Tennessee v. Meta
Case No. 23-1364-IV
PX-02328

Problematic Use Overview

Past Product Investment and Future Opportunities

Compiled by Jennifer Guadagno & Judy [redacted] Well-being Research - October 2020

This document is out of date.

Background

Starting in 2018, there was growing concern in the public (amongst media, academics, policy elites, and everyday users) that technology companies were deliberately manipulating users by designing addictive products that can harm well-being and subvert control, labeling these concerns "Facebook Addiction". Efforts were spun up across Facebook and Instagram to more deeply understand these concerns. Initial products were launched to give people more control over their use, though efforts were defunded end of 2019 with additional opportunities still available.

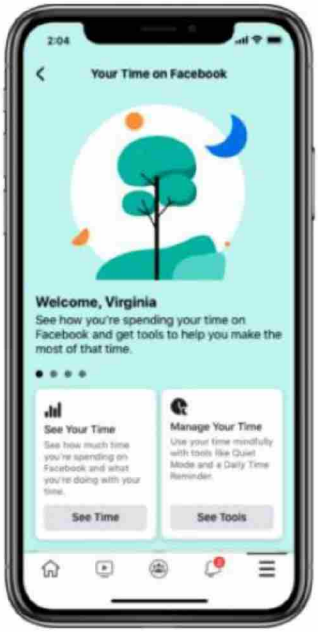
Terminology	- An [HYPERLINK "https://fb.workplace.com/groups/ResearchInsights/permalink/2042922635756341/" \h] shows that claims of "**Facebook Addiction**" are largely inaccurate with respect to clinical definitions. There is insufficient evidence that FB itself could be capable of causing true addiction, though there are processes at play (reward learning and habit formation) that may contribute to issues. - "**Excessive use**" does not completely capture this issue either -- people may be negatively impacted by little use and some people with high/excessive use may find that time very valuable (e.g., using FB for their business or using FB because they are isolated or home-bound and it's their only form of connection). - We internally aligned on "**Problematic Use**" (PU) as a more accurate term to describe habitual or undesired use of Facebook.
Definition	A person is classified as experiencing problematic use through self-reported survey measures. Internally, we define problematic use as experiencing both of the following issues either "very often" or "all the time": ([HYPERLINK "https://dl.acm.org/doi/abs/10.1145/3290605.3300429" \h]) • Lack of control or feelings of guilt over Facebook use. • Negative impact in at least one of the following areas: sleep, parenting, social relationships, or productivity.
Prevalence	12.5% of people worldwide experience problematic use. Rates are higher in countries like the Philippines (25%) and India (24%). ([HYPERLINK "https://fb.workplace.com/notes/anneke-buffone/facebooks-measurement-strategy-for-problematic-use-well-being-survey-first-resul/164034771370608/" \h])
Facebook Behaviors	Those who experience high PU (compared to those low in PU): ([HYPERLINK "https://fb.workplace.com/notes/anneke-buffone/facebooks-measurement-strategy-for-problematic-use-well-being-survey-first-resul/164034771370608/" \h]) - Have more sessions, particularly low engagement sessions - Spend more time on Facebook, particularly at night - Respond to more notifications - Engage in more repetitive behaviors, such as frequent app checks or checking News Feed several times a session - Have more feed inventory coming from Groups and Pages

Impact to Business	- In a [HYPERLINK "https://fb.workplace.com/photo?fbid=153237582450327&set=a.153237359117016" \h], people rated higher PU on FB compared to all other services (Twitter, YouTube, IG, WA, Snapchat, Reddit, World of Warcraft) - People who experience PU are [HYPERLINK "https://fb.workplace.com/notes/anneke-buffone/facebooks-measurement-strategy-for-problematic-use-well-being-survey-first-resul/164034771370608/" \h] more likely to consider deactivation or deletion of FB compared to those who do not experience PU (20% vs 5%). For IG, PU was ranked as one of the [HYPERLINK "https://fb.workplace.com/permalink.php?story_fbid=182089972881958&id=100032428698906" \h] reasons for churn. - [redacted] - There is increasing industry activity in this space. Apple and Google continue to invest, generating a steady series of announcements. ([HYPERLINK [redacted]])

