

SOLVING BRAND SUITABILITY

Machine Learning Propelled By Brand Preferences

MAGNA

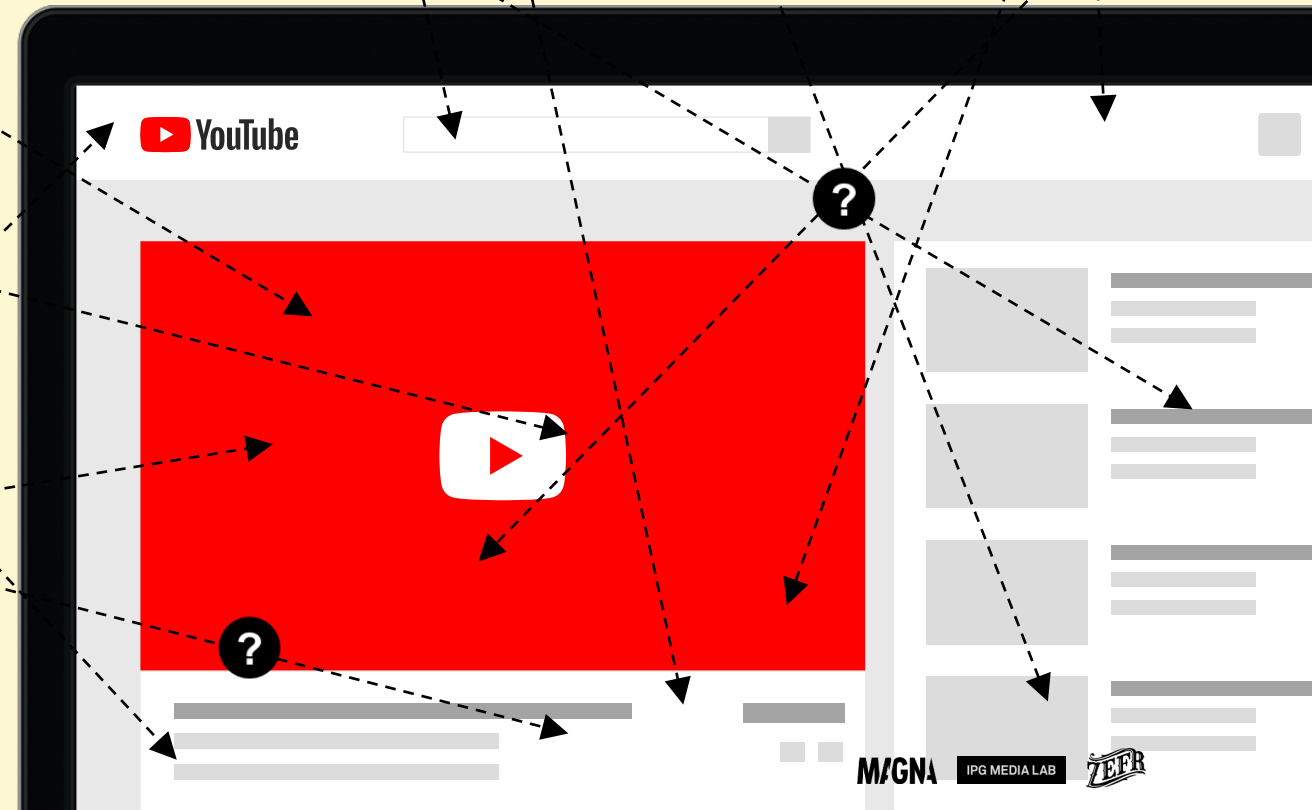
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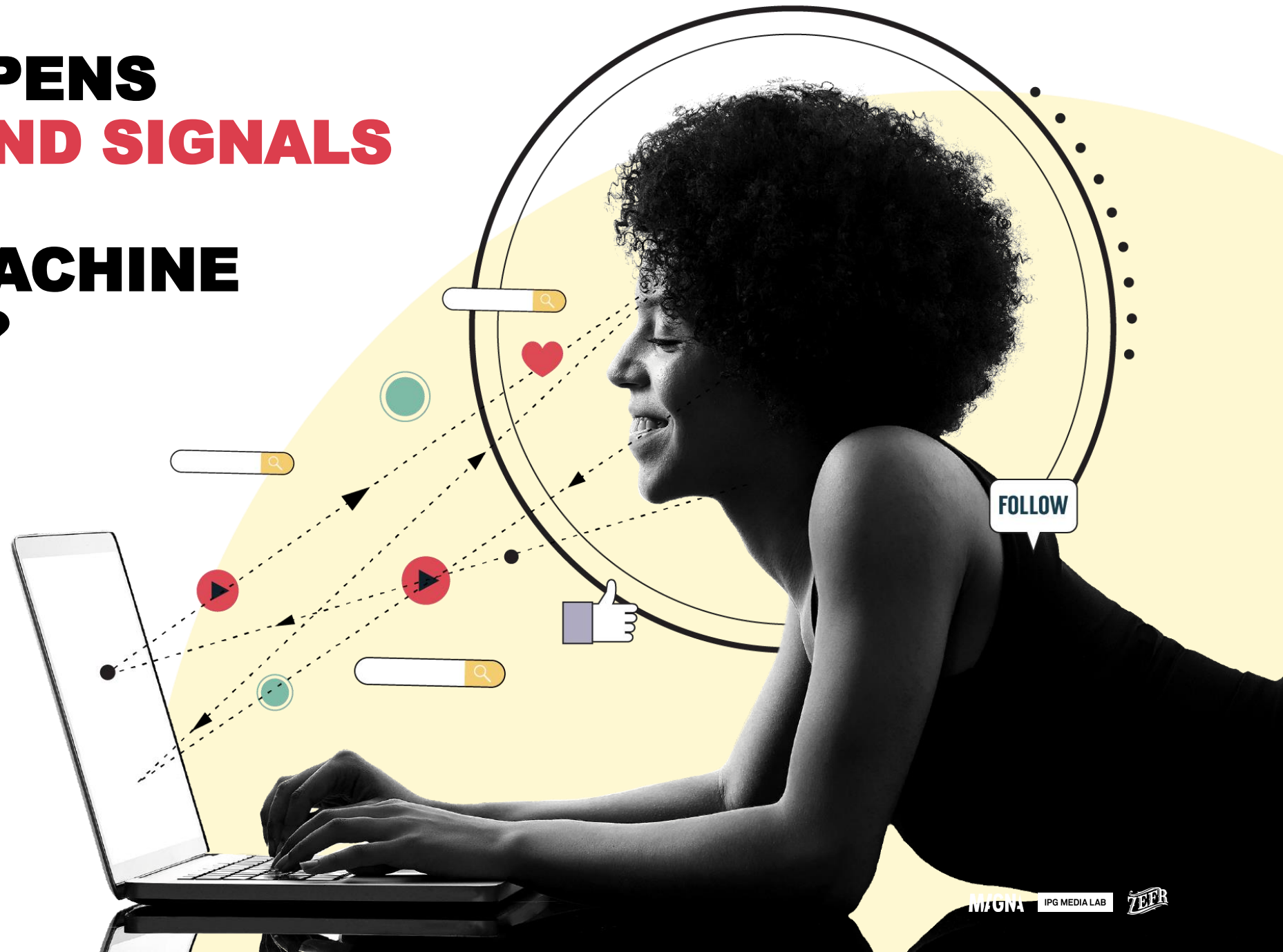


**MACHINE LEARNING
IS ONLY AS GOOD AS
ITS SIGNALS.**

**ESPECIALLY WHEN
IT COMES TO VAST
AMOUNTS OF
VIDEOS, WHERE
EACH AND EVERY
VIDEO HAS
COUNTLESS
NUANCES**



WHAT HAPPENS WHEN **BRAND SIGNALS** ARE USED TO FUEL MACHINE LEARNING?



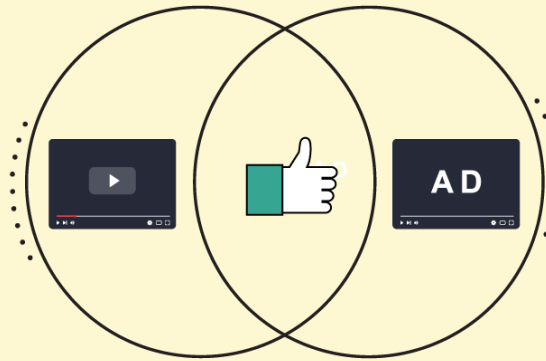
GLOSSARY

Important Terms To Know



BRAND SUITABILITY

Brand Suitability is the alignment of an individual brand's advertising with content that makes sense for their image, customer base, and business objectives



BRAND PREFERENCES

Brand Preferences are signals brands communicate about what content is best for them. Examples include inclusions lists, exclusion lists, content descriptions, and preferences about individual pieces of content.



HUMAN IN THE LOOP

Human in the Loop (HIL) is a process of guiding machine learning with human supervision. People review content with brands' preferences as guides in order to train machine learning algorithms, creating a cycle that consistently improves its models.

RESEARCH QUESTIONS

1

What are consumer attitudes toward video ad and content alignment?

2

How does “human in the loop” machine learning perform compared to traditional targeting methods?

3

Can “human in the loop” machine learning prevent ad/content misalignments?



