

AMENDED Exhibit 786

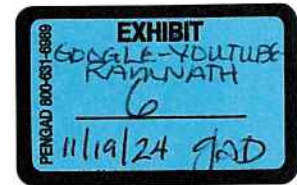
PLAINTIFFS' OMNIBUS OPPOSITION TO DEFENDANTS' MOTIONS FOR SUMMARY JUDGMENT

Case No.: 4:22-md-03047-YGR

MDL No. 3047

In Re: Social Media Adolescent Addiction/Personal Injury Products Liability Litigation

Produced in Native



6



Relatable Recs for Youth: Demographic Signals

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Eng

PM:

DS:

RG Check-in | YT Discovery for Youth | 20 March 2023

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Executive Summary

- We propose ways to leverage **demographic signals (today's focus)** to make YT Discovery recs more relatable to Youth (other areas in Relatable Recs include location signals and creator connections).
- **Goal: Share learnings and solicit feedback from leads on ideas and roadmap**

Contributors



Eng

- YT Home: [REDACTED]
- YT Watch Next: [REDACTED]
- Ads A1: [REDACTED]
- YT Youth: [REDACTED]
- Product: [REDACTED]
- DS: [REDACTED]

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Relatable recs is a key pillar of the Discovery for Youth 2023 Strategy

H1 OKR: [REDACTED] or overall through launches

1.



Make recs more
relatable to youth

2.



Elevate fresh,
trending content

3.



Drive efficient
browsing and
content

4.



Increase fun
content

Today's focus



UXR: What is “relatable” content for youth?

relevant to direct interests and values
(e.g. Roblox, drawing, TV shows)



"I will watch this after this recording. I **was in this dance**. Absolutely relatable to me."

considers their life stage
(lived experiences & future plans)



easy ways to make your notes neater / takes 5...
1.3M views • 1 year ago

"There's something about note taking... about to be **back to school season** so this could be handy."

is made by creators similar in identity (e.g. also young)



"The video was very relatable because **just like the people in the video, I am also Haitian/ Haitian- American**. So seeing people who can relate to me or relate the food/appetite to me was, in a way comforting."

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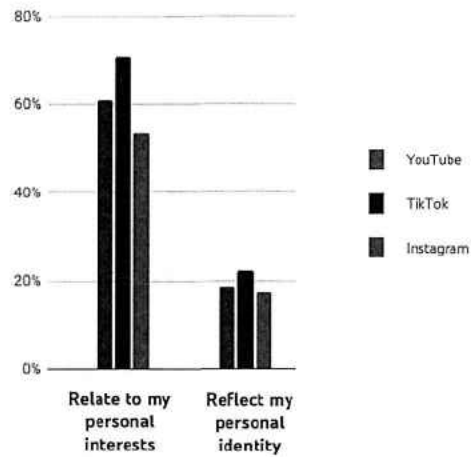
Source: [REDACTED] YouTube

Youth also primarily use Home and then Search to find relatable content:

So in order to improve within this space we needed to understand what relatable means to youth. Relatable content can be put into three categories — relevant to direct interests and values, considers their lived experiences and future life plans, and is made by creators similar in identity to them.

However, YouTube lags behind in relatability for youth

Content Gaps for Gen Z



When looking for a “relatable” video to watch in a session, our users were successful only ~50% of the time.

GenZ who couldn't find a relatable video to watch were more likely to abandon the task and leave the app compared to Millennials.

