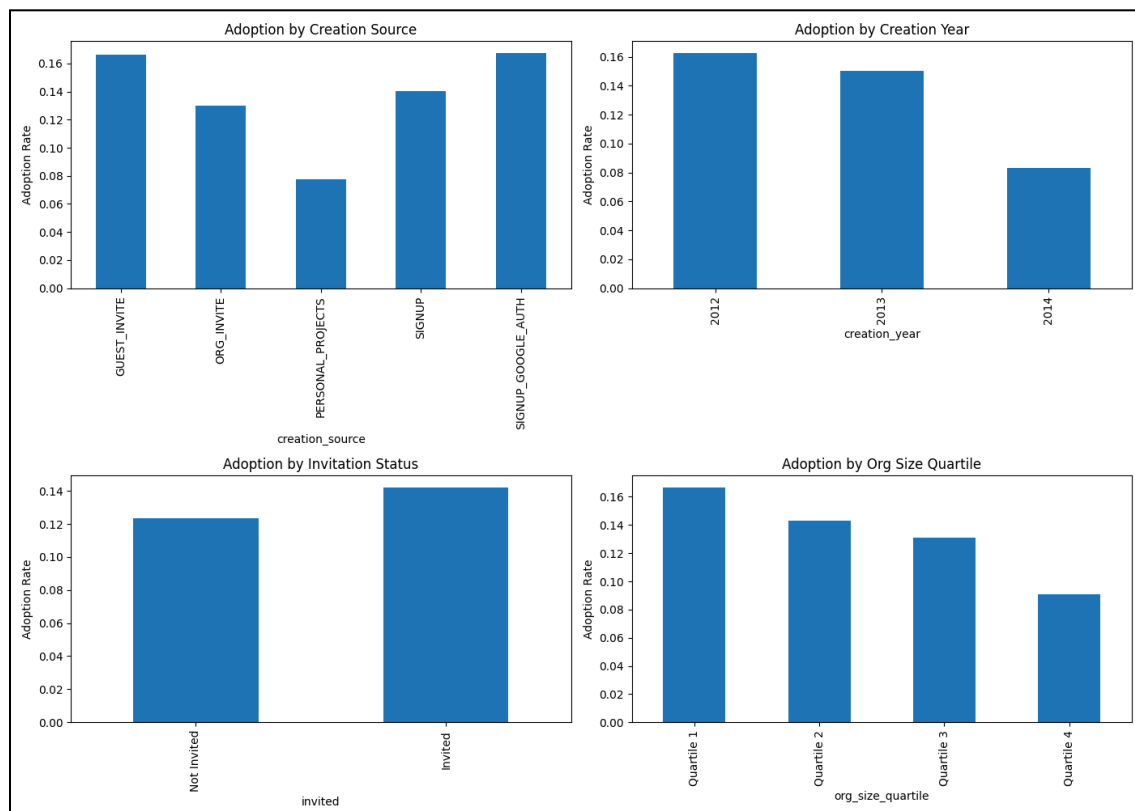


# User Adoption Analysis Summary

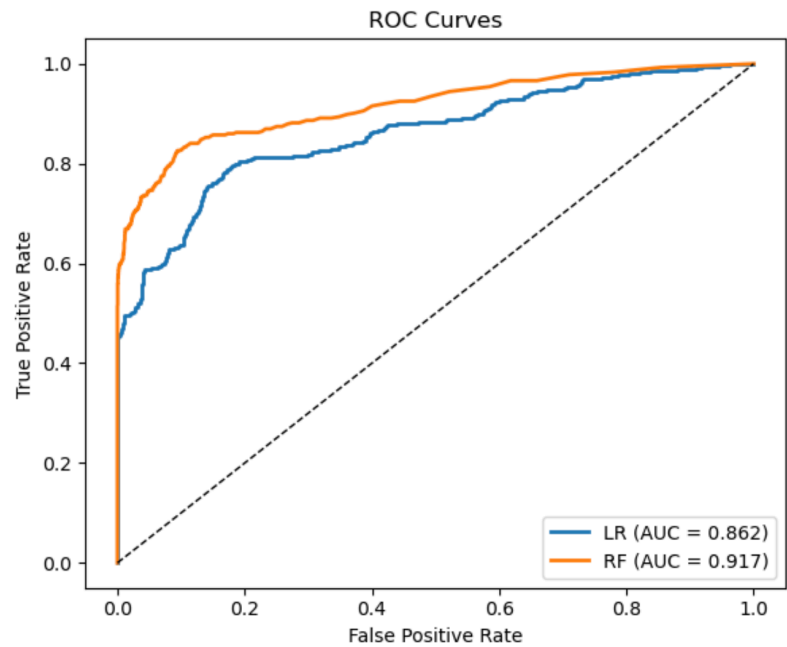
The objective of this analysis was to identify factors that predict future user adoption, defined as logging into the product on three separate days within any seven-day period. Two datasets were used: user account metadata and engagement data with login timestamps. Users meeting the adoption criteria were flagged and merged with their attributes to explore correlations.

