# >>> neue fische School and Pool for Digital Talent

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# KICKSTARTER



#### Who we are...

Consulting company which analyses kickstarter projects and **predicts their chances of success** with machine learning algorithms







#### Our Stakeholders

For any person or company that wants to crowdsource a project through Kickstarter and needs advisement on strategy and prospects of success.





#### Goal

#### How to optimally raise money with crowdfunding?

- Recommendations and Insights for crowdfunding projects
- Predicting the success of a project → Chances







# **Business questions**

- What does the average project on Kickstarter looks like?
- What can you expect with a specific project?
- Which factors are important for success?
- Which machine learning model is the best to predict the success?





#### **Data Overview**

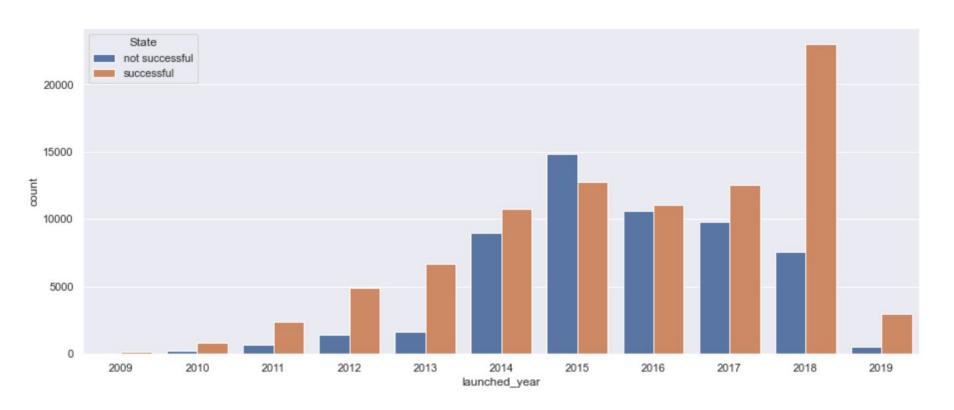
- 2009 2019
- 33 Features (dropped 16)
- nearly 200,000 projects
- from 22 different countries
- strong outliers (i.e. unrealistic/"fun" goals)





#### **Timeline**

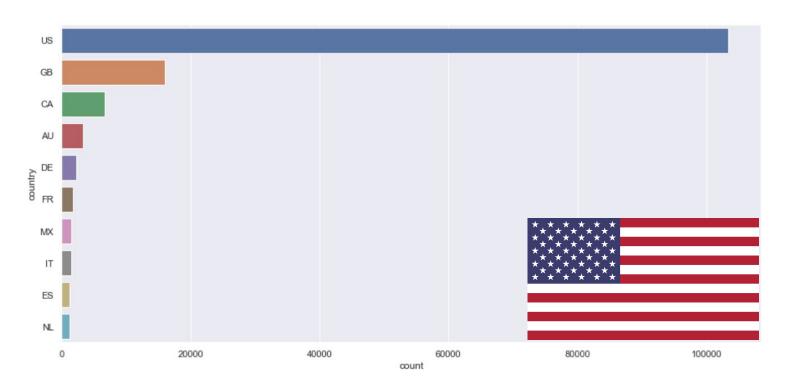






### Countries



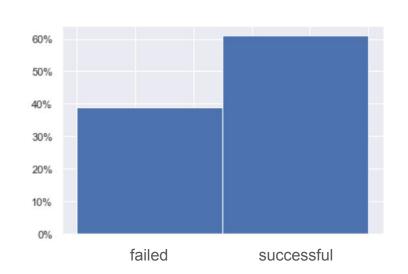






# Average Kickstarter Project

- 61% are successful
- 27% were in the categories of music, film & video
- 30 days funding period
- 30 Backers
- \$59 per backer
- \$5,000 Goal







# Successful Projects

How does a successful project on kickstarter looks like?

