AMENDED

Exhibit 772

PLAINTIFFS' OMNIBUS OPPOSITION TO DEFENDANTS' MOTIONS FOR SUMMARY JUDGMENT

2019 Strategy Offsite Two Pagers

CONFIDENTIAL

go/ytstrategybook-2019

EXHIBIT
9
YOUTUBE-KIM 3/11/25

SEARCH & DISCOVERY

S&D Engagement, Satisfaction, Responsibility

S&D's three-legged stool: Engagement v. Satisfaction v. Responsibility

Summary of S&D's top-level priorities. S&D cares about more than just Engagement.

Background

S&D does not care only about Engagement (YTT and DAU). For many years, the S&D team has prioritized additional objectives alongside Engagement: our ranking algorithms incorporate valued watch time; we demote Clickbait+ and Racy content; and we have been investing heavily in fighting misinformation/harmful content in the past year.

This 1-pager provides a summary of S&D's philosophy. What immediately follows this 1-pager are two 2-pagers diving into the areas of Satisfaction and Responsibility, respectively.

S&D's three objectives: Engagement, Satisfaction, and Responsibility

	Description	**Example projects**
Engagement	*Quantity* of consumption. Engagement focuses on driving greater consumption of videos. *Key metrics: increase WT, YTT, DAU, DAV*	The typical S&D YTT-driving project launches
Satisfaction	*Quality* of consumption. Not all WT is equally valuable to our viewers, and not all users like the same videos. Satisfaction aims to measure an individual user's satisfaction with a video and tries to increase satisfaction by recommending videos that are likely to yield high satisfaction from that user. [redacted]	[redacted]
Responsibility	[redacted]	[redacted]

The Satisfaction 2-pager deep dives into the evolution of and refinements to S&D's philosophy in driving personalized user satisfaction. The Responsibility 2-pager deep dives into specifically Responsibility to Users/Society. While not covered in 2-pager deep dives, we intend to further invest into Responsibility to Brand projects as well -- Racy (especially i18n) and egregious forms of Clickbait.

Responsibility to Users/Society: Operationalizing Responsible Growth

[redacted] John Hebda, [redacted]

What are the next steps in our responsible growth efforts? How do we make sure that our focus on "extremely low quality" (XLQ) content as a metric is globalized and we have set goals to reduce it throughout 2019? How do we operationalize this metric and work to reduce it? Additionally, how do we ensure progress across the three pillars of combating misinformation and low quality content? What should the goals for each pillar be?

Problem statement

While the broad S&D's Responsibility area has been an active project area for a few years (Clickbait, Racy), the efforts focused specifically on Responsibility *to Users/Society* are relatively new. First initiated to deal with misinformation/"fake news" in 2017, this area has evolved to more comprehensively cover the following pillars:

REDUCE EXTRA LOW QUALITY CONTENT	PROMOTE AUTHORITATIVE CONTENT	PROVIDE CONTEXT TO USERS
Do not recommend content potentially harmful to user & society But don't hinder high-intent users	For information verticals with clear sources of authority, promote authoritative content	Equip users with helpful content – even if they explicitly choose to consume potentially harmful content

We have made rapid and encouraging progress in this area. In 2017, we struggled to manually respond to misinformation during real-world crises; today, our protections will automatically trigger in over 20 markets for breaking news. We can also now measure "extremely low quality"[1] (XLQ) content: ~1% of WT in en-US is considered XLQ. Though not a huge fraction, it represents 10M+ hours/day globally.

This paper highlights select, key strategic initiatives in this area of Responsibility to Users/Society; it is not an exhaustive overview of our 2019 OKRs.

Proposed solution

1) Reducing consumption of XLQ content

- Improve the XLQ metric - In order to understand our ability to reduce XLQ WT, the metric needs to be more robust. We will focus on decreasing noise in the metric (smarter sampling) and may need to invest in increasing the rater pool to reduce latency in collecting data for this metric & classifier training data.
- Drive recommended XLQ WT to zero - Our goal is to never proactively **recommend** XLQ content (Home/WatchNext); however, in keeping with our "Freedom of Expression," we will not hinder **intentful** watches of XLQ content (e.g. high-intent searches, external referred traffic, embed player). On intentful watches, we will expand our Context products (e.g. Information Panel) to provide factual & clarifying context information (see solution #3 below).
- Shape the external narrative: communicate the existence of this program externally and provide high-level transparency on our rater guidelines. As with other existing content policies, we will not publish specific rater templates or share details on individual verdicts.

