



School and Pool for Digital Talent

Christoph & Sven

KICKSTARTER



Who we are...

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



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CONSULTING



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



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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?

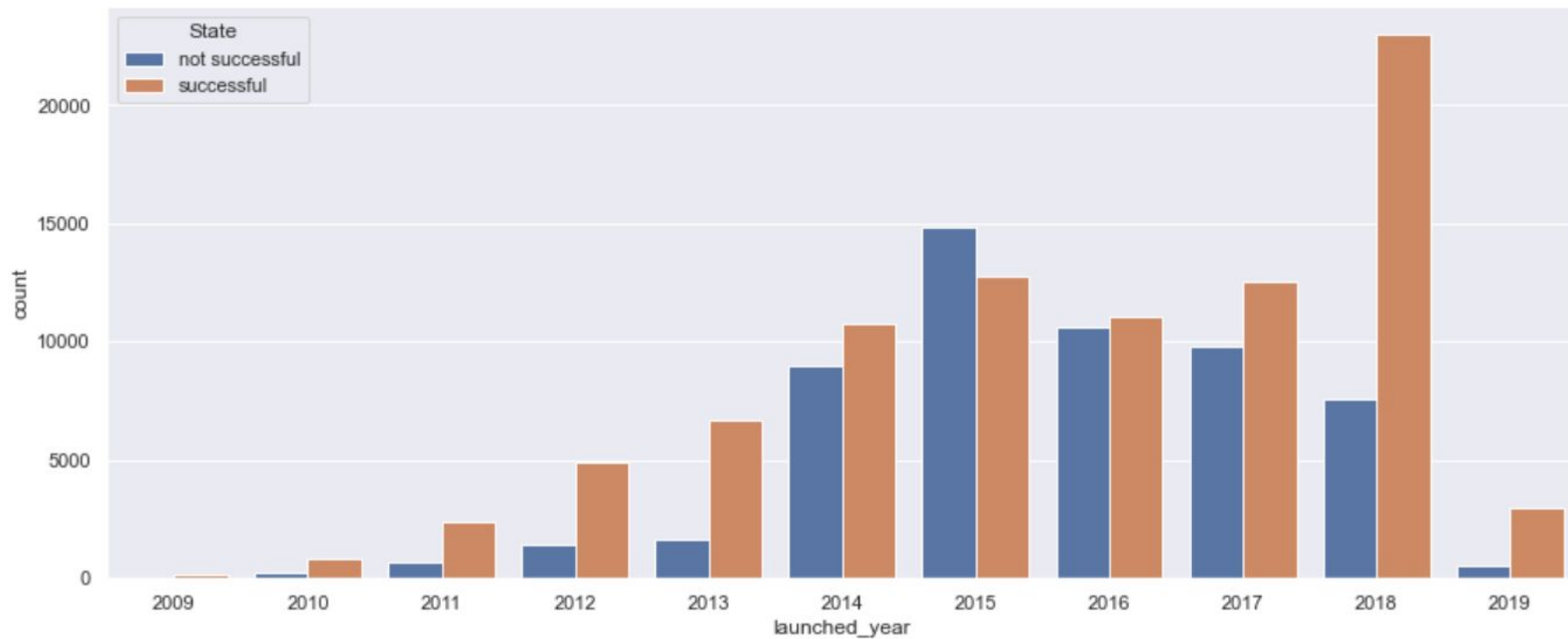


Data Overview

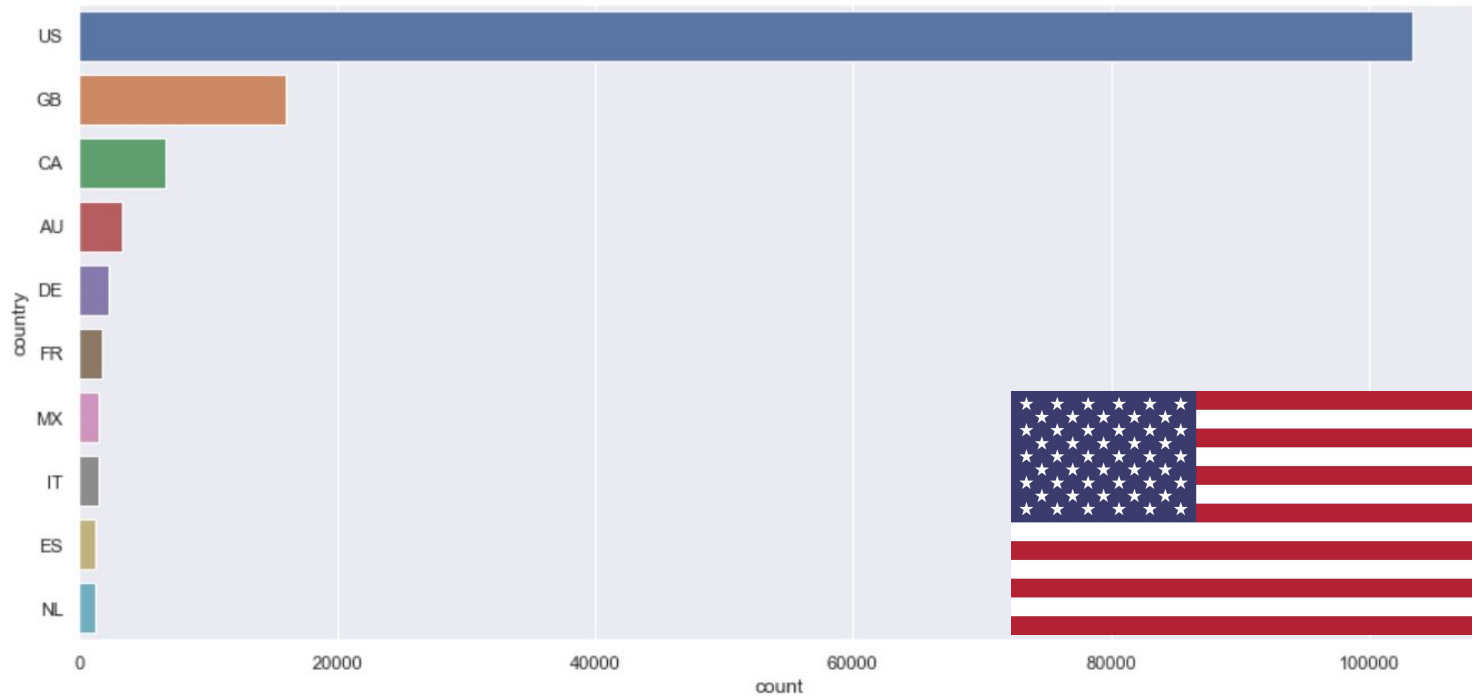
