

## **AMENDED Exhibit 937**

# **PLAINTIFFS' OMNIBUS OPPOSITION TO DEFENDANTS' MOTIONS FOR SUMMARY JUDGMENT**

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

MDL No. 3047

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

# Streak Restore - Deep Dive (3/30)

POC: Product: [Abby Tran](#), [Jeremy Voss](#), DS: [REDACTED]

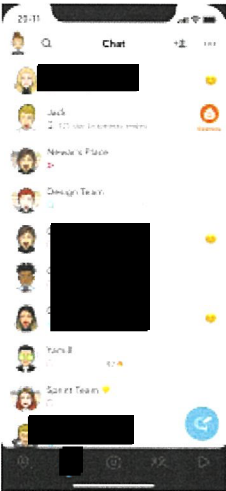
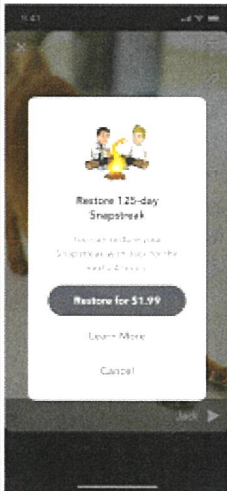
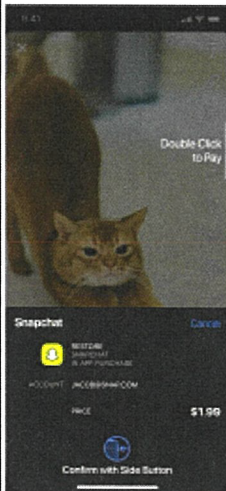
Our key findings have been summarized below! For additional details, you can find our deep(er) dive [here](#).

## 1. Engagement Impact of Restores:

On 3/15, we started [Stage 2b](#) of our AB (iOS, [Android](#)), opening up our country test to Norway, in addition to New Zealand and Australia. We tested relaxed qualification criteria, reducing the minimum Streak length from 50 days to 7 or 10 days and expanding the maximum post-expiration period from 24 hours to 48 or 72 hours. Our most relaxed combination of 7days/72hours increased our traffic by 4x. Our two most viable treatments both show substantial increases to the volume of successful paid Restores, increasing this by ~3.4x for the 7days/72hours case and by ~3x for the 7days/48hours case. Perhaps most importantly, across all treatments we saw **neutral impact to core engagement** metrics and a decrease of -1.55% on iOS and -0.18% on [Android](#) of Streak reset counts, indicating fewer lost Streaks that restarted from scratch.

**Conclusion:** Given the similar performance of 7days/48hours vs. 7days/72hours treatments, we will launch with the 7days/48hours variant to avoid overexposing users to Restore options, especially at lower levels of Streaks (e.g., I lose a 7-day Streak and see a Restore button for 3 days). [A4](#)

## 2. Conversion Rates in the Restore Funnel:

|                        | #1 See Restore Button                                                               | #2 Tap Restore Button                                                               | #3 Take Snap                                                                        | #4 See Restore Modal                                                                  | #5 Tap Restore                                                                        | #6 St                                                                                 |
|------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|                        |  |  |  |  |  |  |
| Conversion Calculation | -                                                                                   | (#2 Tap Button/<br>#2 Tap Button)                                                   | -                                                                                   | (#4 See Modal/<br>#2 Tap Button)                                                      | (#5 Tap Restore/<br>#4 See Modal)                                                     | (#6 I<br>#2                                                                           |
| iOS                    | Coming in 12.27                                                                     | 100%                                                                                | Coming in 12.27                                                                     | 89%                                                                                   | Paid: 4.9%<br>Free: 47%                                                               | F                                                                                     |



