



Testimony of Maggie Stanphill
Director of User Experience, Google
Senate Committee on Commerce, Science, and Transportation
Subcommittee on Communications, Technology, Innovation, and the Internet
Hearing on “Optimizing for Engagement: Understanding the Use of Persuasive Technology
on Internet Platforms”
June 25, 2019

I. INTRODUCTION

Chairman Thune, Ranking Member Schatz, Members of the Committee: Thank you for inviting me to testify today on Google’s efforts to improve the digital wellbeing of our users. I appreciate the opportunity to outline our programs and discuss our research in this space.

My name is Maggie Stanphill. I am a User Experience Director at Google, and I lead our global Digital Wellbeing Initiative.¹ Google’s Digital Wellbeing Initiative is a top company goal, focused on providing our users with insights about their digital habits and tools to support an intentional relationship with technology.

At Google, our goal has always been to create products that improve the lives of the people who use them. We’re constantly inspired by the ways people use technology to pursue knowledge, explore their passions and the world around them, or simply make their everyday lives a little easier. We’ve heard from many of our users — all over the world — that technology is a key contributor to their sense of wellbeing. It connects them to those they care about and it provides information and resources that build their sense of safety and security. This access has democratized information and provided services for billions of people around the world. In many markets, smartphones are the main connection to the digital world and new opportunities, such as education and work. For most people, their interaction with technology is positive and they are able to make healthy choices about screen time and overall use.

But for some people, as technology becomes increasingly prevalent in our day-to-day lives, it can distract from the things that matter most. We believe technology should play a helpful, useful role in all people’s lives, and we’re committed to helping everyone strike a balance that feels right for them. This is why last year, as a result of extensive research and investigation, we introduced our Digital Wellbeing Initiative: a set of principles that resulted in tools and features to help people find their own sense of balance. Many experts recommend self-awareness and reflection as an essential step in creating a balance with technology. With that in mind, at Google’s 2018 I/O Developers Conference, our CEO Sundar Pichai first announced several new features across Android, Family Link, YouTube, and Gmail to help people better understand their tech usage, focus on what matters most, disconnect when needed, and create healthy habits for their families. These tools help people gain awareness of time online, disconnect for sleep, and manage their tech habits.

¹ <https://wellbeing.google>

In 2019, we applied what we learned from users and experts. We know that one size doesn't fit all and behavior change is individual. Some people respond more readily to extrinsic motivation (like setting their app timer) and others to intrinsic motivations (based on personal goals like spending more time with family). With this ongoing and evolving approach to supporting our users' digital wellbeing, I'd like to go into more depth about key products and tools we have developed for our users.

II. ANDROID

The latest version of our mobile operating system, **Android**, added key capabilities to help users achieve the balance with technology they are looking for, with a focus on raising awareness of tech usage and providing controls to help them interact with their devices the way they want.

- First, since we know that people are motivated when they can reflect on tangible behaviors they want to change, we have a **dashboard** that provides information all in one place. This shows how much time they spend time on their devices, including time spent in apps, how many times they've unlocked their phone, and how many notifications they've received.
- With **app timers**, people can set time limits on specific apps. It nudges them when they are close to their limit, and then will gray out the app icon to help remind them of their goal. We have seen that app timers help people stick to their goals 90% of the time.
- Android's **Do Not Disturb function** is one way we address the impact that notifications have on the cycle of obligation we found in user research. Do Not Disturb silences the phone calls and texts as well as the visual interruptions that pop up on users' screens. And to make it even easier to use, we created a new gesture. If this feature is turned on, when people turn over their phone on the table, it automatically enters Do Not Disturb mode so they can focus on being present.
- Because there is extensive research that indicates the importance of sleep on people's overall wellbeing, we developed **Wind Down**. This function gets people and their phones ready for bed by establishing a routine that includes their phone going to into Night Light mode to reduce blue light and Grayscale to remove color and the attendant temptation to scroll. Since introducing this function, we have seen Wind Down lead to a 27% drop in nightly usage for those who use it.
- Finally, at Google's 2019 I/O Developer Conference, we introduced a new setting called "**focus mode**." This works like Wind Down but can be used in other contexts. For example, if you're at university and you need to focus on a research assignment, you can set "focus mode" to pause the apps and notifications you find distracting.

III. YOUTUBE

Individuals use YouTube differently. Some of us use it to learn new things, while others use it when they need a laugh or to stay in touch with their favorite creators. Whatever their use case, we want to help everyone better understand their tech usage, disconnect when needed, and create healthy habits. That's why YouTube launched a series of updates to help users develop their own sense of digital wellbeing.

- **Time watched profile:** This profile in the main account menu gives users a better understanding of how much they watch. It lets users see how long they have watched YouTube videos today, yesterday, and over the past seven days.

- **Take a break reminder:** Users can opt-in to set a reminder that appears during long watch sessions. They receive a reminder to take a break after the amount of time they specified. We have served 1 billion reminders since the inception of the feature.
- **Scheduled Digest for Notifications:** This feature allows users to combine all of the daily push notifications they receive from the YouTube app into a single combined notification. Users set a specific time to receive their scheduled digest and from then on, they receive only one notification per day.
- **Disable notification sounds and vibrations:** This feature ensures that notifications from the YouTube app are sent silently to your phone during a specified time period each day. By default, all sounds and vibrations will be disabled between 10pm and 8am, but you can enable/disable the feature and customize the start and end times from your Settings.

