
Project JW

BI Analyst challenge

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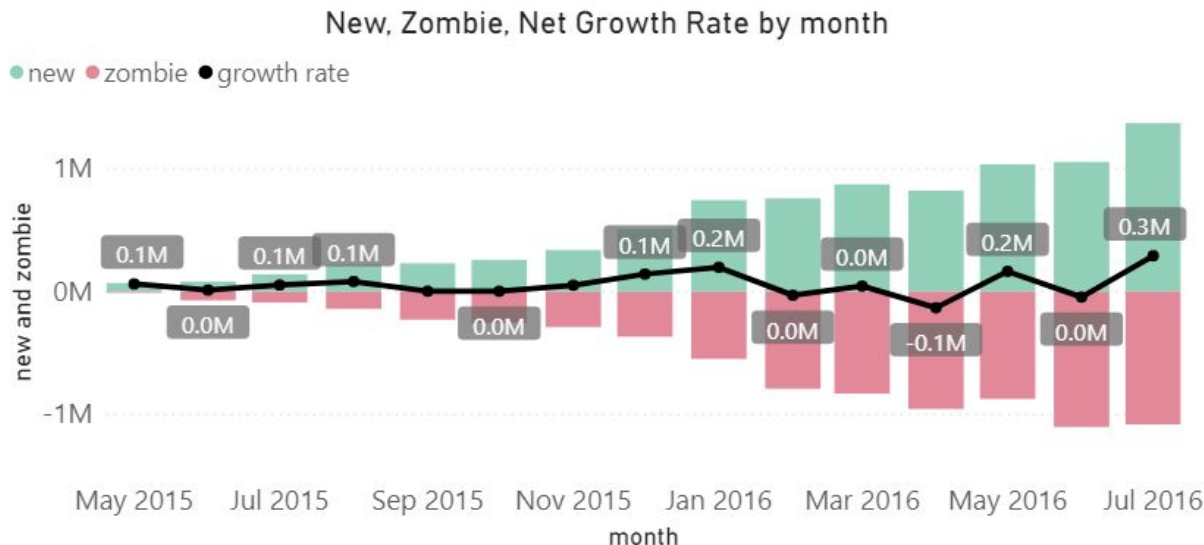
What is our current net growth-rate?

Month ▲	Net Growth Last Month	Net Growth	Net Growth MoM	%Net Growth MoM
2015-05-01		63769	63769	Infinity
2015-06-01	63769	13816	-49953	-78.33%
2015-07-01	13816	55001	41185	298.10%
2015-08-01	55001	83586	28585	51.97%
2015-09-01	83586	4901	-78685	-94.14%
2015-10-01	4901	4709	-192	-3.92%
2015-11-01	4709	53382	48673	1033.62%
2015-12-01	53382	143981	90599	169.72%
2016-01-01	143981	199073	55092	38.26%
2016-02-01	199073	-28012	-227085	-114.07%
2016-03-01	-28012	46198	74210	264.92%
2016-04-01	46198	-129995	-176193	-381.39%
2016-05-01	-129995	165922	295917	227.64%
2016-06-01	165922	-42961	-208883	-125.89%
2016-07-01	-42961	293247	336208	782.59%

- The Net Growth rate month over month percentage doesn't look very promising.
- Overall observation: there is a very slight upward trend.
- Need for customer retention efforts.

What is our current net growth-rate?

- clear growth of clientele,
- most of users do not return right away (next month)
 - become “zombies”,
- number of new users grow, but not fast enough to show a distinct increase MoM%



=> growth rate trend is highly volatile

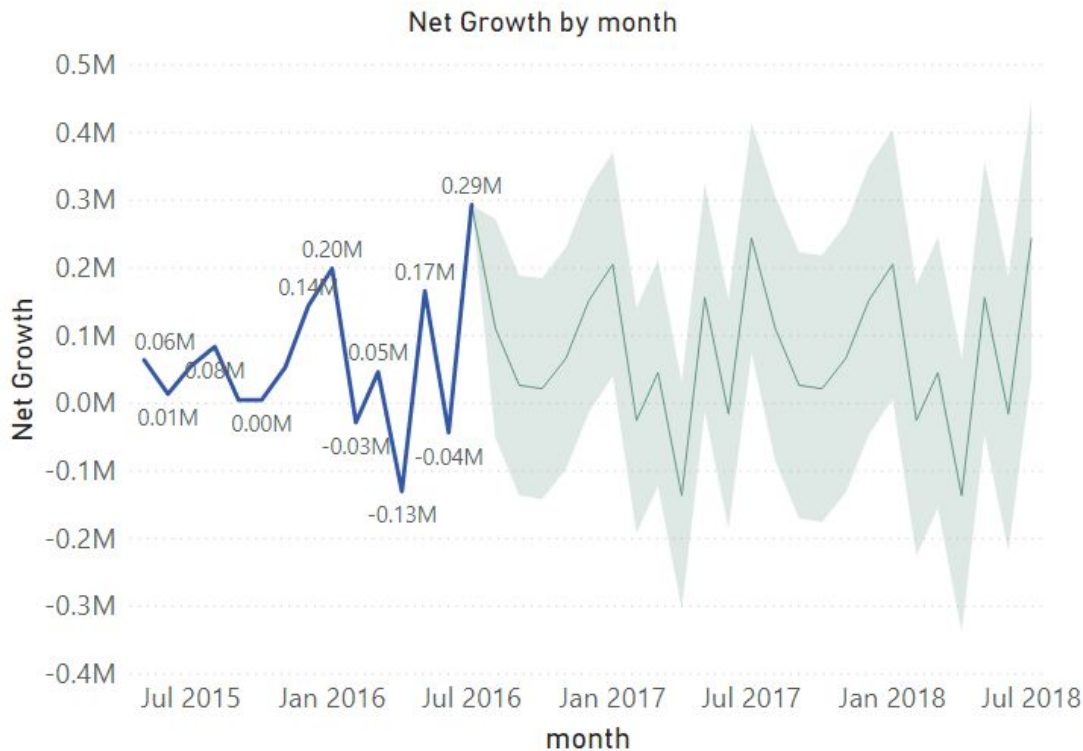
“what will be our usership will look like in 2 years from now?”