2) Internationalize the three Responsibility pillars

[1] Extreme Low Quality used to be called Grey content. It refers to non-policy violating content still deemed harmful to users/society.

Scale these initiatives globally in a manner that balances time, cost, and vast cultural differences.

[redacted]

3) Expand authoritativeness and high quality context beyond news

- Expand authoritative sources to cover other content verticals: our Authoritative content pillar currently covers News, where we have identified authoritative news channels. We will start with expanding to also cover the Medical content vertical, after which we will evaluate Science and Financial. For learning specific topics please see the Learning Strategy paper.
- Context: today our context products (e.g. Information Panel) covers limited topic coverage; we plan to dramatically increase the coverage in 2019 across XLQ and sensitive content. We can vastly expand our context through expansions to our product partnerships worldwide leaning on the knowledge graph to start with. From there we should expand to cover a broad range of topics that might be covered in an encyclopedia. We will rely on 3rd-party expert input to identify channels for inclusion into authoritative source hubs for each of those verticals

4) Operational excellence

[redacted]

How will we know we have succeeded in 2019

- Reduce **recommended** XLQ watchtime to zero
- Develop standardized i18n tiering for Responsibility, and expand the three pillars to the next priority locales
- 3x increase in proportion of news and medical watchtime coming from authoritative sources
- 100% of intentful XLQ watchtime has some factual context (i.e. information panels)

Discussion questions:

- Different countries have different cultural norms. Should our Responsibility to Users/Society have standards adjusted to each market? What if such local standards conflict with YouTube's own standards? (Example: women's rights in Saudi Arabia)

[redacted]

- Driving recommended XLQ watchtime to zero would require not enabling protections that exist for other classifiers (e.g. Clickbait), such as for subscribers. Is mitigating the risk of exposure to harmful content worth the tradeoff of potential user and creator frustration this invites?
- Many teams across YouTube, both within Search & Discovery and beyond, are increasingly reliant on human raters for building classifiers and evaluating quality. Should YouTube develop a shared pool for all teams to leverage?

Supporting & Accelerating Strategic Initiatives

[redacted]

As YouTube grows, we have the opportunity to grow revenue while making sure that our user experience remains high quality. How should we think about increasing the amount of ad inventory on the platform without sacrificing user experience? This includes support for new formats (eg, not just video but display). For example, could shorter form video (eg, stories) allow for more ads? What about longer feeds?

Problem Statement and Background

YouTube has delivered strong revenue growth without sacrificing the user experience through thoughtful integration of display ads to complement our core in-stream ads business. However, Facebook and Instagram have been able to scale up monetization faster than YouTube. There's evidence that much of this difference is due to the feed-based consumption model of those platforms. Feed-based consumption scales well for ads because it's low friction (users can simply scroll past), fits well with DR ads (which are less budget constrained than brand ads), and allows for more ad slots which, when done right, can feel native to the experience. Facebook and Instagram also have a simpler ads model, with less brand safety considerations, fewer revenue share constraints, and easier conversion attribution. Within that context, we should consider which aspects of the feed model can help accelerate YouTube's revenue growth.

When thinking about this problem, there are a few things to keep in mind:

- Home and Watch Next are by far the biggest feeds on the platform, generating more than 75% (46% Watch Next, 30% Home) of feed content impressions on mobile. The next largest "feed" is Search, with 11% of impressions.
- Direct Response ads are our fastest growing, least budget constrained business. DR ads should be a focus and the DR Ads paper highlights how we will grow demand and evolve our formats and quality. We recently launched video ads throughout the home feed and will launch more demand into these slots over the next 2 quarters.
- Watch Next and comments compete directly for user attention in their current, adjacent configuration on mobile. This produces a zero-sum trade-off for user attention. We've historically viewed watch time & Community as similarly important priorities, which has constrained Watch Next to only 16 videos.
- Inline Playback in the Home feed experiments were metrics negative when they focused on shifting watch time to the feed (in 2015). Our current approach, which is metrics positive, provides a preview experience designed to bring users to the watch page, with an emerging secondary use case of watching videos with captions "on the go".