METHODOLOGY

Rigorous Testing Through Experimental Design



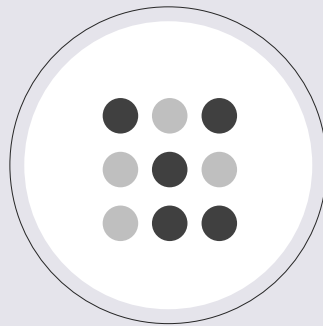
RECRUIT

Recruited YouTube users
for participation
n=3,858



VIDEO INTERESTS

Participants selected online
video topics based on personal
interests; those not interested
screened out to ensure natural
audience



RANDOMIZATION

Randomization into test and
control groups

- Test = Brand Ad (15s)
- Control = Public Service
Announcement



YOUTUBE EXPERIENCE

Participants visit YouTube
testing page, where participants
select and play video content
based on their interests

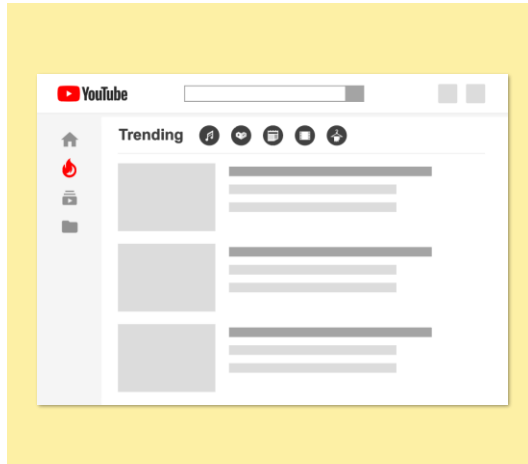


BRAND KPIS

Post-exposure survey to
measure traditional branding
metrics and perceptions of
advertising

WHAT WE MEASURED

Isolating Targeting Effects

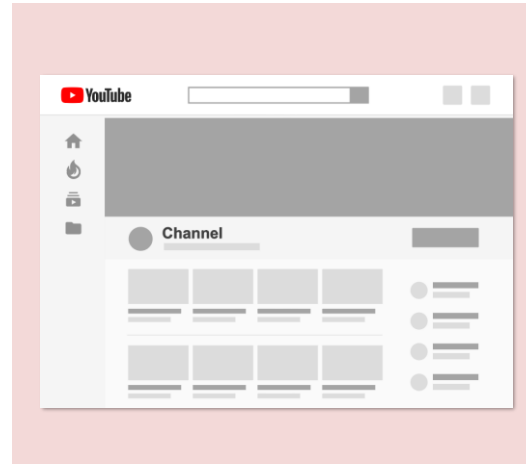


DEMO

Reflects typical demographic buy on YouTube

Who: Brand's demographic target

What: Popular content on YouTube



CHANNEL

Reflects typical channel buy on YouTube

Who: General YouTube audience

What: YouTube content based on channels the brand typically targets



KEYWORD

Reflects typical keyword buy on YouTube

Who: General YouTube audience

What: YouTube content based on keywords the brand typically targets



“HUMAN IN THE LOOP”

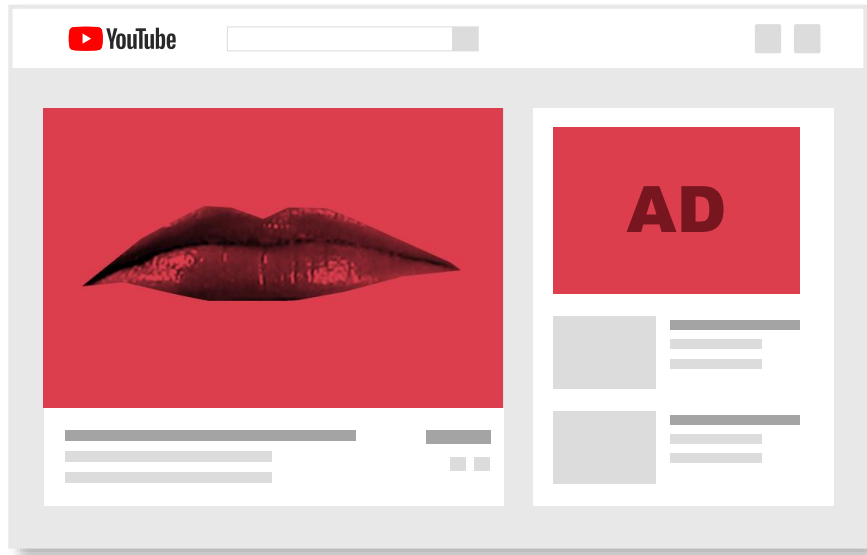
Reflects buy on YouTube based on brand-determined suitability signals

Who: General YouTube audience

What: YouTube content selected via machine learning + human review based on brand-determined signals for suitability

WE ALSO MEASURED

Isolating the Impact of Content Quality

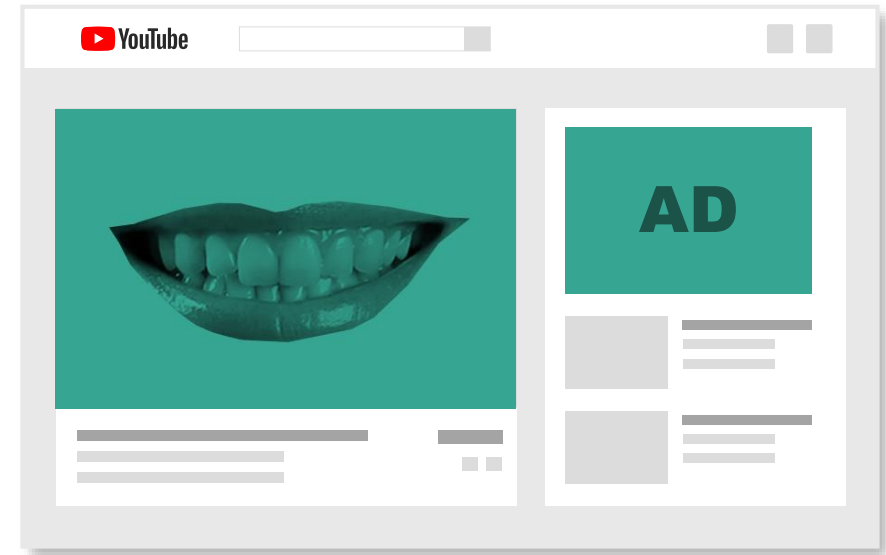


LOW QUALITY CONTENT

Reflects what happens when ads appear next to what are traditionally considered low quality videos

Who: General YouTube audience

What: YouTube content identified via machine learning + human review based on what is traditionally considered low quality content



HIGH QUALITY CONTENT

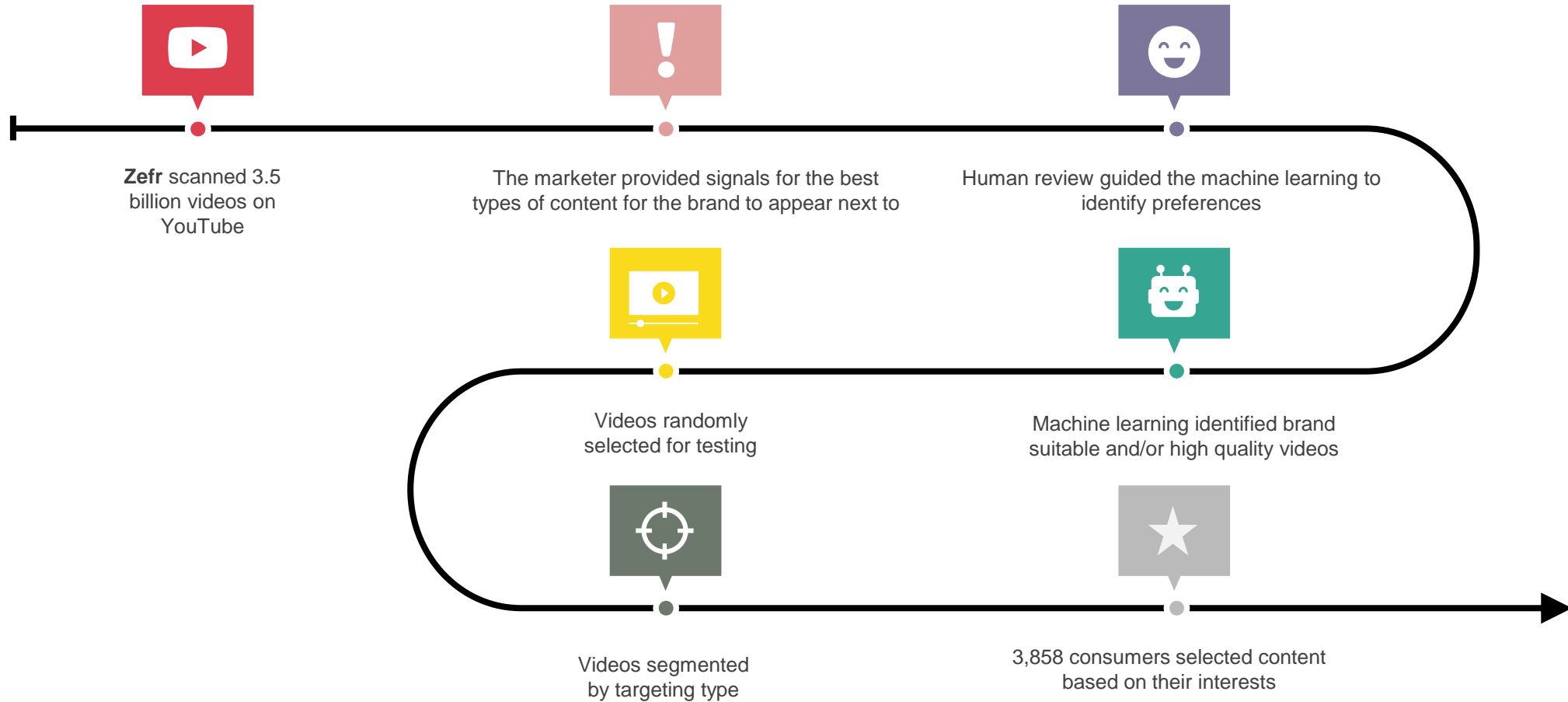
Reflects what happens when ads appear next to what are traditionally considered high quality videos

Who: General YouTube audience

What: YouTube content identified via machine learning + human review based on what is traditionally considered high quality content

