

Age Assurance roll-out in the US

Global Velocity

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Context for Age Assurance roll-out in US

- > **We expect that most new kids laws, both US & globally, will require some level of age assurance for minors**
- > **We need a product approach for age-assurance rollout** that we can advocate and use to navigate the current bills on the table
- > **We will still need flexibility to layer on additional legal requirements** of specific state/country laws (e.g., Utah's pending laws have hard verification requirements going beyond a US-wide approach)
- > **While the European model provides a solid blueprint, we recommend some changes for the US**

Our preferred product approach

Signed In

Roll out age inference as a viable path to move age-incorrect under-18s into a more protective minor state

Signed Out

Provide baseline protections as a floor of protections for all users

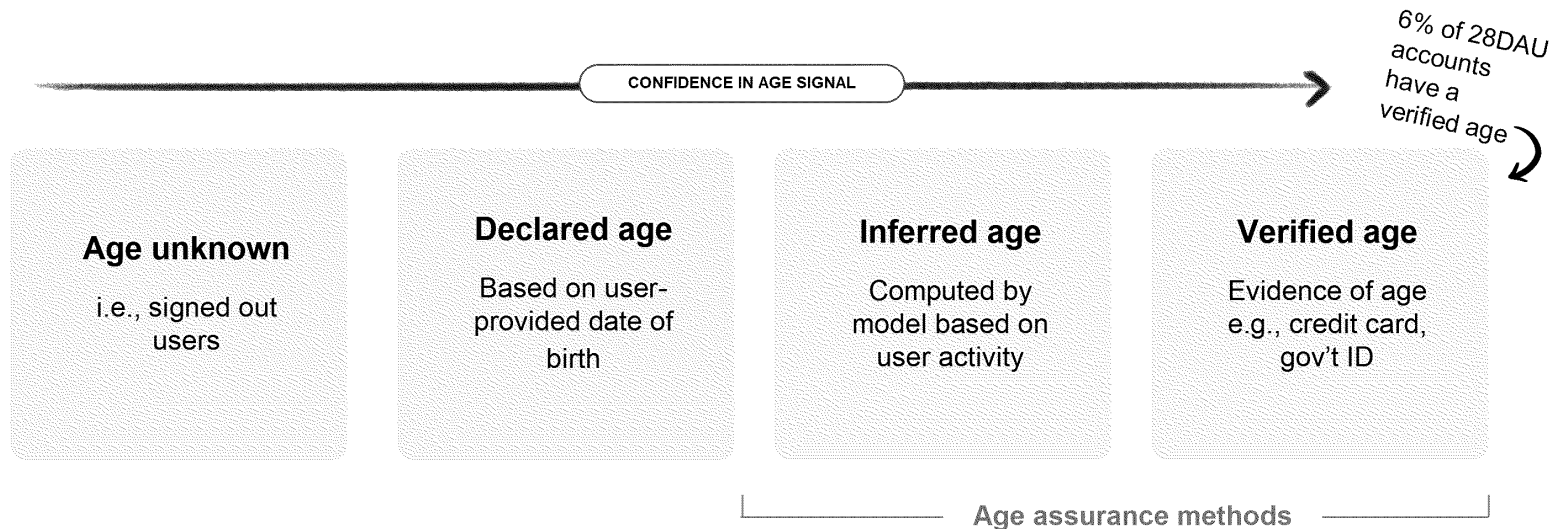
For Decision

In the US, whether to roll out state-by-state, starting with California, or nationally

We do our best when we know a user is a child

KEY GLOBAL CHILD PRODUCT PROTECTIONS				
 Under Age of Consent	Parental supervision	Content	Data processing	Wellbeing
	Yes	SafeSearch on YT mature content filter Play mature app restrictions Ads kids content policy	Ads personalization off YT uploads off Location history off	YT autoplay off by default YT take-a-break & bedtime reminders default on
 Under 18	No	SafeSearch on by default YT mature content filter Ads teen content policy	Ads personalization off YT default upload private Location history off	YT autoplay off by default YT take-a-break & bedtime reminders default on

But our knowledge of age varies





More flexibility, should
rely on age inference,
not hard verification

sentiments influencing
legislation

Prohibits SM algorithms that recommend UGC to minors,
age verification requirement

Slide 6 Notes

KATE

- At the federal level, there is a lot of activity, a lot of bipartisan engagement, and the conversation is getting shaped, but it's unlikely that something passes in the next year or two in the current political climate
- In the meantime, states are filling vacuum - and these are the ones that are currently, actively reviewing legislation
- It's a very unpredictable, fast moving, enormous political speed and backing
- They tend to divide into two types of bills - AADC style, and more severe social media/tech bans
- We should expect age requirements of some sort in nearly all bills
 - Some of those come in the form of explicit requirements to conduct age estimation (as in CA AADC and the other AADC models here)
 - Others come in the form of expectations that if we have a level of knowledge or SHOULD have known that a child was using our service.
 - And a few include hard age verification requirements for services, with hard identifiers like drivers licences.
- Federal and state level of slightly different emphases on kids bills -- federal level cares about both content and advertising but is relatively more focused on advertising to kids, which of course isn't a problem except for age unknowns.... On the other hand, many bills at the state level are dialing in on Tiktok and Instagram

Would doing this nationally stop hard verification?

- Not going to preclude the outlier bills in 2023 -- we will push back on hard verification thru traditional advocacy methods
- Over the medium term though, having a strong story around inference helps us influence the bills and shape inference requirements
- So for example, it helps us get a good approach to inference in one of these AADC style bills -- then that can be replicated in other states
- Avoiding patchwork is not the goal - there will be a patchwork -- the goal is reducing its impact

Principles and considerations when applying child protections

PRINCIPLES

- > **Based on child developmental needs**
Focus on the most important protections from a child-development perspective (e.g., content and contact harms)
- Apply protections globally**
- > Protect kids everywhere – minimize local variation

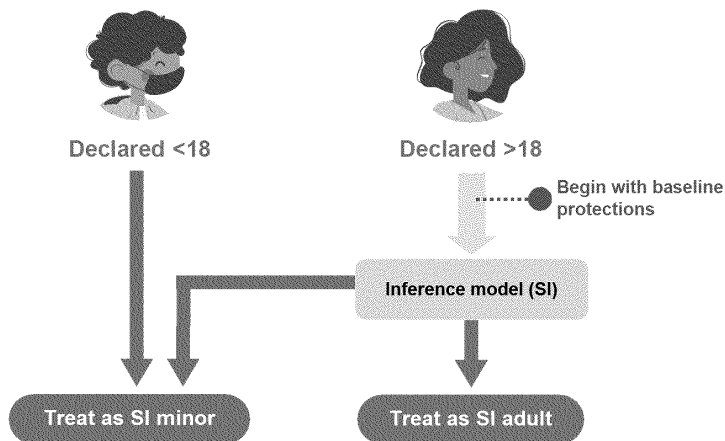
CONSIDERATIONS

- > **Balance user experiences**
Balance preserving the adult experience with Protections for children
- > **Promote a sustainable ecosystem**
Ecosystem that serves the needs of developers, creators, and publishers
- > **Minimize product complexity**
Minimize the number of “states” (differing protections) to reduce operational complexity and improve explainability for users & regulators

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Today in Europe we use an inference model to better understand age

Signed-in (SI)

