

Understanding_Search_Functionality

Understanding of Search:

Search feature's goal is to help user to find their wanted content more efficiently.

Base on this understanding, when a search is needed, the logical sequence of search we could expect the user to take is:

1. Search_autocomplete. If can't find the content then proceed.
2. Search_run, click through the result in the search result list until the content is found.

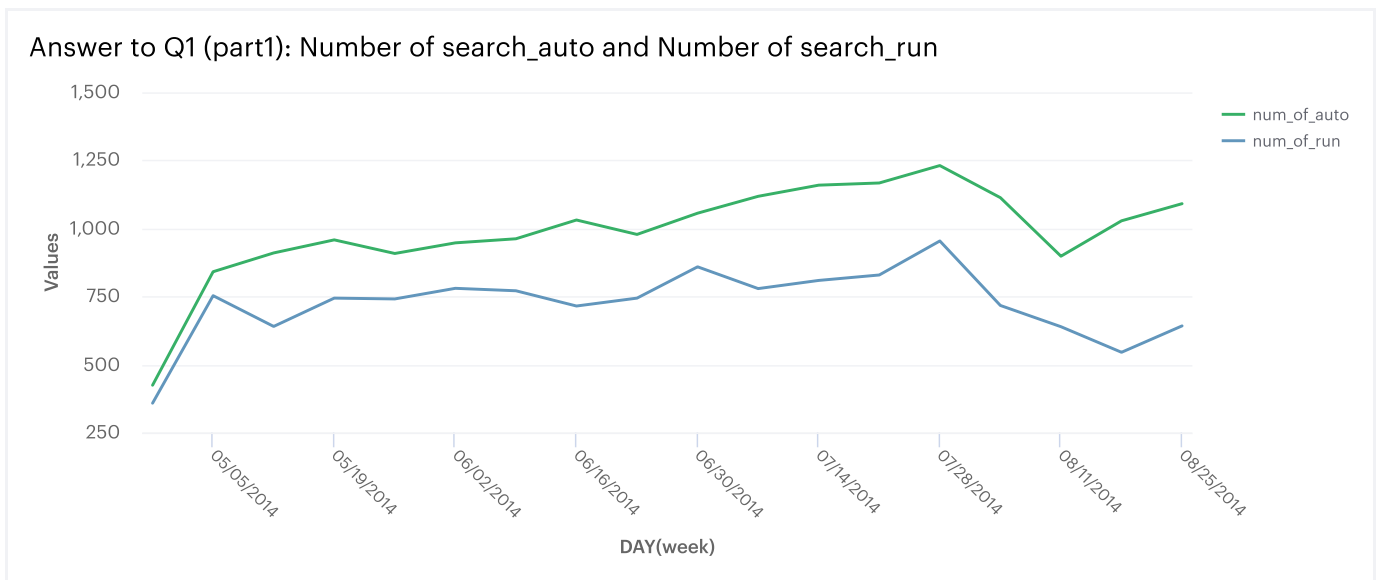
Definition of "session":

I feel the best way to evaluate the value of search functionality to user is to observe what user do every time they login to yammer. In order to do that all events are ordered by user_id and occurred time, then divided into sessions.

A session is a collection of events which start from a login events to the next login event of a same user exclude the second the login event.

Question_1: Are user's search experience generally good or bad?

From the graph below, we can see that user prefer to use autocomplete much more than search_run.