- 2009 - 2019
- 33 Features (dropped 16)
- nearly 200,000 projects
- from 22 different countries
- strong outliers (i.e. unrealistic/"fun" goals)



Timeline



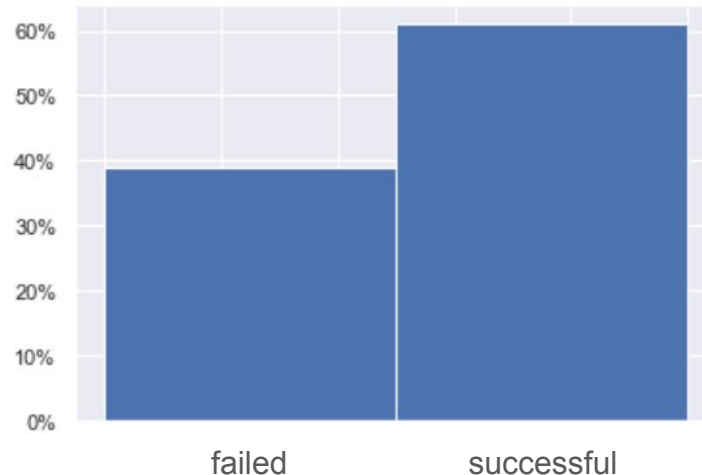
Countries





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

→ 50% of the project goals are between \$1,000 - \$10,000





Top 10 Projects



→ 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
26828	technology	5333792
5946	technology	4236618