VIDEO SELECTION FOR TESTING

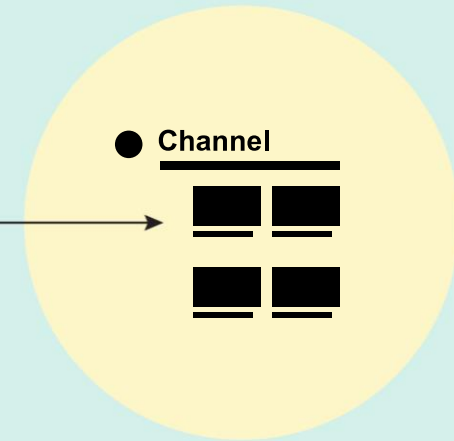
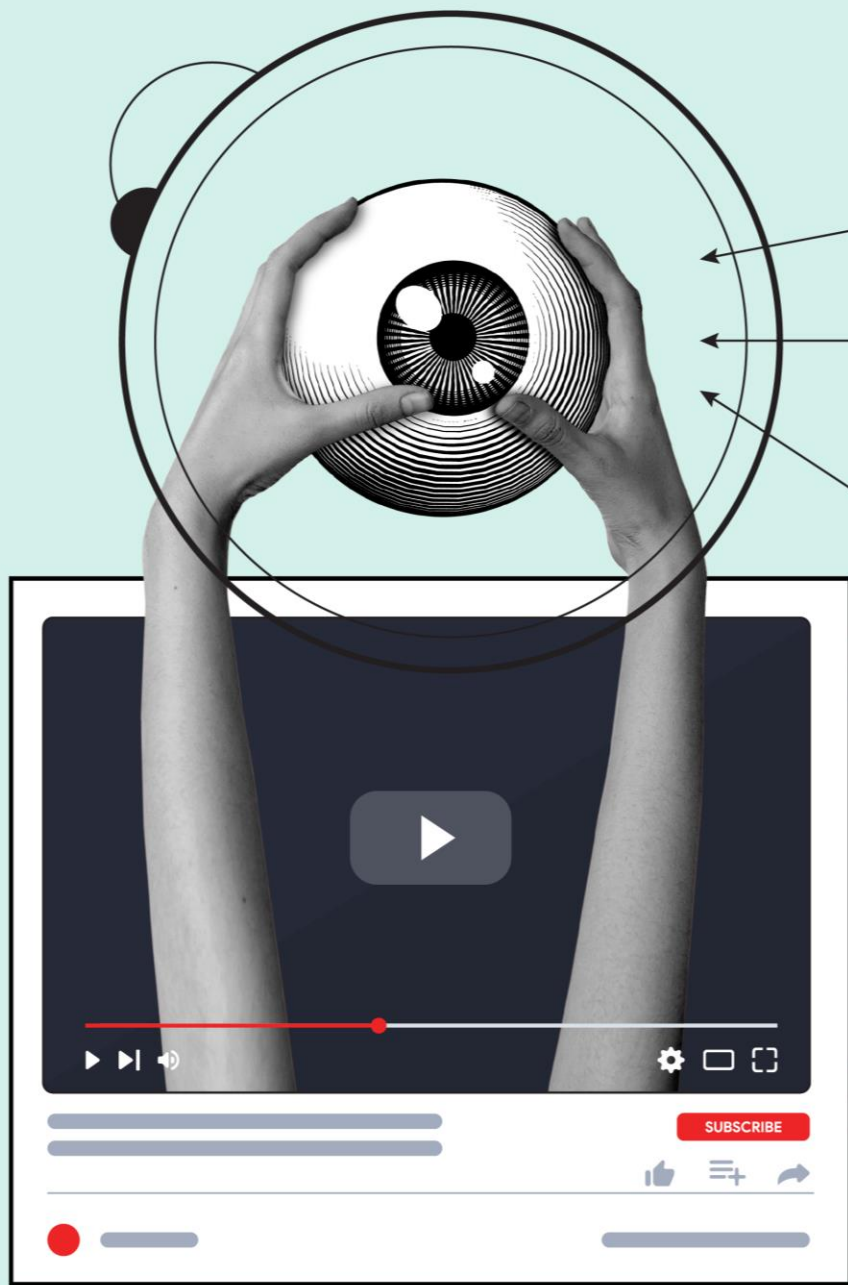
"Human In The Loop" Curated Videos



BRANDS WE INCLUDED



Three Industry Verticals



BRANDS ON YOUTUBE THROUGH THE EYES OF CONSUMERS





CONSUMERS UNDERSTAND THAT YOUTUBE AD PLACEMENTS ARE INTENTIONAL

Perceived Method for Video Targeting on YouTube

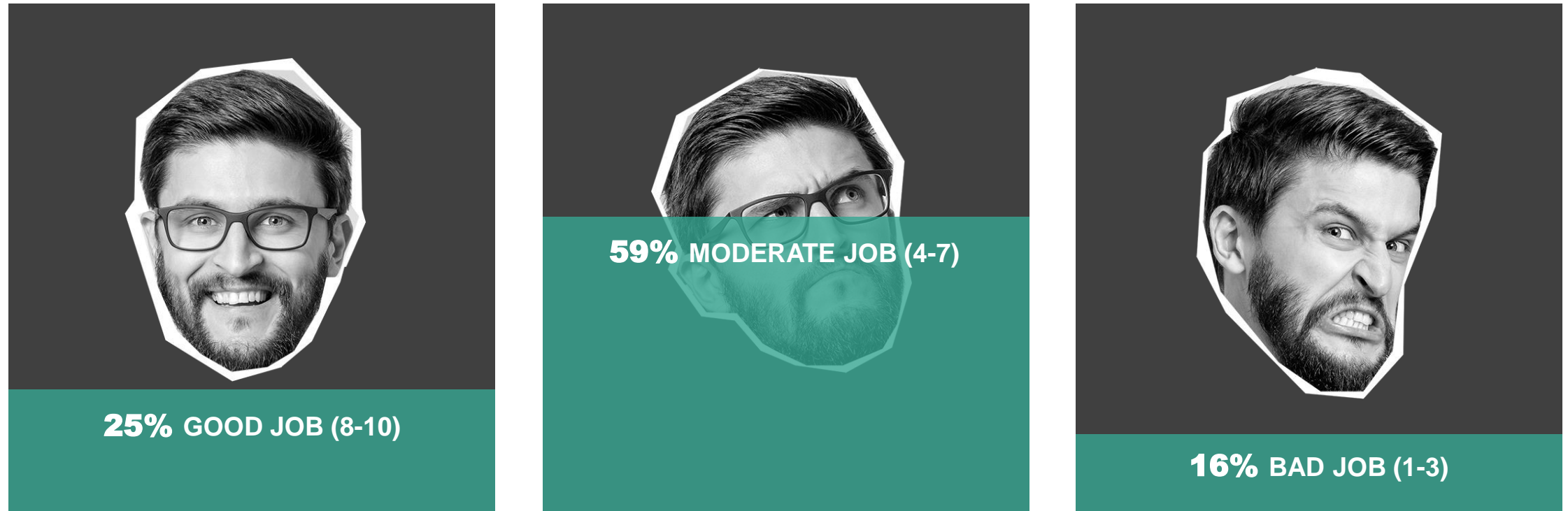
Believe ad placement is _____

■ Intentional (net score)

■ Random

BUT, JUST 25% THINK BRANDS ARE DOING A GOOD JOB

Consumer Scorecard For Brand Performance In Ad Placement



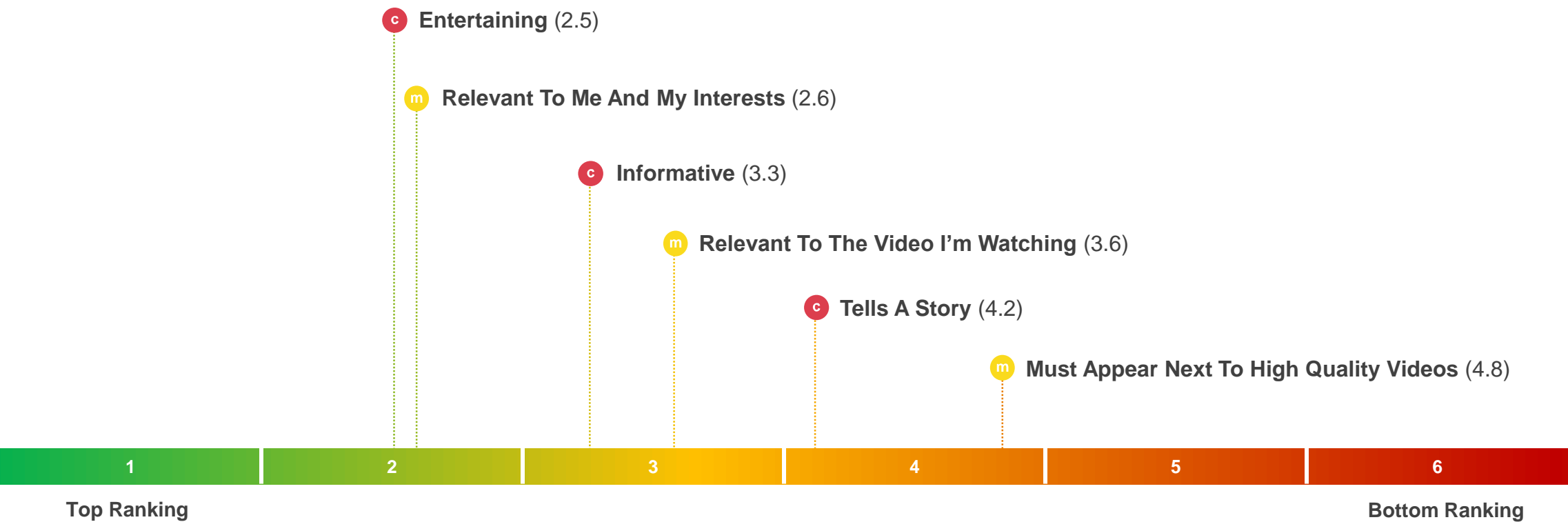
Q: In fact, brands have a hand in deciding which videos their ads are placed with on YouTube. Knowing this and thinking about your past experiences on YouTube, do you think brands are doing a good job with selecting videos to place their ads with? Drag the slider to a point on the scale (e.g. 1: Very bad job, 10: Very good job)
General Population n=2,401

HOW SHOULD MARKETERS IMPROVE AD EXPERIENCES ON YOUTUBE?