Google

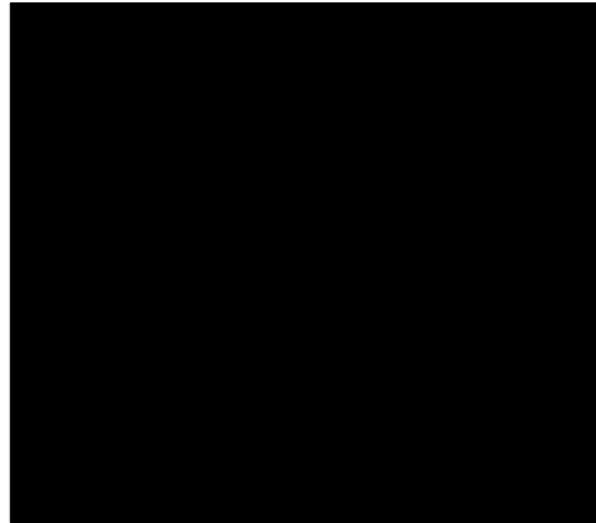
Source: [go/GenZNeeds](#), [go/relatabletoGenZ](#)

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User demographic signals are a critical first step in considering a users' life stage and identity, yet there are gaps in the Discovery system

Current state

- [Redacted]
- [Redacted]
- [Redacted]
- [Redacted]
- Calibration on [Redacted] shows headroom
 - [Redacted]
 - [Redacted]

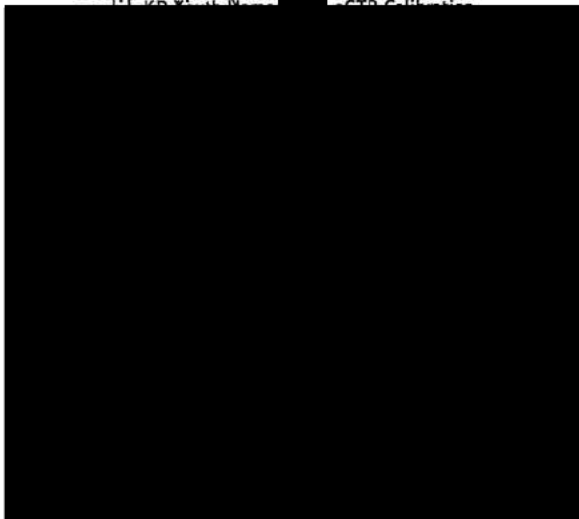


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Calibration from [go/genz-deep-dive-analysis](#)



Calibration based on similar analysis for US Millennial women (go/vt user-
 Youth Home Hydra pCTR Calibration by S2



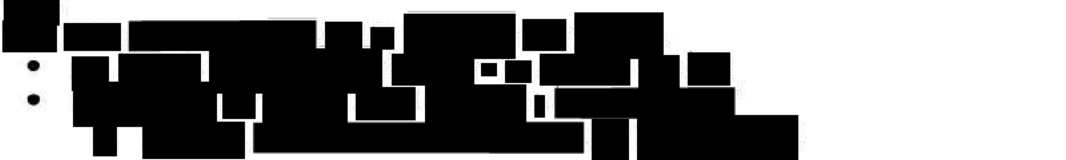
Understanding demographic signals: What are they

- Available categories
 - Declared user age and gender
 - Inferred user age and gender
- Summary in the next slide, some nuances



- Declared age
 - Required during registration starting from 2018
 - 0 is default value
 - 13-17: set by users, accounting for  DAU

- Inferred age

- 
- 



Slide 1

- 3 [REDACTED] do you mind checking slides 7-12 and seeing if there's anything we are missing / can't share during our director check in on monday?
Assigned to [REDACTED]
[REDACTED]; 3/15/2023 11:51:09 PM
- 2 [REDACTED] is that a correct summary ?
[REDACTED] 3/16/2023 4:18:27 PM
- 1 [REDACTED]
- [REDACTED]
- [REDACTED] Youth team is working with legal stakeholders: REDACTED - PRIV
REDACTED - PRIV
- [REDACTED]
[REDACTED] 3/16/2023 12:51:19 AM
- 3 I see. Thank you! I also saw [REDACTED] comments in other places too. The main question I wanted to clarify is whether or not [REDACTED] guidance
REDACTED - PRIV
[REDACTED] 3/16/2023 1:13:04 AM
- 2 REDACTED - PRIV
[REDACTED - PRIV] but [REDACTED] can confirm
[REDACTED] 3/16/2023 1:21:58 AM
- 1 REDACTED - PRIV
[REDACTED] 3/16/2023 3:32:10 PM
- 3 REDACTED - PRIV
[REDACTED] 3/16/2023 4:18:27 PM

