#### How to get loans funded on Kiva



KIVA loans that change lives

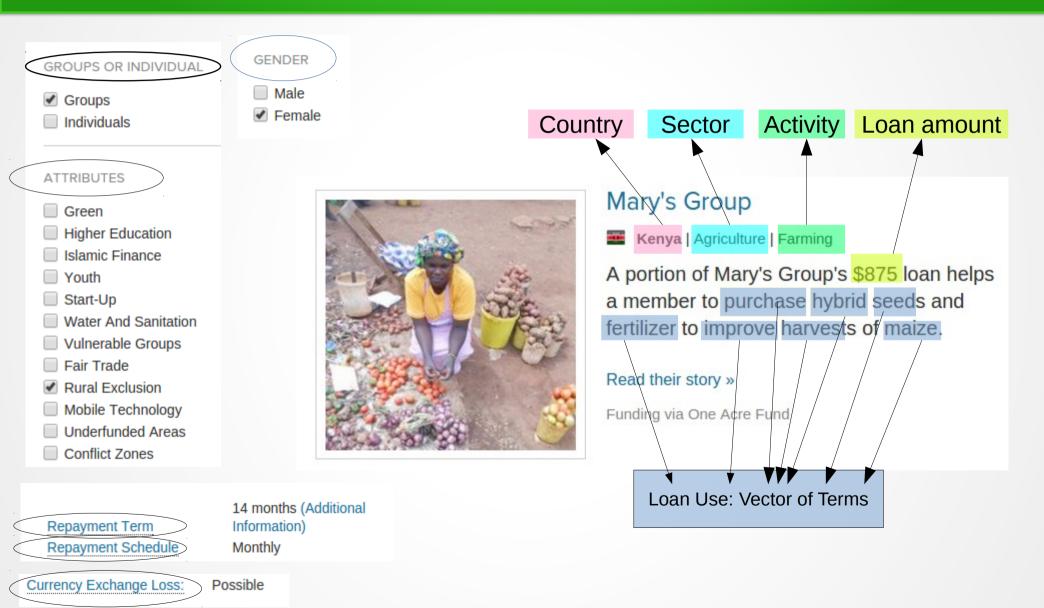
Matthew Lichti
Data Science Fellow
Zipfian Academy

### Problem

- 850,000 loans (\$682 million) funded by 2 million lenders around the world on Kiva
- Kiva loans expire if not funded in 30 days
- Microfinance organizations need to determine which features make loans more likely to get funded



# Feature Engineering



### Model

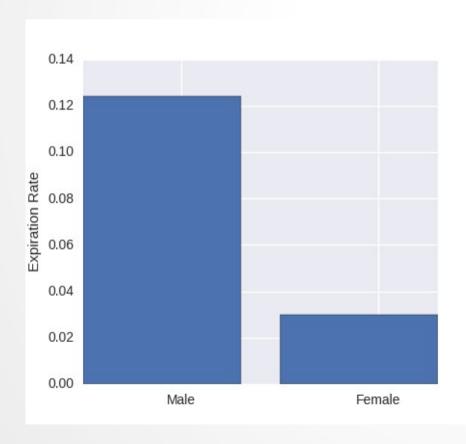
- Random Forest
- Unbalanced classes: weighted samples of expired loans
- Tuned model to avoid overfitting
- Trained model on April Sep. 2014 loans
- Tested model on Nov 2014 loans

## Results

	33% Predicted High Risk	67% Predicted Low Risk
14% of Loans	38.8%	1.5%
Expired	expired	expired
86% of Loans	61.2%	98.5%
Funded	funded	funded

## Keys to getting funded

- Loans to women
- Loans with monthly payments





## Keys to getting funded

- Smaller loans and shorter repayment terms
- Agriculture and education best, housing and personal expenses did poorly
- Group loans over individual loans
- Shorter text is better