WE’VE HEARD IT BEFORE...CONSUMERS WANT RELEVANT ADS. IT’S AS IMPORTANT AS BEING ENTERTAINED

Expectations of Video Ads on YouTube | Average Ranking (1–6)

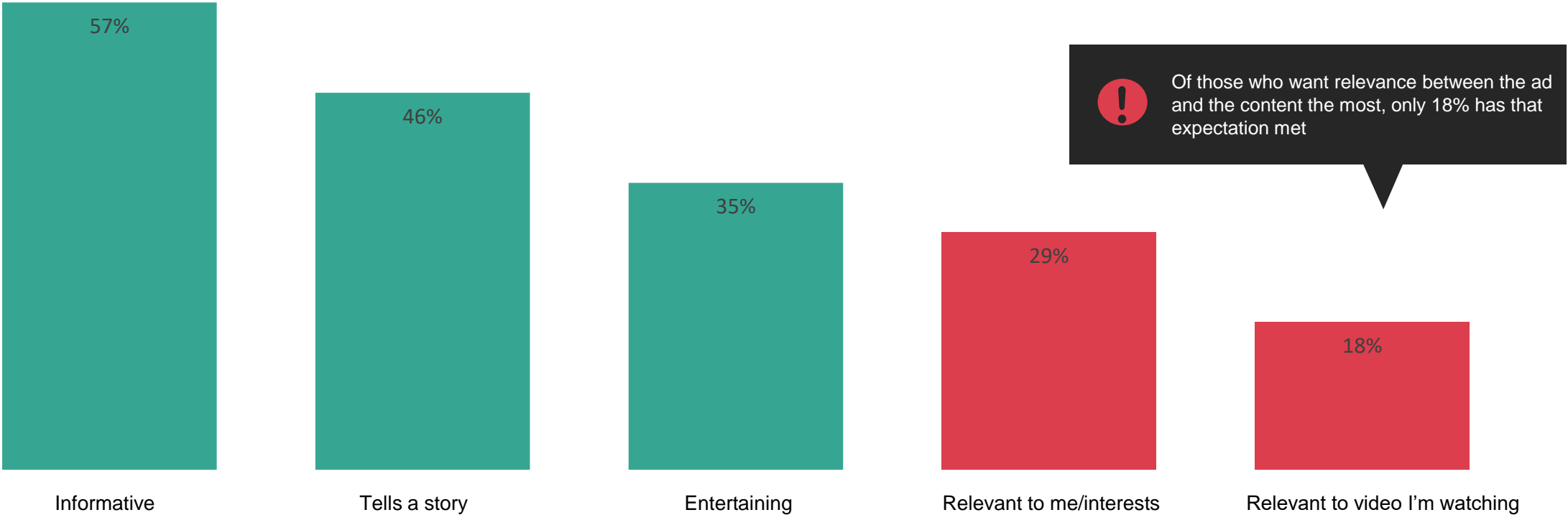
c Creative Agency **m** Media Agency



HOWEVER, BRANDS HAVE BEEN LEAST SUCCESSFUL MEETING RELEVANCE EXPECTATIONS

Success at Meeting Top Ad Expectation Based on Typical YouTube Experience

% Whose Top Ad Expectation Was Met

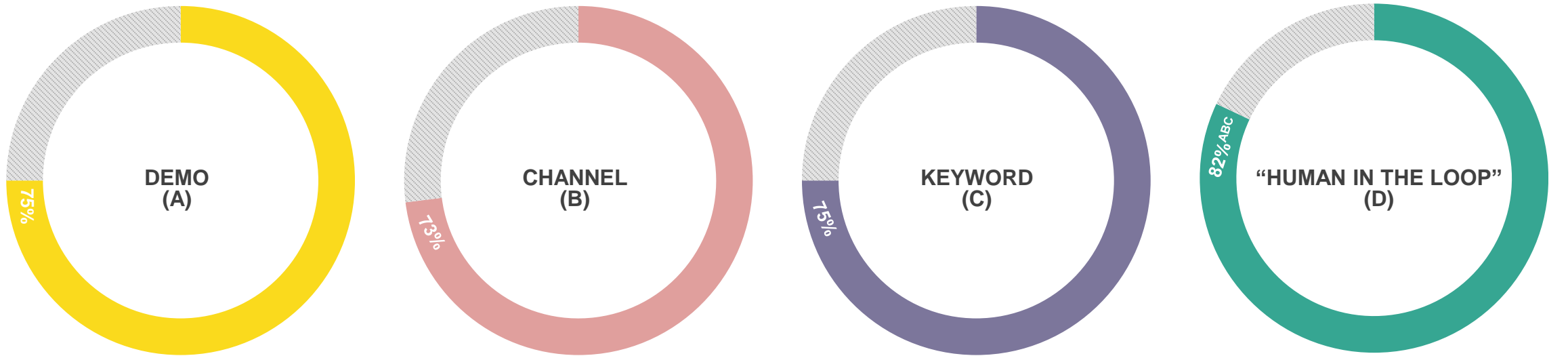




TARGETING RELEVANCY WITH BRAND DRIVEN CONTENT PREFERENCES

REACHING IN-MARKET CONSUMERS IS “BUILT-IN” WHEN BRAND-DRIVEN SIGNALS FUEL MACHINE LEARNING

Targeting Effectiveness Among Demo Target | % In-Market for Advertised Product



By targeting the most suitable content for the brand, ads are naturally reaching a more relevant audience

BECAUSE MORE OF THE RIGHT CONSUMERS ARE REACHED, ADS ARE MORE RELEVANT

Ad Was “Relevant to Me and My Interests”
Among Demo Target | % Strongly or
Somewhat Agree

- Demo Targeting (A)
- Channel Targeting (B)
- Keyword Targeting (C)
- “Human in the Loop” (D)

64% ABC

52%

48%

44%

Ad Was Relevant to Me
And My Interests

Brand suitability
targeting is 23% more
effective than demo and
45% more effective
than keyword targeting
at delivering on ad
relevance



...WHICH MEANS THE SAME CREATIVE LEADS TO A BETTER AD EXPERIENCE

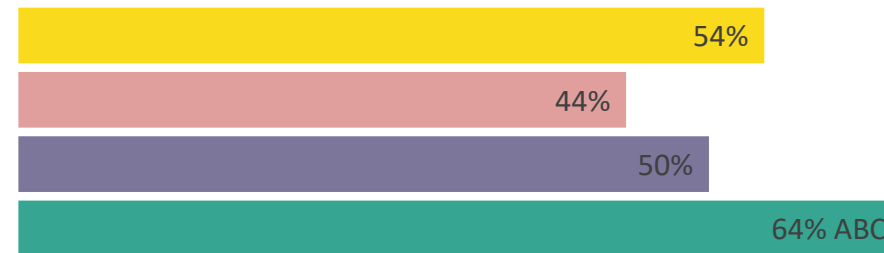
Impact of Targeting on Ad Opinions | % Strongly or Somewhat Agree

- Demo Targeting (A)
- Channel Targeting (B)
- Keyword Targeting (C)
- “Human in the Loop” (D)

HIGH QUALITY



AUTHENTIC



INNOVATIVE

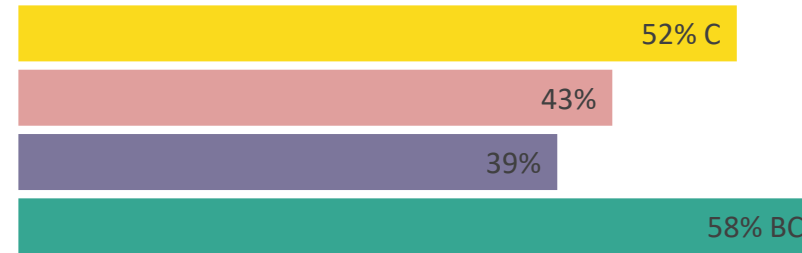


THE SAME BRAND MESSAGE COMES ACROSS MORE POSITIVELY

Impact of Targeting on Ad Message Perceptions | % Strongly or Somewhat Agree

- Demo Targeting (A)
- Channel Targeting (B)
- Keyword Targeting (C)
- “Human in the Loop” (D)

AD MESSAGE RESONATED WITH ME



AD MESSAGE WAS CREDIBLE



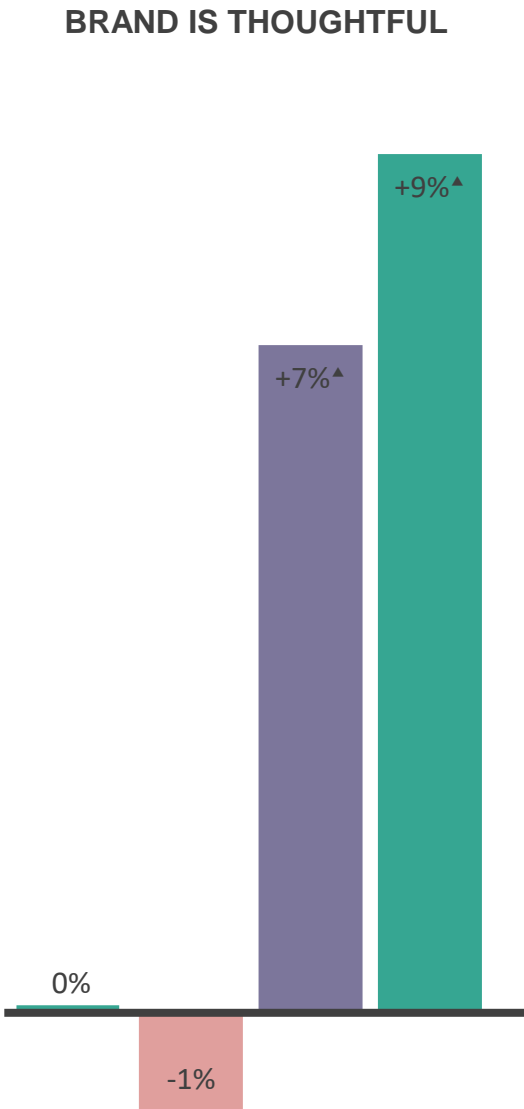
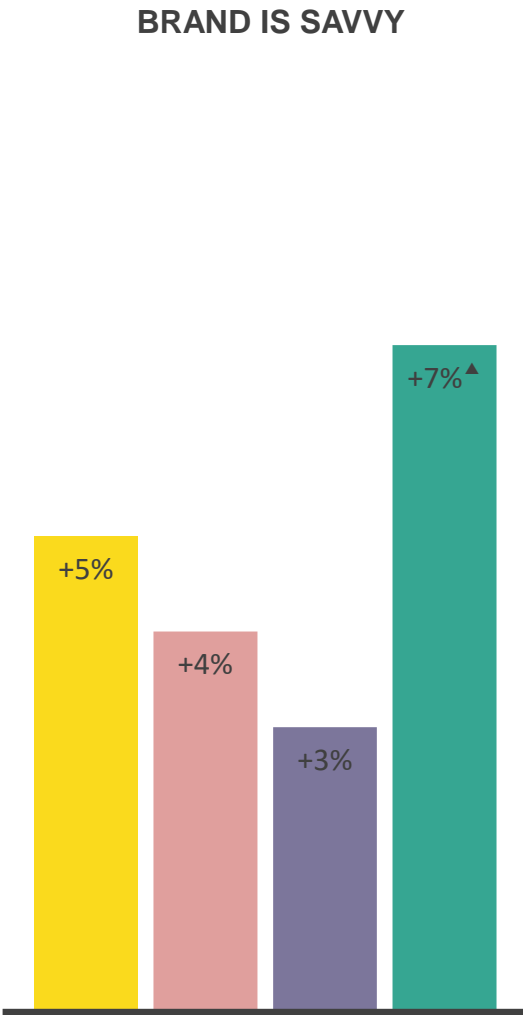
AD MESSAGE WAS POSITIVE