Net growth rate forecast with exponential smoothing is not informative.

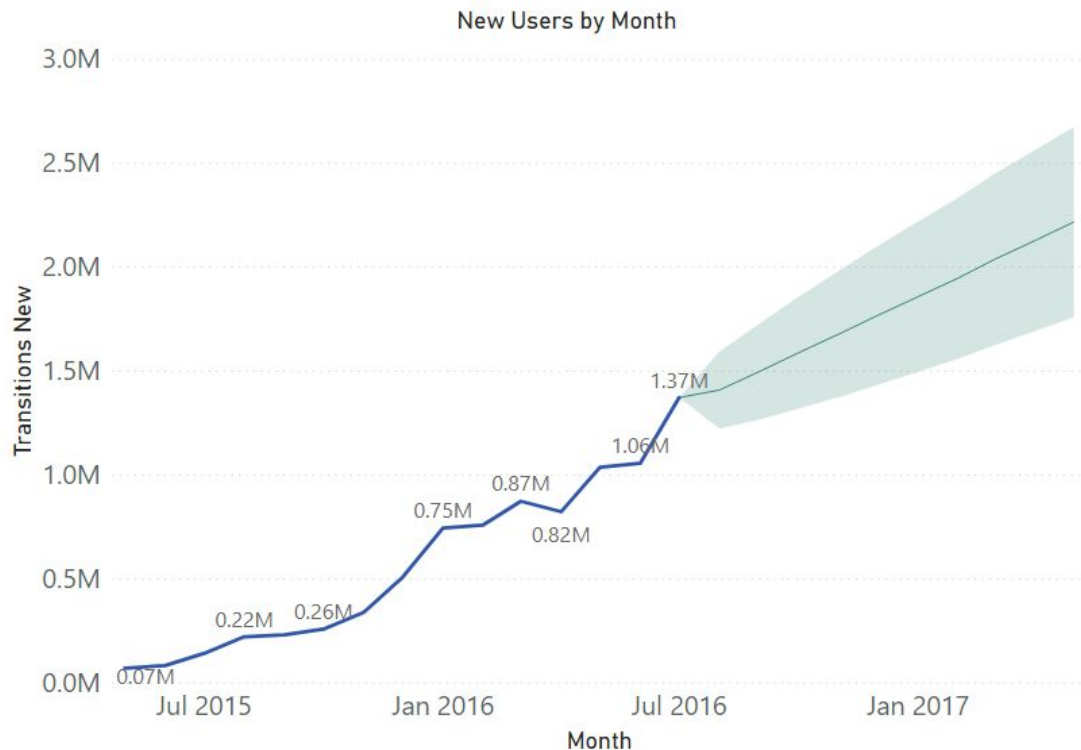
Net Growth is highly volatile and unpredictable:

- no clear pattern/trend;
- high “seasonality”;

Given the current ratio of “new” and “zombie” users all outcomes are equally likely.



“what will be our usership will look like in 2 years from now?”



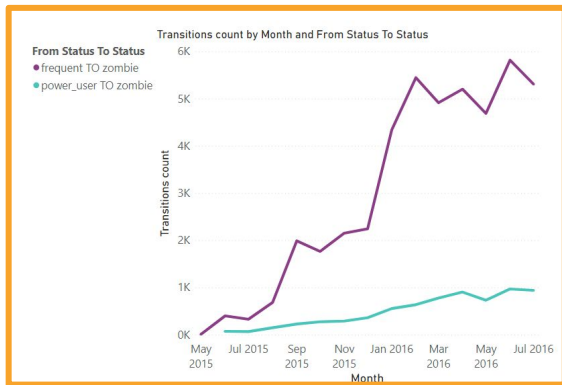
Only way to affect the Net Growth rates and set the upward trend is to reduce “churn” - number of “zombie” users.

Under the premise that analysis is done to find the reasons why users leave and user retention measures are implemented, the usership may grow exponentially.

“Are there groups / cohorts of user that show a certain risk or potential to our growth & loyalty?”

Mainly the “infrequent” cohort tends to be converted to zombie, makes sense: Loyalty is not among their values. The “reacquired-to-zombie” trend slowed down in April.

“Frequent-to-zombie” trend has been also quite steep until Jan 2016.



Transitions count by Month and From Status To Status