## Page 1 Comments

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- J1 do we believe this is because of more streaks being restored now or better incentive/reminder to not lose your streaks in the first place coming from the in-app paid restore flow?  
*Jack Brody, 3/31/2023 08:00 AM*
- A2 That's a good callout - we think it's mostly due to the ease of Restoring directly in the app. Through this timeframe we had over 25K paid restores and more than 1.2M free restores, so there is a very real increase in the volume of Streaks that have continued (that would have otherwise been lost and then reset). It's also possible that exposure to this flow and/or to our new education encourages better Streak maintenance too, but this effect was observed early in the test where users had not yet had long term incentives to keep Streaks alive to avoid payment. We also want to test lower pricing at higher levels of Streaks to see if we can deliver more user value via more restored Streaks while keeping revenue relatively steady. cc: [REDACTED]  
*Abby Tran, 4/4/2023 03:59 PM*
- E3 ok :)
- Do we have some sense of where these restore buttons are in the feed? I.e. do we know how many are visible vs. below the fold?  
*Evan Spiegel, 4/1/2023 05:20 AM*
- A4 We only have a rough approximation of Restore Button visibility, since impression logging just began in 12.27. So far with 6 days of data, on the user-level, 90% of iOS users and 61% Android users who qualify for a Streak Restore view at least 1 Streak Restore button on Feed or in Chat on the same calendar day. On the feed session level, of 10M (iOS) and 0.2M (Android) Friends Feed sessions that qualify for showing at least 1 Restore Button, 16% (iOS) and 4% (Android) had a visible button, with the average session showing ~2 buttons, which suggests we may have a opportunity to increase awareness of Restores by testing more aggressive UI options. (We've added this breakdown in the Appendix section as well.) cc: [REDACTED], [REDACTED]  
*Abby Tran, 4/4/2023 04:04 PM*

|         |                 |      |                 |     |                         |   |
|---------|-----------------|------|-----------------|-----|-------------------------|---|
| Android | Coming in 12.27 | 100% | Coming in 12.27 | 87% | Paid: 4.6%<br>Free: 54% | F |
|---------|-----------------|------|-----------------|-----|-------------------------|---|

While we await additional logging in 12.27 to come in, we have an early view of the [conversion rates](#) in the user's Restore journey:

- 89% of iOS and 87% of Android users who tap on the Restore button enter the camera, take a Snap, and attempt to send it to their friend, allowing them to see Restore modal dialog. (11-13% drop off)
- 4.9% of iOS and 4.6% of Android users who tap on the Restore button tap on the "Restore for \$\$\$" button in the dialog for a paid Restore. (~95% drop off) <sup>[A6]</sup>
- 0.72% of iOS and 0.46% of Android users who tap on the Restore button ultimately successfully complete an in-app purchase for a paid Restore. (~99% drop off)

**Conclusion:** While we lose users in the conversion funnel at every step, the most dramatic drop off occurs when a user sees the Restore modal and whether they choose to tap the "Restore" button. Our biggest opportunity for improvement here will be to test new pricing and optimize the copy/design elements of the modal itself to see if we can increase conversion.

### 3. Pricing Analysis:

Our current pricing is linearly set, starting at \$0.99 for Streaks <100 days long, with price increasing by \$1 for each hundred days up until 900+ day Streaks, which are capped at \$9.99. [Conversion rates](#) go up as Streak length goes up, with the lowest conversion rates at 3-6% for users with <200 day streaks (price sensitive) and the highest conversion rate between 8-10% for 500+ day Streaks (price insensitive). We will be hyper focused on increasing conversion volume for two Streak length buckets:

- **0-200 days:** These Streaks make up 87% of paid Restore volume and 54% of revenue right now, and improved conversions here (currently at 3-6%) can have downstream impact in 1) creating a precedent/habit for a purchase and 2) extending more Streaks for additional high-Streak length inventory later. Given their price sensitivity, we will test lowering prices in these tiers across more granular buckets: 0-29 = \$0.49, 30-79 = \$0.99, 80-129 = \$1.29, 130-159 = \$1.59, 160-199 = \$1.99.
- **500+ days:** These Streaks only make up about 3% of paid Restore volume, but make up 22% of revenue. While conversion here is already high (8-10%), these Streaks are significantly more valuable and typically belong to the strongest of power users. To extend as many of these valuable Streaks as possible (and avoid alienating power users), we will test lower prices in this bucket with a potential variant that holds cost steady at \$0.99. <sup>[A6]</sup>

**Conclusion:** Our next round of testing will include a new pricing schema that adds more granular price buckets for Streaks <200 days and a lower price point for Streaks over 500+ days.