Proposed Solutions

We approached this problem from two angles, focusing on mobile platforms: 1) consider the opportunity presented by the existing feeds in Main App and second 2) consider ideas for new feeds. We arrived at the following strategy:

- **Existing feeds**: Focus on a large, untapped opportunity to improve the user experience and monetization of Watch Next. For Home, we plan to stay the course: continue to optimize for getting people to initiate long video watching sessions, while also continuing to optimize the emerging Inline Muted use case and introducing more non-video content with Posts. We will invest significantly in monetizing both of these feeds with display and inline muted video ads.

- **New feeds**: We recommend focusing on Swipey Watch which creates a new long-form "feed" that fits naturally within the YouTube experience, along with focusing on Stories for short-form video. The Swipey feed will not create new inventory, but it enables us to increase fill rates by including display interstitials which fit naturally into this experience. We evaluated the possibility of developing a new "snacky" (in-feed consumption, more scrolling) feed in 2019. We believe the investment to build a compelling new feed would be high with low odds of success; plus, this would distract focus from our core use case (infrequent, long sessions). That said, we see an option to set up a separate, exploratory project team to build this new type of feed, which we'll explain below.

1) Existing Feeds

Watch Next *(Currently $950M ARR)*

Watch Next is the most important set of videos on YouTube, generating 50% of sitewide watch time, and it represents a major untapped opportunity. Today it has only one ad slot, has bare bones front-end eng resourcing, and has the potential to generate a better user experience by becoming more "feed like"/ "browsey" (e.g., today, we restrict Watch Next to 16 videos on mobile in order to maintain Comments engagement directly underneath).

In 2019, we'd like to focus on this opportunity, investing in the following changes:

- **Dedicated team:** Run this as an empowered, focused, end-to-end team with dedicated ads, front-end and ranking SWEs
- **New comments UX:** Move comments into its own module with a separate, prominent entrypoint below the player. Build select high-quality comments into the feed (note: high back-end eng cost)
- **Infinite feed:** Infinitely extend Watch Next so that it becomes an endless discovery feed for new content
- **More ads:** Interleaving and ranking ads throughout the endless feed could generate 47% more ad slots on watch, with minimal anticipated adverse impact on the UX (adding more display ads has historically generated no adverse user reaction)
- **More visual organic and ads content with inline actions**: Experiment with larger video thumbnails and Posts so that larger image and video ads feel native. Explore lightweight inline actions such as survey questions and carousel image ads that enable users to engage inline.
- **Commercial intent**: Experiment with ideas to promote content with higher commercial intent, which also has higher monetization potential. Ideas include new browse modules that promote shopping, how-to, review content personalized to the user based on their interests or tasks in progress, and algorithmic changes to bias towards higher RPM content

Home *(Currently $100M ARR, targeting $600M ARR by end of 2019)*

We recommend sticking with our existing principles and focus for Home.

We know from past efforts (e.g., in-feed playback in 2015) that getting people to the watch page is key to engagement and revenue, so we'll continue to do that. In terms of scroll depth, Home is already a deep feed, with plenty of scrolling--62% of impressions and about 45% of clicks are past position 10. We know that both organic and ads CTRs decline significantly lower in the feed, but that ads CTR improves relative to organic CTR. This suggests there's a large opportunity to continue existing work to rank ads throughout the Home feed, but CTRs will not be in the ballpark of Facebook without a shift in user engagement.

We should also lean into the opportunity presented by Inlined Muted Playback, which introduces a new "on the go" use case. We'll create more variations on muted inline video ads for driving direct response, and intersperse visual display ads throughout the feed (more details in DR Ads YT Strat paper).

