

# What Makes a Successful Crowdfunding Campaign?

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An Analysis of **KICKSTARTER** Successes and Failures

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# Agenda

- Background
- Process
- Analysis
- Conclusions
- Next Steps

# Background

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## ....By the Numbers

"I thought:

**What if people could go to a site and pledge  
to buy tickets for a show? And if enough  
money was pledged they would be charged and  
the show would happen. If not, it wouldn't."**

**- Perry Chen,  
Founder of Kickstarter**

**17,232,552**

Total backers

**5,673,016**

Repeat backers

**58,167,772**

Total pledges

**\$4,698,908,879**

total dollars pledged to Kickstarter projects

KICKSTARTER

## Oculus Rift: Step Into the Game



Developer kit for the Oculus Rift - the first truly immersive virtual reality headset for video games.

Pre-order Rift!

Created by  
Oculus

9,522 backers pledged \$2,437,429 to help bring this project to life.

Last updated January 30, 2016



KICKSTARTER

## Pebble 2, Time 2 + All-New Pebble Core



Two affordable, heart rate-enabled smartwatches and a hackable, 3G wearable for phone-free running with GPS, music, and Amazon Alexa.

Order now!

Created by  
Pebble Technology

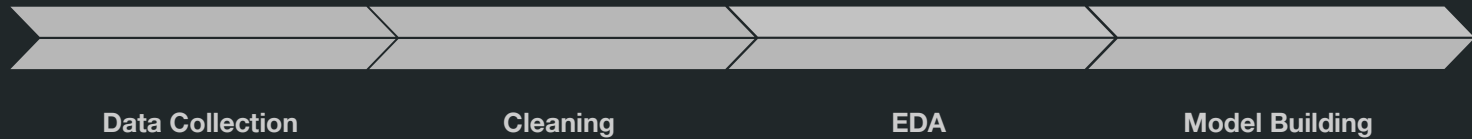
66,673 backers pledged \$12,779,843 to help bring this project to life.

Last updated September 7, 2017



# Process

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## Initial Kaggle Dataset

### Original Key features:

- Title/Name
- Blurb
- Success/Failure
- Num Backers
- Total pledged
- Total pledged (USD)
- Launch/Deadline Date and Time

## Data.World Dataset

### Kaggle Dataset + more

#### Key New features:

- URLs for projects
- Staff Pick Indicator
- Location
- Creation Date

#### Features lost:

- Subcategories

Different Time Period

## Additional Scraping

### Key Missing Pieces from both of these:

- Full Project Text
- Rewards

#### Collection success:

Project Text → ~50%

Rewards → ~99%



Data Collection

Cleaning

EDA

Model Building

Reward Cost

# of Backers

```
[['Pledge $9 or more', '', '12 backers'],  
 ['Pledge $25 or more', '', '46 backers'],  
 ['Pledge $29 or more', '', '123 backers'],  
 ['Pledge $59 or more', '', '6 backers'],  
 ['Pledge $89 or more', '', '14 backers'],  
 ['Pledge $159 or more', '', '9 backers'],  
 ['Pledge $199 or more', '', '23 backers'],  
 ['Pledge $489 or more', '', '38 backers'],  
 ['Pledge $10,000', '', '0 backers'],  
 ['Pledge $999 or more', '', '2 backers'],  
 ['Pledge $2,990 or more', '', '1 backer'],  
 ['Pledge $5,000 or more', '', '2 backers']]
```

Reward Description

Pledge \$9 or more

Steam Backer

INCLUDES:

- - Your name in the credits
- - Desktop wallpapers

ESTIMATED DELIVERY

May 2017

12 backers



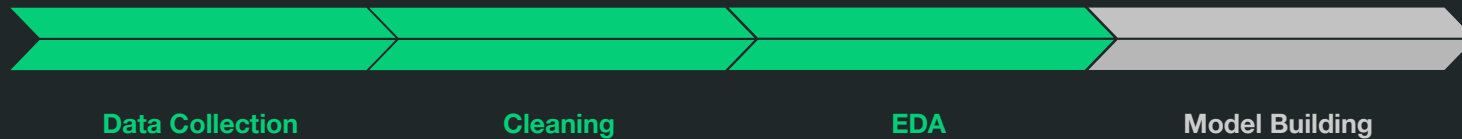
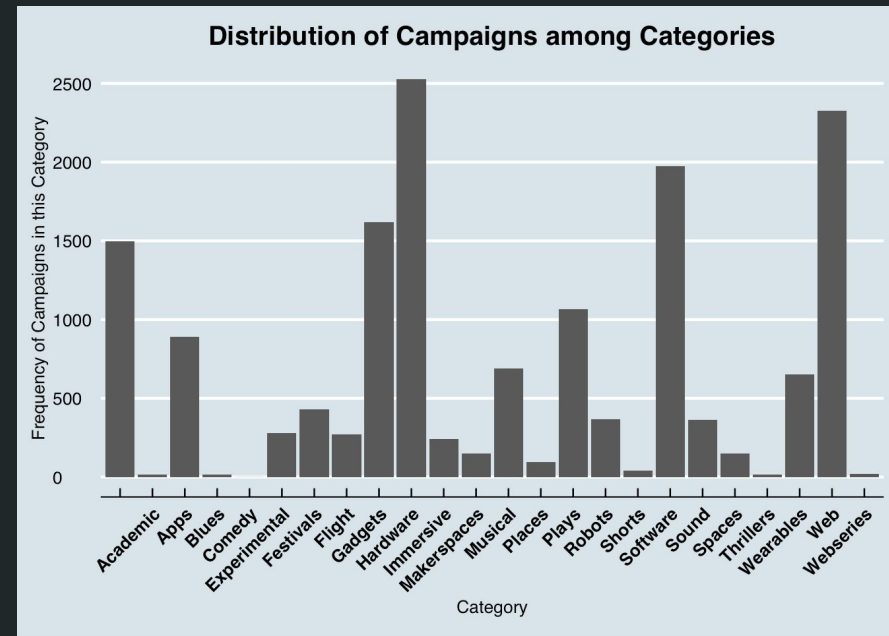
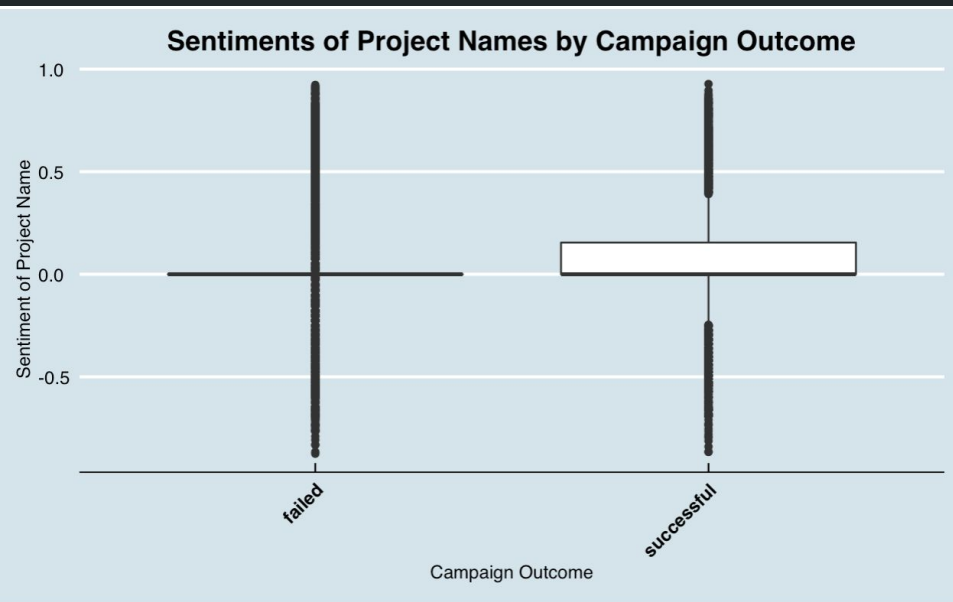
Data Collection

Cleaning

EDA

Model Building





# Feature Engineering

- **Sentiment with VADER:**
  - Change in Sentiment of Rewards  
(Highest Reward - Lowest Reward)
  - Sentiment of Name
  - Sentiment of Blurb
- **Minimum Reward Value (\$)**
- **Change in Number of Words Describing Rewards**

Pledge CA\$ 1 or more

ABOUT \$1

Big Thank You!

We're grateful for your support! Your money will help us improve our technology and put trees into the ground. Together we'll create a cleaner, greener future!

INCLUDES:

- 1 Tree Planted

ESTIMATED DELIVERY  
Jun 2020

28 backers

Pledge CA\$ 25 or more

ABOUT \$19

Greta Approves!

We Plant 25 Trees

INCLUDES:

- 25 Trees Planted
- Digital Card

ESTIMATED DELIVERY  
Jun 2020

54 backers



Data Collection

Cleaning

EDA

Model Building

# Analysis, Interesting Findings

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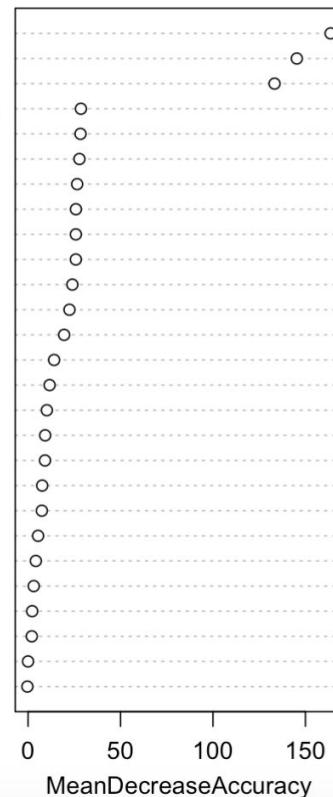
# Random Forest:

- Number of Trees: 1000
- cp: 0.1

Final Model  
Accuracy:

76.54%

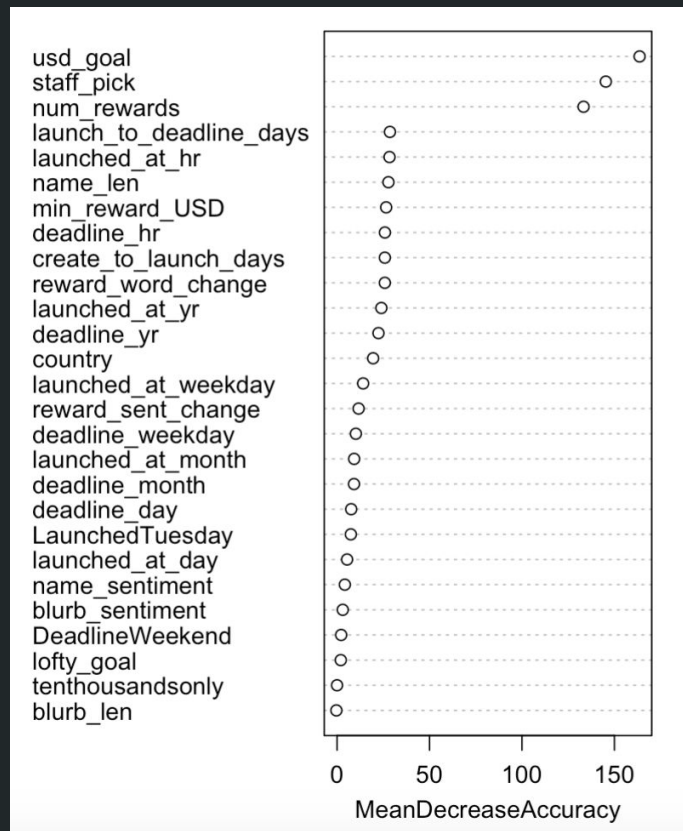
usd\_goal  
staff\_pick  
num\_rewards  
launch\_to\_deadline\_days  
launched\_at\_hr  
name\_len  
min\_reward\_USD  
deadline\_hr  
create\_to\_launch\_days  
reward\_word\_change  
launched\_at\_yr  
deadline\_yr  
country  
launched\_at\_weekday  
reward\_sent\_change  
deadline\_weekday  
launched\_at\_month  
deadline\_month  
deadline\_day  
LaunchedTuesday  
launched\_at\_day  
name\_sentiment  
blurb\_sentiment  
DeadlineWeekend  
lofty\_goal  
tenthousandsonly  
blurb\_len



Beyond Sentiment....

- the **Number of Rewards** that a Campaign had was a good predictor of whether or not it was successful!

This shows just how important it was to incorporate rewards into the model!



# Next Steps

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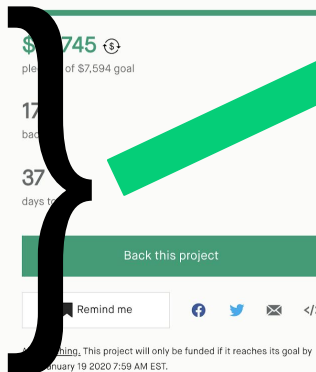


## Flash Forest: Using Drones to Plant 1 Billion Trees

Technology to rapidly accelerate the rate of tree planting and ecological restoration on a planetary scale

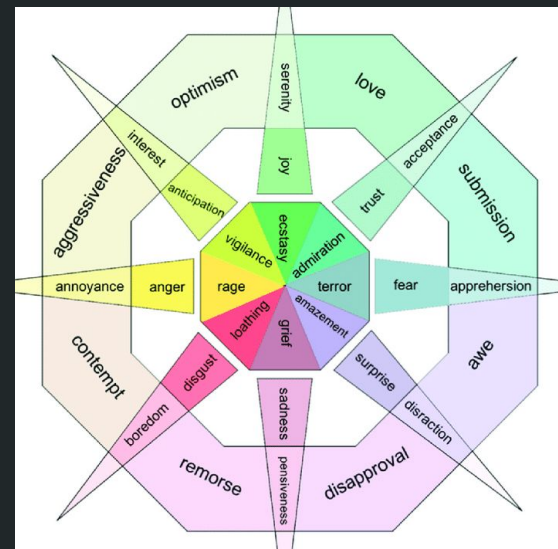


Project We Love Robots Toronto, Canada



1. **Image/Video Analysis:**
  - Aesthetic rating
  - Content
  - Tone

2. **Emotional Analysis, not just sentiment**



## 3. Finish Textual Analysis on Project Description

### Our project

We are a Canadian drone reforestation company that modifies drones to fire rapidly germinating tree seeds into the soil. We merge technology, software and ecological science to surpass traditional tree-planting efforts and rapidly accelerate global reforestation efforts. Help us with our ambitious goal of planting 1 billion trees by 2028.