In addition to our efforts to help improve users' awareness of their usage of the YouTube platform, we have also listened to feedback about the YouTube recommendations system. We understand that the system has been of particular interest to the Committee. We recognize we have a responsibility, not just in the content we decide to leave up or remove from our platform, but for what we choose to recommend to people. Recommendations are a popular and useful tool in the vast majority of situations, and help users discover new artists and creators and surface content to users that they might find interesting or relevant to watch next. YouTube is a vast library of content, and search alone is an insufficient mechanism to find content that might be relevant to you. YouTube works by surfacing recommendations for content that is similar to the content you have selected or is popular on the site, in the same way other online services recommend related TV shows, and this works well for the majority of users on YouTube when watching music or entertainment.

Over the past year, we've made a number of improvements to these recommendations, including raising up content from authoritative sources when people are coming to YouTube for news, as well as reducing recommendations of content that comes close to violating our policies or spreads harmful misinformation. Thanks to this change, the number of views this type of content gets from recommendations has dropped by over 50% in the U.S.

IV. FAMILY LINK AND YOUTUBE KIDS

We believe the bar on digital wellbeing should be even higher when it comes to children. This is why we launched the Family Link app in 2017 to help parents stay in the loop as their child explores on their Android device. For Android Q, we have gone a step further and are making Family Link part of every device. When parents set up their child's device with Family Link, we'll automatically connect the child's device to the parent's device to supervise. We'll let parents set daily screen-time limits, set a device bedtime, and remotely lock their child's device when it's time to take a break. Family Link also allows parents to approve actions before their kids can download any app or make any purchases in apps, and after download they can see their child's app activity and block an app any time. These features will be available later this summer with the consumer launch of Android Q.

Similarly, YouTube Kids was designed with the goal of ensuring parents have control over the content their children watch. YouTube Kids uses a mix of filters, user feedback, and moderators to keep the videos in YouTube Kids family friendly. There are also built-in timers for length of use, no public comments, and easy ways to block or flag content. In Parent Approved Mode, parents can take full control over what their children watch by hand selecting the content that appears in the app.

V. OTHER EFFORTS

Wellbeing tools are also available on a range of other Google products and services. Using the Google Assistant, you can now voice-activate Do Not Disturb mode — silencing all notifications and communications — and the Bedtime Routine. On Google Wifi, parents can pause connectivity on one or all of their kids' devices simultaneously, or help them wind down by scheduling a time-out. While on Google Home you can also easily schedule breaks from one or all of the devices your family uses. Gmail now has the option to allow only high priority notifications and a snooze function to let you put off notifications until later.

User education: Beyond making tools available to help our users improve their digital wellbeing, we're also committed to helping through user education. We believe it's important to equip kids to make smart decisions online. That's why we're continuing to work with educators around the world on our "Be Internet Awesome" program. This is a Google-designed approach that teaches kids to be safer explorers of the digital world. The 5-part curriculum also teaches kids to be secure, kind, and mindful while online. We have committed to reach five million kids with this program in the coming year.

Industry outreach: Similarly, we are also thinking through our role in the broader internet ecosystem and trying to find ways to help users find the content they're looking for quickly without extensive device usage. One major change we have made in this space can be found in our efforts to reduce the use of interstitials. Pages that show intrusive interstitials provide a poorer experience for users than other pages where content is immediately accessible. This can be problematic on mobile devices where screens are often smaller. To improve the mobile search experience, pages where content is not easily accessible to a user on the transition from the mobile search results may not rank as highly. Some examples of techniques that make content less accessible to a user can include showing a popup that covers the main content, either immediately after the user navigates to a page from the search results or while they are looking through the page.

Research & strategy: We're also actively conducting our own research and exploring partnerships with independent researchers and experts to build a better understanding of the many personal impacts of digital technology. We believe this knowledge can help shape new solutions and ultimately drive the entire technology industry toward creating products that support digital wellbeing.

From research in the US in March 2019,² we know:

1. **One in three people** (33%) in the US have **made or attempted to make changes in how they use technology** in order to address negative effects they've experienced.
2. **Taking action DOES help: 80+%** of users who took an action found the action to be helpful.

To make sure we are evolving this strategy, in 2018 we conducted research with more than 90,000 people globally, and we have launched a longitudinal study to better understand the effectiveness of our digital wellbeing tools in helping people achieve greater balance in their tech use. These findings will help us optimize our current offerings while inspiring brand new tools. We are also exploring new ways to understand people's overall satisfaction with our product experiences. Through emphasizing user

² <https://www.blog.google/outreach-initiatives/digital-wellbeing/find-your-balance-new-digital-wellbeing-tools/>

goals (rather than solely measuring engagement and time spent on our platforms), we can deliver more helpful experiences that also support people’s digital wellbeing.

Partnerships: To bolster our digital wellbeing efforts for kids, one key partner we work with is the Family Online Safety Institute (FOSI), an international, nonprofit organization that works to make the online world safer for kids. FOSI convenes leaders in industry, government, and nonprofit sectors to collaborate and innovate new solutions and policies in the field of online safety. Through research, resources, events, and special projects, FOSI promotes a culture of responsibility online and encourages a sense of digital citizenship for all.

We also support the bipartisan and bicameral Children and Media Research Advancement (CAMRA) Act, which proposes to authorize the National Institutes of Health to research technology’s and media’s effects on infants, children, and adolescents in core areas of cognitive, physical, and socio-emotional development.

Wellbeing.google: Finally, you can find more of our tools, as well as expert recommendations, at wellbeing.google.com.

VI. CONCLUSION

We believe this is just the beginning of our work in this space. As technology becomes more integrated into people’s daily lives, we have a responsibility to ensure that our products support their digital wellbeing. We are committed to investing more, optimizing our products, and focusing on quality experiences.

Thank you for the opportunity to outline our efforts in this space. I’m happy to answer any questions you might have.