Yammer: Investigating a Drop in User Engagement

Link:

https://community.modeanalytics.com/sql/tutorial/a-drop-in-user-engagement/

Yammer's Analysts are responsible for triaging product and business problems as they come up. In many cases, these problems surface through key metric dashboards that execs and managers check daily.

The problem

You show up to work Tuesday morning, September 2, 2014. The head of the Product team walks over to your desk and asks you what you think about the latest activity on the user engagement dashboards. You fire them up, and something immediately jumps out:
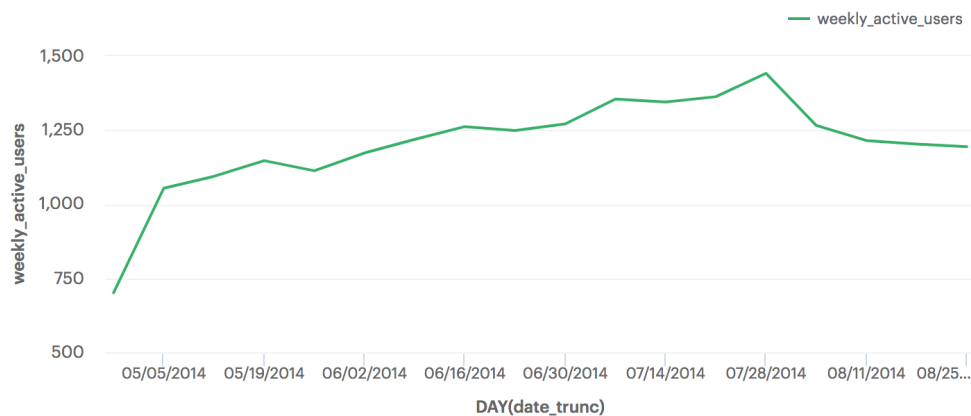

My hypothesis for the decrease/dip in the number of active users were:
1. Changes in the rate of growth
2. Problems with the functionality of a particular brand or type of device
3. Change in the particular type of action performed by users

1. Changes in the rate of growth

I start by looking at the daily and weekly rate of growth, expressed as the number of active users and total users over time.
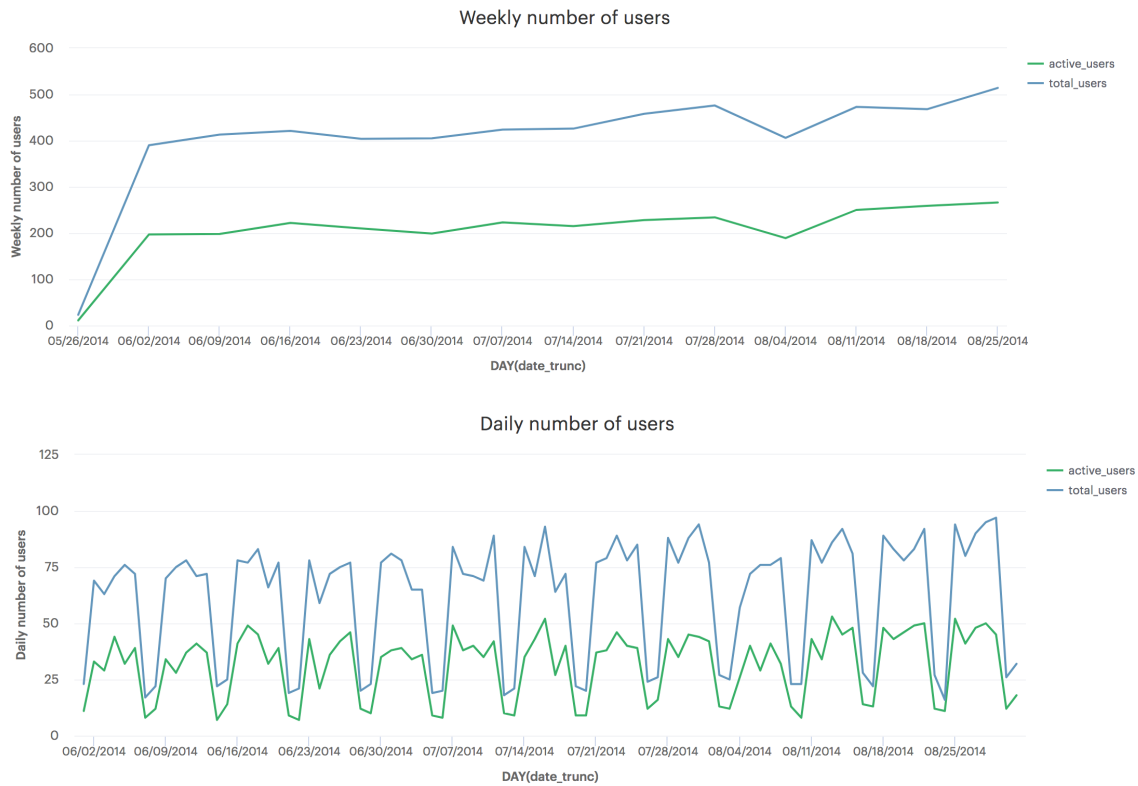

