Investigating the Decline in User Engagement

Understanding the Product

Yammer is an enterprise collaboration platform enabling coworkers to share documents, updates, and ideas by posting within group forums.

Defining the Metric - User Engagement

User engagement refers to any interaction that triggers a server call—such as posting, commenting, or liking. Each chart data point shows users with at least one such action at the week's start.

Time Period Analysis

Data reveals a significant decline commencing in the first week of August, followed by a gradual downward trend in subsequent weeks.

Segmentation Analysis

- **Holiday Impact**: Investigate whether country specific public holidays coincided with the weeks exhibiting decreased engagement.

- **Device Usage:** Analyze engagement metrics across different devices—mobile phones, tablets, and desktops—to determine if the decline is platform-specific.

Funnel Analysis:
Identifying particular stages with notable reductions.

1. Sign-in into the web/mobile app.
     - Entry point for users
2. Home/Landing Page
     - Upon login, users are directed to the home page.
3. Viewing Inbox

- Users often check their inbox for messages and notifications
4. Sending messages
    - Users may send reply or start a new conversation
5. Conducting Search
    - Users may search for specific content, groups, or individuals
6. Executing Search queries
    - system processing the search input and displaying results.
7. Liking a page or post
    - Engaging with the content

Email Engagement Metric
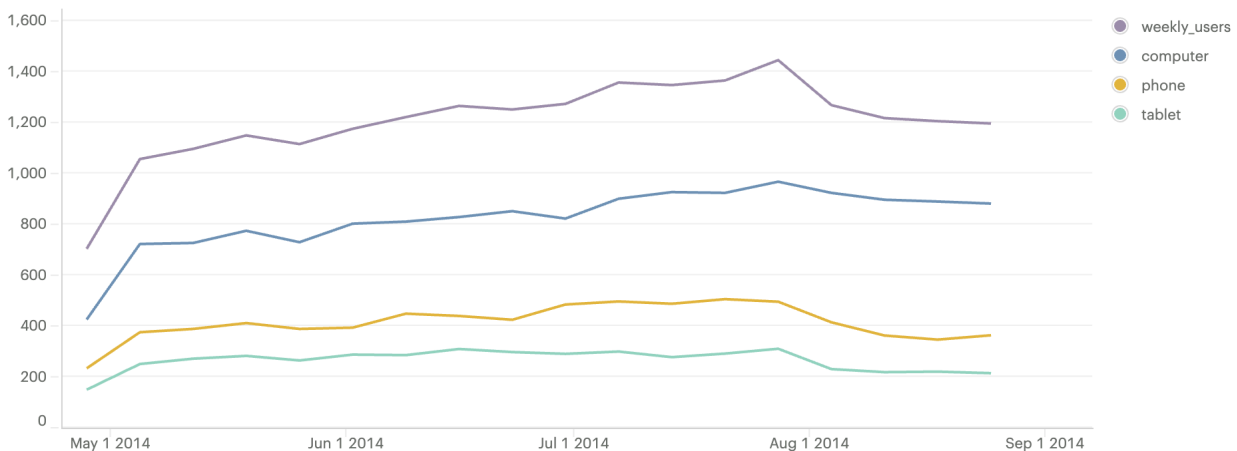- we also observe weekly digest emails, email opens and email click-throughs

External Factors
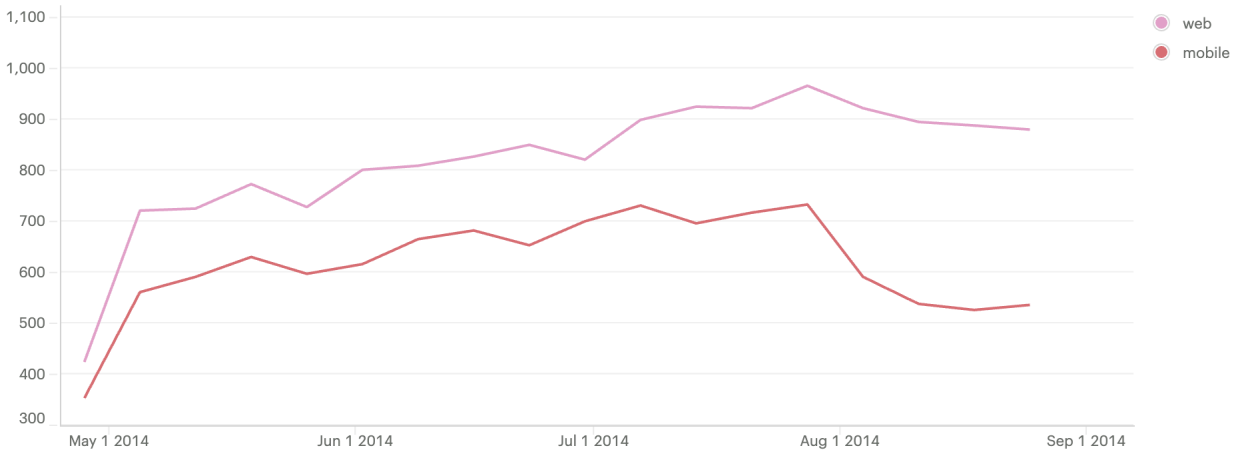- we examine external factors like Marketing, Bad Press.

