

Relax Inc. makes productivity and project management software that's popular with both individuals and teams. Founded by several former Facebook employees, it's considered a great company to work at. This report contains analysis for factors that influence adoption rate of Relax products. Since all of the features are categorical, we employed Chi-squared test to determine the correlation of each feature with the rate of adoption.

## Results

From the results shown in Table 1 we can see clearly that the variables that are correlated to adoption, and hence can be used for prediction ( $p < 0.05$ ), includes

1. The creation source
2. The organization id
3. The month of creation
4. The year of creation
5. The domain name of the registered email (i.e. hotmail, gmail, etc.)

## What does this tell us?

This shows that the marketing strategy of the company is not effective as both mailing list and marketing drop do not make any statistical difference in adoption rate. All of the influencing factors identified here are external. Therefore, this urges the company to gather more data related to those features to further determine the characteristics that could bring more adopted users or to create a more accurate marketing strategy. For example,

1. The characteristics of people who use hotmail and gmail
2. The economy in each month and year

However, the current results can already lead to some actionable recommendations to boost the adoption. By just plotting the ratio of **[adopted:not-adopted]**, we can already draw further insight from the correlations (Fig. 1), such as

1. The company should encourage more guest invitation and signup through google auth
2. The company should create more promotion in some year ex. 2014 and in certain months of year, especially March, April, May
3. The company should target ads to more gmail and hotmail users.

	name	chi2	p-value
	creation_source	79.7687	1.94985e-16
	opted_in_to_mailing_list	1.02471	0.311405
	enabled_for_marketing_drip	0.0539105	0.816393
	org_id	531.968	9.94151e-05
	invited_by_user_id	2641.29	0.137438
	created_month	162.918	3.36925e-29
	created_year	188.251	1.32394e-41
	domain	31.8415	1.74997e-05

Table 1. The results of the Chi-squared test for each feature.

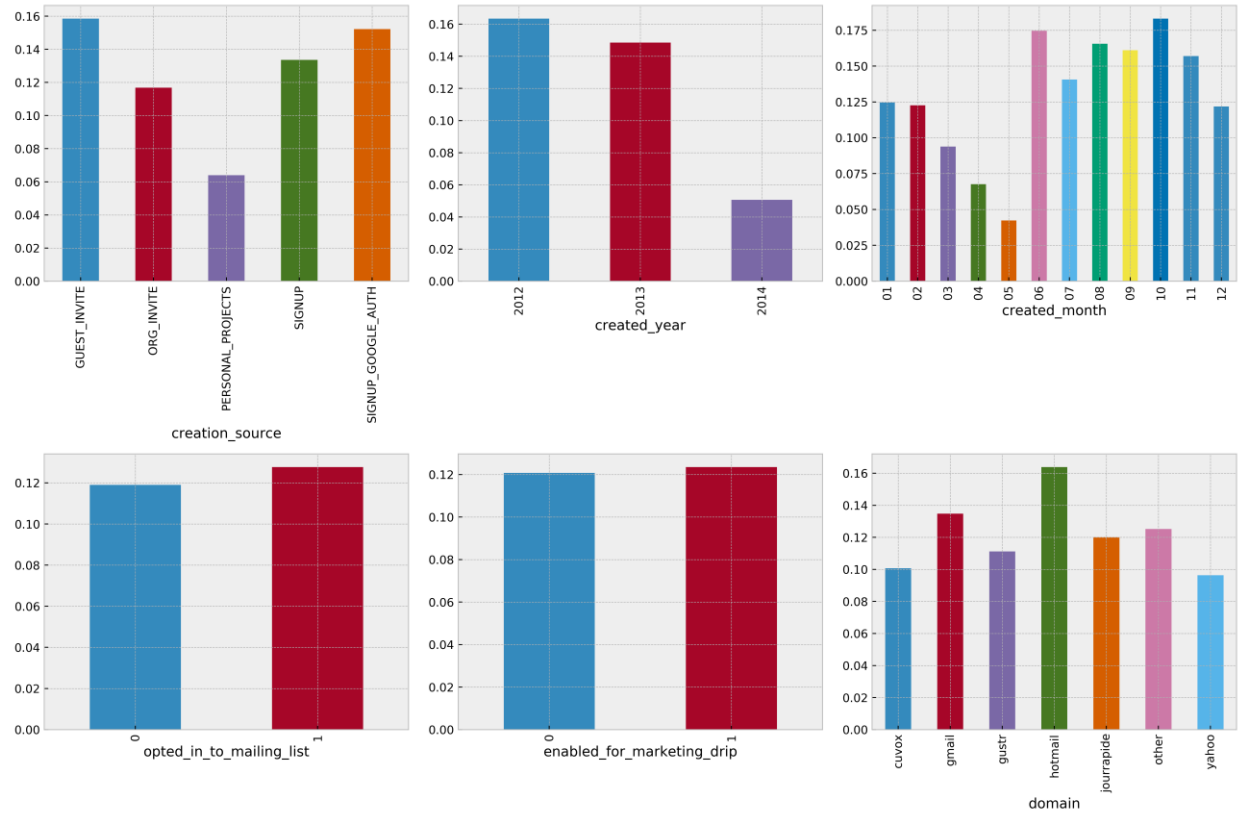


Fig. 1. The ratios of adoption vs. no adoption for each features.