- \$3,500 goal (not successful = 7,000\$)
- \$4,900 reached
- 69 backers
- \$62 per backer
- $\rightarrow$  50% of the project goals are between \$1,000 \$10,000









→ Only 2% got more than \$100,000





backers_count	category	$converted\_pledged\_amount$
63416	games	8596474
69320	games	6333295
41939	games	6256244
41939	games	6256244
91585	film & video	5702153
64867	games	5545991
105857	technology	5408916
26828	technology	5333792
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5946	technology	4236618



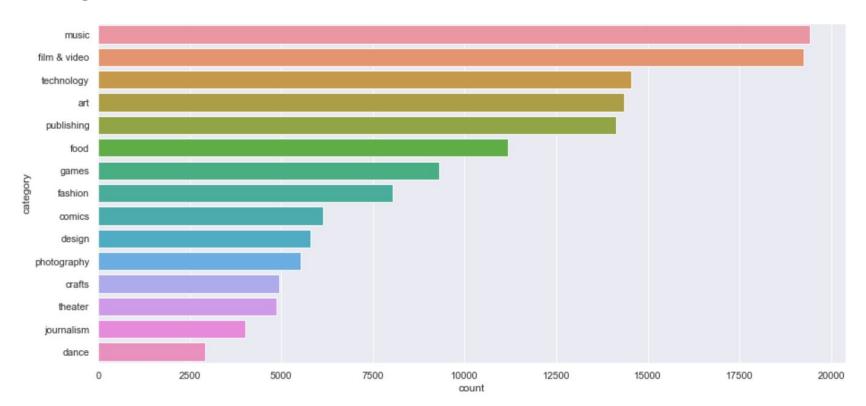
#### Featured on Kickstarter

- 16% of the projects will be picked by staff to get featured
- 90% of featured projects succeed
- On average, these projects received \$25,000 more than expected
- Also on average: 400 more backers and \$16 more per backer



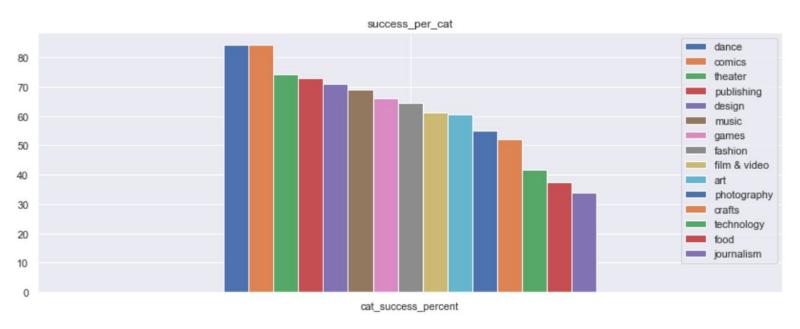








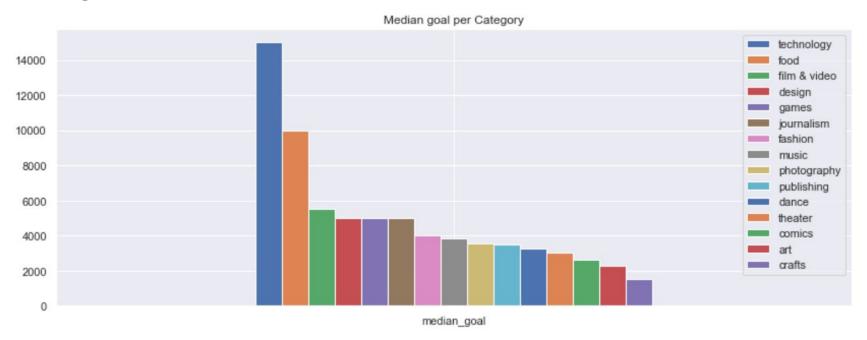




	dance	comics	theater	publishing	design	music	games	fashion	film & video	art	photography	crafts	technology	food	journalism
cat_success_percent	84.0	84.0	74.0	73.0	71.0	69.0	66.0	65.0	61.0	61.0	55.0	52.0	42.0	37.0	34.0