Validating through Data

1. **No major holidays** during the time frame in which drop happened - so for now, we can rule it out

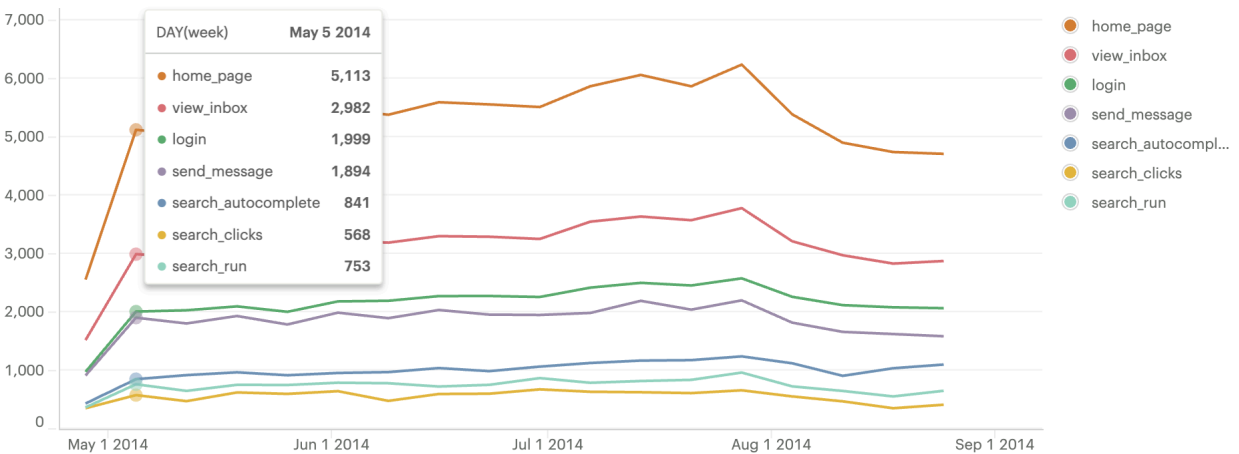2. **weekly user engagement in different devices**

- There is a drop in user engagement in mobile users.
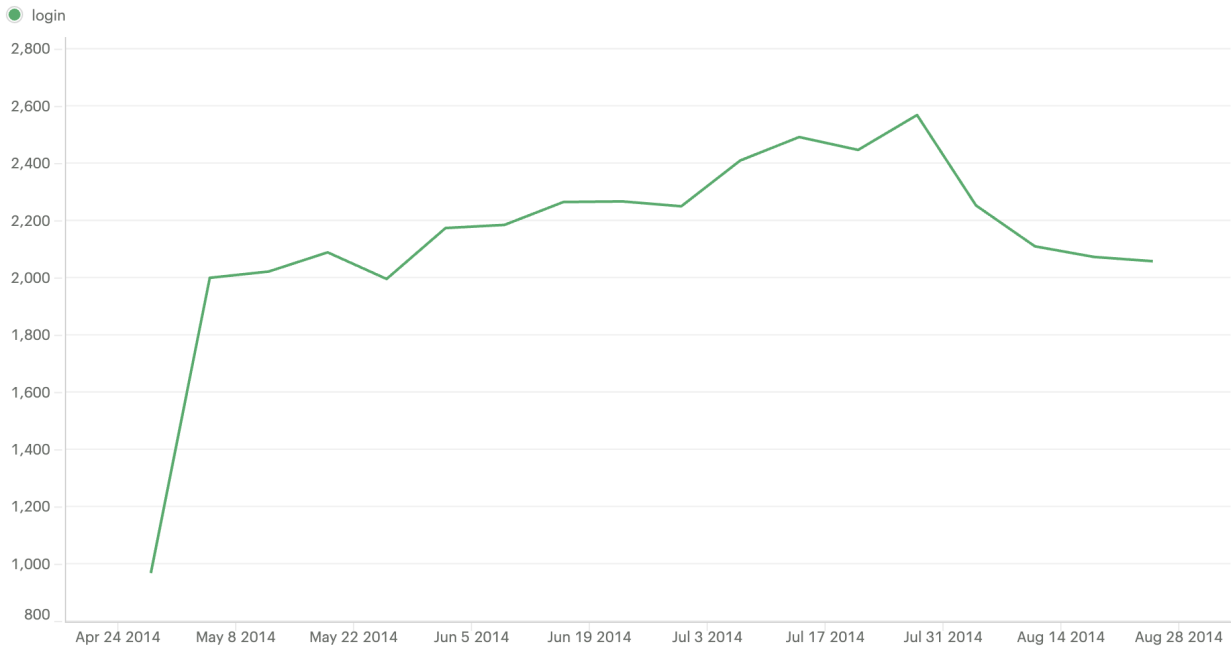- Let's Plot a chart in user engagement in mobile vs web

- From above chart, there is a sharp decline in mobile usage
- Diving deep, calculating drop % of devices
    web ~ 7.3% drop
    mobile ~26.7% drop
- Indicating there is an issue with the mobile app.

