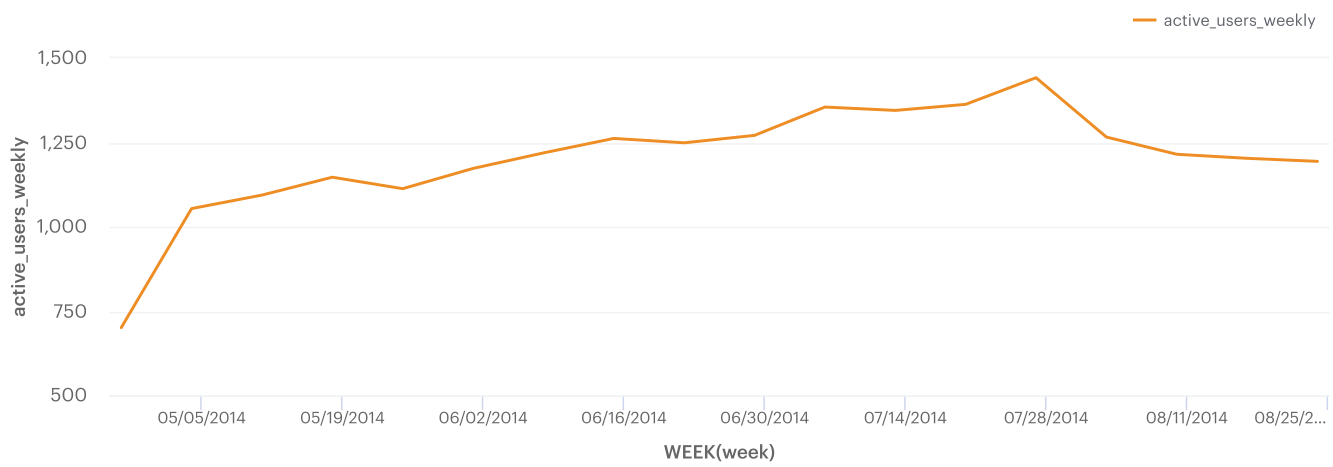
Yammer Dip In User Engagement Analysis

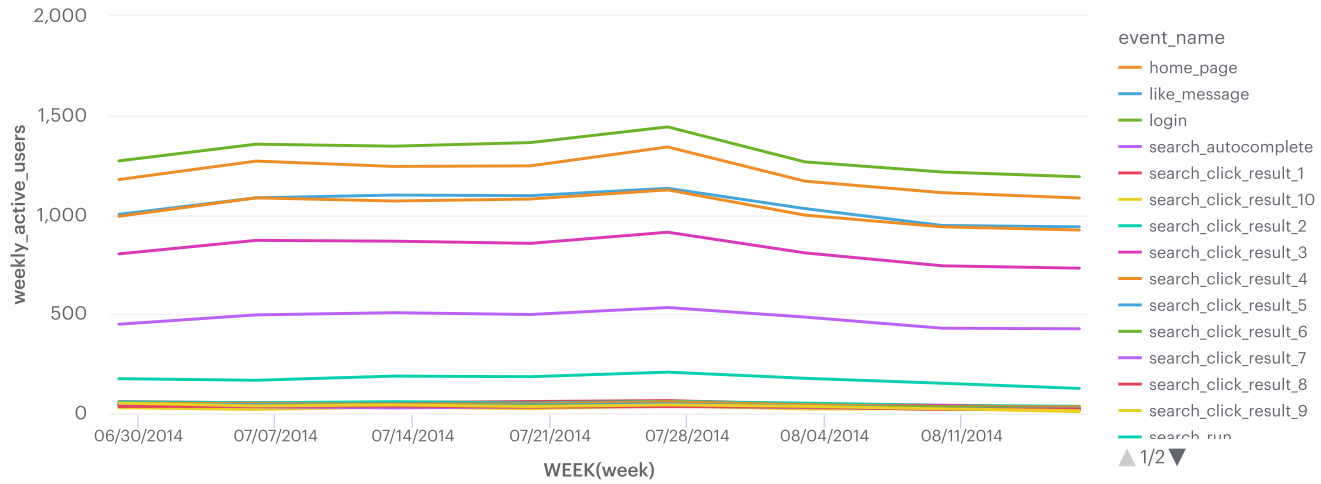
Introduction:

The chart below shows that the dip in user engagement occurred on the week of July 28, 2014 and continued through the month of August. The objective of this analysis is to determine why the dip occurred and to provide recommendations on appropriate corrective actions.

