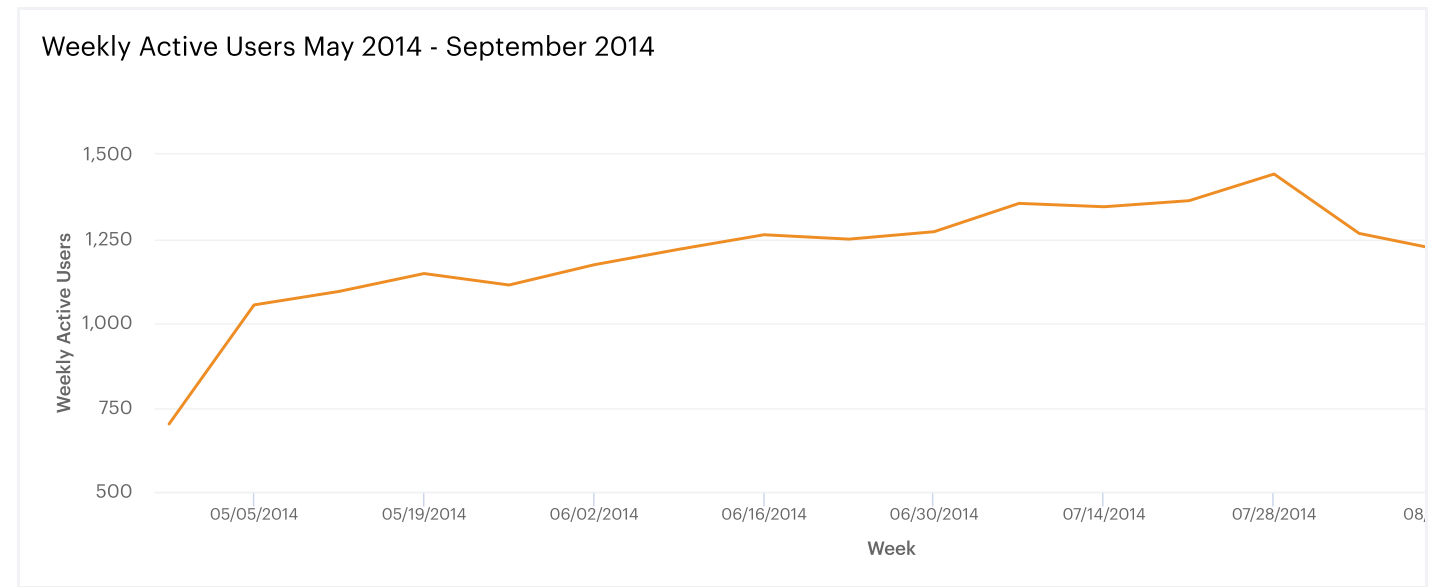


Drop In User Engagement

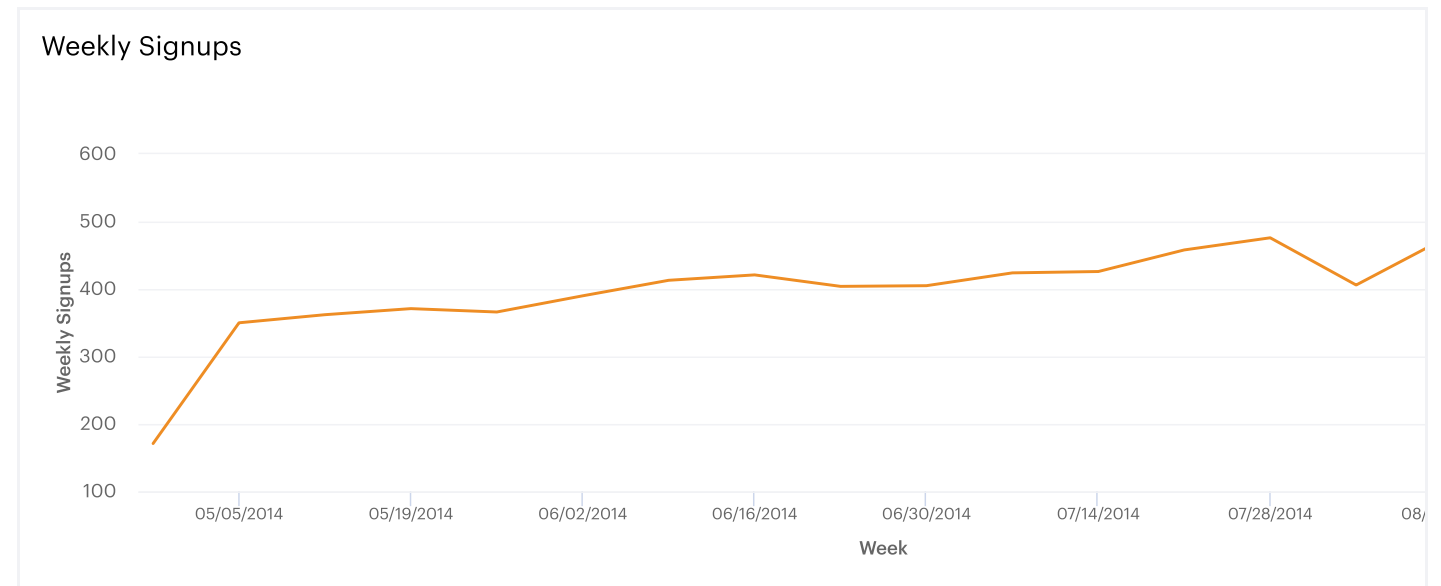
Determining the reasons for a drop in user engagements

Problem

Based on the chart below, the number of engagements on the Yammer site declined at the end of July 2014. This report