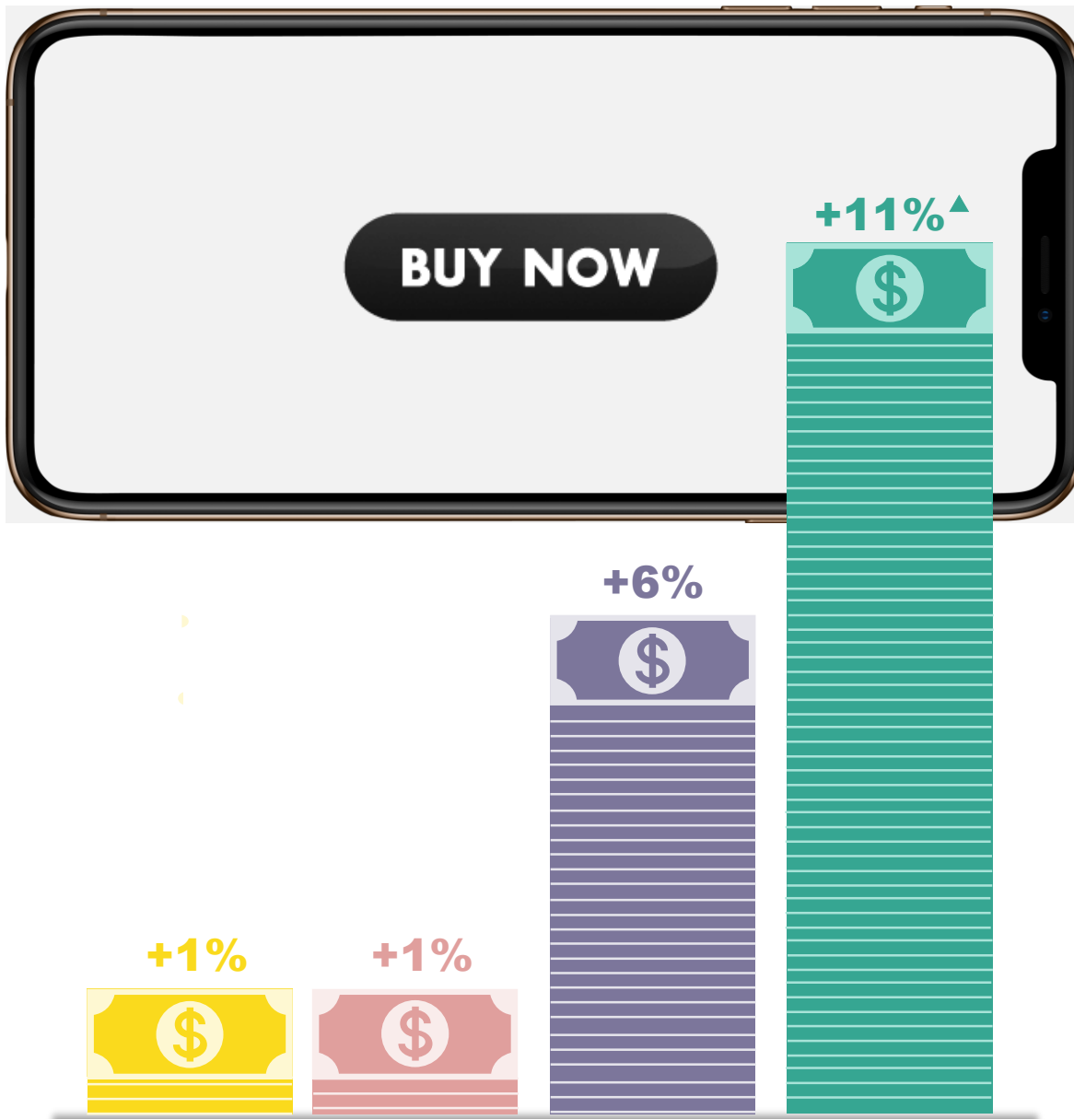


THE SAME AD FOSTERS MORE POSITIVE OPINIONS OF THE BRAND

Impact of Targeting on Brand Attributes
| Delta (Test – Control)

- Demo Targeting
- Channel Targeting
- Keyword Targeting
- “Human in the Loop”





THE SAME AD DRIVES GREATER IMPACT IN PURCHASE INTENT

Impact of Targeting on Purchase Intent |
Delta (Test – Control)

- Demo Targeting
- Channel Targeting
- Keyword Targeting
- "Human in the Loop"



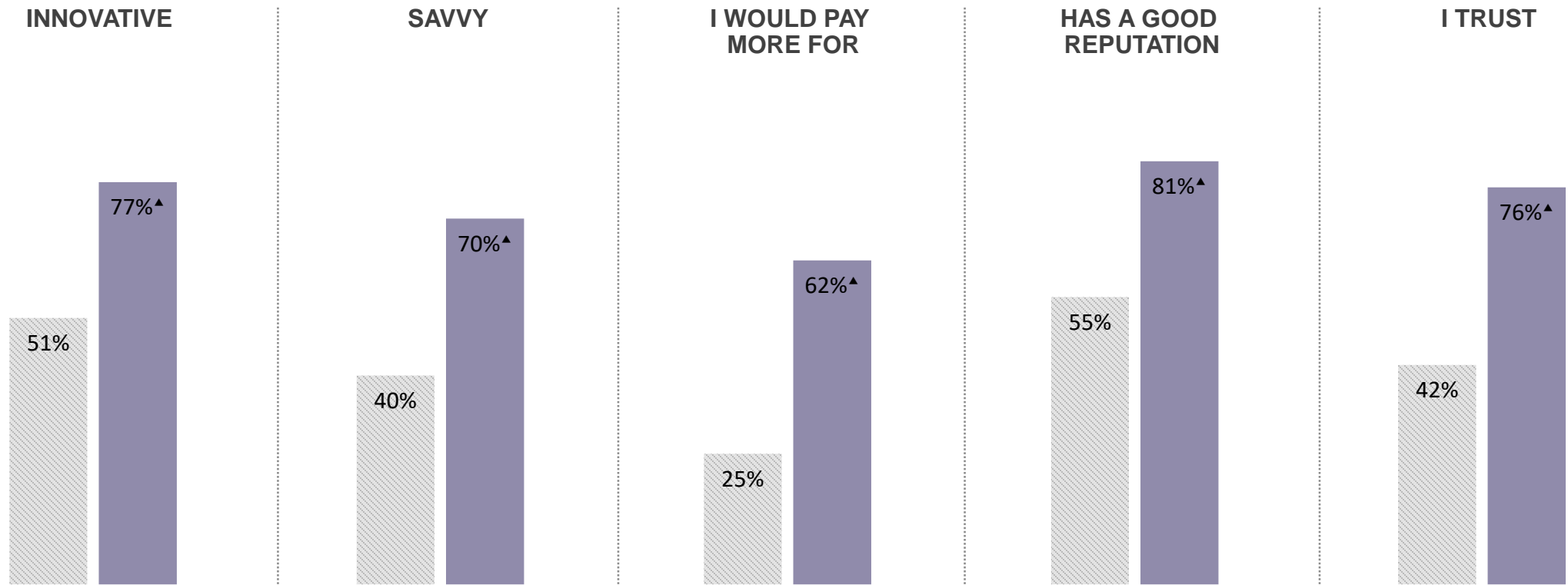
THE DANGERS OF MISALIGNMENT



MISALIGNMENT MAY RUN THE RISK OF HURTING BRAND PERCEPTIONS

Brand Perceptions by Perceived Alignment Between Ad and Content | % Strongly or Somewhat Agree