Weekly Engagements by Yammer Users

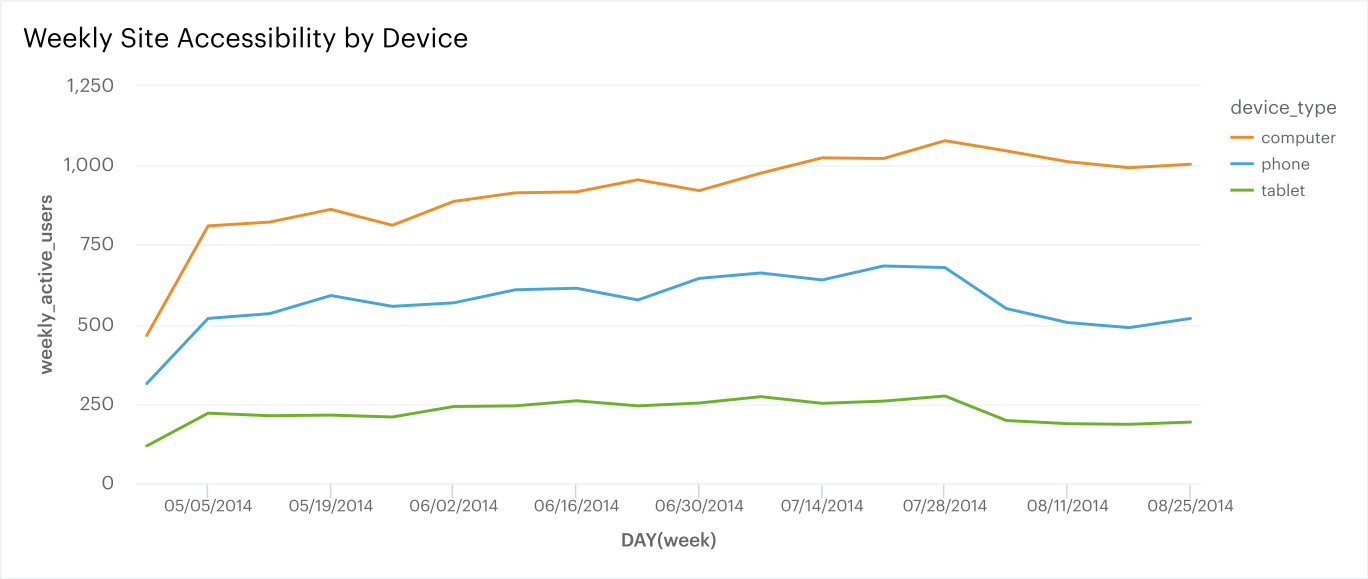


Yammer Site Functionality (Weekly Trends)



Theory 1: Site is malfunctioning

My initial theory centered around the possibility that the Yammer site may have been malfunctioning, which may account for the dip in user engagement, I queried the events data and striated the data by name of each event. The corresponding graph shows that the site was working properly in the days leading to the start of the dip, afterwards all events saw the dip engagement equally indicating no obvious sign of site functionality.



Theory 2: Device type malfunction

My second theory centered around the idea that perhaps mobile/tablet device accessibility may be malfunctioning. I utilized the data from the evetns table can categorized the various mobile devices, tablets, and tablets into corresponding categories. The chart displays no sign that the engagement dip was a isolated to specific device category as all device categories saw the dip in engagement at the same time; not surprisingly however, the largest dip was seen in the mobile device category. This also indicates that there was no site-wide malfunction.

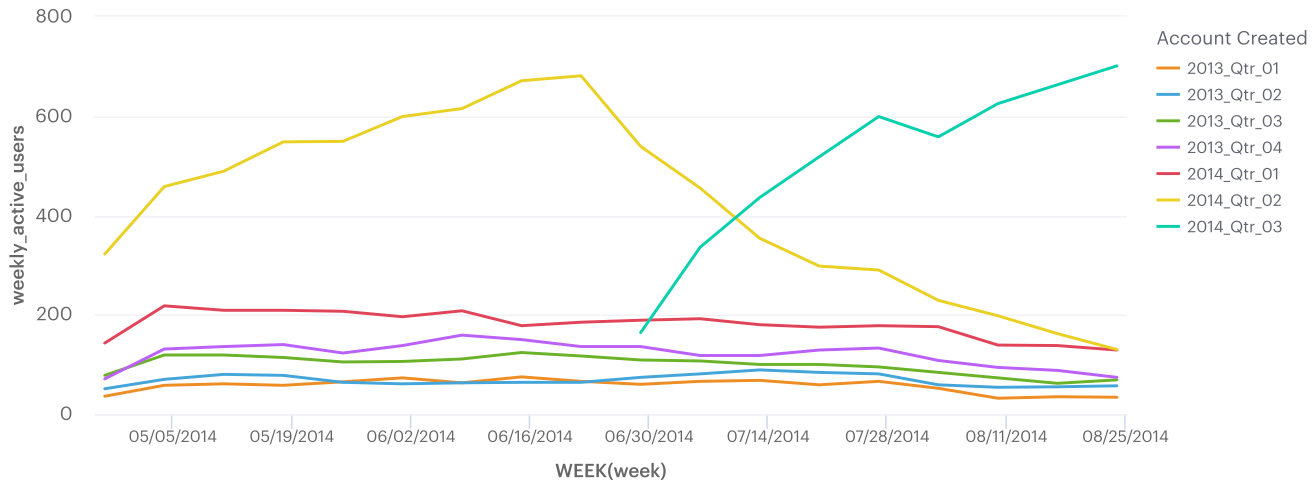
User Engagements Trends by Country (Week-to-week % Difference)