Key findings indicate that users invited by others had higher adoption rates, suggesting that social onboarding or organizational context boosts engagement. Early adopters (2012–2013) were more likely to remain engaged, likely due to longer exposure. Smaller organizations showed higher adoption rates, possibly because of tighter collaboration. Additionally, users signing up via Google Auth or through organizational invites exhibited slightly higher adoption, pointing to the value of streamlined or social sign-up methods. Marketing preferences, such as opting into mailing lists, showed no significant impact on adoption.

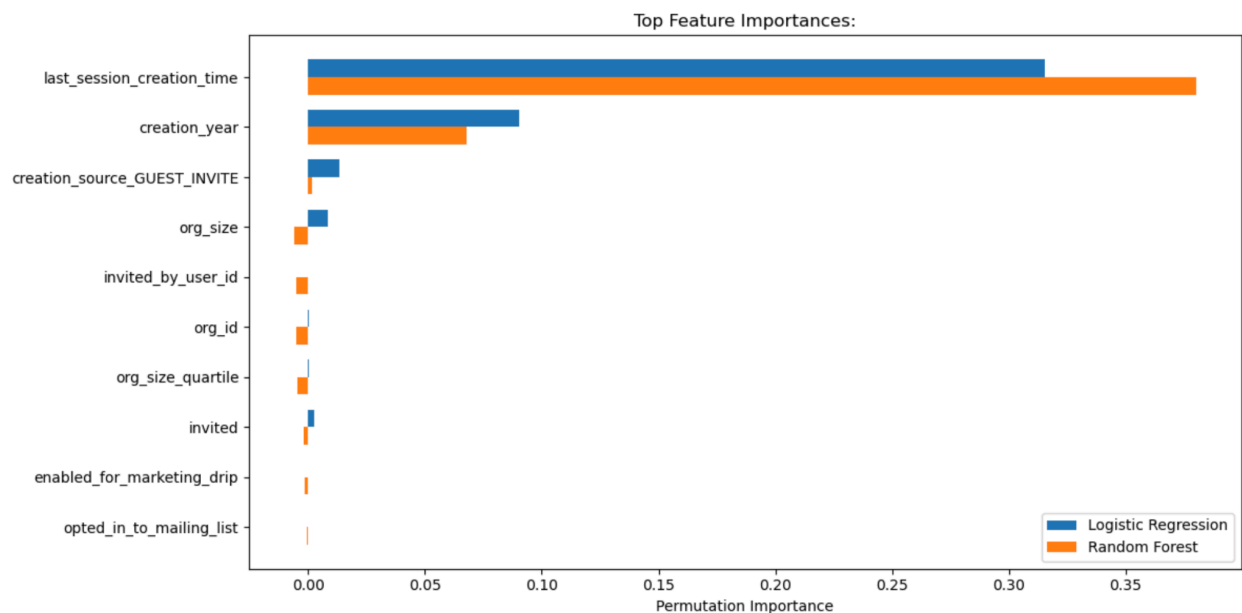
Here is the visual summary of the user adoption analysis. These bar charts illustrate how adoption rates vary across key user attributes:



Predictive models were created using logistic regression and random forest algorithms. The ROC curves show that the random forest model outperformed logistic regression, with an AUC of 0.917 compared to 0.862, indicating stronger predictive accuracy.



Feature importance analysis revealed that last session creation time and creation year were the most influential predictors of user adoption, followed by invitation source and organization size. These insights suggest that both behavioral recency and account tenure are strong indicators of future engagement.



## Summary Tables

### Adoption by Creation Source

<b><u>creation_source</u></b>	<b><u>adopted</u></b>
GUEST_INVITE	0.08
ORG_INVITE	0.12
PERSONAL_PROJECTS	0.10
SIGNUP	0.09
SIGNUP_GOOGLE_AUTH	0.11

### Adoption by Creation Year

<b><u>creation_year</u></b>	<b><u>adopted</u></b>
2012	0.13
2013	0.11
2014	0.07

### Adoption by Organization Size (Quartiles)

<b><u>org_size_range</u></b>	<b><u>adopted</u></b>
Smallest quartile	0.17
Largest quartile	0.09