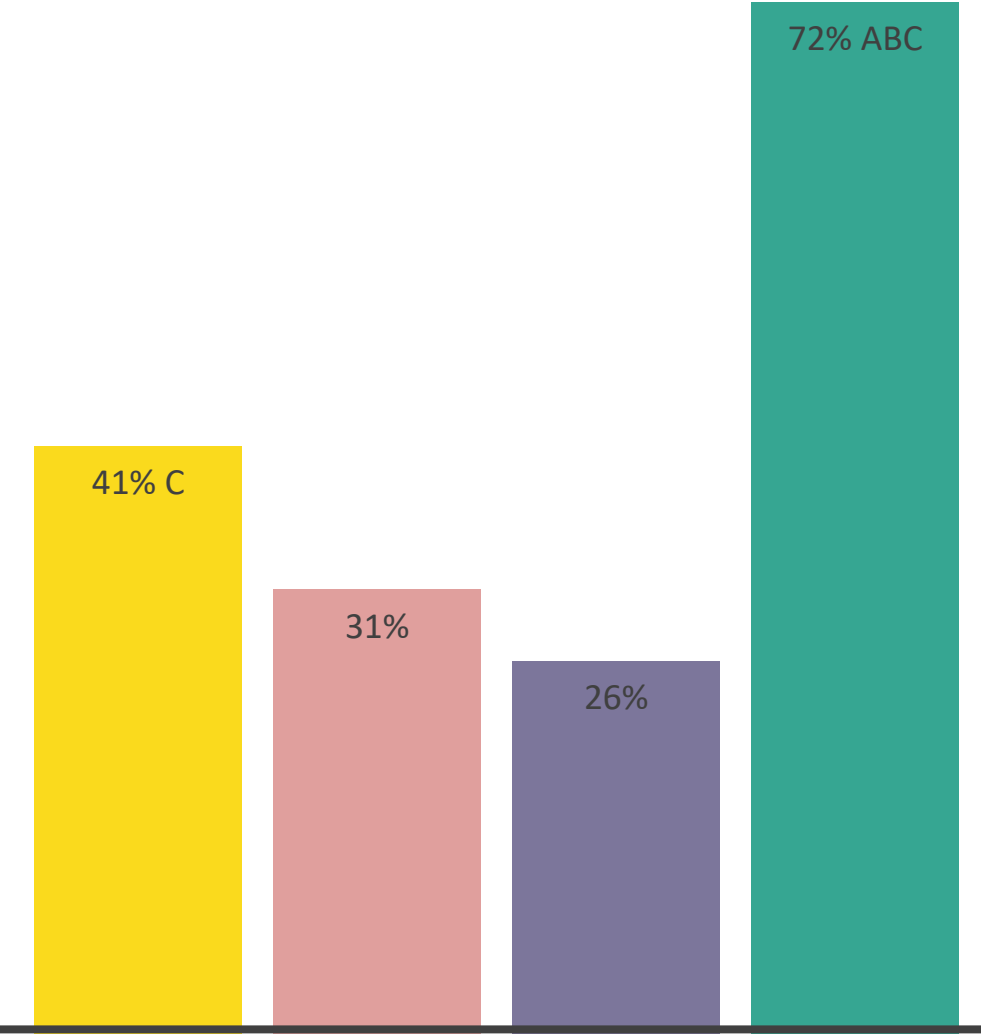
Ad was _____ with content ▨ Not aligned ■ Aligned



MISALIGNMENT IS PREVENTED WHEN BRAND SIGNALS ARE USED FOR TARGETING

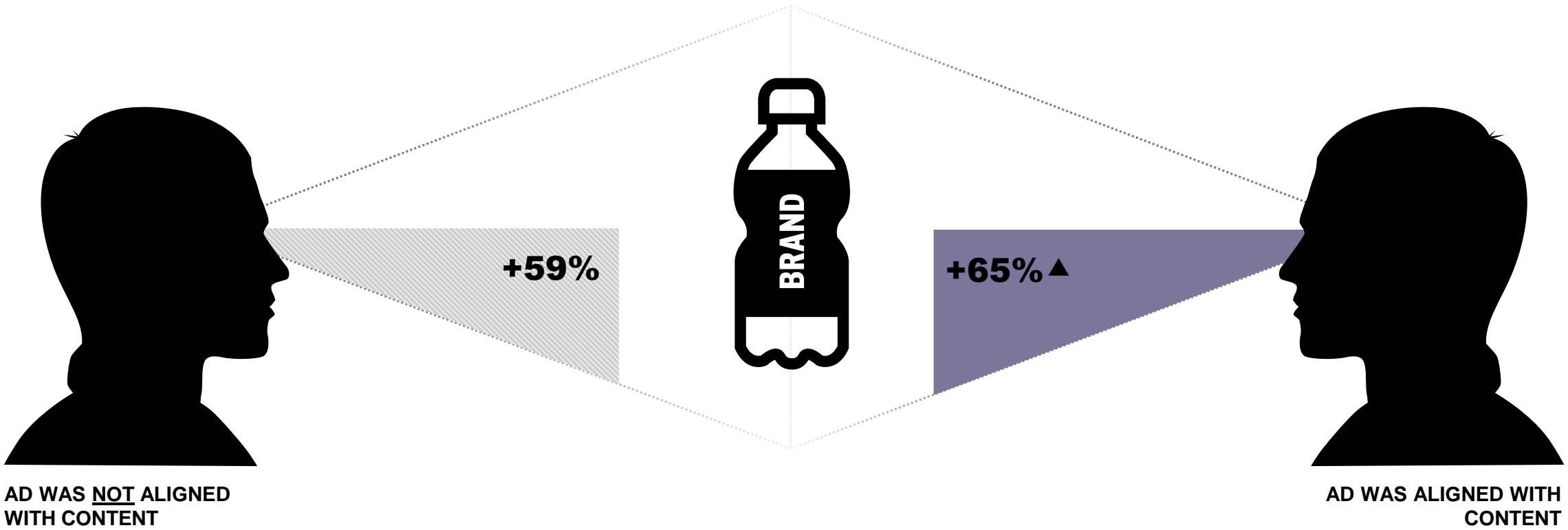
Ad/Content Perceived as Aligned | % Strongly or Somewhat Agree

- Demo Targeting (A)
- Channel Targeting (B)
- Keyword Targeting (C)
- “Human in the Loop” (D)



CONTENT AND AD ALIGNMENT CREATES MORE MEMORABLE BRAND EXPERIENCES

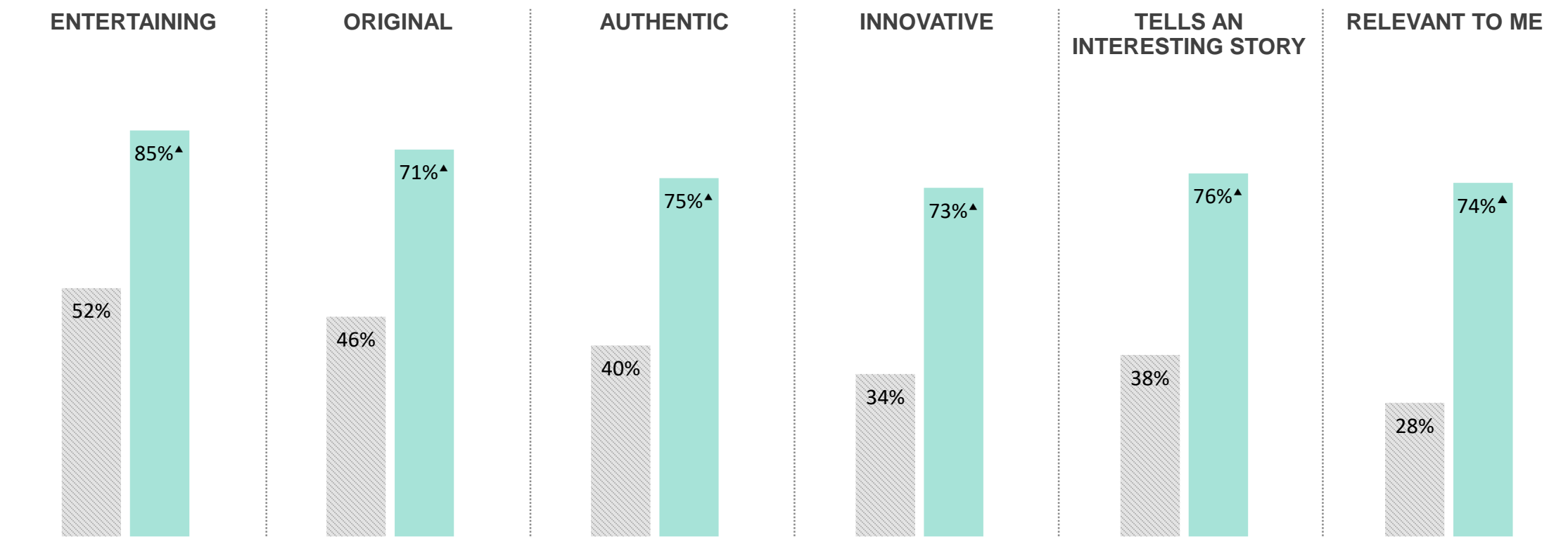
Aided Ad Recall by Perceived Alignment Between Ad and Content | % Who Recalled



Q: How aligned was the ad above with the video titled [content title] that followed? (e.g. the mood of the ad was well aligned with the video)
Not Aligned n=1,082, Aligned n=709
▲ =statistically significant difference between perceived aligned/not aligned at 90% confidence

HIGHER RELEVANCE = MORE POSITIVE OPINIONS OF THE AD

Ad Opinions By Perceived Relevance Between Ad And Content | % Strongly or Somewhat Agree
Ad was _____ to the content ▨ Not relevant ■ Relevant