3.1 **Funnel Analysis**

| DAY(week)	May 5 2014
home_page	5,113
view_inbox	2,982
login	1,999
send_message	1,894
search_autocomplete	841
search_clicks	568
search_run	753

- From above chart, There has been a decline in all the stages. Lets look at the login stage now

      - If users cannot login then engagement in other stages too drop as login is the first stage of user journey.

      3.2 **Weekly Email Engagement**. we observe weekly digest emails and email opens are rising, but email click-throughs have actually dropped. This may indicate an issue with the links in the emails or even user fatigue.
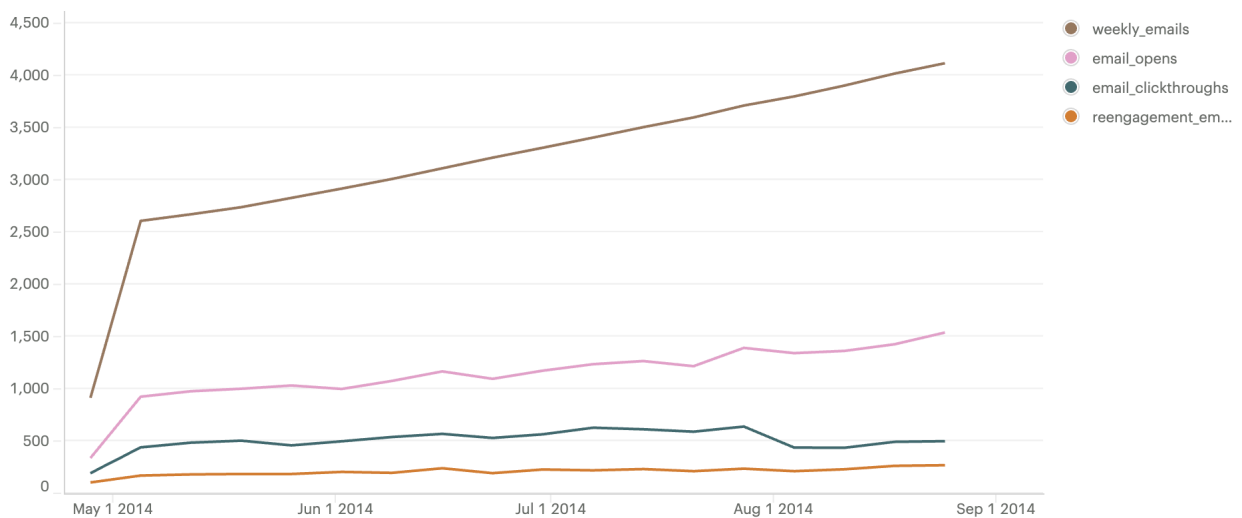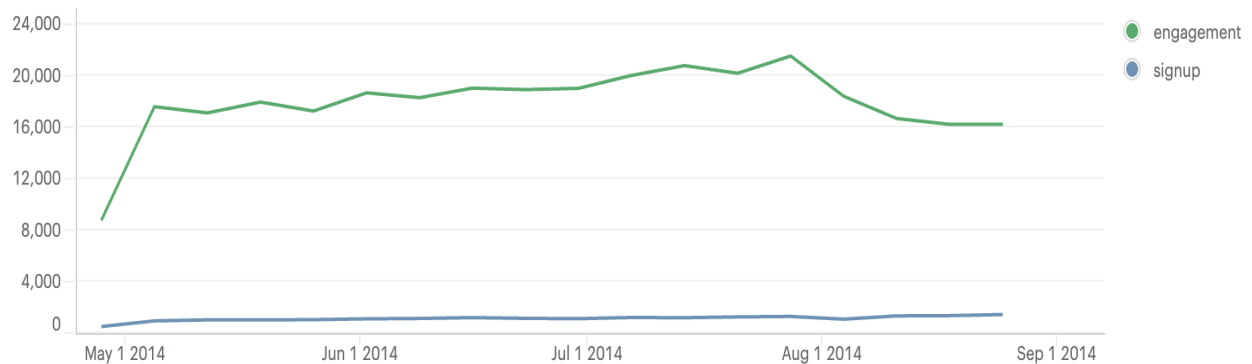
4. External Factors
- Marketing
Any big thing happened in the marketing team ?
- Bad Press
Has Yammer been in news ? resulting in a change in User Behavior and leaving the product

Generally, drop due to External factors like marketing, bad press results in a drop in sign-ups as users tend to disengage from the product. This seems not to be the reason here.