aims to determine the cause(s) of this problem.



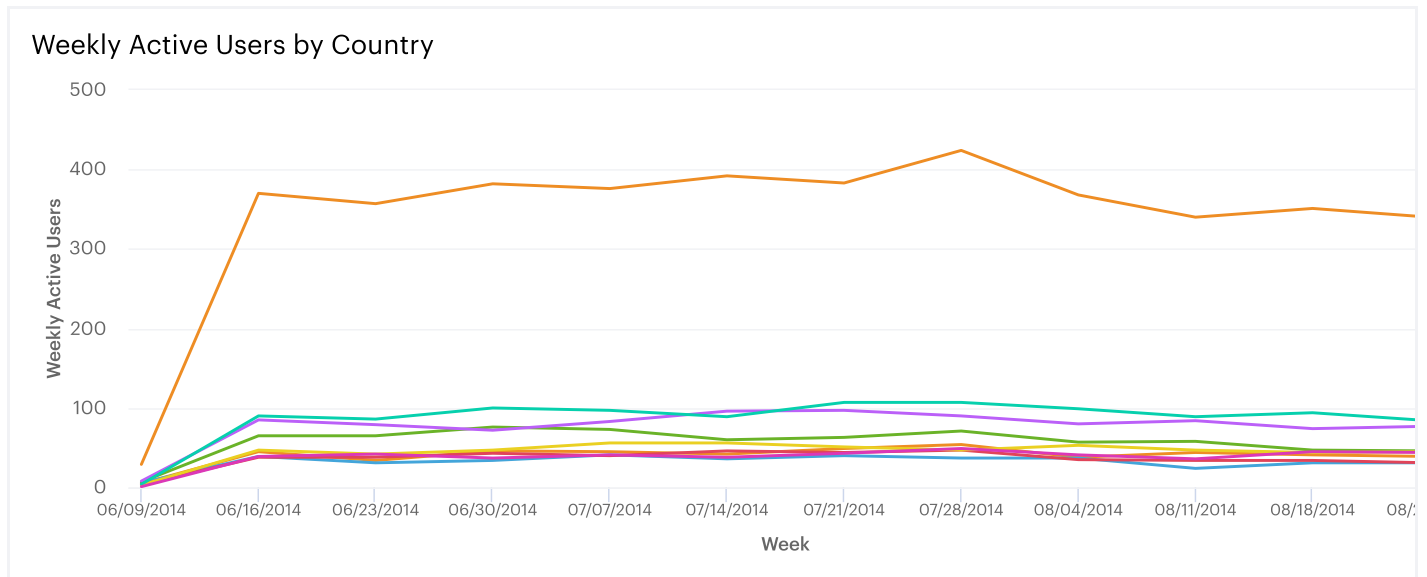
The first thing that was looked at was the number of signups. The table below shows that there was a decrease at the end of July but the number of signups increased through the month of August.