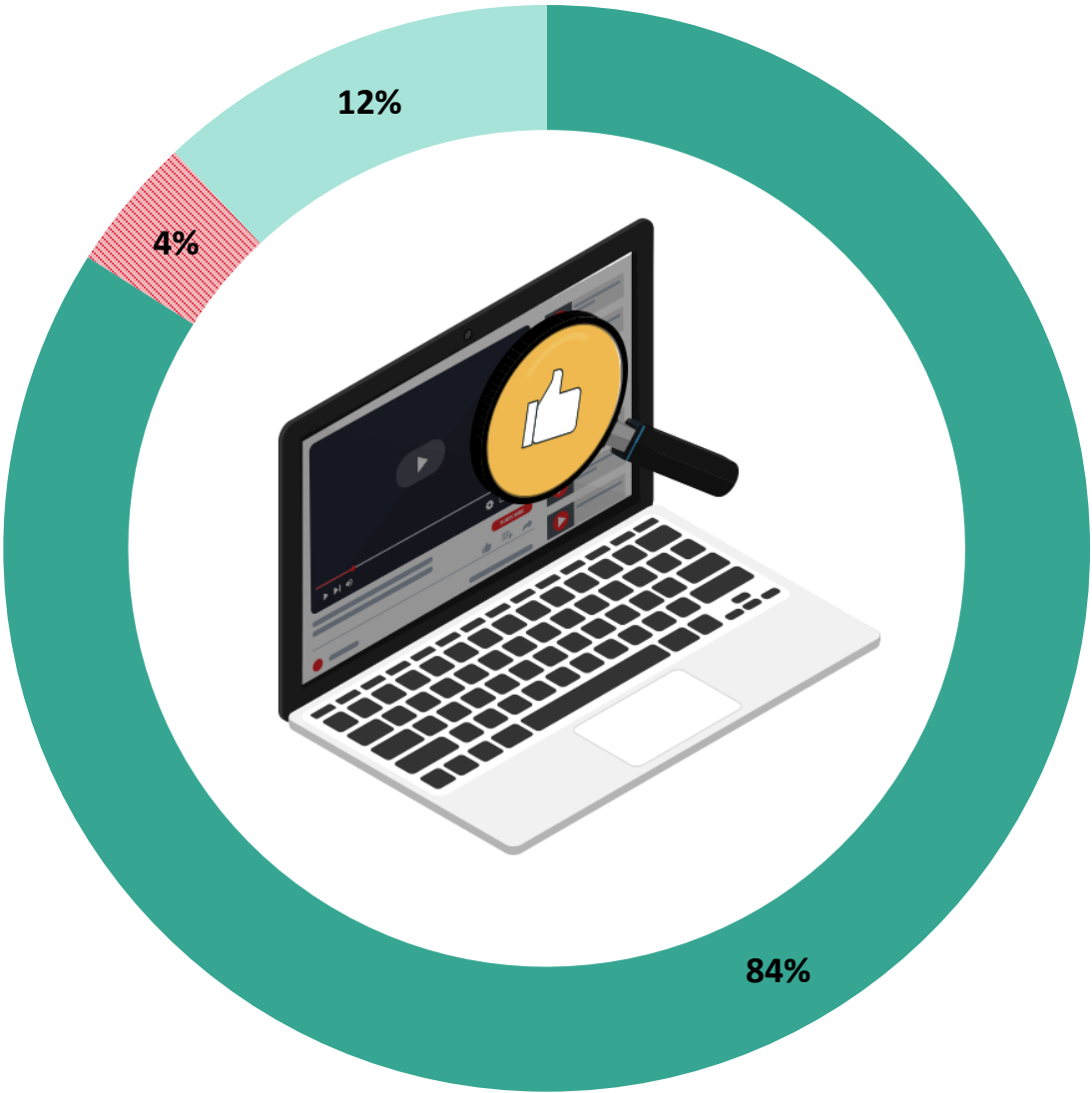


IDENTIFYING THE NUANCES OF CONTENT QUALITY IN VIDEO

MACHINES WERE SUCCESSFULLY TRAINED TO IDENTIFY CONTENT TRADITIONALLY SEEN AS “HIGH QUALITY”

Consumer Ratings of Content
Machine Identified as “High Quality”

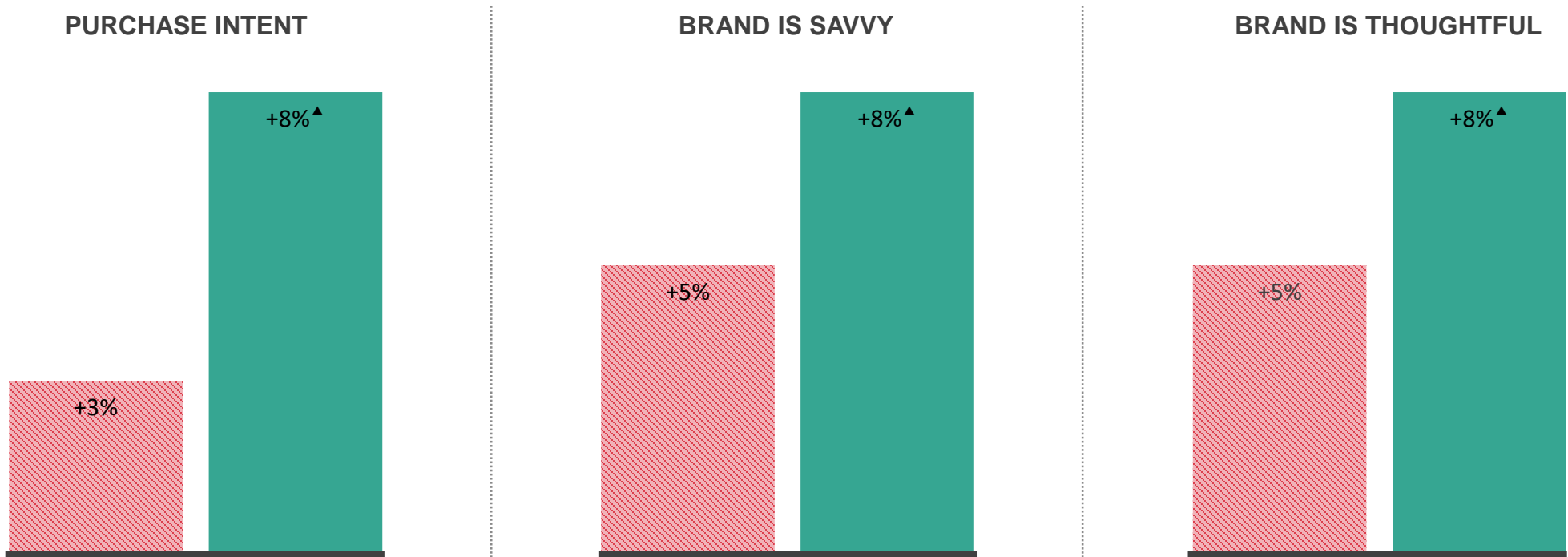
- Consumer Rated As **Low Quality** Content
- Consumer Rated As **Medium Quality** Content
- Consumer Rated As **High Quality** Content



LEVERAGING MACHINES TRAINED TO IDENTIFY QUALITY CONTENT DRIVES KPIS

Impact of Machine Identified Content | Delta (Test - Control)

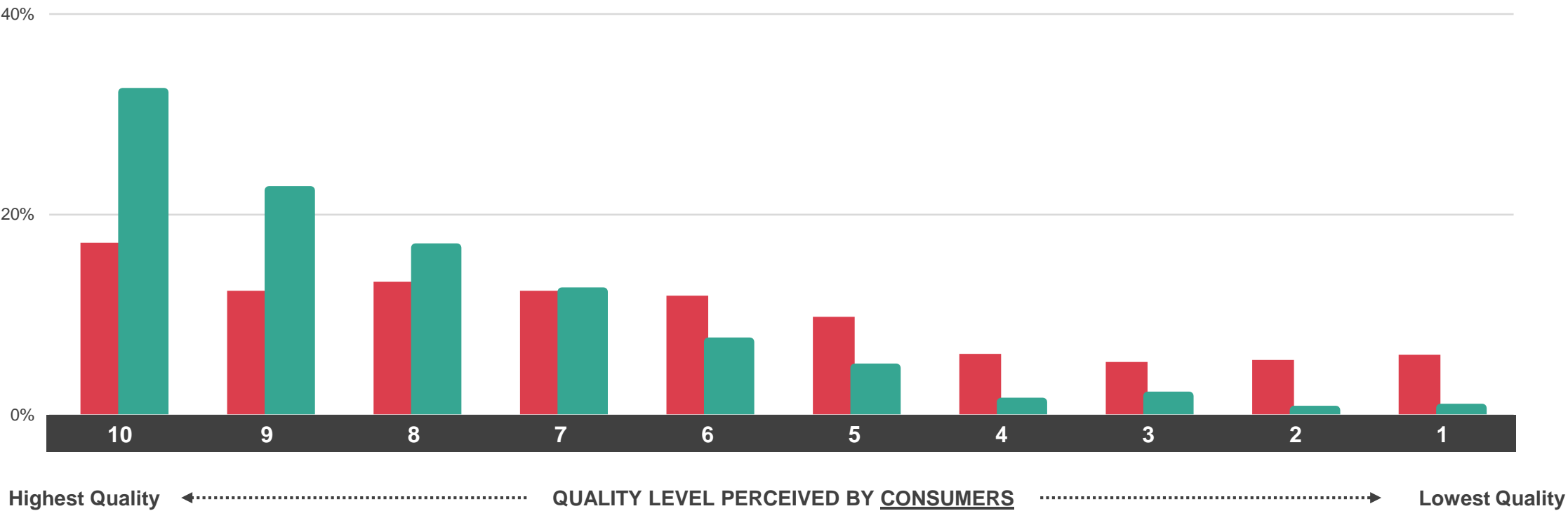
Machine Identified As Low Quality Content Machine Identified As High Quality Content



WHILE THERE IS CONSENSUS ON WHAT TRADITIONALLY CONSTITUTES HIGH QUALITY, PERCEPTIONS OF LOW ARE FAR MORE NUANCED

Consumer Perceptions of Content Quality by Machine Identification

Machine Identified As **Low Quality** Content Machine Identified As **High Quality** Content