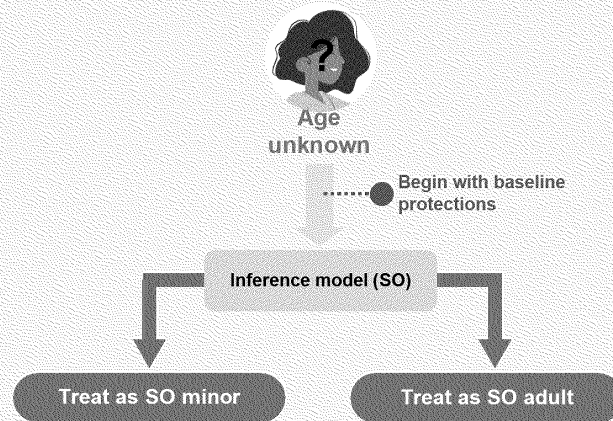


Inference model is working fairly well for signed-in*

U18: ~88% precision / 67% recall

A18: ~99% precision / 82% recall

Signed-out (SO)



Signed-out model performance is limited
and may conflict with user expectation of anonymity;
but pre-inference baseline protections in place

**Current daily P/R with ongoing work to refine inference measurement*

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Preferred product approach in the US

Signed in

- > **Roll out inference** as a low-friction way to move age-incorrect kids into a minor state
- > Ensure accessible verification options as an exit path for misclassified adult users
- > *Impact: expect accounts identified as minors to grow from ~4% to 12-15%*

Signed out

- > **Rely on our baseline protections** of a more limited product experience (Comms, Play, Payments, YouTube) and mature content protections (Search, YouTube, Ads)
- > **Further restrict Ads content** categories
- > Continue to require sign-in for accessing higher risk use cases
- > Layer on inference only where performance enhancing or legally required

Note: We still expect some states will require additional protections and / or more stringent verification but we should enforce those only for specific states

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Slide 9 Notes

US: 7.7M U13 + 16M declared teen / 612 total 28DAU accounts = 3.87%

US population of kids age 5-17 = 50.7M

US total population = 331.9M

Expected ratio = 15%

OPTIONS FOR U.S. ROLL OUT

OPTION 1

State-by-state, starting with CA

Layer on signed out inference if required for compliance

- + Time for more clarity on state regulations & product preparations
- + Unambiguous state of maintaining legal requirements only
- + Lower ecosystem impact
- Reputational risk of CA only
- Operational overhead of multiple rollouts

*Preferred option for:
YouTube, Play, Ads*

[Impact analysis](#)

OPTION 1A

Start with CA with national (or global) rollout plan

Commitment to rollout signed in inference & signed out protections over time starting with CA July '24

- + Improve reputation & advocacy position on kids
- + Phased impact
- Operational overhead of multiple rollouts
- Expect some state-by-state variation regardless

Alternative for discussion

OPTION 2

National rollout of signed in inference. No changes to signed out.

Layer on additional signed out protections where required (e.g. CA)

- + Improve reputation & advocacy position on kids
- + Preserves signed out anonymity
- Larger deviation from EU
- Expect some state-by-state variation regardless, including more in signed out
- KOF pressure to do more in signed out.

Alternative for discussion

OPTION 3*

Roll out nationally

Layer on signed out inference or other requirements if needed

- + Improve reputation & advocacy position on kids
- + Expect to be required in time
- Higher ecosystem impact including from indefinite vice ads prohibition
- Expect some state-by-state variation

*Preferred option for:
Search*

*Numbered to maintain consistency with options previously reviewed [here](#)

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Political Analysis

- > **Age assurance is here to stay** -- age self-declarations are viewed as insufficient, and nearly all new laws will require some form of age assurance.
- > **Compliance approach:** (1) We can defensibly take different approaches for signed-in and signed-out users; (2) we need not feel tied strictly to European-style implementation in the US.
- > **Consistency and reputation:** A strong/consistent story on how we apply protections to the right users helps both our reputation and our kids-related advocacy.
- > **Additional state requirements:** Voluntary roll-out of age-inference will not stop the current wave of new laws. Some states will still require additional/different measures (e.g., Arkansas' hard verification requirements)
- > **Industry approach:** We are investigating how industry peers are implementing age assurance.

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Slide 11 Notes

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- **It is defensible politically to take different approaches for signed-in and signed-out.** In the US, there is no specific pressure yet regarding signed-out users, and federal policymakers have historically been less focused on this area than EEA colleagues. Much of the debate in the US is driven by the desire to curtail the harmful impact of social media on young people, such as Instagram and TikTok, and risky interactions between adult users and minors on social media platforms (e.g. grooming, human trafficking, fentanyl sales), which largely occur on signed-in experiences. We feel reasonably well-placed to argue that signed-out has a lower risk profile than signed-in, and it is important to protect its more privacy-protective state -- which is a position that children's groups like 5Rights have previously acknowledged.
- **Baseline protections will be important, but also raise some unique US political complexities.** Especially in cases (e.g., as proposed for signed-out) where we don't run age inference, baseline protections will be important to show we are taking action to protect potential minors. Baseline protections such as those restricting the service of mature ads (aka "Default Ad Policy") are helpful, but we need to tread carefully about hot-button topics like abortion and junk food marketing, where feelings are very strong on both sides of the aisle, and some policymakers could seek to add categories of content to block under our policies (e.g. reproductive and sexual health). We may want to consider a more limited set of ads policy restrictions than what may be applied in the EEA, that is focused exclusively on legally restricted content (porn, alcohol, gambling).
- **Politically, we need not feel tied strictly to EEA level implementation in the US.** Policymakers in the US are not yet focused on the details enough to deep dive into UK/EEA and US differences. (This could change if there were a major EU enforcement w/ significant press attention or civil society makes a concerted push.) US policymakers are focused on the question of what we do when we have information that a user is a minor, and they are also watching for signals that we are burying our head in the sand about minors lying

Slide 11 Notes (Continued)

about their age. They are relatively less focused on what we do during the inference period or in age indeterminate situations. We think that there is a reasonable argument to make that US legal culture is different, that there's more protections for freedom of expression and access to information, and therefore it's appropriate to depart from EEA-level implementations for age unknown users.

- **At the state level, voluntary rollout of inference will bolster our position to advocate for changes to some bills in the future, but will not stop the current wave of legislation.** State legislators' biggest concerns are not necessarily Google products (but rather, for example, Instagram and Tiktok), and so they will likely legislate anyway.
- **The more consistent our approach to inference nationally, the stronger position we have to engage on kids with KOFs; without strong principles and facts about how we apply protections to the right users in our products, we will face continued headwinds to our reputation and advocacy.** The implementation of the age inference model only where required by law makes it difficult to justify why we are not applying it (in some fashion) to all minors nationwide. While we would explain how age inference methods have tradeoffs and are on a technical journey, this will not land on very receptive ears. This helps us shape laws favorably, eg, bringing in more flexibility to age inference requirements.
- **Politically speaking, there is no significant difference between an immediate rollout compared to an announcement that there would be a phased rollout taking place over 12-18 months (1A versus 3)**

+++++

Global - (1) irrespective of our decisions in the US, we will see forward momentum of AADC style legislation + questions about how we understand the age of our users; (2) where kids legislation emerges globally, especially AADC-style legislation, we should expect to have

Slide 11 Notes (Continued)

to do at least what we are doing in the US; (3) we've so far been maintaining the difference between EEA and ROW.

From a political perspective the most significant difference in your proposal is C/ -- specifically, the removal of the earlier-proposed signed-out baseline protections (e.g., default ads policies). Just to note, part of our strategy with savvy KOFs would have been to point to those baseline protections as an appropriate response in signed-out (e.g., rather than inference). Under this new option, we would instead point to SafeSearch Blur + our general ads protections, which is not as strong a narrative but is manageable in the near-term. Over time, though, we would need to watch for additional pressure on signed-out and possibly pivot if not having enough baseline protections seemed to be resulting in more prescriptive legislative and/or inference requirements.

- "Behavioural estimation" is a very broad category and is the one that is harder to establish. For example, Meta does some work to understand if/when people are being congratulated on their birthday - this is quite obvious, but seems quite effective. Tiktok seems to be doing estimation in a similar way than we do on YT.