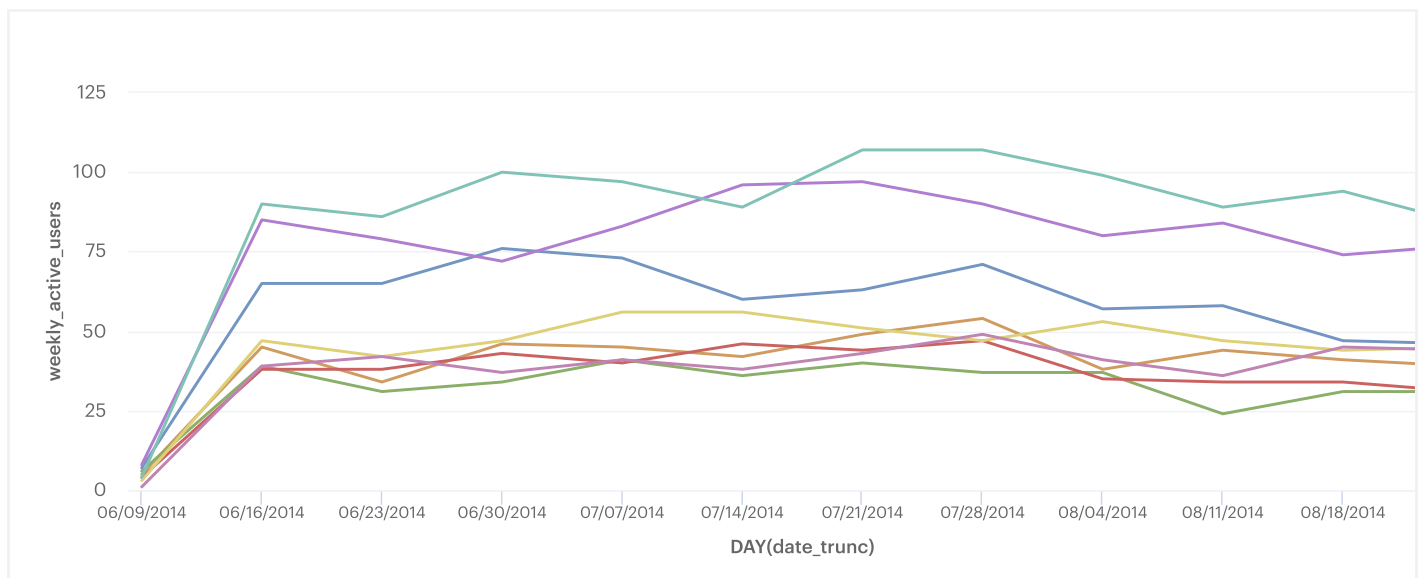
Hypothesis 1: Holiday

The first hypothesis tested was whether there was a holiday during this timeframe that caused the dip in engagement. From the line graph below, the United States dominate the number of Yammer active users. It is declining like the overall trend but because it has the largest number of active users, we cannot determine if other countries are declining as well.

Note: The countries included were the countries that had relatively high total user engagements over the course of the 4 month period (engagements > 500)



In order to determine if other countries had engagement drop, the United States was removed from the graph. The number of engagements from these countries are also in decline after the July 28th week.