2) New Feeds

Swipey Direct Response Ads

Traditionally, we've been able to only show in-stream video ads as pre-rolls on the watch page. Swipey Watch transforms this by turning every watch session into a new horizontally scrolling feed of content (horizontal and vertical videos). This enables us to add full screen interstitial display ads between existing watch pages in Swipey (in addition to the video ads we will continue to show there). By yield managing across these sources of demand (either through a common auction or fallback/backfill), we expect to increase fill rate, advertiser diversity and incremental revenue (at potentially lower blended CPMs). In the short term, we'll repurpose existing display demand for these new full-screen interstitials; longer term, we can create new formats tailored to this experience.

New Consumption Feeds

A big idea we considered would be to create a new consumption feed, optimized to unlock "on the go" usage, maximize time spent engaging with the feed, and integrate native ads (like Instagram). This would likely be based around un-mutable inline video playback and feature shorter content, including Posts and Stories. There could be a separate entry point to this feed; it could be integrated into Home, Watch Next, or Explore; or it could be surfaced selectively based on user signals. The feed could optimize for revenue potential at the expense of some dip in overall watch time or DAVs.

There is a strong argument not to pursue building such a feed at this time:
1. Investment would be high
2. It's likely a relatively small opportunity (30M to 100M people visiting 10 times per day)
3. Multiple experiments have shown that shorter videos lead to shorter sessions rather than more views, limiting the opportunity to create more ad inventory. In the current experience, the end of each short video creates an opportunity for a user to abandon their session
4. Compounding #3 is that we know from measurement that longer sessions generate increased DAU. This is because longer sessions represent more engaged and satisfied users, who then come back more often. We also know that an increase in DAU is highly leveraged for revenue (more so than watch time). A short form feed would first have to overcome this deficit before it could generate a net gain in revenue
5. Visit frequency on FB and IG are driven by friends graphs, where there's a strong incentive not to miss out on a post. It's harder for our creator/interest graph to drive this kind of behavior. Instead, usage data shows that YouTube benefits from a "primetime" effect, similar to TV
6. Driving more frequent daily usage is not well aligned with our efforts to improve digital wellbeing

This would be a difficult problem to solve, with low odds of success. However, the revenue opportunity could be large ($200M to $875M[2]), justifying a calculated bet. If we were to make this bet, we recommend trying a fresh approach: create a new, full-stack, XFN, joint Ads/organic team with a mission to invent a feed-based consumption experience that is compelling for users, with increased revenue (due to time spent in the feed, scroll depth, and ads engagement).

If we choose not to build a new feed, we should instead focus on leaning into Stories, in which we're making a strong, strategic investment. Stories could create a new revenue stream in 2020 and beyond.

Measuring Success

Our goal is to increase revenue by increasing ad inventory with minimal adverse impact to organic metrics and no significant adverse user reaction. We are also open to trading off small decreases in organic metrics (e.g., less than 2% YTT, 1% DAV) for substantial revenue. We will measure:

- **Increased DR ad inventory**
  - Watch Next: targeting 47% increase[3] in Watch Next daily ad queries, beyond organic growth rates
- **Increased revenue**
  - Watch Next: targeting incremental $330M-$615M[4] by end of 2019 beyond momentum forecast, given a 47% inventory increase, lower CTRs at lower feed positions, and improved performance with richer formats and more engagement
  - Swipey Display ads: targeting up to $300M[5] incremental revenue by end of 2019
- **Organic impact**
  - Reduction in watch time and DAVs attributable to incremental ad slots/load

[redacted]

Discussion Questions

1. Do you agree with the approach of focusing on Watch Next, including moving comments to a separate area, and aggressively exploring ideas to boost browsing and monetization?
2. Is it worth making a calculated bet to build a new "snackable" feed? Or, should we keep our focus on the other opportunities outlined in the paper, including Stories?

APPENDIX

[redacted]

A reimagined Watch Next feed. This would include:

- Infinite scroll
- Comment teaser entrypoint to separate comments module
- Browsey modules - including some with higher commercial intent
- Ads interleaved throughout the feed

[redacted]

Diversity in the feed can lead to more engagement

Integrating more browsy elements like Posts may capture users' interest further down in the feed and lead to more engagement - including with ads. Similarly, a heterogeneous feed leads to more opportunities for relevant ads to blend in with organic content.