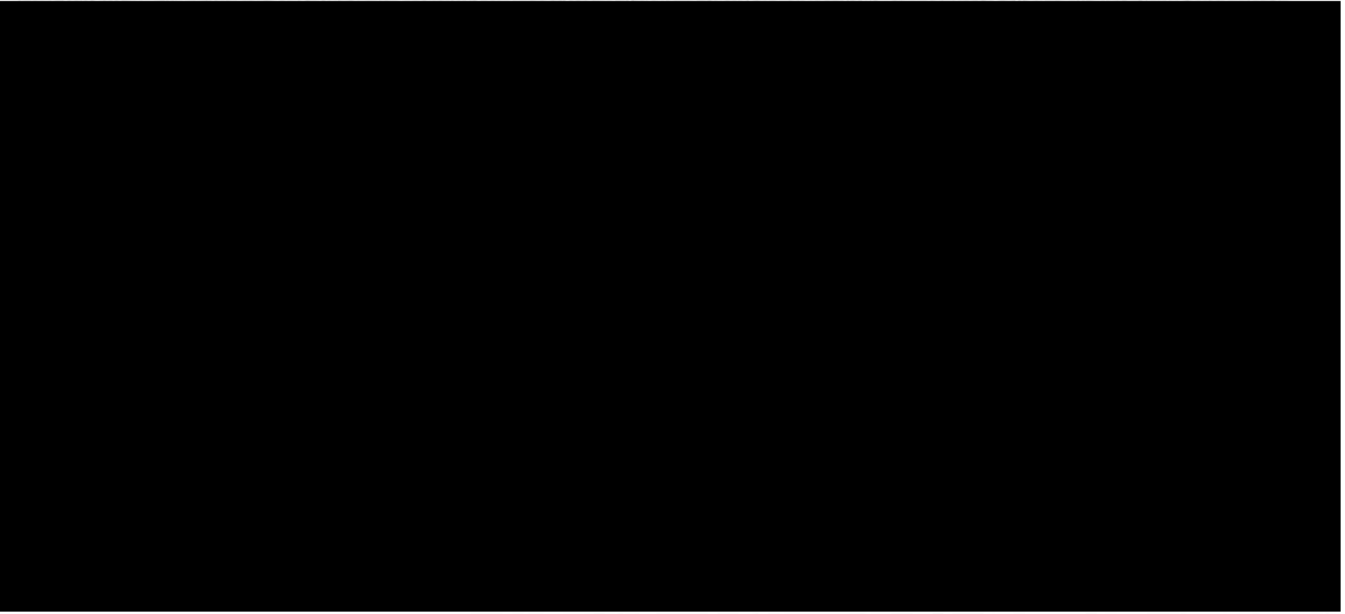
Understanding demographic signals: How they work

1 Signal Set	Declared		Inferred	
Data source	Users set birthday and gender when opening Google account (starting from 2018). Can also be updated in account settings.			
Kansas column				
Scoring Service Module				
Signal name				
Type				

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██████ of Home DAU with missing declared age have valid inferred age



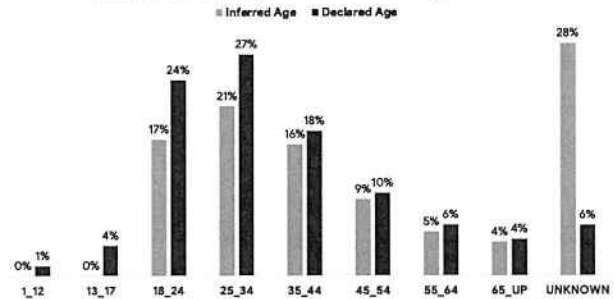
Declared vs. Inferred age signals: Key differences