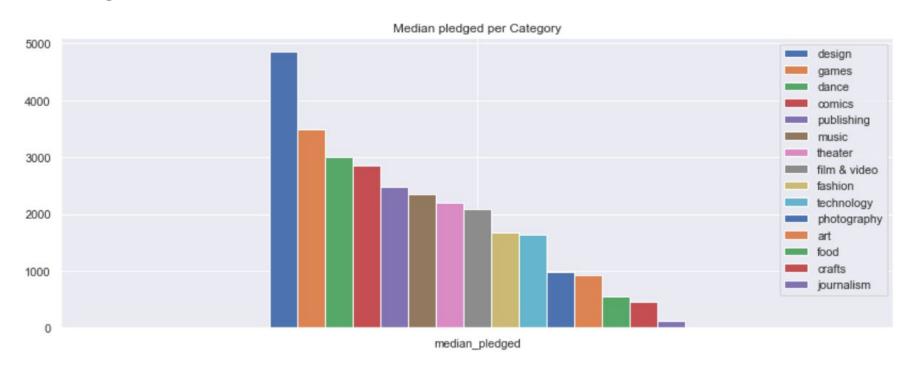






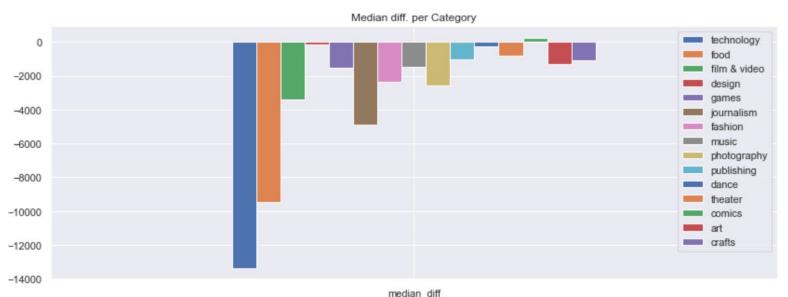










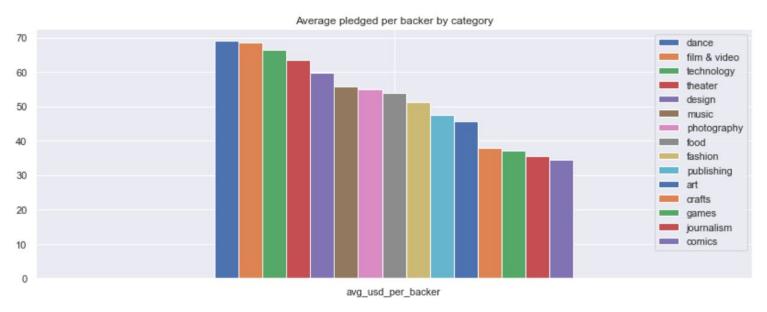


	technology	food	film & video	design	games	journalism	fashion	music	photography	publishing	dance	theater	comics	art	crafts
median_goal	15000.0	10000.0	5500.0	5000.0	5000.0	5000.0	4000.0	3827.0	3532.5	3500.0	3260.0	3000.0	2600.0	2250.0	1549.0
median_pledged	1628.0	550.0	2086.0	4850.0	3498.5	117.0	1676.0	2345.0	987.0	2476.0	3004.5	2191.0	2852.0	922.5	447.0
median_diff	-13372.0	-9450.0	-3414.0	-150.0	-1501.5	-4883.0	-2324.0	-1482.0	-2545.5	-1024.0	-255.5	-809.0	252.0	-1327.5	-1102.0



# Average \$ per backer





	film & video	dance	technology	theater	design	music	photography	food	fashion	publishing	art	crafts	games	comics	journalism
avg_usd_per_backer	69.0	69.0	67.0	64.0	58.0	56.0	55.0	54.0	52.0	48.0	46.0	37.0	37.0	35.0	34.0





#### **Evaluation metrics**

- We try to minimize False-Negatives (high recall)
- High recall is easily achieved, so we also need a metric to balance it out
- For this we are using the area under curve for precision-recall





#### **Prediction Model**

Model	KNN	DecTree	LogReg	RandomForest
Recall	1	0.88	0.51	0.87
AUC	0.58	0.67	0.65	0.7



#### Recommendations



- → Don't expect too much → just 25% of the projects got more than \$7,000
- → Set a realistic goal not too high
- → Be aware of the different chances of success per category
- → Try to get featured (hints: <a href="https://www.kickstarter.com/blog/how-to-get-featured-on-kickstarter?lang=en">https://www.kickstarter.com/blog/how-to-get-featured-on-kickstarter?lang=en</a>)





#### Future outlook

- Text Analysis: Which words are important?
- Software-as-a-Service / Web-Application for Clients
- Get more data for marketing budgets
- Try more ML algorithms
- Compare different crowdfunding providers



