Kunst

Comics & Illustration

Design & Technologie

Gastronomie & Kunsthandwerk

Spiele

Musik

Publishing

### Ein kreatives Projekt Wirklichkeit werden lassen!

AUF KICKSTARTER:

231.992

finanzierte projekte

7.031.850.591\$

beiträge für kreative arbeiten

84.972.706

finanzierungsbeiträge

#### VORGESTELLTES PROJEKT



#### EMPFEHLUNGEN FÜR DICH



Nightlight Daily Horoscopes 2023

155 % finanziert

Von Adam Elenbaas



Navigator's Loupe by Oceanus Brass 103.740 % finanziert

Von Oceanus Brass





LaserPecker 4: Dual-Laser Engraver for Almo... 3.625 % finanziert









### **Kickstarter Project Success**

- Well-known and popular crowdfunding platform founded in 2009
- Model of operation: All-or-nothing funding
- Projects can only be funded if it meets its goal amount
- Success or Failure of a project is impacted by various factors
- >> The aim of this project is to construct a model to analyse Kickstarter project data in order to help project creators assess if Kickstarter is a **good option** and what their chances of **success** are.

### **Team**







Karine Niels Jens

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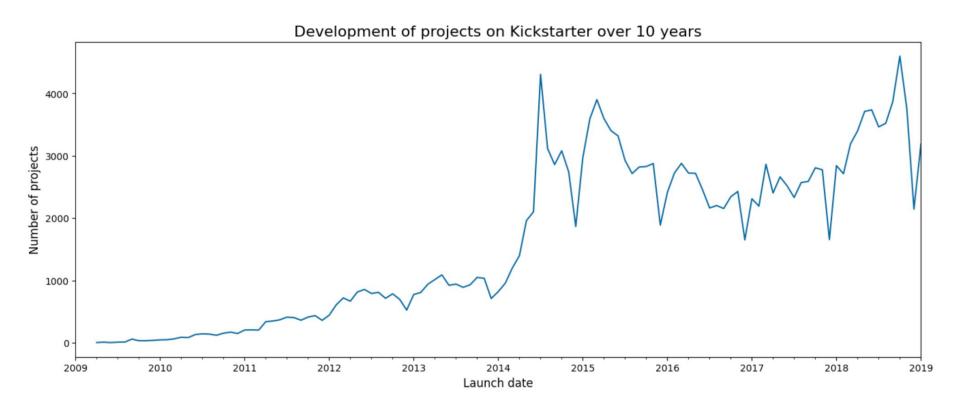
- 1. Obtaining the data
- 2. Exploring the data
- 3. ML: Aim and assumptions
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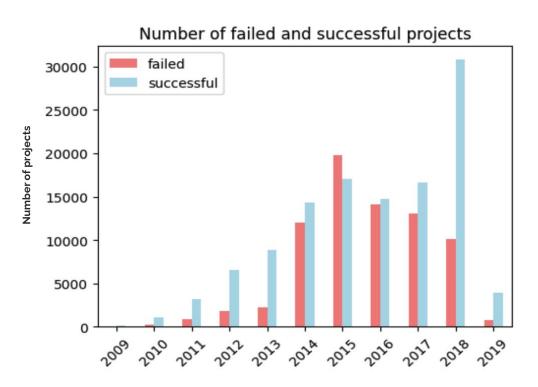