Product Investment

Your Time on Facebook v2 (2019)

Extensive [HYPERLINK "https://[redacted]] informed creation and launch of [HYPERLINK "https://www.internalfb.com/intern/wiki/Your_Time_on_Facebook/Intro/" \h][HYPERLINK "https://www.internalfb.com/intern/wiki/Your_Time_on_Facebook/Intro/" \h] in mid-2019 (see v1 in Appendix). It included a redesign, new features, and centralized controls:



1. "See Your Time"
   - Time spent dashboard with 3 views: overall, day vs night time use, sessions
   - Toggle weekly time spent summary
   - Quick access to "Activity Log"
2. "Manage Your Time"
   - "Quiet Mode": mute notifications for a set time paired with a reminder that the mode is activated when a person accesses FB
   - "Scheduled Quiet Mode": Controls to set recurring quiet hours
   - "Daily Time Reminder": the original feature from *YToF* v1. Alerts a person when they have exceeded a set amount of time on FB
3. "Get More From Your Time"
   - "News Feed Preferences": Options to control who to follow, unfollow, or snooze
   - "Friends on Facebook": Shortcut to People You May know and new friend requests
4. "Control your Notifications"
   - "Notification settings": Change where and when a person receives notifications
   - "Notification dots": Enable or disable notification dots on shortcut icons

Your Activity on Instagram v1 (2018)

When *YToF* v1 launched in 2018, Instagram also developed a time monitoring tool for the app called *Your Activity* (see Appendix). The tool included similar features to set a daily reminder and an option to mute Instagram notifications. Additional development was deprioritized due to iOS rolling out their operating system level time management tool and inaccuracies in time tracking. It still exists on Instagram today although it is unsupported and there have been considerations to unship ([HYPERLINK "https://fb.workplace.com/groups/184250878939438/" \h]).

Impact

Facebook *YToF v1 & v2*

- 70% of respondents to a [HYPERLINK "https://fb.workplace.com/notes/malkeet-[redacted]/moving-the-needle-on-problematic-fb-use-with-your-time-on-facebook-v2/156189899306793/" \h] considered *YToF* v2 'somewhat' to 'extremely' useful for reducing PU issues.
- Over 1M (iOS) users visit *YToF* each day (see [HYPERLINK "https://fburl.com/unidash/v9ocqu5b" \h]). *YToF* v2 will be rolled out to all Android users by the end of 2020.
- People on Facebook appear interested in learning more about controlling their time on Facebook. During the *YToF* v1 launch, click through rates (CTR) of the accompanying QP reached 4.4% (average CTRs for most QPs is between 1-4%). Within the *YTOF* product, CTRs for features reached as high as 54% ([HYPERLINK "https[redacted]

