

AMENDED Exhibit 1169

**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

From: Josh Siegel [REDACTED]
Sent: 9/7/2018 3:54:24 PM
To: [REDACTED]
CC: [REDACTED]; Jonathan Jaklitsch [REDACTED] Jacob Andreou
Subject: Re: DAU decline investigation

Thanks [REDACTED] again, I consider this a longer term project that I understand will require some additional lift. We can talk offline more -- I'll find time for us next week.

On Fri, Sep 7, 2018 at 3:50 PM, [REDACTED] wrote:

I talked with [REDACTED] and [REDACTED] from targeting team, and there are two datasets we can use. Based on what I know about the data, the retention is 40 days, and we will need privacy approval to store some aggregated version of it for longer. We also will need to be whitelisted to access that data so we can write DAGs. High schools are not tracked in the venue dataset since they are not considered venues, but we can track US university / college campuses though not 100% accurate, as anyone walking by / visitors can be considered DAU. Also we will need school / campus enrollment data from an external source.

If you need to track high school DAU, there is another dataset with users mapped to geocells. Someone will have to manually generate a high school -> geocells mapping (this is a very significant amount of manual work).

On Fri, Sep 7, 2018 at 1:32 PM [REDACTED] wrote:

I did this a while ago, so datasets / logging may have changed. I am talking to the targeting team now to figure out what kind of data is available for us to use. I will update this group once I get some direction from them.

On Fri, Sep 7, 2018 at 7:51 AM Josh Siegel [REDACTED] wrote:

Thanks, I am also suggesting we decouple them, sorry if that wasn't clear.

I'm noting that we should have intelligence on students separate from this investigation. I don't know if there's any relation to what we are seeing this week or not, I'd just want to know more about user breakdowns by school in general, first in the US and eventually in new markets as we grow in them.

On Fri, Sep 7, 2018 at 9:36 AM [REDACTED] wrote:

+ [REDACTED]

Josh:

Thanks for the thoughts. The data you mentioned is what [REDACTED] previously pulled for [REDACTED] about US campus DAU. [REDACTED] has been in talk with [REDACTED] to understand the data availability and quality/accuracy, and we will get back to this thread about what we find and what we can do. In order to calculate the school penetration, we will also need the denominator, which is the total number of students in each campus.

It is nothing that I disagree with you on getting this data and understand better on US college students, I do want to share my doubts that whether the US college students are the the users that are causing the current

growth slow down, especially in the past 2-3 days. I would like to decouple the above two projects for now, meaning we will start looking into US college penetration, but we will keep monitoring DAU growth and paying attention to all age groups and all countries.

Thanks

On Fri, Sep 7, 2018 at 12:53 AM Josh Siegel [REDACTED] wrote:

Thanks. I don't think we have closure on the US back to school piece though. US universities and high schools are really our core, both in terms of historic growth and high penetration, as well as the loudest source of user feedback for us and the primary place investors / advertisers assume we are winning. If we lose these users, we lose.

@ [REDACTED] - I remember seeing a map at one point that clustered users by school. What I'd really love to see is a regular report or analysis that looks at US school penetration -- either Universities or Universities + High Schools to start. City or state level aggregates are really easy to query against, but they're too aggregated to know what's going on IMO.

For example, 40K students go to U of Arizona, 50K go to Penn State (main campus). We have all the data to figure out who these users are based on their GPS location or even age + IP-based location at the minimum. I realize this is not a trivial query or analysis and it's asking a lot, but I think it's worth investing in a model that helps us understand what's happening in these schools on a regular basis, not just one-off.

My best guess is that we have >90% penetration at the top 100 US universities. If we see overall penetration, penetration of specific features, or anything else sliding at these schools, that might be a warning sign for the rest of our user base, or a sign that something broke.

This might be a longer term research project we can ask for help from another team, but let me know if this doesn't make sense or if you disagree with the importance of modeling school-by-school behavior and penetration.

Zenly does this too, btw, and it's how FB grew and how where IG is focusing now too via school groups. Over time, I could imagine us using this to figure out how to ignite growth in new markets by focusing on school-by-school takeover tactics.

On Thu, Sep 6, 2018 at 7:09 PM, Jonathan Jaklitsch [REDACTED] wrote:

Hi Jacob,

See [here](#) for an update on our DAU decline investigation. Below are some of the key talking points:

1. DAU decline (comparing last 2 days vs previous week) was mainly driven by MENA coming off a high during the Eid Al Adha period.
2. US: Back to school is an unlikely cause of the overall DAU decline although we only have 2 days of data and will want to continue monitoring this.
 1. The more concerning (longer term) trend in the US is the continued [Android decline](#). iOS is up while Android continues to decline over the last month
3. Q3 Revised Forecast: **186.1M**
 1. Removed Eid impact in Sep which was already captured in actuals in Aug. This was a weakness in our forecast where we didn't properly capture the Y/Y timing difference for this holiday period. [REDACTED] is

actively working on a v2 forecast model which will attempt to capture y/y holiday/seasonal timing differences

2. Removed seasonal impact from iOS 11 launch last year

Please let us know if you have any questions.

@Josh - [REDACTED] put together a [DAU view by state](#). We're not seeing anything that links back to school with the DAU decline. For example, NY schools started on 9/5 and are seeing a +1% w/w improvement.

Best,
Jon