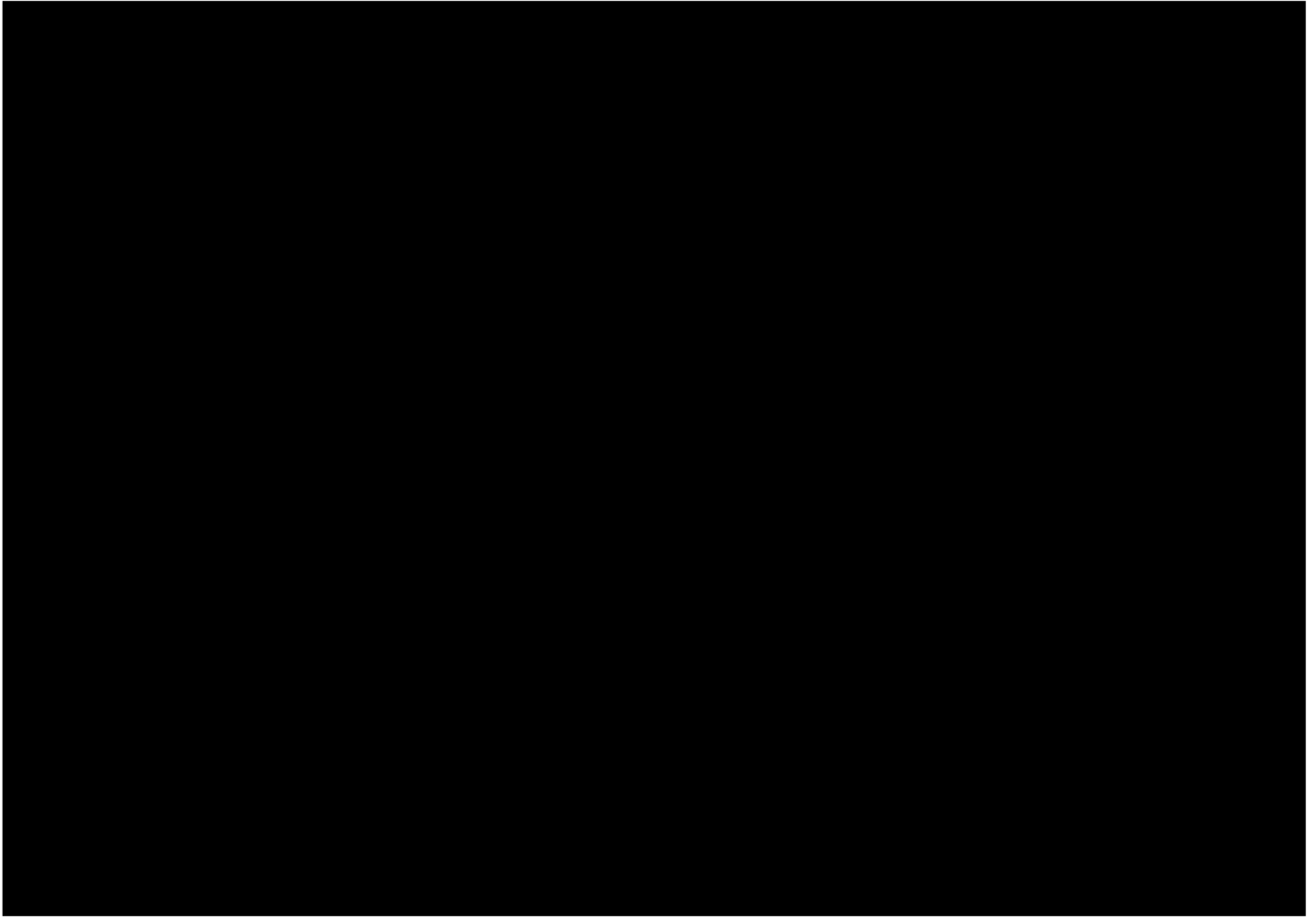


Declared age recall for Teens is low: most actual YT Teens users did not declare themselves between 13-17¹. This partially explains why only around 3-4% of the YT DAU are Teens users based on the declared age.