	week			
location	2014-07-07T00:00:00.000Z	2014-07-14T00:00:00.000Z	2014-07-21T00:00:00.000Z	2014-07-28T00:00:00.000Z
Argentina	0	0	-40	28
Australia	0	-12	0	34
Austria	0	9	0	-22
Belgium	0	-16	33	-63
Brazil	0	-7	14	9
Canada	0	-13	10	-8
Chile	0	-16	40	-66
Colombia	0	28	-16	40
Denmark	0	-10	0	0
Egypt	0	-25	-60	28
Finland	0	18	-22	-28

Theory 3: Country-specific dips

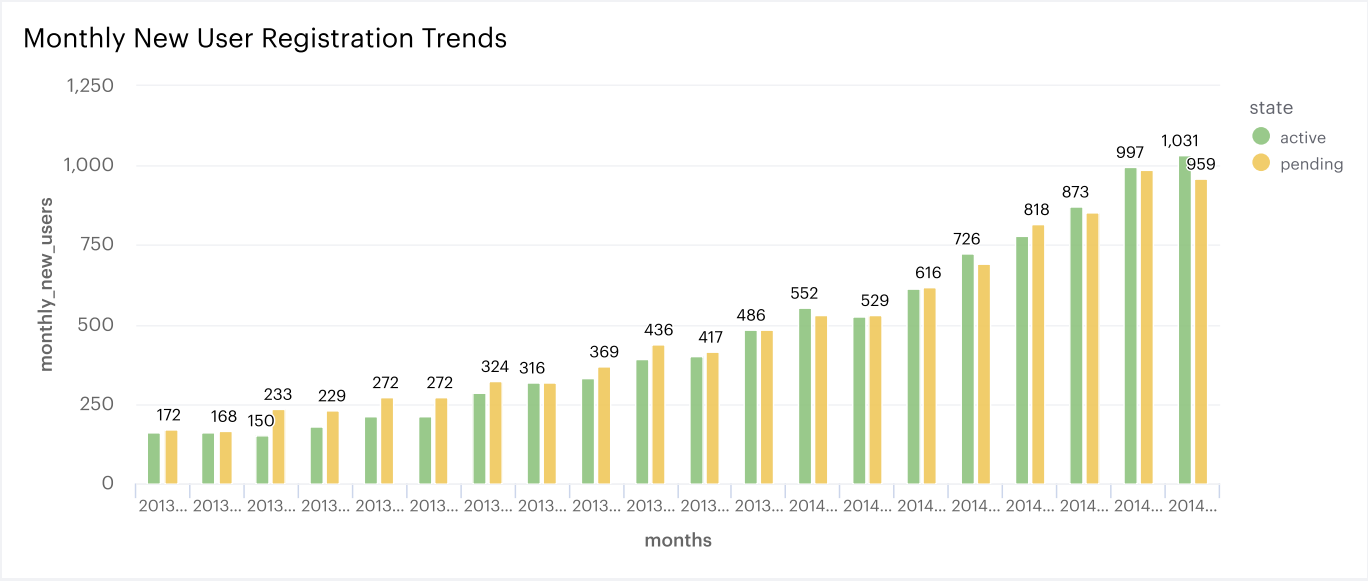
My third theory centered around the idea that the dip in engagement was isolated to a specific country. I used the data from the events table and calculated the week-to-week user accessibility using the lag and count functions.
The correspondong pivot table shows that all countries saw a a dip in engagement by percentage in various degrees
indicating that dip in user engagement was universal and not isolated to a specific country.