Next steps for advocacy & product workstreams

WORKSTREAM		OWNER	ROADMAP
1	GAPP Advocacy Approach <i>Limit additional / unique kids requirements that disproportionately burden Google.</i>	GAPP	- PR/3P campaign to limit spread of UT-style bills - Push for amendments in CA and other AADC style bills, push model AADC as alternative to harsher bills. - Demonstrate strong record of keeping kids safe online and differentiate ourselves from other Social Media companies
2	CA AADC compliance <i>Prepare for CA as part of RegReady</i>	xPA, Unicorn, GA, Core	- Develop PA implementation plans (EOQ2) - Enable state level geo-fencing (Core EOQ4)
3	Inference Model Improvements <i>More accurately identify adults & kids in different regions</i>	Unicorn, Ads, Core	- Optimize model for CA/US rollout (EOQ2); signed-in improvements - Signed-out inference investigations <i>Not currently staffed (Ads): improve time to inference</i>
4	Verification & Platform Approach <i>Provide accessible verification options for misclassified adults or where required by regs</i>	Core, Payments	- Launch reverse phone & email look up in priority markets (Q3/4) - Launch selfie verification in regulated markets (Q3/4) "Verify once, use everywhere" in early discussions with key partners
5	Graduation <i>Allow a user to exit the kid experience at 18</i>	Unicorn, Ads	- Reduce ads cooldown period to 90 days (EOQ2) - Launch MVP (email) graduation flow for declared users (EOQ2) - Launch re-inference & graduation for inferred u18 (EOQ4) <i>Not currently staffed (Ads): in-product ad p13n consent moment</i>

APPENDIX

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Appendix 1

US Privacy & Kids Campaign

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North Star Goals - US Kids Legislation

1

Near Term H1 2023

Close out H1 state legislative cycle with fewest possible requirements that significantly alter Google's current product and business roadmap.

2

Mid-term 2023-2024

Drive more awareness of our responsible approach, amplify/grow supportive third party voices, foster a common regulatory baseline at the state level, and forestall/shape problematic federal policies.

3

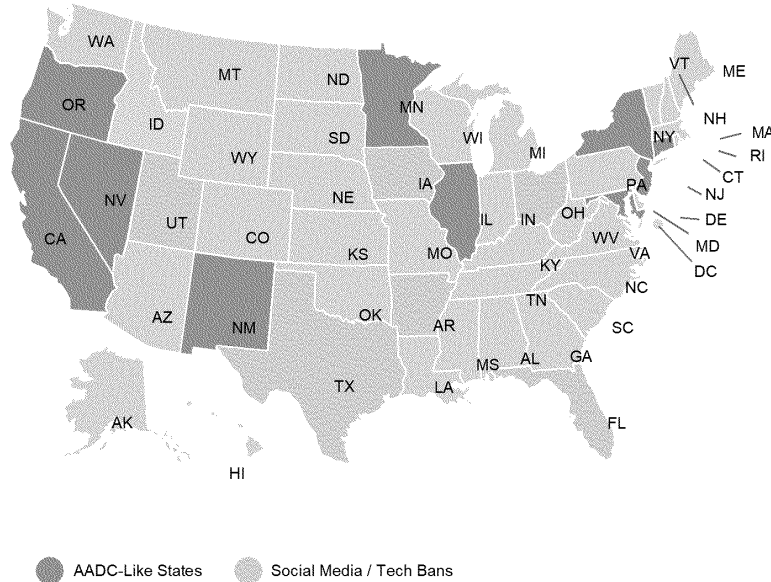
Longer Term 3-5 years

Support a reasonable, consistent, federal standard that preempts state bills and does not run counter to our product and business roadmap.



Fast moving nature of bills and broad political support are proving to be a major challenge to this goal.

US state regulatory landscape fragmented, fast moving, unpredictable, novel



Global Affairs

AADC-like

More flexibility, should
rely on age inference,
not hard verification

MN: Introduced, 1st hearing held

NM: Introduced, bill passed 1st hearing

MD: Introduced, hearings in March

NY: Introduced in Assembly & Senate

CT, IL, NJ, OR: Introduced, no activity yet

NV: not introduced

UT: Passed by legislature

Prohibition on addictive features, predicate for litigation

FL: Introduced; high likelihood of passage

*Broad anti-tech data privacy legislation targeting Big Tech;
additional kids related bills likely*

TX: Introduced

Prevents SM harm to minors; hearing in March

OH: Budget proposal

*Includes hard age verification, parental permission
requirements*

AR: Introduced; no activity yet

IA: Introduced

Prohibits SM for users under 18

MN: 2nd committee

*Prohibits SM algorithms that recommend UGC to minors,
age verification requirement*

Social Media / Tech Ban

Broader anti-tech
sentiments influencing
legislation

Slide 16 Notes

KATE

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GAPP Advocacy Priorities

1 Avoid proposals that restrict children accessing products and services

- Avoid bans on u16 access
- Avoid blunt age verification requirements using hard identifiers (driver's licenses)

2 Manage impact of age inference provisions, especially on signed-out and unknown users

- Protect space for flexible, proportional and risk-based approach to product design and content decisions and to application of inference
- Balance user inference/verification with privacy & data minimization
- Add other protections that would contribute to greater flexibility for signed-out

3 Incorporate a holistic approach to kids rights, including on content personalization

- Recognition of a broad range of children's rights in addition to the right to be protected, including rights to access to information, freedom of expression, and right to participate in society.
- Space to personalize content based on compelling benefits for minors (like YouTube Watch-History enabled personalization)

4 Guard against content and intermediary liability, unreasonable compliance/enforcement

- Avoid provisions that interfere or make us liable for content decisions, such as "legal but harmful" definitions, duty of care, general monitoring, liability for content policy enforcement
- Reasonable compliance / Data Protection Impact Assessment provisions
- Avoid broad private right of action

Slide 17 Notes

State by State vs Federal -- assuming state, biz risk
Nuance with signed out

US PRIVACY & KIDS CAMPAIGN

Our campaign approach

1 Build allies and educate

Engage allies to help balance conversation, differentiate ourselves from other Social Media companies; demonstrate our strong record of keeping kids safe online.

2 Shape state/federal laws

Bring expert insight and offer alternative policy solutions that help lawmakers meet their goal of protecting kids and families.

3 Scale campaign tactics to contain the worst bills

Generate local pressure by building grasstops and 3P capacity in key states, amplifying 3P concerns and driving affirmative messaging.

Slide 18 Notes

- **Near-term collateral of our K+F protection narrative, especially on our baseline protections**, tailored for use when engaging on regulation in H1.

K&F Campaign efforts

Kids and Family, YouTube Reputation and Policy Campaign marketing teams are working in close alignment with GAPP teams to drive KOF engagement and awareness on how Google and YouTube help keep kids safe.

TACTIC	STRATEGIC IMPERATIVE	TIMING
Collateral for KOFs (explainers, 2 pagers, product stories)	Educate KOFs	Ongoing
Online Safety Roadshow at schools in target states	Educate KOFs & build allies	April - May, option for Q3/Q4 expansion
State-level research on kids privacy sentiment and responsibility (KOF, parents and consumers)	Inform campaign strategy	March - May
Develop Google/YouTube branded state-level paid media plan and creative	Educate KOFs, build allies & reduce reputational exposure	March - May

Appendix 2

Details on Child & Age Unknown Protections

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What are the child harms we are trying to address?