Swipey Direct Response Ads

Swipey DR ads can appear in between videos when the user swipes, autoplays, or paddles to the next video. Because they are between the video they need not disturb the existing pre-roll ads experience.

Cumulative distribution of clicks vs position in the Home feed

[redacted]

Ad CTR relative to organic CTR vs feed position

[redacted]

Digital Well-Being

Brian Marquardt, [redacted] Contributors: [redacted] Reid Watson

Problem Statement and Background

In 2017, excessive screen time and "tech addiction" became a major topic of concern. France recently banned cell phones from school for children < age 15 and China's rising cases of childhood myopia have led to plans to restrict gaming. These concerns have led to growing expectations for major tech companies to take more responsibility. Google prioritized wellbeing as a top OKR and looks to YouTube (one of the world's most popular apps) for leadership in supporting wellbeing. Being a leader enhances our brand, reduces business risk, and creates a more sustainable path for growth.

The American Heart Association recently published a position paper based on 185 peer-reviewed studies asserting that screen time > 2 hours / day dramatically increases rates of obesity and cardiometabolic effects among adolescents. There are also growing concerns that excessive screen time is stunting physical, emotional, and social development of teens. A recent Pew Research study reported: the average U.S. teen spends > 6 hours / day on a screen; 54% report spending too much time on their phones; the % of teens who said they are online "almost constantly" has doubled to 45% since 2015; YouTube is the most widely used internet platform by US teens (who watch[6] an average of 1 hour 22 min / day). We developed a Vision & roadmap for wellbeing, focused on 3 concern areas, impacting users 13-24 disproportionately:

- *Habitual heavy use:* ~10% (32MM) of 13-24 year olds on YouTube habitually[7] watch > 2 hours / day (excluding music).[8] ~13% (36MM) of 18-24 year olds reported "I regret how long I stayed on YouTube" in the past week.

- *Late night use:* ~7% of teens on YT watch past midnight on school nights. Teen "night owls" were 88% more likely to have emotional & behavioral problems (article, study). 30% of users 18-24 say YouTube has cut into sleep.

- *Unintentional use:* Among users 18-24 years old, 23% report "losing track of time on YouTube,"[9] 20% report "procrastinating on YouTube," and 20% report YouTube "interfered with work, school, or homework."

Strategy & Principles

1. *Empower control, never assume control*
   We want to empower users to achieve their goals. We won't ever assume control (e.g., proactively turn off YouTube) and users should be able to opt in & out of features. We aim to give insight & support, not nag or judge.

2. *Youth first*
   We believe we should focus our efforts on Teens & Young adults, who are in a crucial stage of mental, emotional and social development and are more vulnerable to wellbeing challenges. In addition to focusing our research and product development on this group, we want to target this group with proactive messaging and intros to opt-in tools. Finally, we want to give parents much stronger controls for their teens (via YouTube and / or Family Link).

3. *Disincentivize growth that doesn't support wellbeing*
   We propose developing a methodology to avoid incentivizing growth that detracts from users' wellbeing, e.g., we could adjust top-level watch time goals to exclude Heavy Use, Late night use, and/or Unintentional use.

Proposed Solutions

YouTube launched some successful and needed quick wins[10] at I/O. While these efforts garnered positive press, they are mobile-phone-only MVPs, they haven't been iterated on, and they're only a first step in addressing Habitual Heavy Use, Late Night Use, and Unintentional Use. We propose 4 major efforts in 2019.