In the two previous plots we can see that the number of active users seems to correlate with the total number of users.
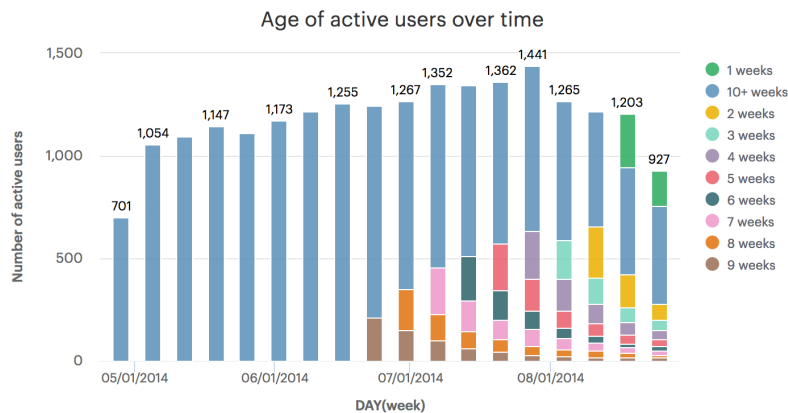
In addition, grouping the active users based on their age of joining yammer, shows that most of the users are 10weeks or older and that the dip in active users seems to come primarily from this group.

## 2. Problems with the functionality of a particular brand or type of device

To explore the possibility that the dip in active users might be due to a problem in functionality/connectivity, I grouped the active users by the type of device as well as device brand.