REDACTED - PRIV

In signed out, even before inference, we have a set of baseline protections and more limited product experience

Additional protections in EEA

Content Harms: Restrict age in-appropriate content

-  Blurring of explicit media
-  Age-restricted YT content blocked
-  Play download gated by sign-in
-  Ads categories restricted until adult inference

Contact & Conduct Harms: Safeguard from bad actors & actions

-  Uploads, livestream & commenting gated by sign-in
-  Location sharing gated by sign-in
-  Comms (e.g. meet, chat, gMail) gated by sign-in

Data processing: Protect privacy & limit personalization

-  Location history off
-  Signed out state limits collection & storage for organic & ads p13n
-  Ads personalization period limited (i.e. max 2 week unless adult inference)

Financial harms

-  Purchases on Payments platforms gated by sign-in

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Comparison of child protections with age unknown baseline protections

		<AOC (Signed in, Global)	TEENS (Signed in, Global, EEA only)	SIGNED OUT BASELINE PROTECTIONS (Global, EEA only)	SIGNED IN BASELINE PROTECTIONS (Global, EEA preference)
1. Bad actors	YouTube uploads / livestreams	OFF	Most Private most private settings by default	Gated on sign in	
	Location sharing	Controlled by parents only share with parents	Limited to 24hr	Gated on sign in	
	Comms products	Access controlled by parents		Gated on sign in	
	Payments	Blocked		Gated on sign in	
2. Content	SafeSearch	ON By default (parent can change)	ON By default (can change)		
	Search reduce explicit media exposure e.g., blurring [2023]	ON	ON	ON	ON
	Ads filter out mature content	ON Child Policy	ON Teen Policy	ON Trenchcoat	ON Trenchcoat
	YT filter out MA+ content	ON	ON	Age restricted content gated on sign in	ON blocked until inferred / verified
	Play App Restrictions	Restricted to Teens Parents can change	Blocks mature content downloads	Downloads gated on sign-in	ON blocked until inferred / verified
3. Data collection	Search p13n	Controlled by parents	OFF By default		
	Ads p13n	OFF	OFF	Collection & storage more limited in signed out Limited by 2 week grace period	OFF blocked until inferred / verified
	Location history	OFF	OFF	OFF	OFF
4. Controls	Parent Consent/Supervision	Required			

EEA

Ads content policies

Proposed
restricted
categories

Could also include
elements from here

Policy Category	Adult Treatment	Trenchcoat	Proposed Teen	Kids
Policy violations (e.g. Tobacco, Counterfeit...)				
Porn, Adult, Gambling and Alcohol		Condensed for Illustration		
Speculative Financial Products; Restricted Drug Terms; Shocking Content				
Cosmetic procedures/weight loss/tanning				
Casino Games; Sweepstakes		Condensed for Illustration		
Pharmaceuticals/ supplements				
Piercing/Tattoos				
Reproductive & Sexual Health or Sexual Aids & Tips/Adult Products				
Spying/Arrest Records				
Virtual Worlds & chats with strangers; Live Streaming		Condensed for Illustration		
Fireworks, Spray Paints & Glass Etching Tools				

Slide 24 Notes

Note: Proposed Teen policy

There will likely be use cases for age unknown (e.g. signed out) requiring appropriate protections

Signed out usage



35%

Signed out queries



20%

Signed out watch time

Signed out CUJs

- **Using multiple identities on the same device**
(e.g. shared device)
- **Anonymous experience**
(e.g. browse for personal sensitive content)
- **Avoid sharing data with 3rd parties**
(e.g. public wifi, sharing data with a website, or government entity)

When we don't know age we should provide a floor of protections that balances the adult user experience with the highest risk protections in case it is a child

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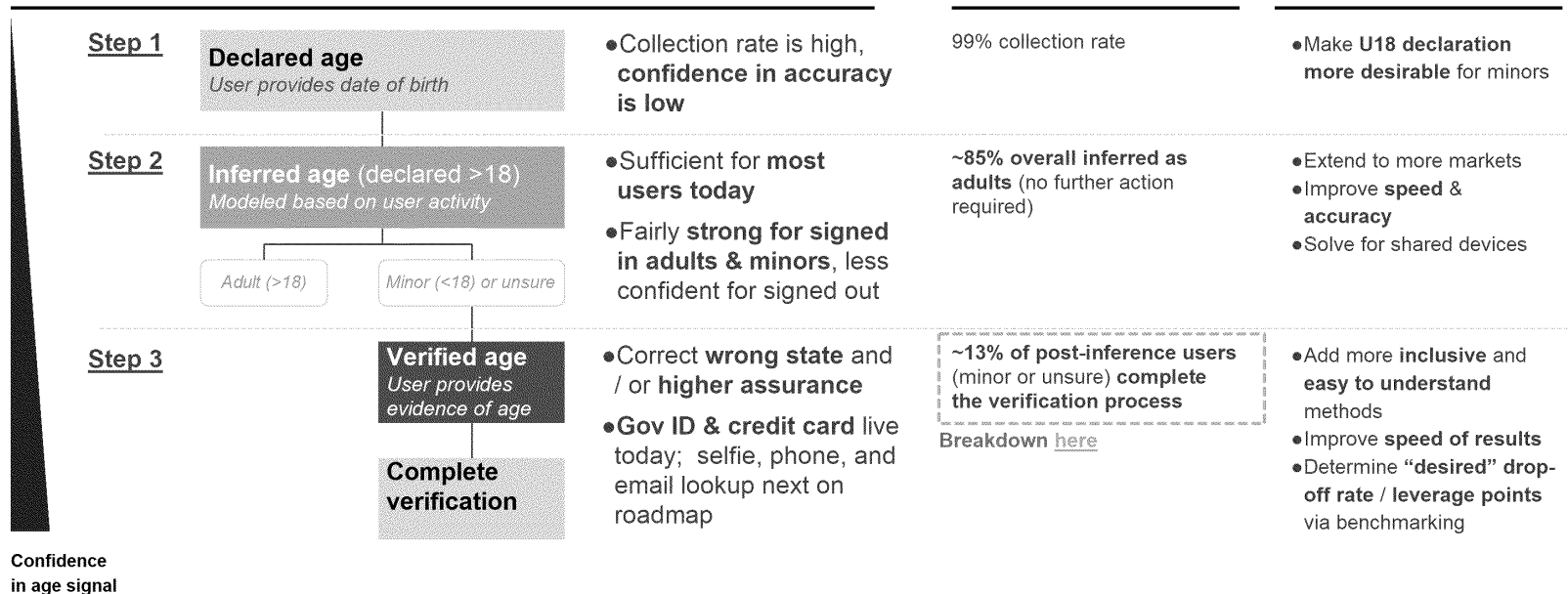
Appendix 3

Identity strategy: signed in age understanding

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Most of our accounts rely on declared age. In regulated markets, we have introduced an inference model and a few verification flows

Process for signed in accounts in regulated markets up to 3 steps



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Slide 27 Notes

KATE

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Slide 27 Notes (Continued)