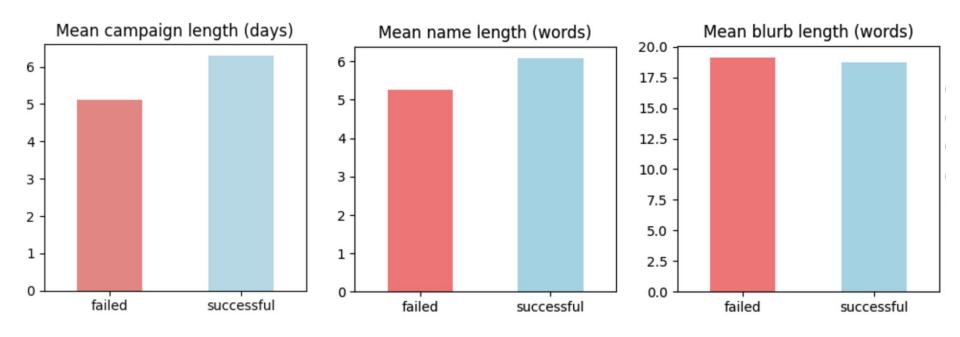
# 1. Obtaining the data

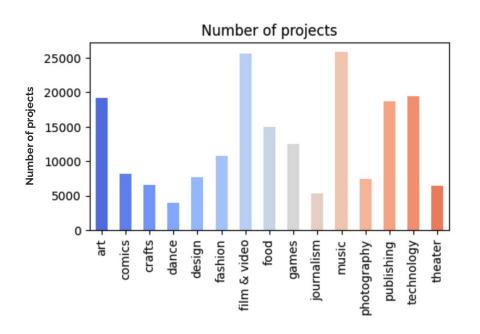
- Kickstarter data was obtained from 56 separate csv files
- They were combined into one dataframe.
- The resulting dataframe contained
  - o 209,222 projects
  - o 36 features

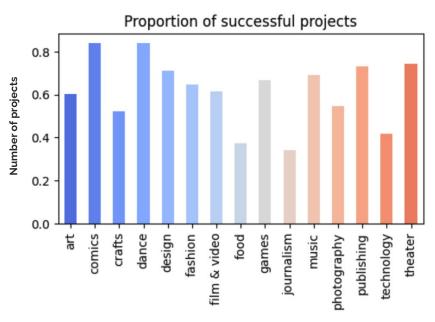
- Total of successful or failed projects: 192,664
- Successfully funded projects: 117,465
- Proportion of completed projects which were successfully funded is: 61%
- Money pledged by backers to successful projects: \$2,522,416,846
- Average amount pledged per successful project: \$21,474
- Average backers per project: 153

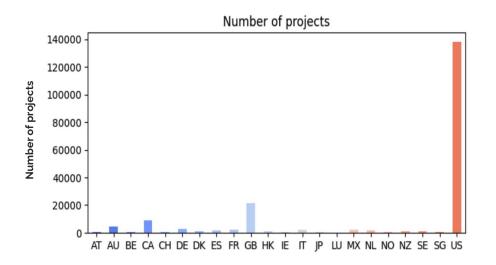


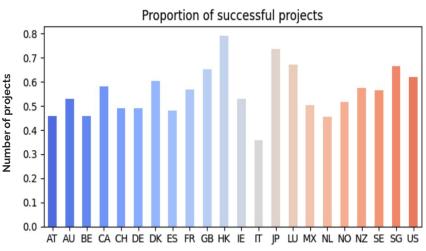












# 3. ML: Aim and assumptions

Aim: We want model success chances of new projects

Assumptions: We (only) included features which are present in new campaigns

Prediction is the state of finished projects (successful or failed)

Base model: Predict success based on **usd\_goal threshhold** 

### 4. Applied ML models

Different machine learning algorithms were considered in this project, as below:

- 1. Baseline model (Goal < 4,000 \$ gets funded)
- 2. Logistic Regression
- Logistic regression with hyperparameter tuning and cross validation
- 4. Random Forest
- 5. XGBoost

#### Performance results of the test data set

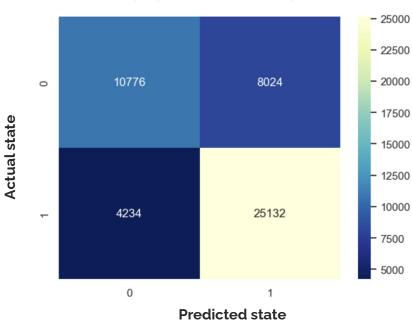
|                     | accuracy | recall   | precision | f1       |
|---------------------|----------|----------|-----------|----------|
| base model          | 0.578437 | 0.527447 | 0.706712  | 0.604060 |
| logreg              | 0.716896 | 0.857012 | 0.727286  | 0.786838 |
| gridsearchCV_logreg | 0.719906 | 0.861336 | 0.728661  | 0.789463 |
| random_forest       | 0.745505 | 0.855820 | 0.757993  | 0.803941 |
| xgboost             | 0.745920 | 0.847749 | 0.762201  | 0.802702 |

# 5. Best performing model

Baseline model performance: f1 = 0.604

Random forest performance: f1 = 0.804

### **Random Forest Model**



### 6. Recommendations



>>> Factors with a **Positive Effect** on success rate and/or the amount of money received:

### **Most important:**

- Smaller project goals
- Campaign duration of 6 days or more
- Take your time between creation and launch
- If you get chosen as a staff pick this is a good sign
- Projects in certain categories have a higher success chance:
  - Comics, dance, theater and publishing are most likely to succeed
  - Food, journalism and technology were least likely to succeed

#### Less important:

- shorter blurbs preferred
- longer names preferred



# **Questions?**