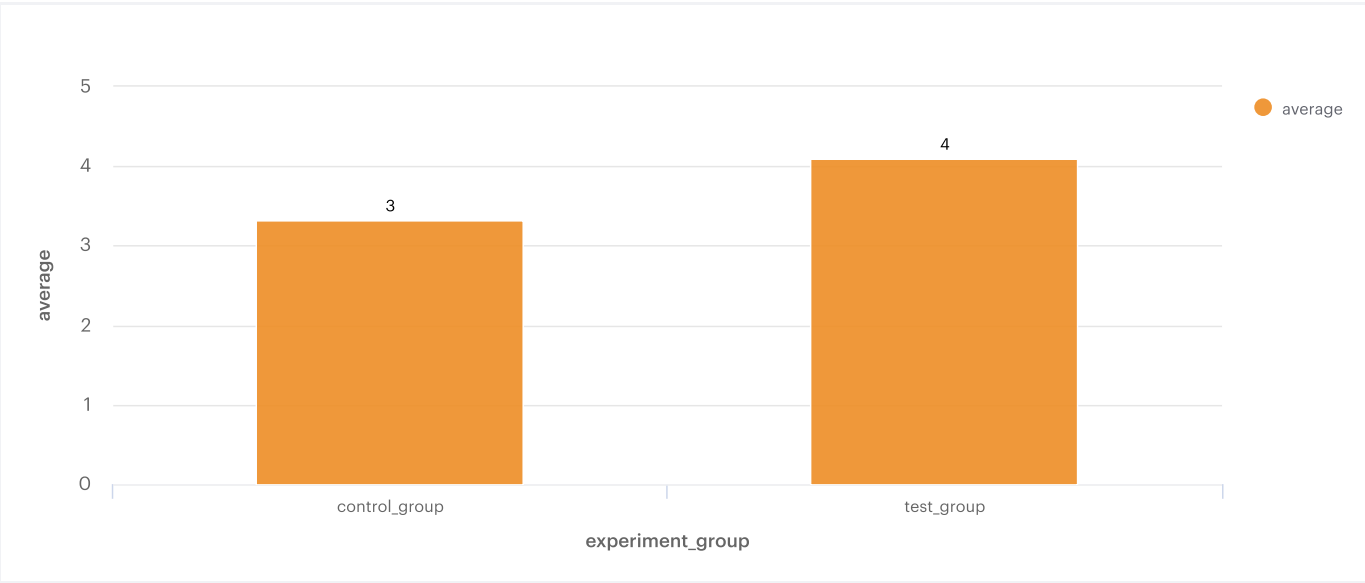


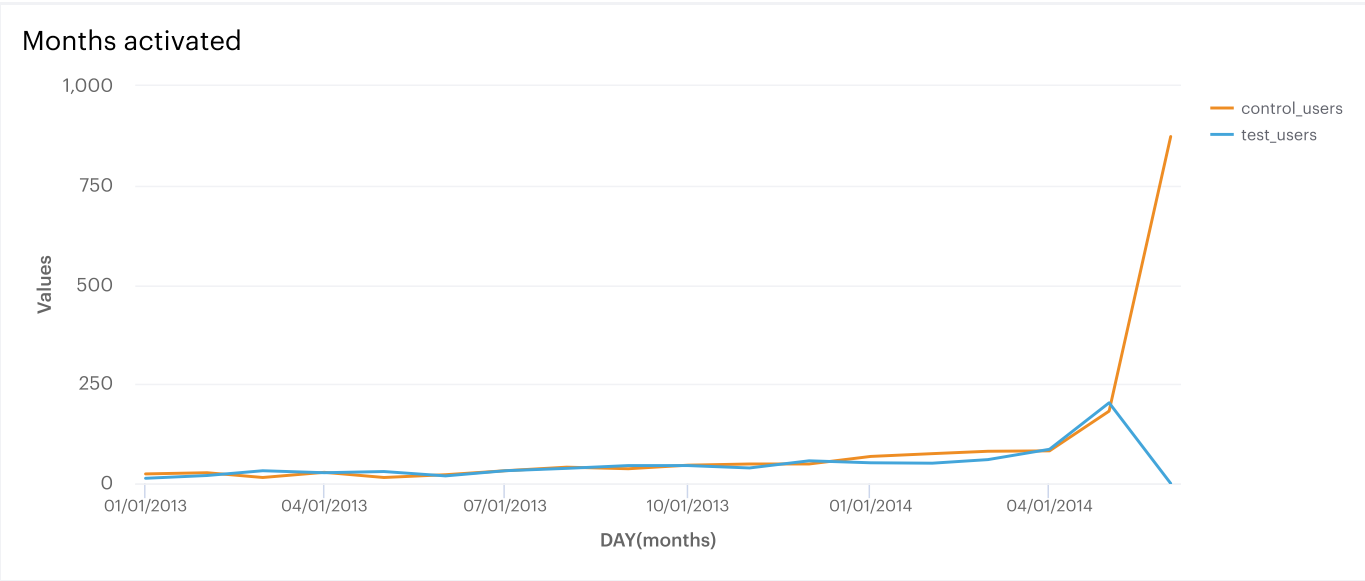
Validating A/B test results using SQL in MODE