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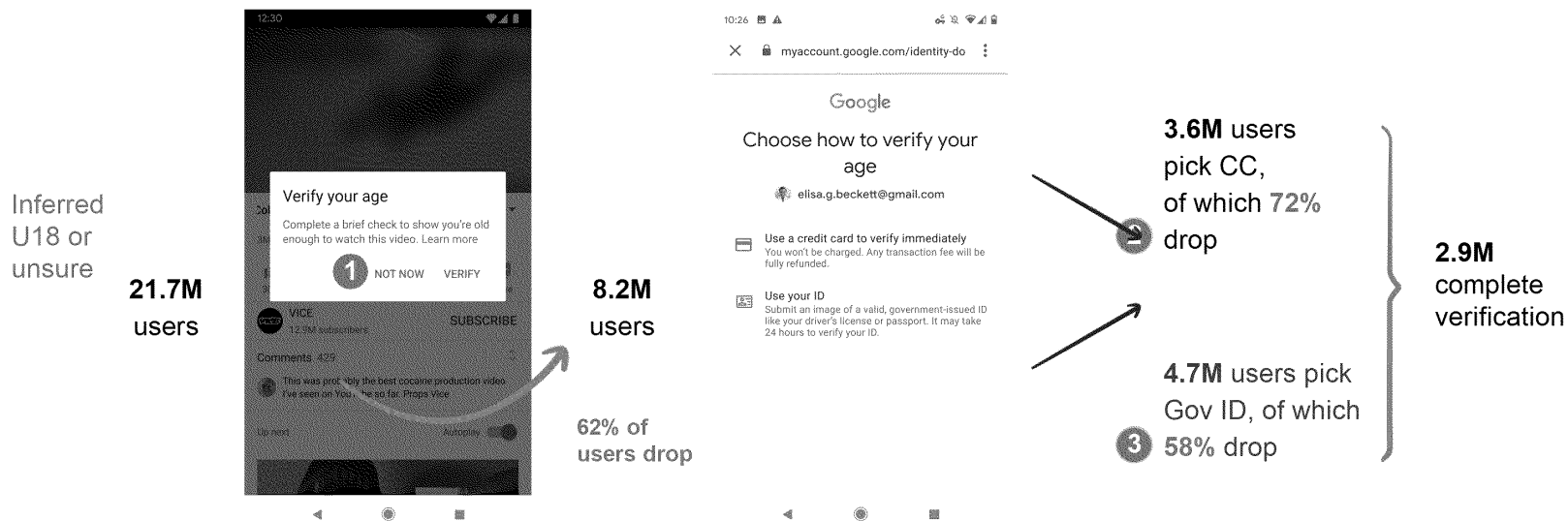
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- **Politically speaking, there is no significant difference between an immediate rollout compared to an announcement that there would be a phased rollout taking place over 12-18 months**

Only ~13% of post-inference users (minor or unsure) complete the verification process

Step 3

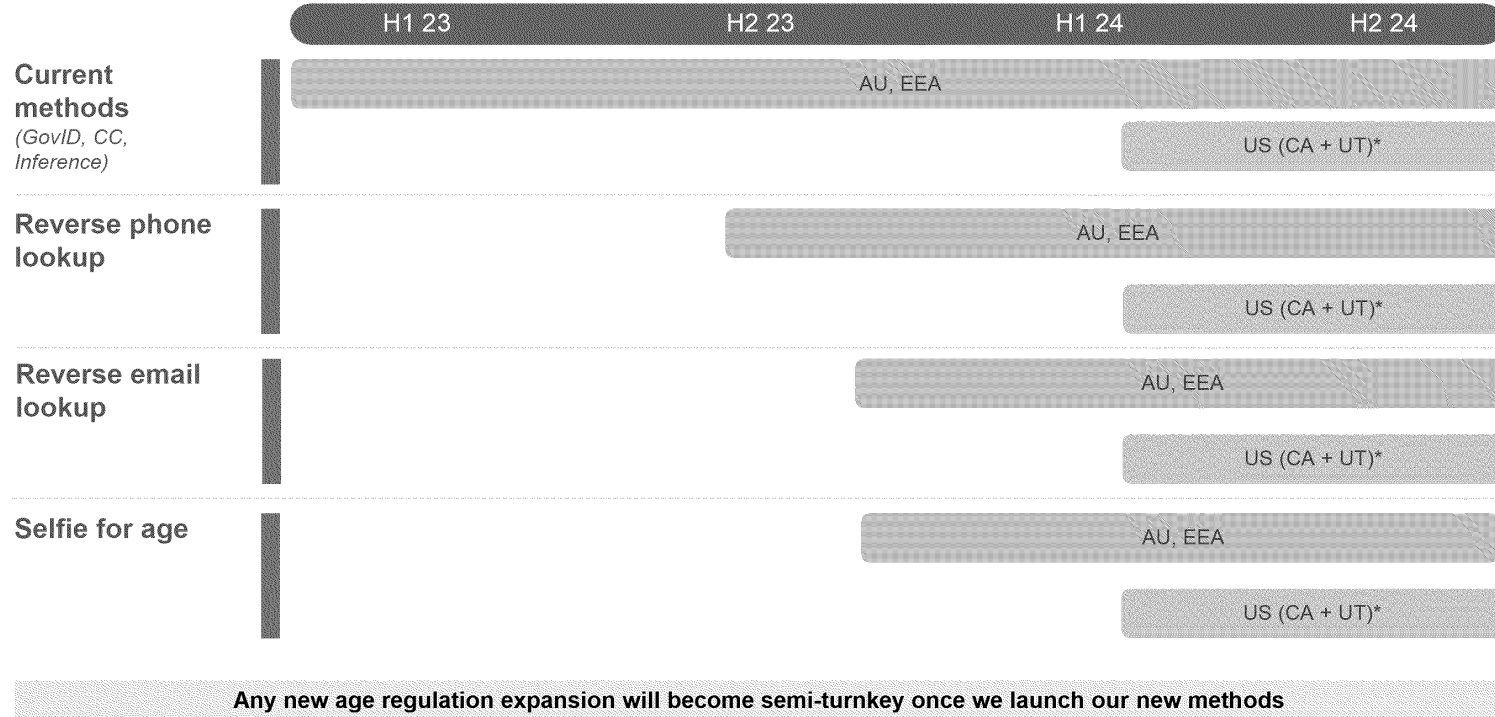
Verified age -User provides evidence of age

Verified



Note: 2022 YTD data (dashboard 1 & 2)

3 new verification methods will begin launching in 2H'23



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Note: *Pending GV regionalization decision

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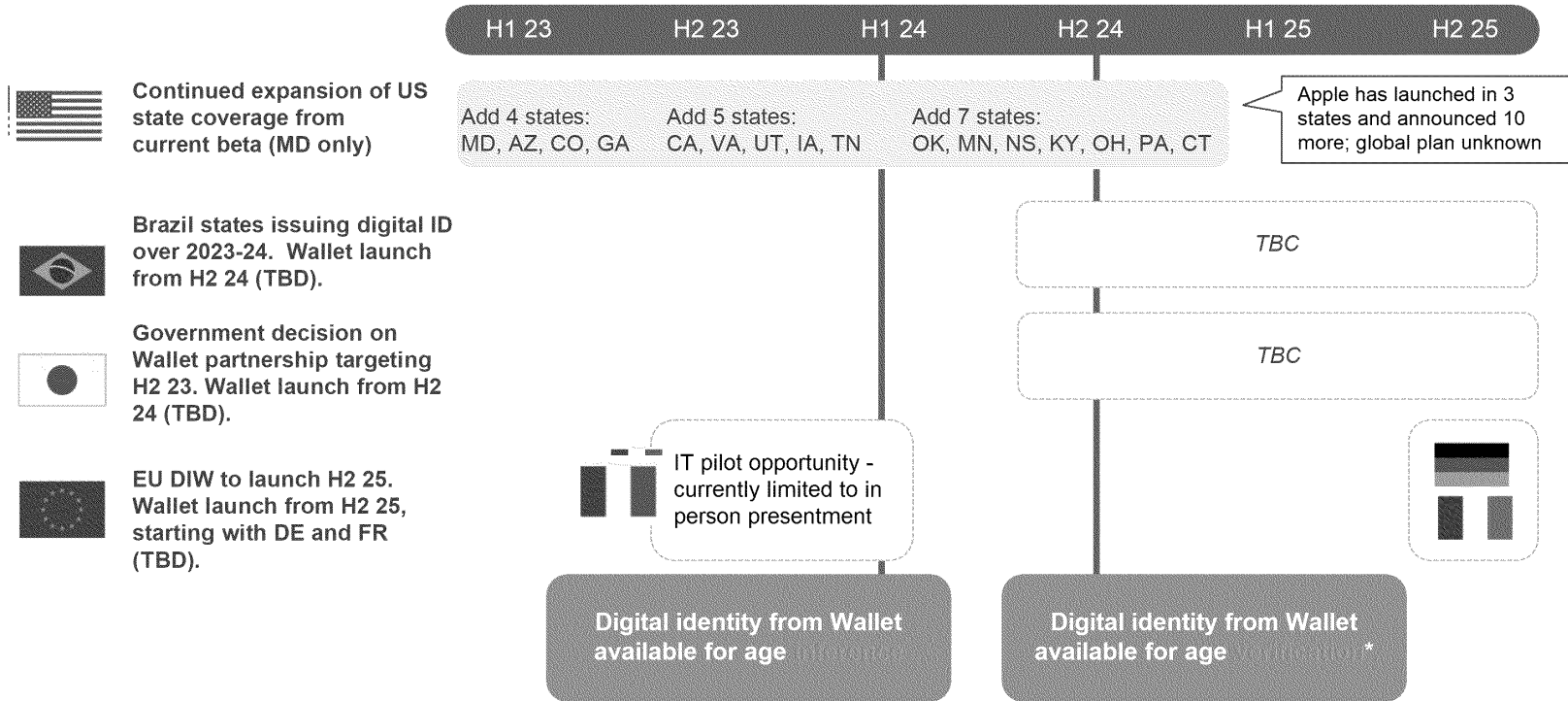
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Prioritizing options with broad inclusivity and less friction