Active users grouped by device type

Active users grouped by device brand
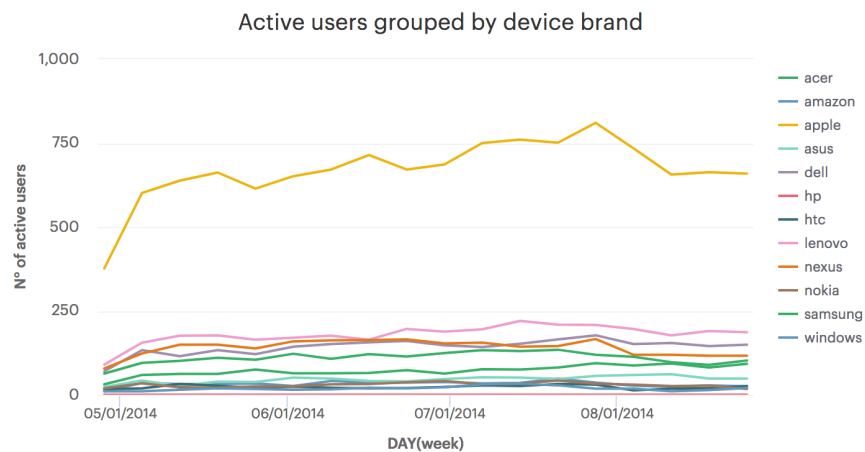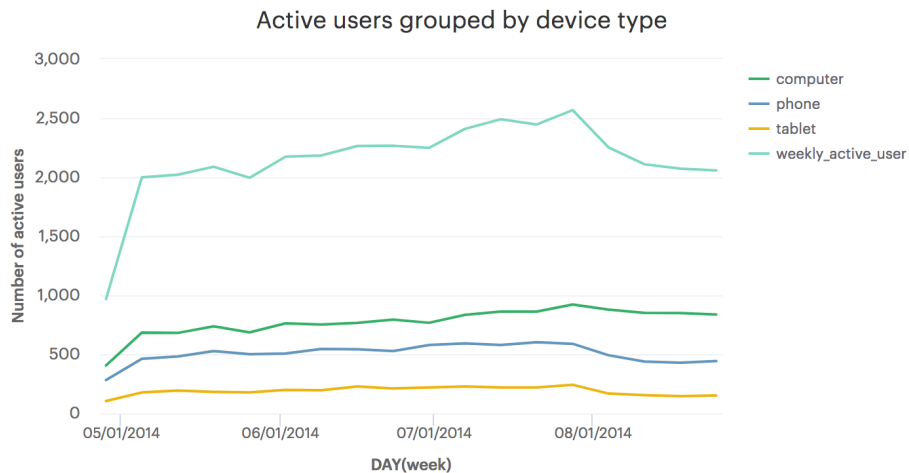
The previous graphs suggest that the decrease in user engagement is due to a reduce engagement for users using phone and tablet devices, and that this devices might be mostly from the brand apple.

3. **Change in the particular type of action performed by users**

    Finally, to see if a specific type of action correlates with the decrease in user engagement, I group the number of emails of active users based on the specific action executed by the user.
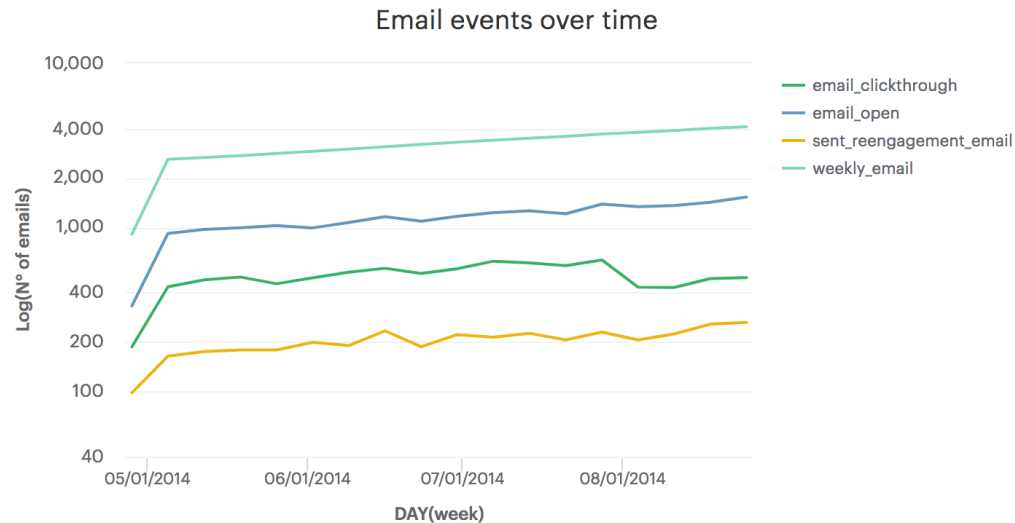
This graph shows the decrease in user engagement correlates with a decrease in the rate of email click-through.

Conclusion:

Although the exact reason for decrease in user engagement is still unclear, the present analysis suggest that there is a problem affecting the email click-through rate with the Yammer Application when implemented in phone and tablet devices of the brand apple. For example, possible factors for the error could include: link positioning, time of the day when email was sent, email length, link emphasis, etc.

The queries associated with the graph shown here can be found at:
https://modeanalytics.com/editor/mathias_saver/reports/24abaf40c13d#