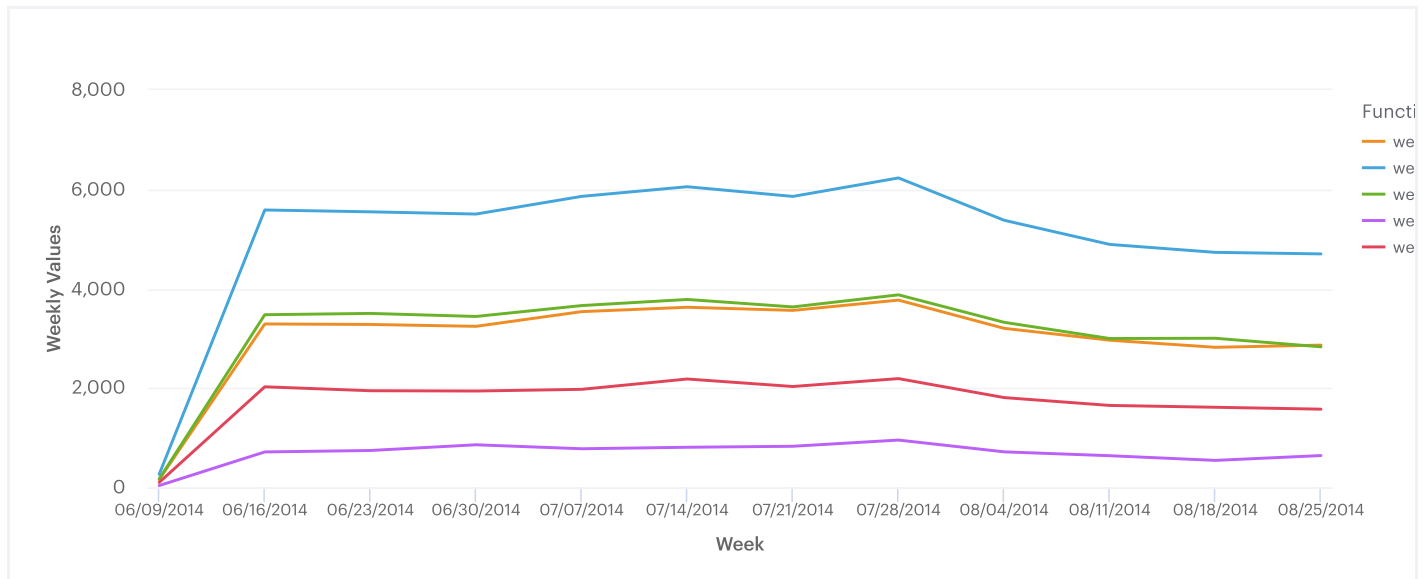


Determination of Holiday

The two graphs above should that the countries that had the highest engagements all had weekly engagements drop around the same timeframe. We can conclude that there was not a holiday that caused this drop in engagement.

Hypothesis 2: Broken Functionality

The next hypothesis tested was to see if there was broken functionality, which could cause users to not use the product (example: homepage is down causing users to not be able to navigate to the site/app).