1. **Inferred age does not cover Teens users:** inferred age can't be applied to U18 users. Both 1 and 2 cause some major challenges on identifying Teens users on YT and improve their experiences.
1. **Inferred age has much lower coverage than declared age:** 33% of Home DAU do not have inferred age, compared to 6% do not have declared age

YT DAU Distribution by Declared & Inferred Age Buckets

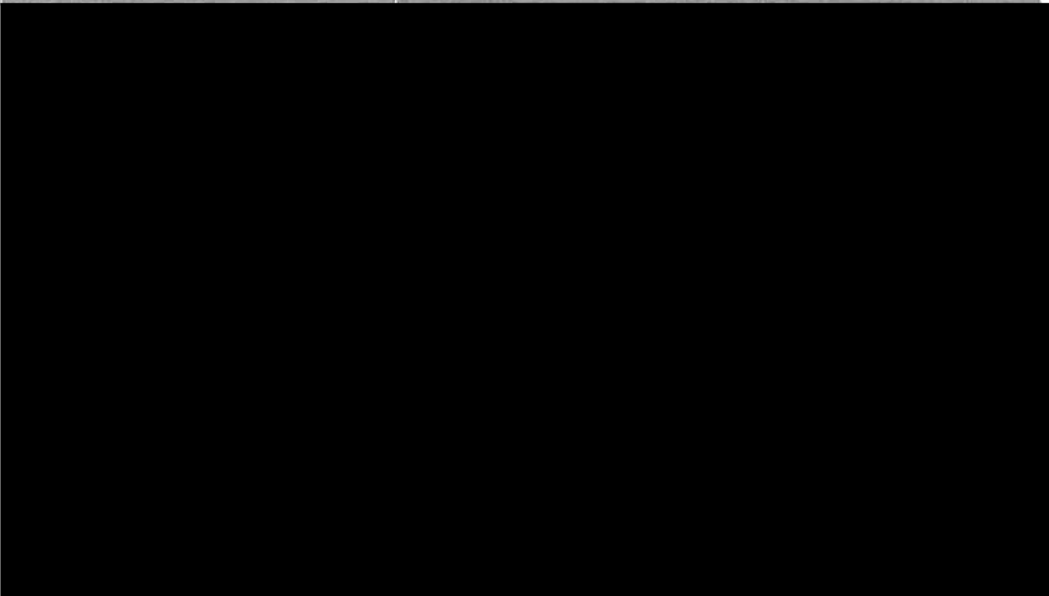








1 Despite various challenges (legal, privacy, signal quality), we've made a lot of progress in adding demo signals across

Surface	Model	Before	After
Home	LRF		
	All Nominators		
			
	Satisfaction		
WN	LRF		
	Engagement		
	Satisfaction		

Recap & Next steps

1. We have **identified and closed multiple gaps** across the recs stacks
 - [REDACTED]
2. More gaps remain, and there are **further opportunities** to improve our recs relatability for Youth through
 - Demographic signals (cont.)
 - Youth-specialized modeling and features (e.g. [REDACTED])
 - Teen tastes model (led by YT Youth team)
3. In addition to improving applications of demographic signals, there are opportunities in **improving the raw signals themselves** ([REDACTED])
 - [REDACTED]
 - [REDACTED]
 - [REDACTED]

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YouTube

Video Virality score boosting experiment [REDACTED]

[REDACTED] DAU for 13

-17

Recap & Next steps



Declared and inferred age usage

☐ Fallback: if there's no declared age, fallback to inferred age (for user age ≥ 18)

☐

☐

- Collaboration with A1

☐ Demographics for U18

☐ Improve coverage

- Demographic sliced signals

☐

Close limitations and collaborate with other teams

- Not every model has this feature, will hand off to others :-)

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Video Virality score boosting experiment

-17

DAU for 13