This report presents the analysis on the A/B test results on an improvement to one of the features in Yammer's core "publisher". The results are presented as a comparison between control (shown older version of publisher) and test (shown newer version of publisher) groups.

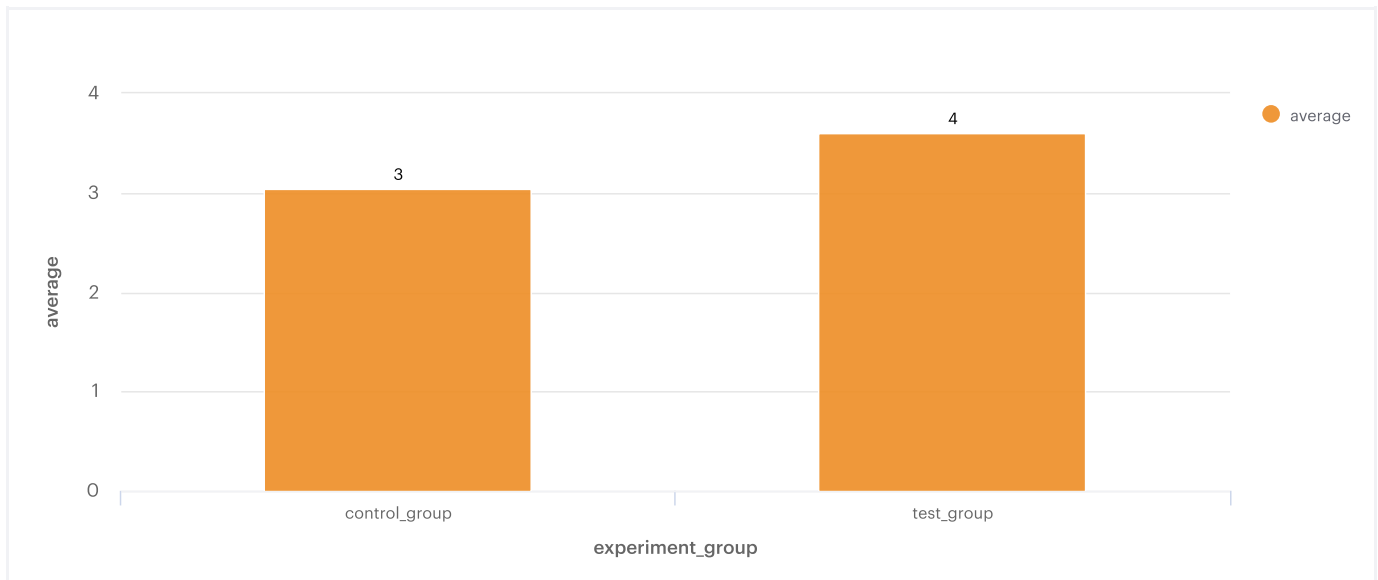
Average increase in the number of users that logged in were significantly higher for the users in test group as compared to the control. This may suggest that the newer version of publisher is better, but there are other possible underlying cause for this increase.



The following graph gives insight to the time period for which control and test group users were using the publisher. For instance a new user would have less time to log in or post messages, resulting in less activity compared to the existing user.



Above graph point out that new users were included in the control group. This signifies a bigger problem with the test :splitting of users in control and test groups. In order to dig deeper we can also check the login activity of only the existing users in control and test groups using the plot below:



Query 3

	experiment	experiment_group	users	total_treated_users	treatment_perc	average	t_stat	p_value
1	publisher_update	control_group	1746	2595	0.673	3.034	0	1
2	publisher_update	test_group	849	2595	0.327	3.603	5.371	7.80000000145e-8

The bar plots above show that the average difference between the log in activity of control and test groups reduced for the existing users. In addition to the above analysis, it will be interesting to compare the activity of control and test group users interacting through different devices such as cellphones, windows, macbook etc.