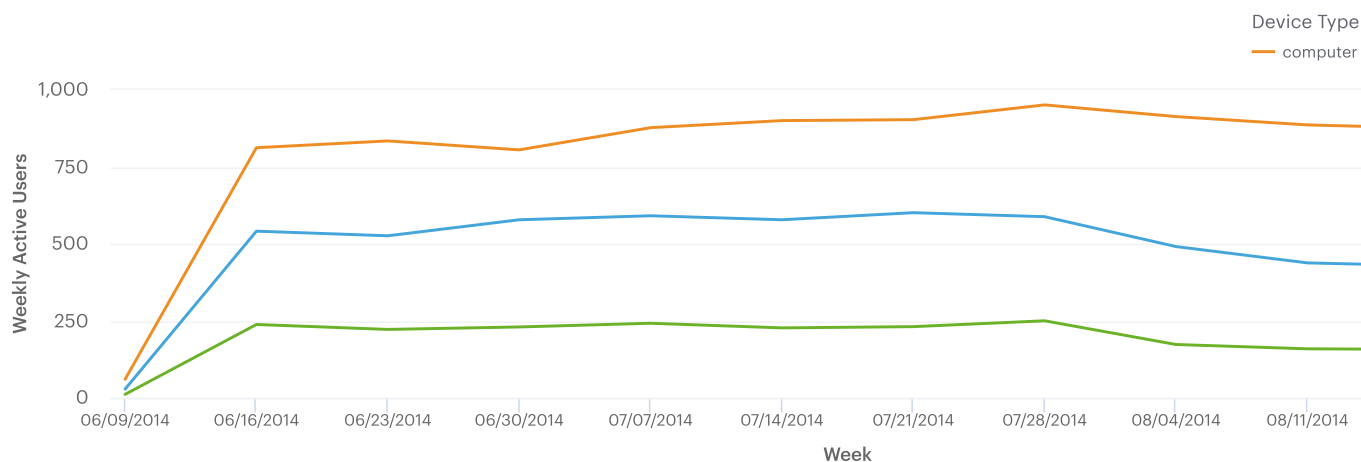


The functionality included in the chart above include sending messages, liking messages, using the search functionality, viewing the homepage, and viewing the inbox. All of the pieces of functionality following a similar trend of dropping engagements after the week of July 28th. Based on this, we can conclude that there is not a piece of broken functionality.

Hypothesis 3: Issue with the App or Website

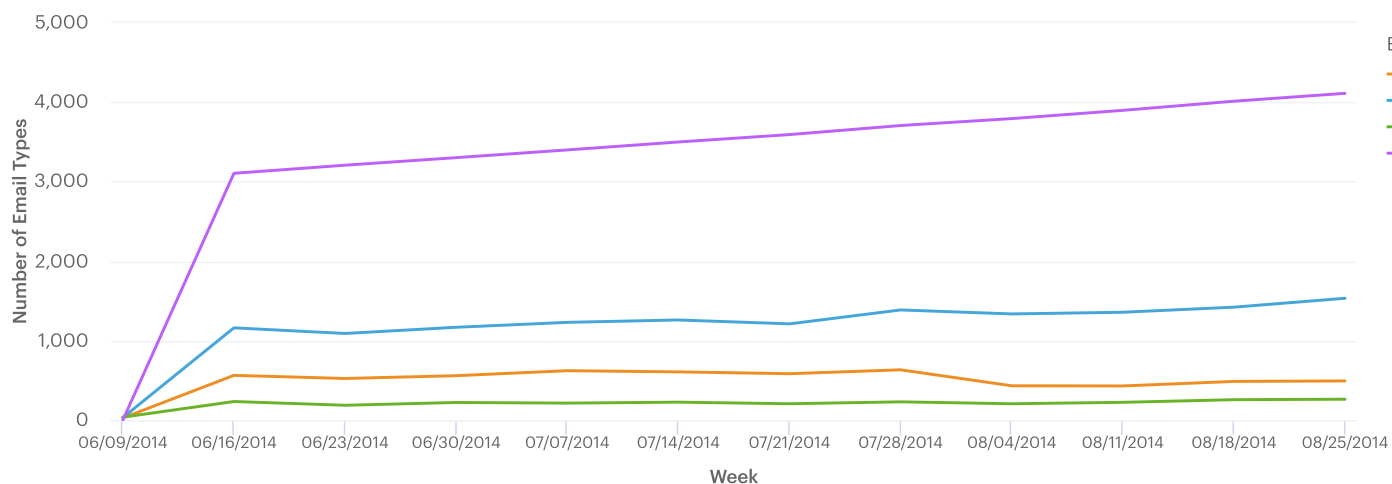
The next hypothesis tested was to see if there was an issue with either the app or the website. The data provided breaks down the engagements based on device type. The devices were grouped by computer (laptops and desktops), phones (iPhones, Galaxy phones, etc.), and tablets (Kindle Fires, iPads, etc). The chart below shows the number of engagements (logins) for each of the different device types. Phones have had a much more drastic drop in engagements compared to computers and tablets. This should be investigated more.

Weekly Active Users by Device



If functionality was not an issue, the other way that users could access the product is through emails. The chart below shows the number of weekly email events broken down by clickthroughs, email opens, re-engagement emails, and weekly emails. While the number of emails opened have increased during the decreased engagement period, the number of clickthroughs (clicking on a link in an email) have decreased. This is a cause for concern. The decrease in the number of clickthroughs could mean that there are broken links in emails or that users don't navigate to the product from emails.

Email Types



Conclusion

The biggest drop in user engagements could be caused by both an issue with the mobile application and the drop in clickthroughs from emails sent to users. These two issues could also be linked but could not be determined based on the data at hand.