

What Makes Projects Succeed?

By: Griffin Hundley and Mitch Krieger

Kickstarter only makes money when a project gets fully funded by backers.



Understanding factors that affect project success is critical for both Kickstarter and project creators



Can we use data to predict a kickstarter project's success or failure?

If so, what features of the data have the largest impact on project success?



Type of Project



Location



Returning Creator



Monetary Goal



Funding Deadline

Process

Dataset generated from Web Robot's web scraping software





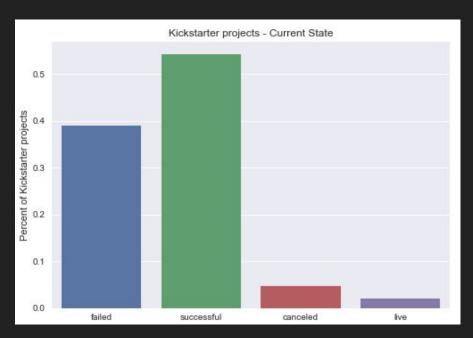
- Cleaned data using pandas
- Conducted exploratory data analysis using visualizations from seaborn and matplotlib
- Created classification models using Random Forest and Logistic Regression, and XGboost



Analyzed results using accuracy and f1 metrics

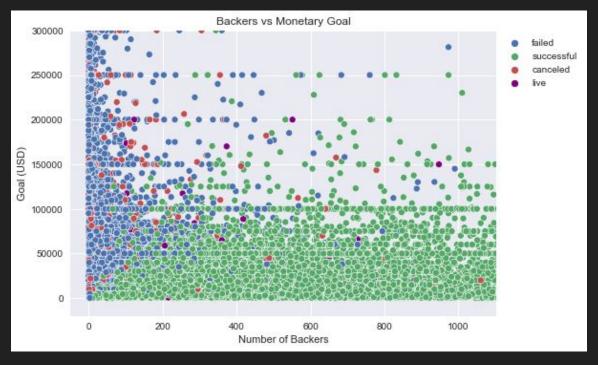
The Data

- 191,875 kickstarter projects launched between April 2009 - October 2020
- About 54% of projects were successful
- 161 different categories of projects



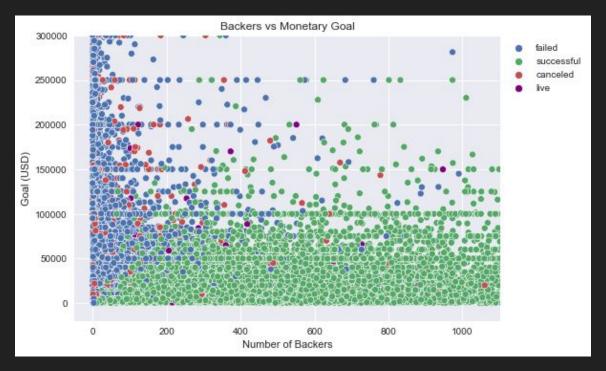
Canceled & Live Projects

- Most canceled projects behave like failed projects, so we'll treat them as failed in our models:
- Live projects we will remove (and can predict outcome later)



Goal setting

- Reasonable goal setting is critical
 - Clear decision boundary between funding goal and backer's willingness to provide funds
 - Indicates that backers like to pledge money to projects that will be successful



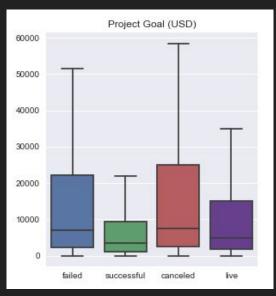
Successful creators:

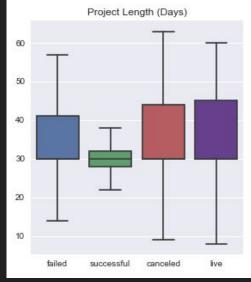


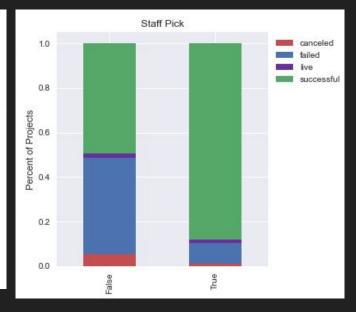
Set smaller goals

Have a target funding deadline of about 30 days after launch

Can increase chance of success by getting a kickstarter staff pick

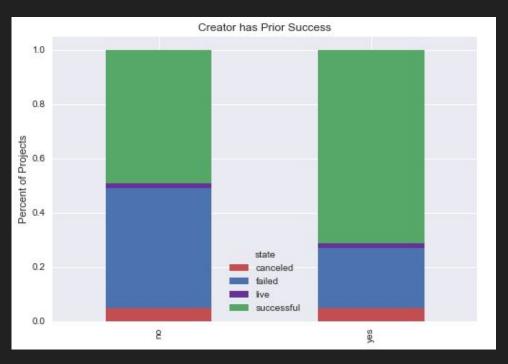






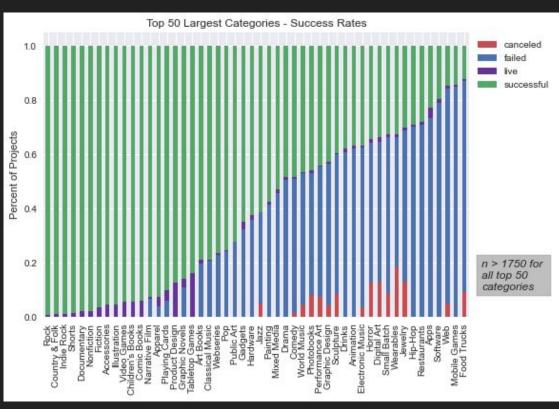
Returning Creators

 Creators with a prior successful project are more likely to have another successful project:



Type of Project Matters

Certain categories of projects tend to be more often successful than others



Modeling Goals

- Somewhat Interpretable from feature importance
- Using only features that are known at project launch.
- A model that encourages creators to kickstart their project and helps them succeed while still being straightforward with them: Use Accuracy & F1



Results

- Chose Logistic Regression Model
- Model Performed similarly in predictive power to other models
- Predicted success with:
 - Accuracy: 80.1%
 - F1 score: 0.799
- Features with largest impact in model:
 - Goal Needed per Day
 - Goal
 - Highly successful categories:
 - Video Games, Tabletop Games
 - Documentaries, Shorts
 - Children's Books, Fiction
 - Rock Music
 - Accessories

Conclusion

Confirms findings of EDA:

Set *reasonable* goals



More time ≠ Project Success



Category is critical



Next Steps:

How does the number of rewards and the reward quality affect success & our predictive model?





Do our findings apply to other crowdfunding platforms? Which platform is best for a particular type of project?

How have success rates changed over time since Kickstarter's launch in April 2009?



Thank you!

Project Links:

- GitHub
- Web Robots Kickstarter DataSet

Griffin Hundley

- Email: hundlegq@dukes.jmu.edu
- Github: @griffinhundley

Mitchell Krieger

- Email: mitkrieger@gmail.com
- Github: @mitkrieg