QUALITY IS IN THE EYE OF THE BEHOLDER

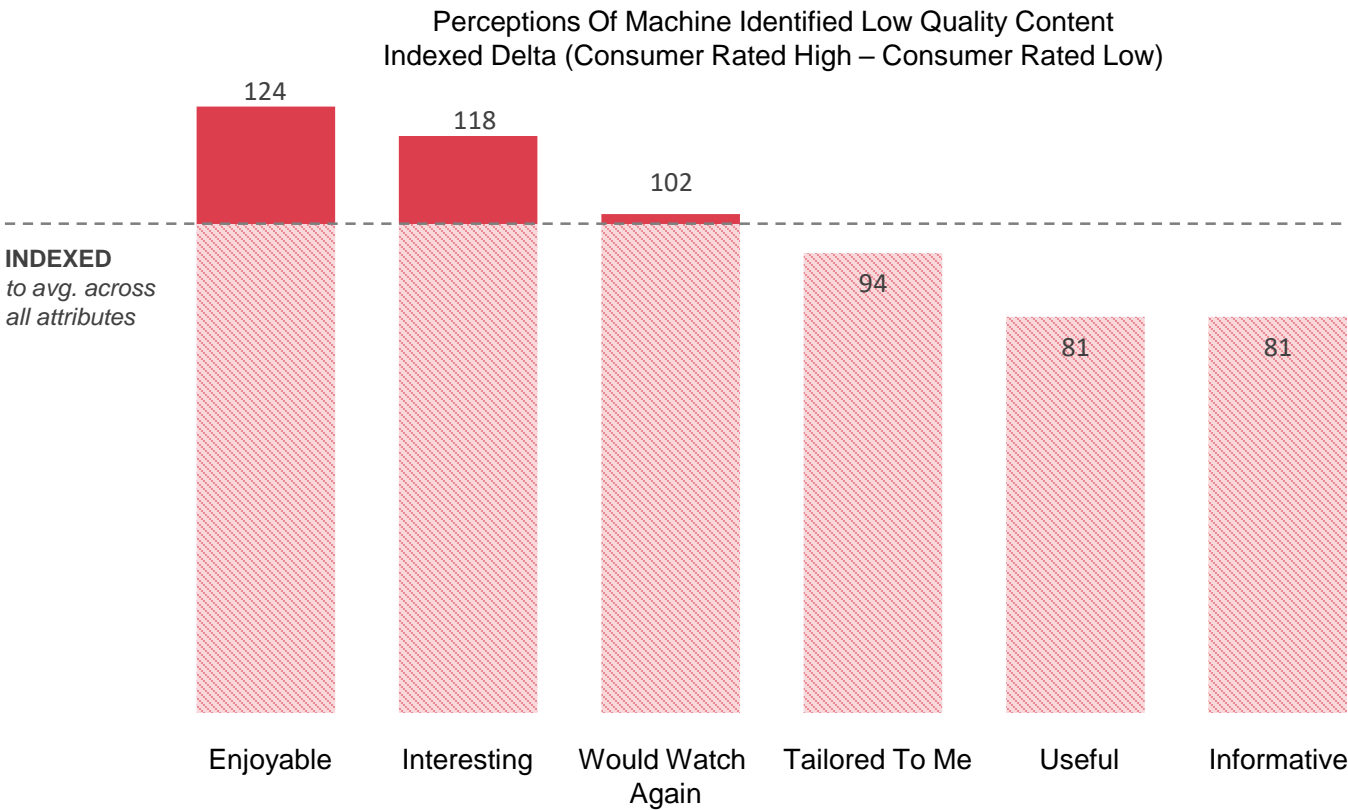
There’s an opportunity to expand definitions of what is traditionally considered “Low Quality” content to include videos that over index on enjoyment and entertainment

% Of Content That Machines Identified As Low Quality, But Consumers Rated As High Quality



Of consumers have a broader definition of content quality than what is traditionally considered high quality

Of Machine Identified “Low Quality” Content, Content Rated as High Quality by Consumers Tends To Be More “Enjoyable” And “Interesting” Than Content Rated As Low Quality by Consumers

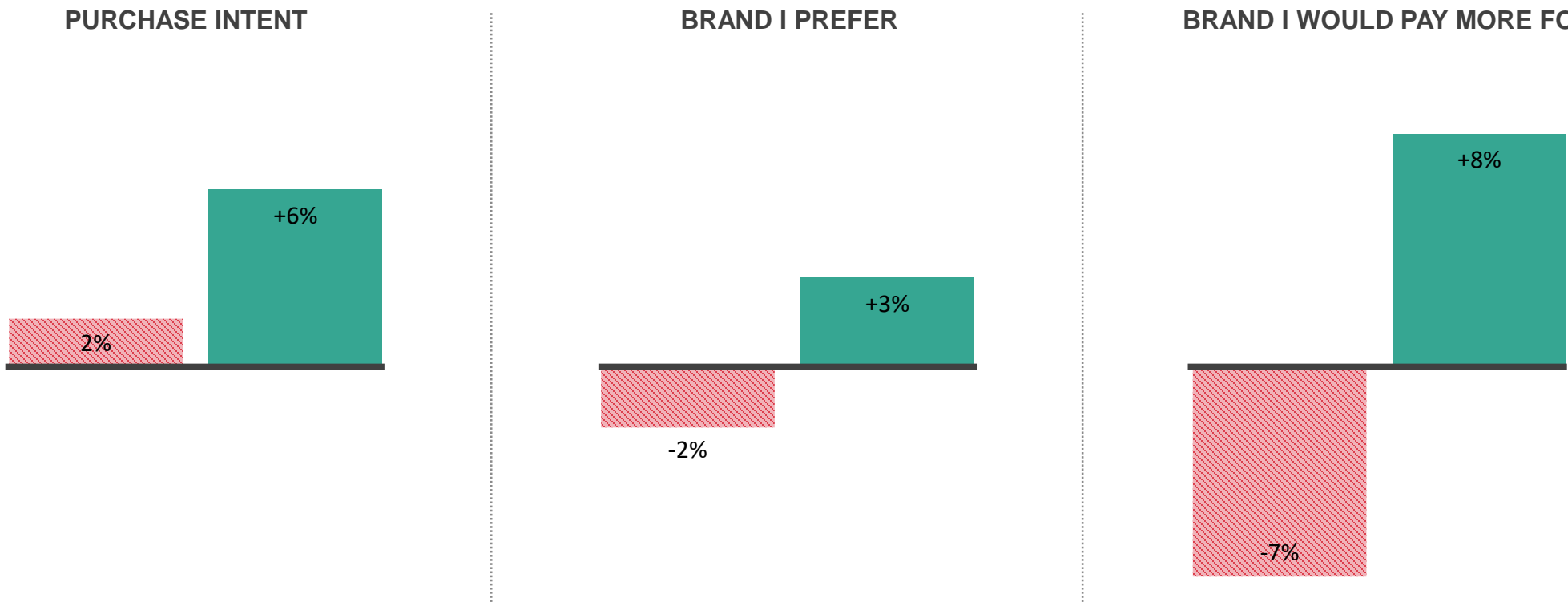


CONSUMER POV ON QUALITY IS WHAT MATTERS MOST

When Consumers Define Content More Broadly Than Machines | Delta (Test - Control)

Machine Identified as Low Quality; _____  Consumers Rated as Low Quality  Consumers Rated as High Quality

To extend reach, brands should consider broadening their perspective on content quality

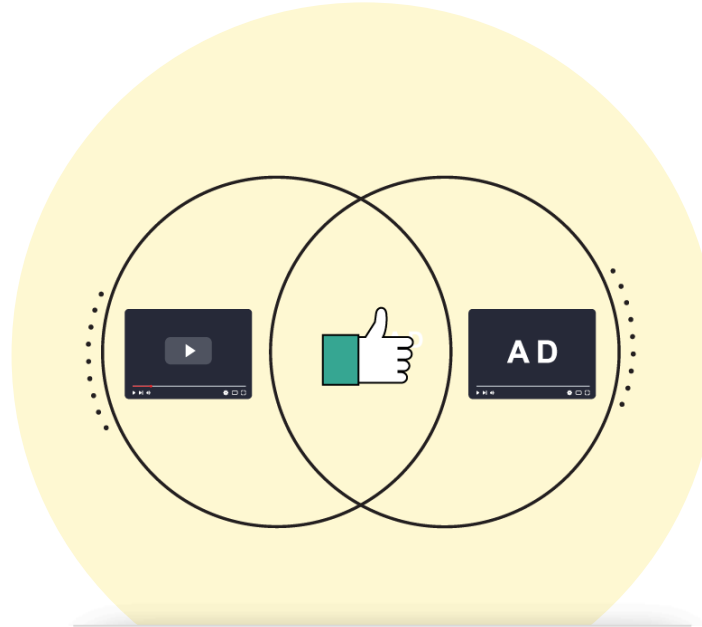


IMPLICATIONS



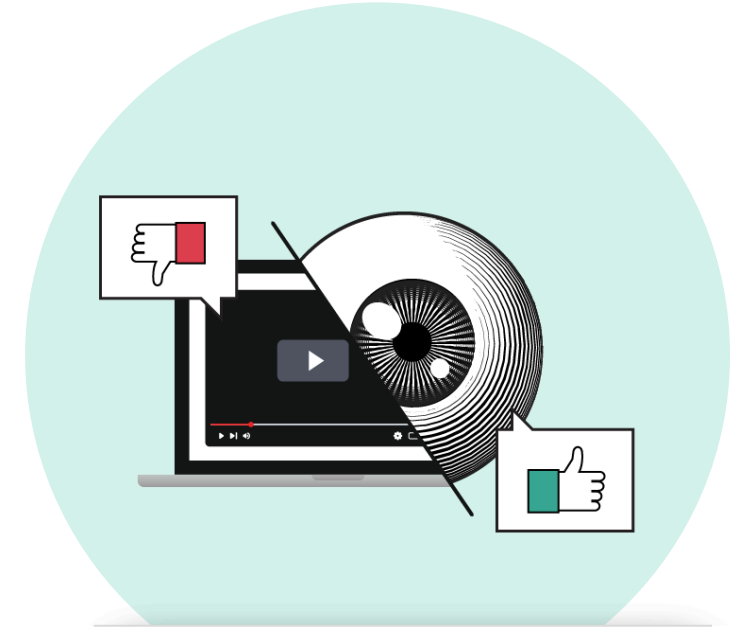
1. Relevancy, a work in progress

The industry needs to continue innovating in order to live up to consumer demands for more relevant ad experiences. **“Human in the Loop”** is a big step in the right direction as it offers benefits for both consumers and brands.



2. Brands know best

When brands determine the signals used to identify content that makes the most sense for them, misalignment between content and ad is curbed and each ad works to its full potential.



3. Quality is in the eye of the beholder

Marketers have an opportunity to extend reach by rethinking what constitutes content as “high quality”. Low production quality does not equal low quality in the eyes of consumers – especially when the content is enjoyable and interesting.



M/GNA

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