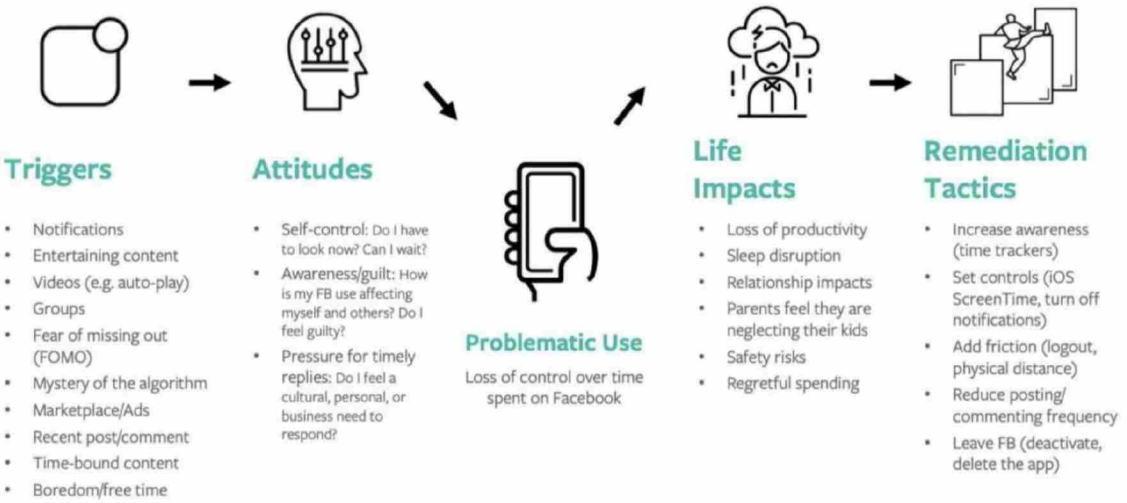
- *YToF* v2 was included in a Facebook [HYPERLINK "https://about.fb.com/news/2020/08/coronavirus/" \h] in April 2020 and was well received. Press coverage includes [HYPERLINK "https://www.adweek.com/digital/facebook-begins-rolling-out-quiet-mode-to-encourage-users-to-take-breaks/" \h], [HYPERLINK "https://fortune.com/2020/04/09/facebook-quiet-mode-debut-coronavirus-covid-19/" \h], and [HYPERLINK "https://venturebeat.com/2020/04/09/facebook-launches-quiet-mode-for-muting-alerts-and-scheduling-downtime/" \h] (see full press [HYPERLINK "https://[redacted]]).

Instagram *Your Activity*

- The number of people who have set a "Daily Time Reminder" has doubled since the product launch in 2018. As of December 2019, 1% Android and 1.8% of iOS users have set a reminder for themselves -- a daily average of 500k and 2.1M users each day, respectively ([HYPERLINK "https://fb.workplace.com/groups/184250878939438/permalink/389725418391982/" \h]).
- Instagram hosted a [HYPERLINK "https://fb.workplace.com/groups/432156973909421/permalink/606168779841572/" \h] in partnership with NGOs in the UK after the release of *Your Activity*. Key stakeholders and leaders in the digital well-being fields recognized Instagram's commitment to well-being.

Future Opportunities

[HYPERLINK "https://fb.alpha.workplace.com/profile.php?id=100013195998758&sk=media_set&set=a.888316751618183&type=3&force_galahad=1" \h] in New York, São Paulo, and Mumbai surfaced triggers and attitudes that contribute to Problematic Use on Facebook and resulting life impacts -- additional or redesigned product work could be considered to address these triggers and life impacts.

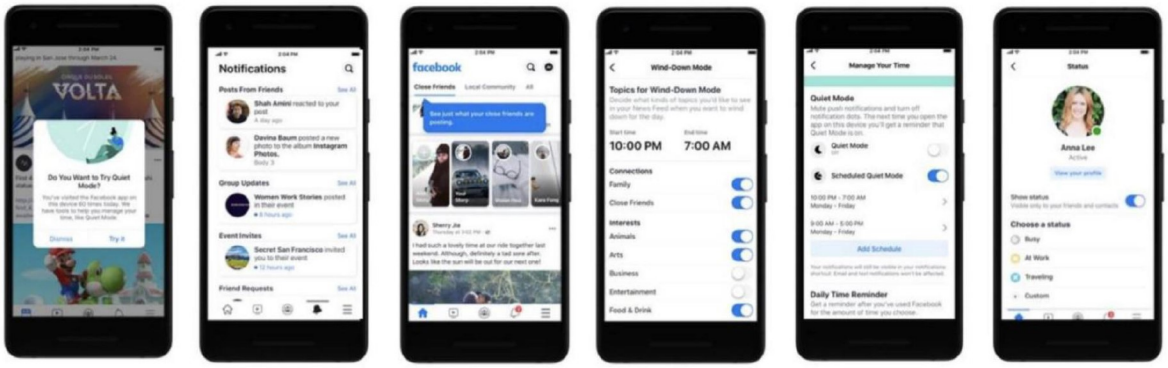


Your Time on Facebook

Future opportunities for new products or redesigning existing products to address triggers and life impacts of PU on Facebook were surfaced through [HYPERLINK "https://fb.alpha.workplace.com/profile.php?id=100013195998758&sk=media_set&set=a.888316751618183&type=3&force_galahad=1" \h] and [HYPERLINK "https://fb.workplace.com/groups/ResearchInsights/permalink/3190445161004077/" \h] research and include:

- Increasing people's awareness of problematic use and how to manage it
- Reducing distractions and increasing the amount of time on Facebook that people feel is productive (eg, allows them to accomplish their goals or connect to their interests)
- Encouraging rest by building features focused on night time usage and winding down
- Supporting healthy commitments to put down Facebook during quality time with others
- Removing the pressure of seeing content or fear of missing content
- Adding features that communicate availability to others
- Investing in parental controls

Of the 13 new concepts tested in research, these 6 were well liked and considered helpful in reducing PU across multiple life impact areas (read more [HYPERLINK "https://fb.alpha.workplace.com/photo.php?fbid=888292921620566&set=a.888316751618183&type=3&theater" \h]):



Your Activity (Instagram)

- Fix inaccurate time spent estimates on the surface (high priority)
- Finish Android roll out (high priority)
- Leverage existing *YToF* v2 research and conduct Instagram specific research, especially with youth-focus, to redesign *Your Activity* and increase functionality

Additional Research & Other Apps

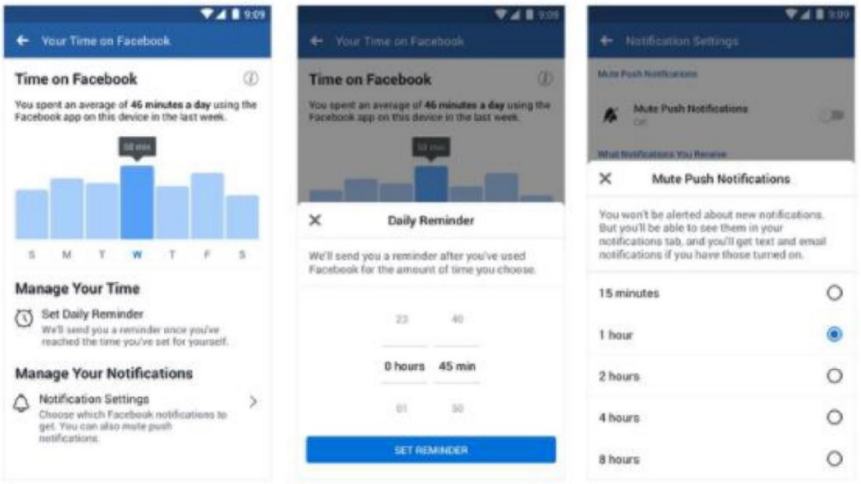
- Understand how problematic use plays out on other apps (WhatsApp and Oculus) and consider building tools for those platforms
- Increase awareness, placement, and usage of time control tools across FB and IG
- Examine the efficacy of tools for real world impact/reducing the prevalence of problematic use

Appendix

Your Time on Facebook v1 (2018)

Research (studies [HYPERLINK "https://www.internalfb.com/intern/research/p/idemj8vebe/" \h], [HYPERLINK "https://www.internalfb.com/intern/research/p/1wta0n9mwo/" \h], [HYPERLINK "https://www.internalfb.com/intern/research/p/2elbj3zft0/" \h], [HYPERLINK "https://www.internalfb.com/intern/research/p/jvml6kcp80/" \h]) informed creation and launch of v1 *Your Time on Facebook (TYoF)* in mid-2018. *YToF* displayed a dashboard where time logged while using Facebook on a mobile device was shown (see design in Appendix). *YToF* included two types of controls:

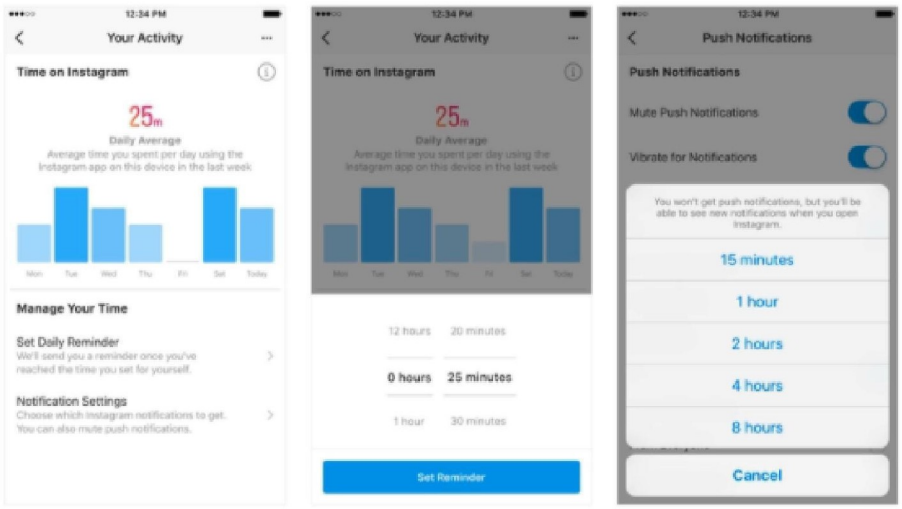
1. "Manage Your Time" had a feature called "Set Daily Reminder" which allowed people to set a self-imposed time limit that would display an alert once this time was exceeded.
2. "Manage your Notifications" was a shortcut to access "Notification settings" which muted notifications for up to 8 hours.



"Time on Facebook", released in 2018, allowed users to set reminders and mute notifications. Find it in the Facebook App under Menu >> Settings & Privacy >> Your Time on Facebook

Your Activity v1 on Instagram

Research (studies [HYPERLINK "https://fb.workplace.com/groups/432156973909421/permalink/482477452210706" \h], [HYPERLINK "https://fb.workplace.com/groups/432156973909421/permalink/546545842470533" \h], [HYPERLINK "https://fb.workplace.com/groups/432156973909421/permalink/572456786546105" \h], [HYPERLINK



"https://fb.workplace.com/groups/ResearchInsights/permalink/2147020682013202" \h]) informed creation and launch of v1 of *Your Activity* on Instagram in mid-2018.

Your Activity was launched on Instagram in mid-2018. It contains the same layout and features as the 2018 version of Your Time on Facebook. Find Your Activity in the Instagram App in Profile >> Menu >> Your Activity.

Triggers for Problematic Use on Facebook

[HYPERLINK "https://fb.alpha.workplace.com/profile.php?id=100013195998758&sk=media_set&set=a.888316751618183&type=3&force_galahad=1" \h] in New York, Sao Paulo, and Mumbai revealed 10 triggers contributing to PU on Facebook:

Notifications - Getting too many minor/irrelevant notifications. Try to only look at important ones but get sucked into longer sessions.	**Mystery of the algorithm** - Uncertainty over if they will see posts from those they want; if they can find a post again later.
Entertaining content - Many said they'd open FB with a clear intent (like checking the news, a specific group, or work-related posts), then get distracted by something entertaining.	**Fear of missing out (FOMO)** - Worry about missing important world news or updates in their social circles.
Videos - Easy to get immersed (especially before bedtime). Auto-play exacerbates the issue.	**Recently post/comment** - Higher curiosity to see responses.
Groups - Get exponentially more notifications, engaged in chat threads.	**Time-bound content** (eg, Stories, birthdays) - Catch it before it's gone.

Marketplace / Ads - Vigilance of buyers/sellers, sales, lower resistance to purchasing at night.	**Boredom/free time** - Desire to fill downtime or "time pass"

Problematic Use Personas & Framework

Research revealed the following 3 personas across two dimensions: ([HYPERLINK "https://fb.alpha.workplace.com/photo.php?fbid=888292618287263&set=a.888316751618183&type=3&theater" \h])

The PU 2x2

We examined all 24 concept testing 1:1 participants across 12 continuums, such as passive consumption <> active consumption.

- A clear pattern emerged across 2 key variables: **Awareness of PU Impacts x Self-control.**
- Each of the quadrants included 5 – 10 participants.
- The lower right quadrant only had 1 participant, not enough to construct a full persona.

See links to full personas in the description.