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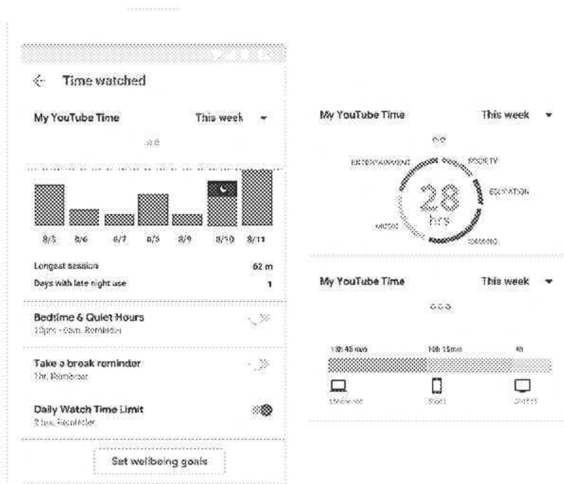
[6] For the purposes of this 2 pager, "Watch" excludes music watch time
[7] Habitual watching defined as >4 days per week / 38M derived from logged in user count 13-24: 318M
[8] We suspect gaming may be a big driver. ~29.6 Million users (of all ages) watch gaming related content > 182 hours per month (on average 6 hrs / day)
[9] Currently we only have survey data for users > 18 years old. go/wellbeingdash Future surveys will assess amount of regret
[10] Take a Break reminder, Time Watched Profile & notification controls. As of September 37MM users viewed Time Watched Profile across Android & iOS, 6.7MM users enabled Take a break reminders

1. Habitual Heavy Use Build on Time Watched Profile & Take a Break Reminder to help users better manage use.

Richer data to enable deeper insight

- Intra-day use details
- Number of times the app has been opened
- Late night use
- Time spent on different content types
- Time across devices (phone, desktop, tablet)

"This would be a wake-up call. Eye-opening. I rarely go into settings so it's good if YouTube could show it to me."



Contextual alerts to encourage positive behaviors

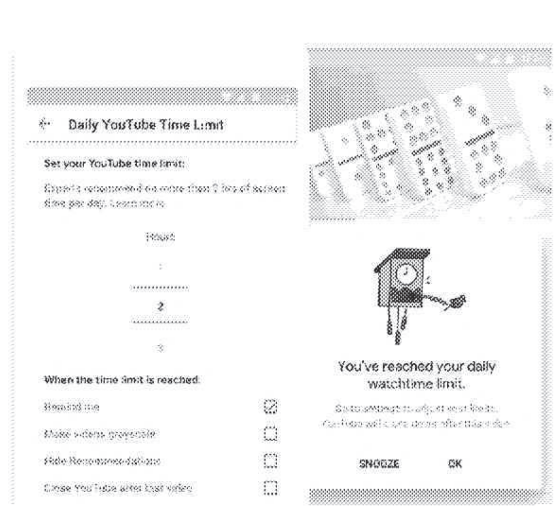
- Targeted towards users with habitual heavy use or after periods of heavy use.
- Expert recommendations / education incorporated into messaging, as well as links to controls.
- Could be delivered next-day to catch users at a more neutral state to reflect on their usage. Tone would range from neutral to positive / encouraging and never be negative or judgy.

"I like how it's a friend suggesting, hey you should probably not do this thing, instead of telling you don't do this thing."

Daily limits to help users maintain control

- Users can opt-in to set daily limits for YouTube (coordinated with Android & iOS level controls).
- Possible actions: reminders, app gray-scaling, hidden recs, app shutdown (with snooze button). Could be bespoke to YT and incorporate our brand & tone.
- In the future, limits could be set by a parent for teens via a managed account (YouTube or Family Link).

"Giving people options is the most important thing. Knowing that you're in control of the app. Because it's YOUR app."

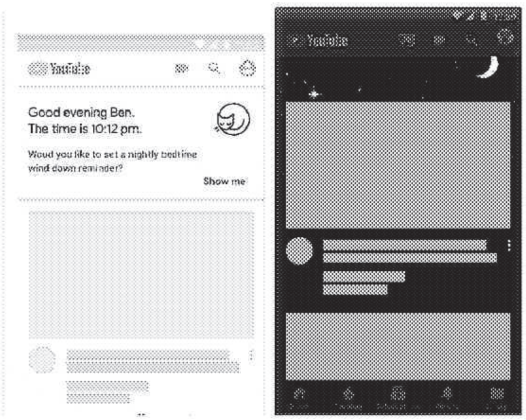


2. Late Night Use Build on our recently launched notification controls to more fully support and protect sleep.

Night Time Nudges

- A Night theme (could be similar to Dark theme) consisting of grey/dark colors & measurable reduction in blue light (enhancing melatonin production).
- Night theme could be turned on automatically by default around sundown (~7pm) for all users.
- Users who show a pattern of late night watch (eg. past 10pm >4 days/ week) could be alerted of time and offered a link to the bedtime settings (see below).