		Portfolio inclusion		Verification method evaluation (to meet user & Google needs)					
	Verification methods	Roadmap status	Rationale if not currently planned	Inclusive	Ease of Use	User Privacy	Fast	Precise	Versatile
				User	Ease in using the	Use of personal	Speed	Data	Suitability for
				age	the	data	suits	privacy	sign out
Age verification methods	Digital identity credential (e.g., mobile driver's license)	'24+	Limited availability	Low	High	High	High	High	High
	Gov ID (e.g., photo of physical ID card)	Live	-	High	Low	Low	High	High	Low
	Credit cards & financial institutions	Live (Planned phase out)	-	Low	High	Low	High	High	Low
	Phone lookup	'23	-	High	High	High	High	High	Low
	Email lookup	'23	-	High	High	Low	High	High	Low
	Other public / private lookups (e.g., credit agencies)	TBD	Begin with phone & email first	Low	-	High	High	High	High
	Platform signals (e.g., Apple, Microsoft)	TBD	Limited maturity	High	High	High	High	High	Low
Age estimation methods	Social based verification (e.g., parent / friend verifies acct.)	Not planned	Low efficacy	High	High	High	High	High	High
	Facial analysis (e.g. selfie)	'23	-	High	-	High	High	High	-
	Other biometric analysis (e.g., voice)	TBD	Limited maturity	High	High	High	High	High	High
	Inference model (algorithmic / ML profiling)	Live (Planned improvements)	-	-	-	-	-	-	-

High Medium Low

Slow adoption of digital identity credentials globally



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* Roadmap placeholder - Resources common across all RegReady verification use cases, so exact timeline TBD

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Verification methods, use cases and scope vary widely across industry

	Verification methods	Meta	Google	TikTok	Apple	Twitter	Microsoft	Roblox	Amazon*	Notes
Age verification methods	Digital identity credential (e.g., mobile driver's license)	-	-	-	✓	-	-	-	-	-
	Gov ID (e.g., photo of physical ID card)	✓	✓	✓	✓	✓	✓	✓	-	-
	Credit cards & financial institutions	✓	✓	-	✓	✓	✓	-	-	Wide adoption but facing regulatory scrutiny (e.g., FR)
	Phone lookup	-	(23)	-	-	-	-	-	-	Precedent exists in the UK and FR with other tech cos (e.g., Pornhub FR)
	Email lookup	-	(23)	-	-	-	-	-	-	
	Other public / private lookups (e.g., credit agencies)	✓	-	-	-	-	-	✓	-	Meta & Roblox allow for a wider variety of IDs (e.g., student IDs, refugee card)
Age estimation methods	Platform signals (e.g., Apple, Microsoft)	-	-	-	-	-	✓	-	-	MSFT has had <u>mixed results</u> with Verifiable Credentials
	Social based verification (e.g., parent / friend verifies acct.)	✗	-	?	-	-	-	-	-	Meta trialed, but <u>rolled back</u> "adult / peer confirmation" and social graphs
	Facial analysis (e.g. selfie)	✓	(23)	-	-	-	-	-	-	Regulator endorsed method that is gaining traction across the industry
	Other biometric analysis (e.g., voice)	-	-	-	-	-	-	-	-	-
	Inference model (algorithmic / ML profiling)	✓	✓	✓	-	?	-	-	-	-

Note: * Amazon has age verification for kids based products, however less focus on AADC compliance for recommendations

✓ Live ✗ Live, but rolled back ? based on unconfirmed discussions

Addressing signed out introduces a number of challenges

Difficult to implement age verification for signed out

Signed out user may **intend to be anonymous**

Few / no reliably persistent identifiers to link an age signal, even if they were to verify age

Recommended approach

Apply **policy limitations** (“baseline protections”) to the signed out state rather than broad reaching age signals, to **honor user intent**

Alternative options - in **regions where we are required to verify age** for signed out users:

1. **Investing in the inference model**, though model is not expected to reach signed in levels of efficacy
2. **Use video selfie** or other non-identifying verification methods and attempt to tie that verification to a persistent identifier like the device
3. Work with the industry to **share signals** in cases where a user has verified elsewhere

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Slide 33 Notes

Category

Risk

Details

Additional talking points:

Product

- Other platforms
 - Need to ensure our platforms remain easily accessible and users are not overwhelmed by blocking and privacy invasive age interstitials while also protecting children, otherwise user may opt out for an easier to use alternative
- Signed out is inherently difficult
 - Users in a signed out state are often signaling a desire for anonymity
 - Both inference and verification methods are challenging in that state

Government / regulatory

•

•

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REDACTED - PRIV

Internal

- xPA coordination

Slide 33 Notes (Continued)

- Tight alignment required across 4-5 PAs to make progress
- Recent events have slowed progress as all PAs regroup

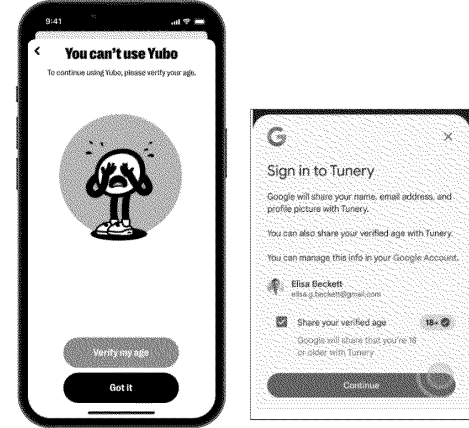
Regulatory requirements for age verification could drive bad user experiences with 3P apps

We want to make age assurance safe and easy on our platforms

Our Vision	• Users: “Verify once, use everywhere” • Developers: “Simple age assurance through standards-based APIs”
‘23 initiatives	• <u>Federated identity</u>: age via Sign in with Google (1.35B 28DA, 60K large 3Ps) ◦ EOY goal: 5 pilot partners • <u>Android</u>: age from mDL in Google wallet via mdoc API (ISO standard) ◦ EOY goal: availability in Android U for users in 8 states • <u>Explorations</u>: (a) Chrome mdoc APIs (b) solutions with stronger privacy protections
Risks	• <u>Coverage</u>: Digital identity credentials (e.g., mDL) will take years to reach critical mass and only a fraction of Google Accounts have verified age today ◦ Mitigation: explore on-demand verification flows (+potential 1P use cases) • <u>Acceptance</u>: Direction of market not yet clear despite signals from users and developers of interest in Google-provided solutions ◦ Mitigation: Continue developer & user research

Concept mock

Users shouldn’t verify repeatedly



We want to prevent this...