### 4. Revenue Projections:

While still early, we can make a broad [estimate](#) of annual revenue, assuming conversion remains stable over time and across markets. In our test, each paid Restore brings in [REDACTED] at the current pricing, with [REDACTED] paid Restores bringing in [REDACTED] in revenue each day in NZ/AU/NO markets. With users exhausting their free Restore over time and with paid Restore expected to grow (then stabilize), we can estimate annual revenue to be between these ranges before any further optimizations:

## Page 2 Comments

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- E5 Can you compare these drop off rates to the free restore option? That's probably the most relevant comparison.  
*Evan Spiegel, 4/1/2023 05:21 AM*
- A6 Yes, the free Restore option has much higher conversion rates than paid cases and serves as a good “ceiling” comparison. When looking at the rate at which a user converts on the modal (sees modal and chooses to tap on the Restore button), paid cases are at ~5% vs. free cases at ~47% (iOS)/~54% (Android). Overall, the percentage of users who complete a successful Restore after tapping on the Restore button in Feed is <1% for paid cases vs. ~17% (iOS)/~19% (Android) for free cases. (We’ve also added these metrics in the conversion funnel chart above for easy reference.) cc: @ [REDACTED]  
*Abby Tran, 4/4/2023 04:05 PM*
- E7 Wow how many of these streaks are expiring on a daily basis? Is there some sort of bar chart that shows number of streaks expiring in different buckets of days on a daily basis?  
*Evan Spiegel, 4/1/2023 05:22 AM*
- A8 Streaks that are over 500+ in length are definitely in the long tail, and make up about ~0.3% of all expired Streak volume. For scale, in our “wave 1” test markets, ~30M Streaks expire each day and globally about ~96M expire. (We’ve added a distribution view in the appendix too.) cc: [REDACTED]  
*Abby Tran, 4/4/2023 04:05 PM*

- [REDACTED] if restricting to “wave 1” markets (AU, NZ, NO, US, GB, CA, FR, SE, FI, DK, SA, AE)
- \$25M if launching globally

**Conclusion:** Even without any improvements to the funnel or optimizations to conversion rate, we have a floor of [REDACTED] in revenue annually. <sup>[A10]</sup>

5. Next Steps:

Given our findings above, we will focus our next steps on:

- (1) Continue our Stage 2b test in NZ/AU/NO with no changes to collect longer term data
- (2) Start Stage 3 testing, expanding the AB to some combination of “wave 1” markets and test new pricing schemas in our 7days/48hours winning treatment
- (3) Work on copy and design iterations of the Restore modal and prepare these for testing in the next round <sup>[D12]</sup>

[Launch Plan](#) | [Week 3 Deep Dive Analysis](#) | [Week 1 Analysis](#) | [Spec](#)

*Special Thanks: Huge shoutout to [REDACTED] for her thorough analysis and actionable insights, and to [REDACTED], [REDACTED] for their work on the feature and logging to make this possible!*

Appendix:

<sup>[A13]</sup>

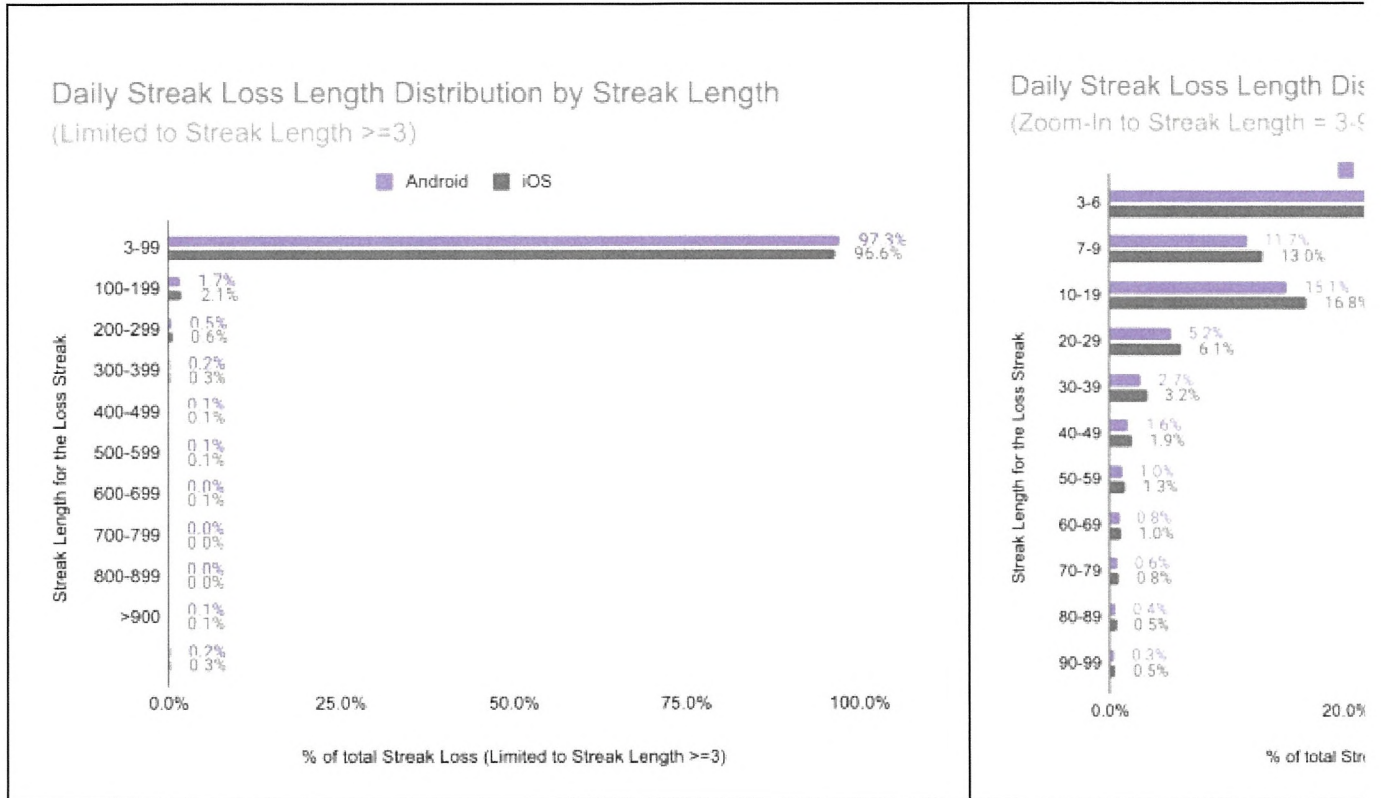
**Expired Streaks: Distribution of Expired Streaks By Length**

|                     |         |
|---------------------|---------|
| Streak Length 3-900 | Zoom in |
|---------------------|---------|

## Page 3 Comments

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- E9 not a bad start! seems like there is potential to get to at least [REDACTED] run rate with some optimizations :)  
*Evan Spiegel, 4/1/2023 05:22 AM*
- A10 We're really excited about the potential here, and are looking forward to testing optimizations around pricing, the Restore flow/modals, and visibility of the button or other design solutions to drive up conversion further. Paid Restores also continue to increase each day in the test markets as free Restores are used up, so the momentum is promising! cc: [REDACTED]  
*Abby Tran, 4/4/2023 04:06 PM*
- E11 Can you please share these when ready  
*Evan Spiegel, 4/1/2023 05:23 AM*
- D12 [REDACTED] will share at the next design meeting (next week) since there are a couple of things i wanna talk out in person  
[REDACTED], 4/4/2023 04:16 PM
- A13 [REDACTED] - You can find the distribution of expiring streaks by length here!  
*Abby Tran, 4/4/2023 04:06 PM*