"This (dark theme) makes you second-guess yourself. But it doesn't make you feel like you're an addict."



Bedtime settings

- Users can opt-in to set a desired bedtime for YouTube use.
- Possible actions include reminders, gray-scaling of the app, hidden recommendations, notification silencing, and app shutdown (with snooze option).
- Another action could be a transition into spotlighted audio content on YouTube that supports deep sleep.

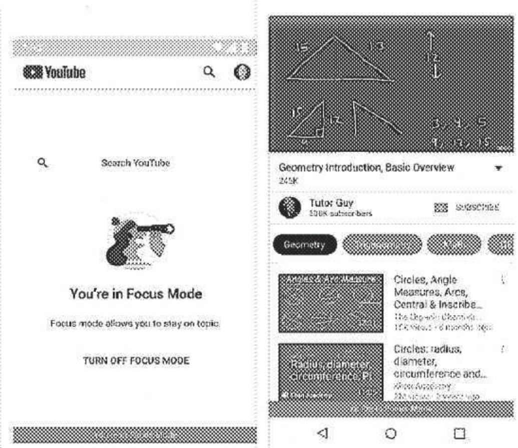
"It's like it's telling me 'Hey, you don't need to stay up another hour, watching videos you don't even really want to watch.'

3. Unintentional Use Help users (especially students) maintain focus on their original intention of use.

Focus Mode

- A mode users can turn on to stay focused on a topic (eg. teens & young adults doing homework).
- Focus Mode keeps recommendations focused on the topic user is searching/watching and offers topic chips to help refine recommendations further.
- This mode could be defaulted ON for certain kinds of use cases (educational content, background music).

"If I had had this, I probably could have stayed on YouTube instead of switching to Khan Academy. With this, you'd really have to go out of your way to get sidetracked."



Wellbeing Tiger Team Bring greater focus, efficacy, and velocity to our wellbeing efforts.

We believe YouTube needs a small dedicated, cross-functional Tiger Team (diversified group of experts brought together for a single project) consisting of PM, UX Design, UX Research, Data Science, Engineering (front & backend), and Marketing. This team is needed to:

- Develop and execute product roadmap
- Drive deeper understanding of platform behavior, measurement efforts (including long-term efficacy)
- Lead/coordinate wellbeing initiatives with other Google PAs
- Research (internal, external) new areas such as parental controls, emerging markets, gaming, spending, VR
- Drive programmatic efforts (creator advocacy, marketing, internal education)

Benefits of a Tiger Team: (a) Bandwidth to accomplishing the above will not happen without dedicated resources; (b) Singular focus freeing the team from conflicting growth goals and enabling them to provide strong internal advocacy around wellbeing. (c) An opportunity for YouTube to pilot a new model that may improve product execution & velocity.

Measuring Success

For 2019, we want to achieve 3 goals:

- Increase awareness of wellbeing tools from 12%[11] to 50% among core YouTube users
- Increase usage of wellbeing tools from 7MM[12] to 50MM+ users
- Establish baseline for wellbeing tool effectiveness (based on user surveys) and begin driving measurable improvement

In addition, our goal for 2019 is to define unwanted watch time (Heavy Use and/or Late Night Use) and disincentivize growth of this type of watch time. We recommend quickly (by end of year) implementing a simple, principled, actionable approach such as excluding watch time > 4 hours/day (4.4% of watch time) from topline goals.

Discussion Questions

- Are we comfortable setting an internal and/or external guideline for recommended daily YouTube use? If yes, should we actively work to reduce usage outside of those limits?
- Should we adopt a simple approach such as excluding watch time > 4 hours/day (4.4% of watch time) from topline goals to disincentivize (avoid rewarding) teams from growing watch time that we don't think supports wellbeing?
- How much of a growth trade-off are we willing to make to improve wellbeing?
- Do we think a Tiger Team model will be successful?

[11] Based on Google Consumer Survey
[12] Estimate based on Take a Break Reminder usage