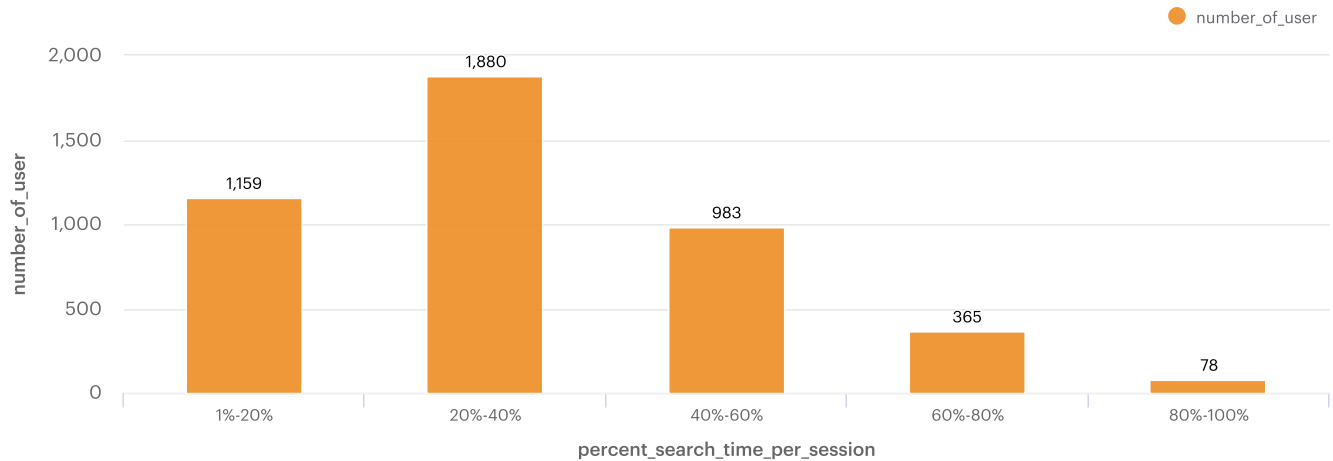
For each user, on average they use search_autocompletion and search_run in 18% and 8% of their total sessions respectively. We can tell that the user feel the search_autocompletion is more helpful than search_run.

Answer to Q1 (part_2): Percent of Session with search_auto and search_run

	percent_search_auto	percent_search_run
1	18.1781298973	8.05467525683

When search is needed user normally spent around 30 percent of their time on searching in each session. User spent too much time on searching tells that the search feature is not efficient enough.

Answer to Q1(part_3): Percent of Time Spent on Search per Session

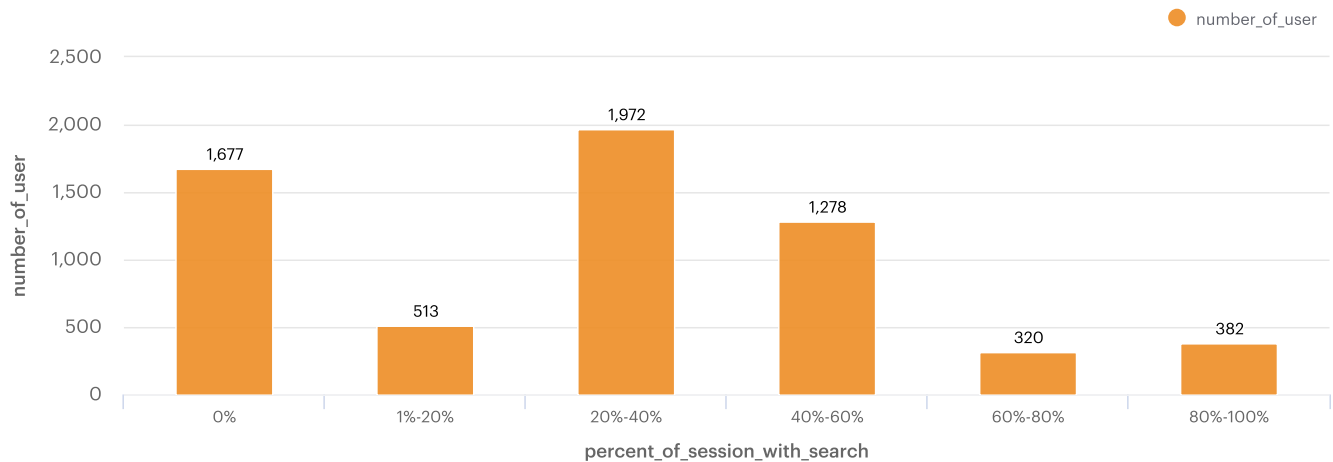


Question_2: Is search worth working on at all?

The chart below shows how often do user use search.

Only 27.3% (which is 1677/6142) of user never use search function. Except users who never use search, on average, when a user login to yammer there's 41% chance he/she will need to use the search features.

Answer to Q2(part_1): Percent of Session with Search of A User



Answer to Q2 (part_2)

avg_percent_of_sessions_with_search

1

40.9449048152

Question_3: What specifically should be improved?

Ideally, user should have a much higher chance to get their wanted content in the first few search result provided by the search result list. However, the distribution of clicks is even which shows that the quality of search_run output doesn't meet the requirement.

Answer to Q3: Number of Click on Each Search Result