Weekly Established-User Logins (Quarter 2 and 3, 2014)



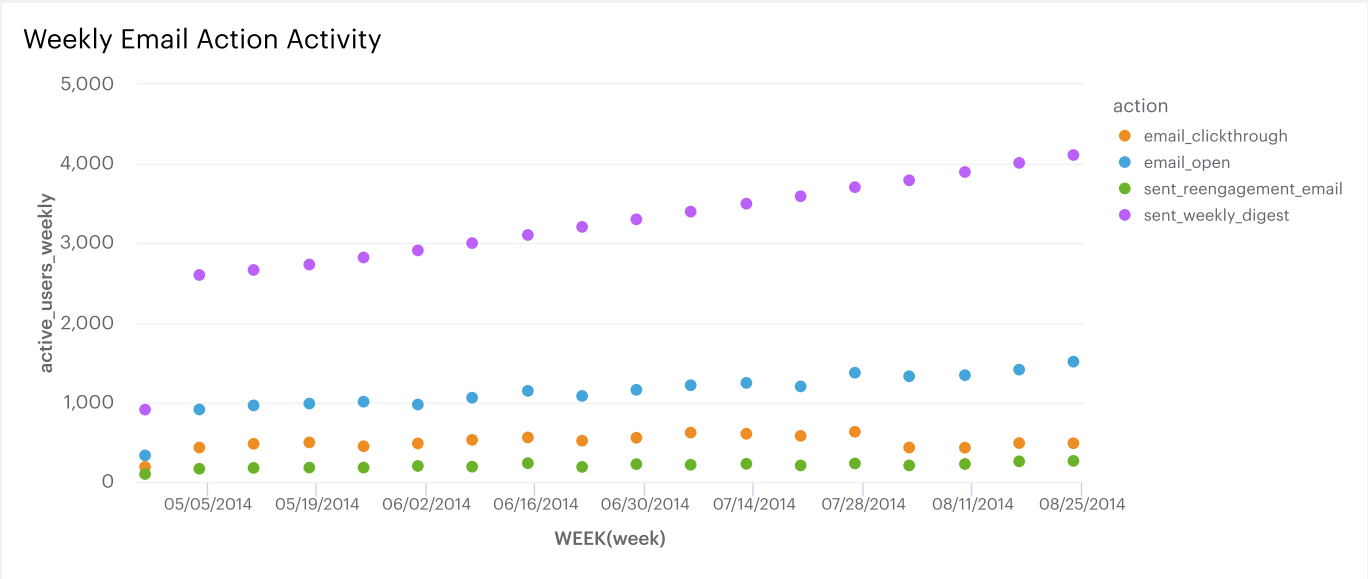
Theory 4: Lessening engagement from legacy users

My fourth theory centered around the idea that legacy Yammer users may be leaving the application which would account for the engagement in dips. I utilized the users data and categorized each user by the quarter in which they signed up. The corresponding chart shows that there has been steady utilization by legacy users, in fact there was a significat spike in utilization followed by a sudden decrease by users that signed-up in Quarter 2 2014. Conversely, there was a surge in utilization by Quarter 3 2014 users that saw a brief dip before resurging through August 2014. This may indicate a response to new features, site design/functionality, or corportate strategy that may be appealing to some users but alienating others.



Theory 5: Decreasing New User Registration

My fith theory centered around the idea that perhaps Yammer may be seeing a decreasing trend in new users. Using the user data, I quantified users by month and account status. The corresponding chart shows an overall increasing trend in new user-adoption, proving my theory false.



Theory 6: Email malfunctions

My sixth and final theory centered around the idea that there may be some sort of malfunction with the email system. I utilized the email data and quantified and group each of the email actions; the corresponding chart is inconclusive in determining a malfunction with the email system itself, it does show however that users are getting more emails from Yammer than are being opened. This suggests possible over-saturation of emails that may either be getting ignored or being caught by spam filters.

Recommendations:

1) Review Email system

The analysis of the data indicate that users are being disproportionally inundated with communication from the Yammer website which is being largely ignored by the user recipients. I recommend that Yammer review the content of their emails to ensure that they are not spam-worthy. Likewise I recommend that Yammer work with the major email service (Gmail, Yahoo!, Hotmail ...) to ensure that Yammer correspondence is approved and recognized as spam.

2) Review commmunication strategy

The analysis of the email data also suggests that Yammer-User communication via email is largely ineffective as there are more emails being sent than are being opened or clicked-through. Assuming emails are not considered spam (see recommendation 1 above), this also indicates that the content being delivered may not be important or relevant to the user. I recommend that Yammer work with customers to identify what they want to be notified about via email correspondence and further scrutinize the email data as a measure of effectiveness. Also, I recommend that communication via social media channels also be pursued so as to develop closer relationships with the customer base.

3) Review strategic objective

The analysis of the data also showed a slight decreasing trend among legacy of users with a sudden spike of new users in Quarter 3 2014. This indicates that there may be new features or functionality, clearly indicating a change to the strategic objective of the company, which may be turning off the legacy users and appealing to new users; long-term this may lead to an erosion of the long-term user base. I recommend that Yammer engage customers directly to identify what exactly is turning off long-term customers and strike a balance between the features/services that are appealing to new customers.