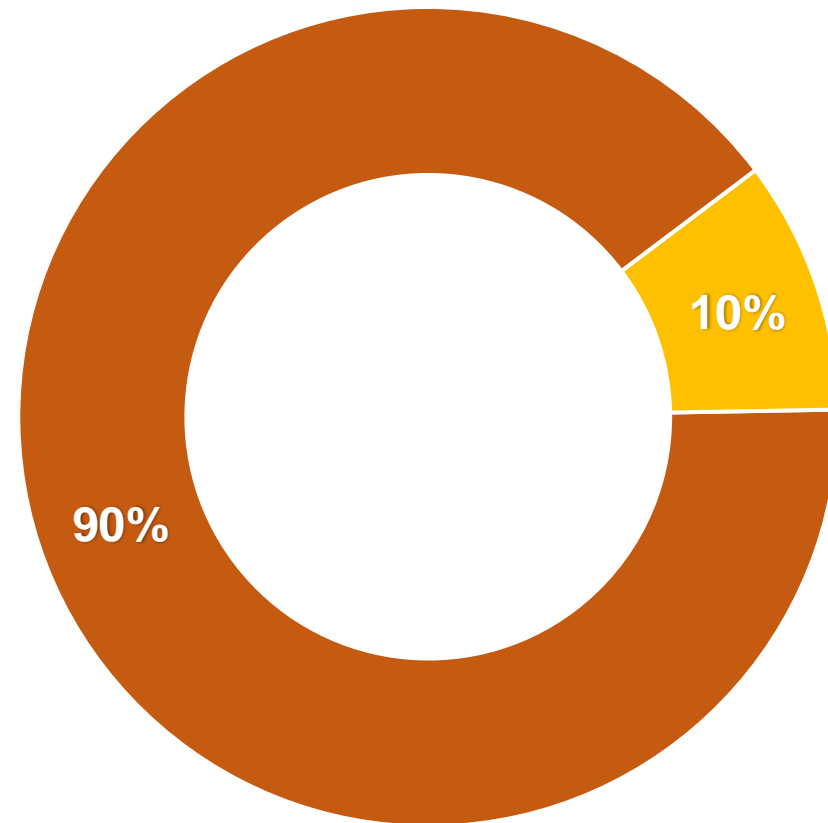
$$\sim 75 \text{ VARIATIONS} = \frac{40\text{M Impressions}}{\text{Month}} \times \text{KPI}$$

More impressions and creative variation will lead to more machine learning



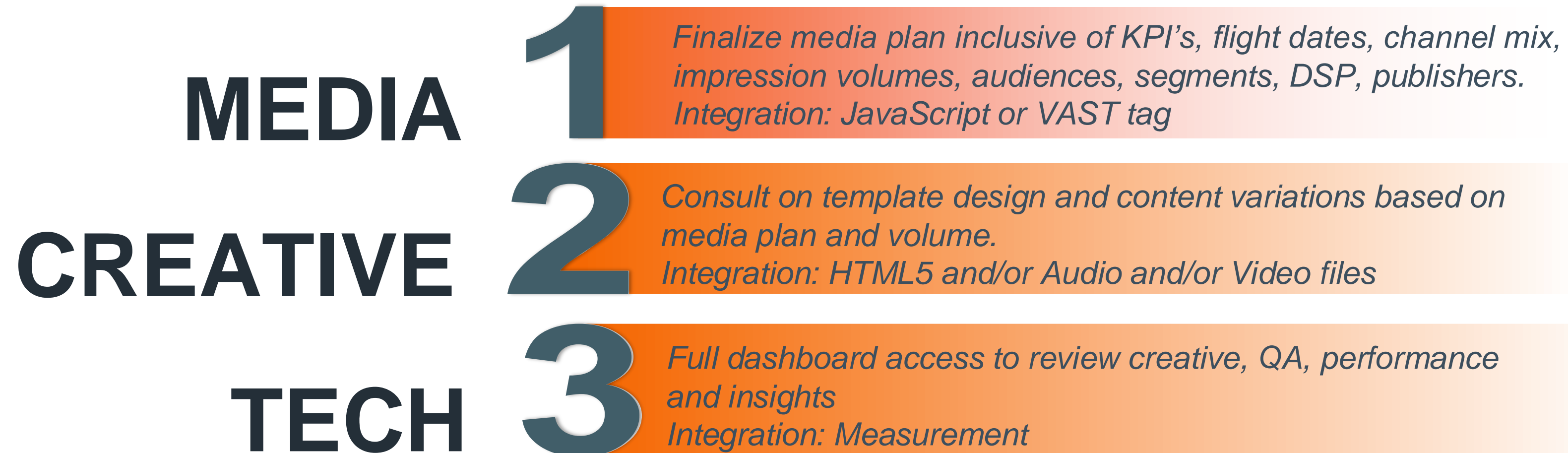
# AI is constantly driving performance

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

# Simple set up across 3 parallel tracks





# Interested in learning & adopting



SCAN ME

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

**Join the Consortium & deploy AI Personalization**