...by offering something like this

Blocking age interstitials may become pervasive, creating user experience and privacy risks. We need to be ready with easy, privacy friendly solutions for our developers.

Slide 34 Notes

Yubo is a French social app that is popular with users under 25. Last year they began age verifying all users with a blocking interstitial.

We face a number risks, both internal and external



User

Ensure our solutions remain accessible / easy to use on **our platforms** (*avoid overuse of blocking age interstitials*)

Balancing **privacy expectations**, especially in signed out state



Regulatory

REDACTED - PRIV



xPA

Age assurance strategy & roadmap requires **alignment across 4-5 PAs** in order to make progress

Recent events have **slowed progress** as PAs work to regroup, particularly with a **loss of BD and PCounsel support**

Slide 35 Notes

Category

Risk

Details

Additional talking points:

Product

- Other platforms
 - Need to ensure our platforms remain easily accessible and users are not overwhelmed by blocking and privacy invasive age interstitials while also protecting children, otherwise user may opt out for an easier to use alternative
- Signed out is inherently difficult
 - Users in a signed out state are often signaling a desire for anonymity
 - Both inference and verification methods are challenging in that state

Government / regulatory

- - **REDACTED - PRIV**
 -

Internal

- xPA coordination

Slide 35 Notes (Continued)

- Tight alignment required across 4-5 PAs to make progress
- Recent events have slowed progress as all PAs regroup

Appendix 4

Inference Model

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Inference model overview

- Originally created for YMCA, and subsequently used for AADC, we developed an inference model that is built from user data from multiple sources that when considered together predicts whether a user is likely above or below the age of 18.
- The model utilizes information that a user has stored w/their account to determine whether the activity patterns are suggestive of minor or adult user behavior.
- The information is controlled by setting like YouTube History, Web and App Activity (WAA) which includes search activities, maps, shopping, travel, and also includes Play store activities.
- We've recently added Assistant and Chrome data as well
- For signed out users, the above information (with the exception of Play Store activity) is collected through the use of cookies.

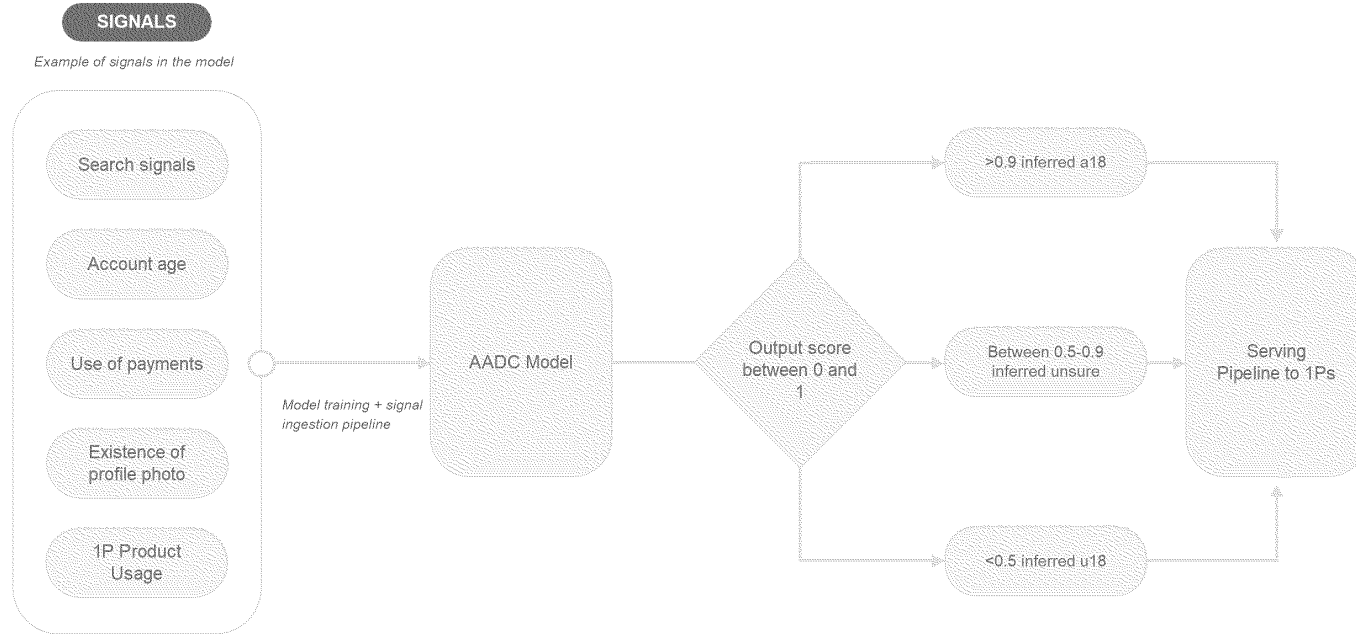
Only when a user has these settings on will data be collected and used for age assurance

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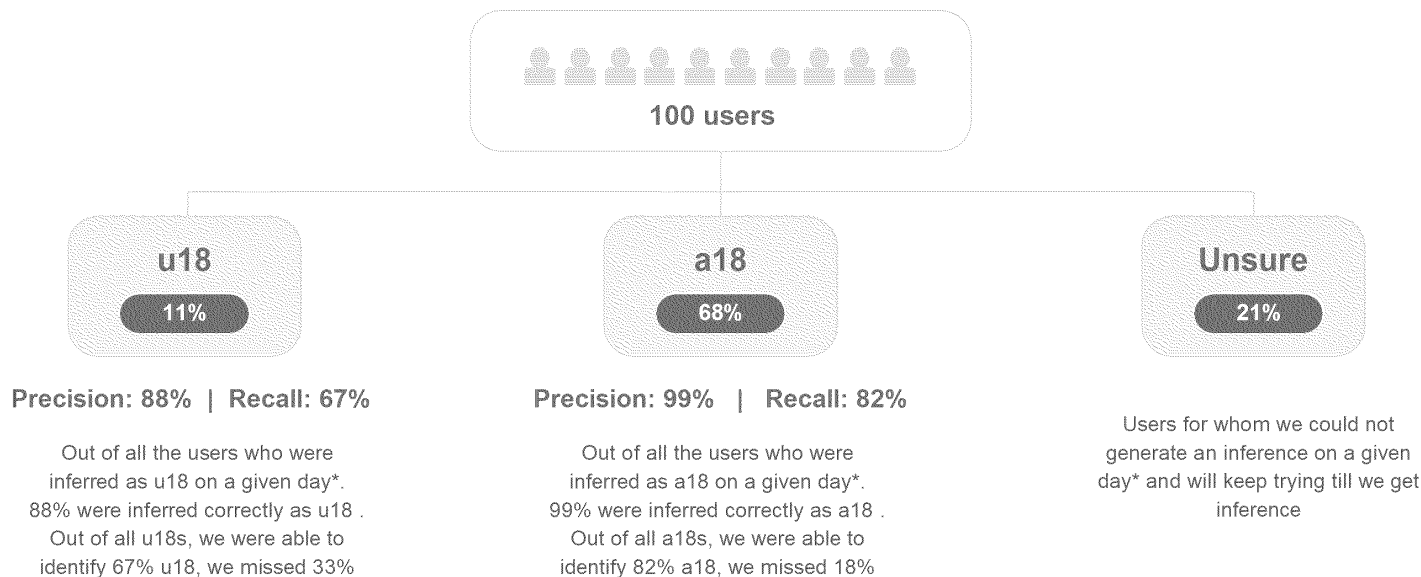
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How does the model work?