### Conversion Funnel: Restore Button Impressions

#### #1 User Level Funnel and Conversion

##### 1) Streak Loss -> Restore Button Impression (Unique User Level Funnel)

|         | Streak Loss UU | Users Has Feed Impression UU | Has Seen Restore Button UU |
|---------|----------------|------------------------------|----------------------------|
| iOS     | 810,532        | 808,754                      | 658,663                    |
| Android | 115,694        | 115,139                      | 63,874                     |

##### 2) Streak Loss -> Restore Button Impression (Unique User Level Conversion)

|         | Streak Loss UU | Users Has Feed Impression UU | Has Seen Restore Button UU |
|---------|----------------|------------------------------|----------------------------|
| iOS     | 100%           | 99.8%                        | 90.3%                      |
| Android | 100%           | 99.5%                        | 61.3%                      |

#### #2 Streak Loss Volume and Unique Users / Day

| OS Types | Total Streak Loss / Day | Unique Users Who Lost Streaks / Day |
|----------|-------------------------|-------------------------------------|
|----------|-------------------------|-------------------------------------|

|         |           |         |
|---------|-----------|---------|
| iOS     | 1,538,544 | 810,532 |
| Android | 186,121   | 115,694 |

(Data: Limited to AU/NZ/NO)

**#3 Unique Users who See Streak Restore / Unique Users who Lost Streaks**

| OS Types | Unique users with >= 1 streak restore impression / day | Unique Users Who Lost Streaks / Day (Limited to streak length >=7) | Unique Users who See Streak Restore / Unique Users who Lost Streaks (Limited to streak length >=7, adjusted for 90% test exposure) |
|----------|--------------------------------------------------------|--------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| iOS      | 658,663                                                | 810,532                                                            | 90.3%                                                                                                                              |
| Android  | 63,874                                                 | 115,694                                                            | 61.3%                                                                                                                              |

(Data: Limited to AU/NZ/NO)

**#4 Restore button views per feed session**

| OS Types | Streak_restore impressions / Day | Unique Feed Sessions / Day | Unique users with >= 1 streak restore impression / day | Restore button views per feed session | Feed Sessions / User / Day |
|----------|----------------------------------|----------------------------|--------------------------------------------------------|---------------------------------------|----------------------------|
| iOS      | 21,196,897                       | 9,135,631                  | 658,663                                                | 2.3                                   | 13.9                       |
| Android  | 611,297                          | 203,198                    | 63,874                                                 | 3.0                                   | 3.2                        |

(Data: Limited to AU/NZ/NO)

**#5 Feed Sessions Seen Streak Restore Button / Total Feed Sessions**

|         | Total Feed Sessions for eligible_users | Total Feed Sessions Users Seen Streak Restore | Feed Sessions Seen Streak Restore Button / Total Feed Sessions |
|---------|----------------------------------------|-----------------------------------------------|----------------------------------------------------------------|
| iOS     | 63,468,800                             | 10,150,701                                    | 16.0%                                                          |
| Android | 4,708,251                              | 225,776                                       | 4.8%                                                           |

(Data: Limited to AU/NZ/NO)

## DOCUMENT SLIPSHEET

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**ENDATTACH:** SNAP1940650

**Custodian:** SPIEGEL\_EVAN

**Author:**

**Filename:** [STREAK RESTORE] DEEP DIVE (3\_30) .DOCX

**Create Date:** 5/5/2023 12:00 AM

**Last Modified Date:** 5/5/2023 12:00 AM

**TNAG BEGBATES:**

**TNAG ENDBATES:**

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