Exception for DMA: since the purpose of the model is for compliance, we can use the range of signals.

Understanding Daily Precision and Recall



**Daily inference takes into account activity from over the last ~30 days. Signed in model performance measured by comparing against users with verified age or high quality self-declared users (unicorn and panel users)*

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Appendix 5

Additional options explored

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CALIFORNIA ONLY OPTIONS

OPTION 1

Inference signed in

Signed in:
Inference model

Signed out:
Raise baseline protections
e.g., vice+ ads

Layer on Option 2 if required for compliance

- + Protects anonymity of signed out
- + Lower ecosystem impact
- Regulatory risk of ads p13n for age unknown
- Reputational risk of CA only
- Adult & ecosystem impact from vice ads prohi'b

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OPTION 2

Inference signed in & signed out

Signed in:
Inference model

Signed out:
Baseline protections +
Inference model

- + Lower regulatory risk and consistent with EEA
- + Lower ecosystem impact
- Model performance & user expectation of anonymity
- Sets precedent for signed out inference
- Reputational risk of CA only

US WIDE OPTIONS

OPTION 3

Inference signed in

Signed in:
Inference model

Signed out:
Raise baseline protections
e.g., vice+ ads

Layer on SO Inference where required

- + Could support common standard in regs
- + Protects anonymity of signed out
- Risk from performing inference without requirement
- Higher ecosystem impact incl. from indefinite vice ads prohi'b
- Expect some state-by-state variation regardless

OPTION 4

Inference signed in & signed out

Signed in:
Inference model

Signed out:
Baseline protections +
Inference model

- + Could support common standard in regs
- + Consistent with EEA
- Risk from performing inference without reqm't esp. in signed out
- Higher ecosystem impact
- Expect some state-by-state variation regardless

Options for US roll out approach

OPTION 1

State-by-state, starting with CA

Layer on signed out inference if required for compliance

- + Time for more clarity on state regulations & product preparations
- + Unambiguous state of maintaining legal requirements only
- Lower ecosystem impact
- Reputational risk of CA only
- Operational overhead of multiple rollouts

Preferred option for:

YouTube

Play

Ads

OPTION 1A

Start with CA with national (or global) rollout plan

Commitment to rollout over time starting with CA July '24

- + Improve reputation & advocacy position on kids
- + Phased impact
- Operational overhead of multiple rollouts
- Expect some state-by-state variation regardless

Alternative for discussion

OPTION 3*

Roll out nationally

Layer on signed out inference or other requirements where needed

- + Improve reputation & advocacy position on kids
- + Expect to be required in time
- Higher ecosystem impact including from indefinite vice ads prohibition
- Expect some state-by-state variation

Preferred option for:

Search

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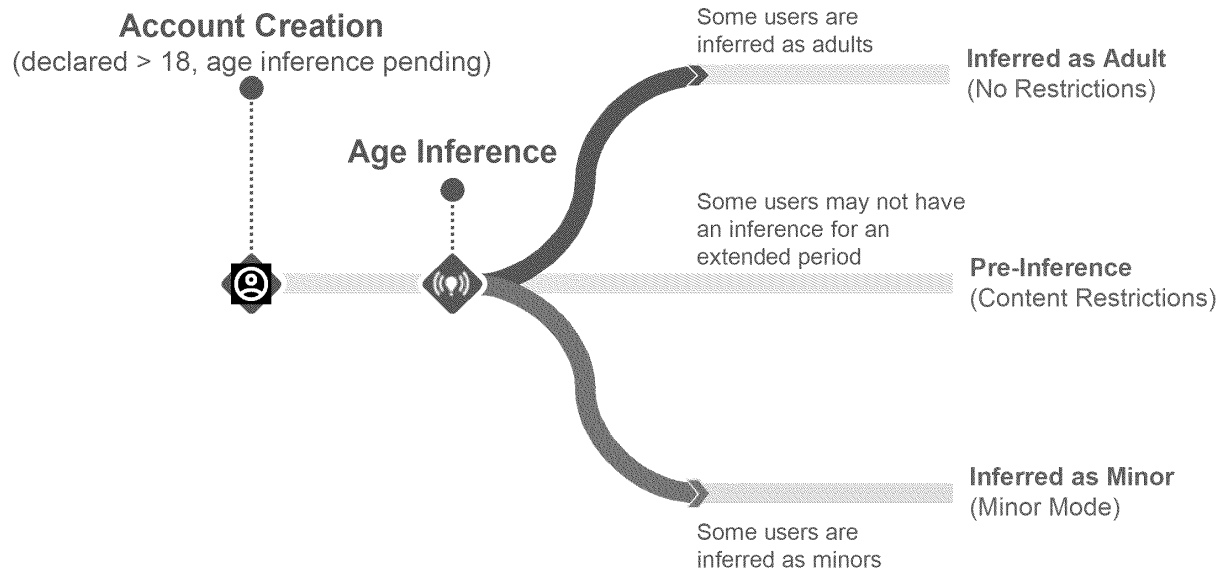
*Numbered to maintain consistency with options previously reviewed here

Impact analysis

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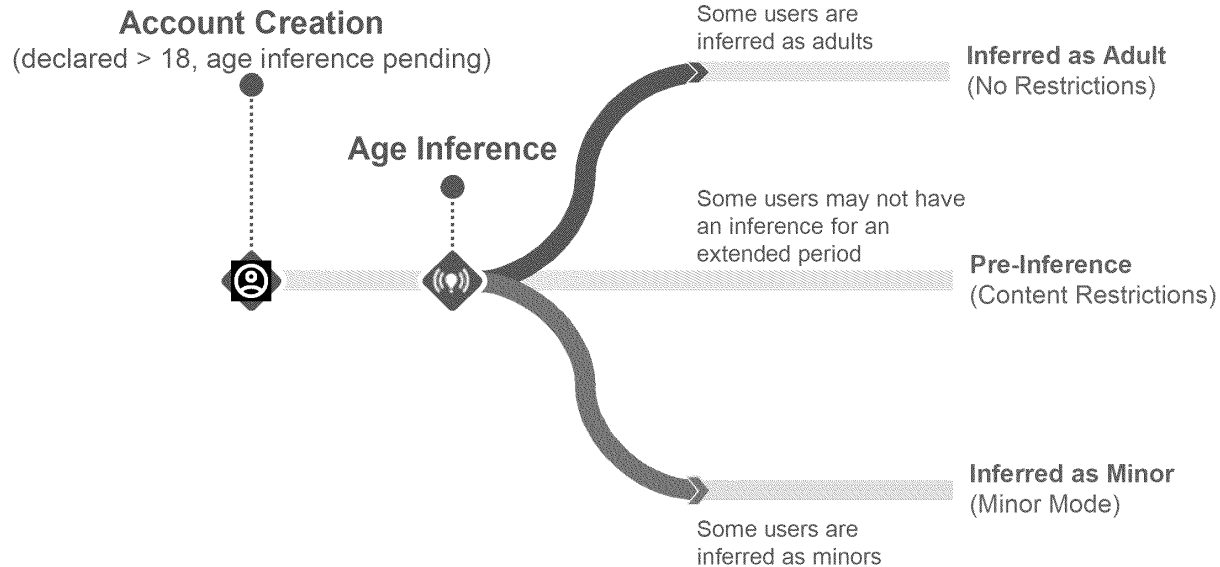
How does age inference work today?



Slide 43 Notes

- Upon creation, accounts that self-declare > 18 are treated as adults for most purposes
- Mature content on YT and Play require an adult inference or verification
- There is no time limit for how long a user can have an unknown age inference
- The more activity an account generates, the faster it will get an inference

How does age inference work today?



Slide 44 Notes

- Upon creation, accounts that self-declare > 18 are treated as adults for most purposes
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