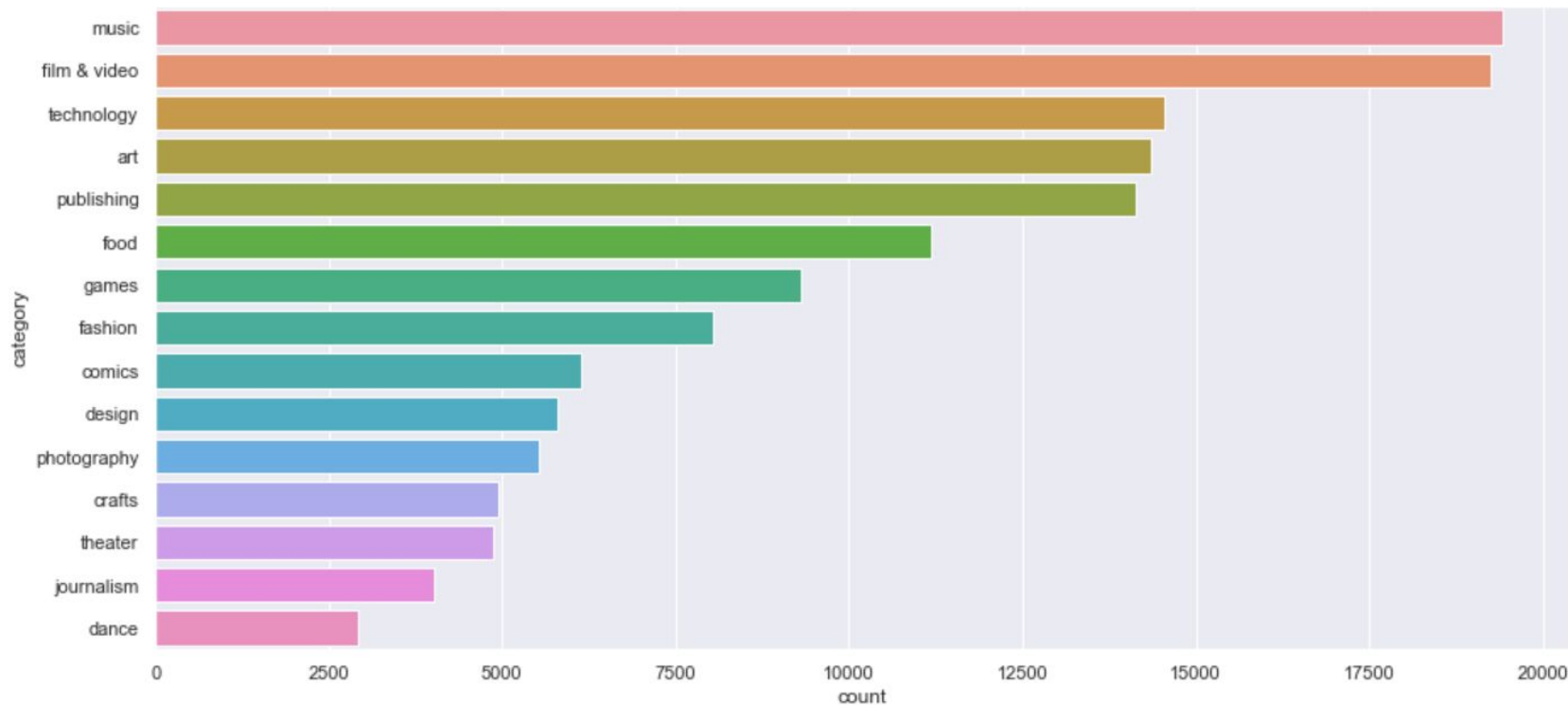


Featured on Kickstarter

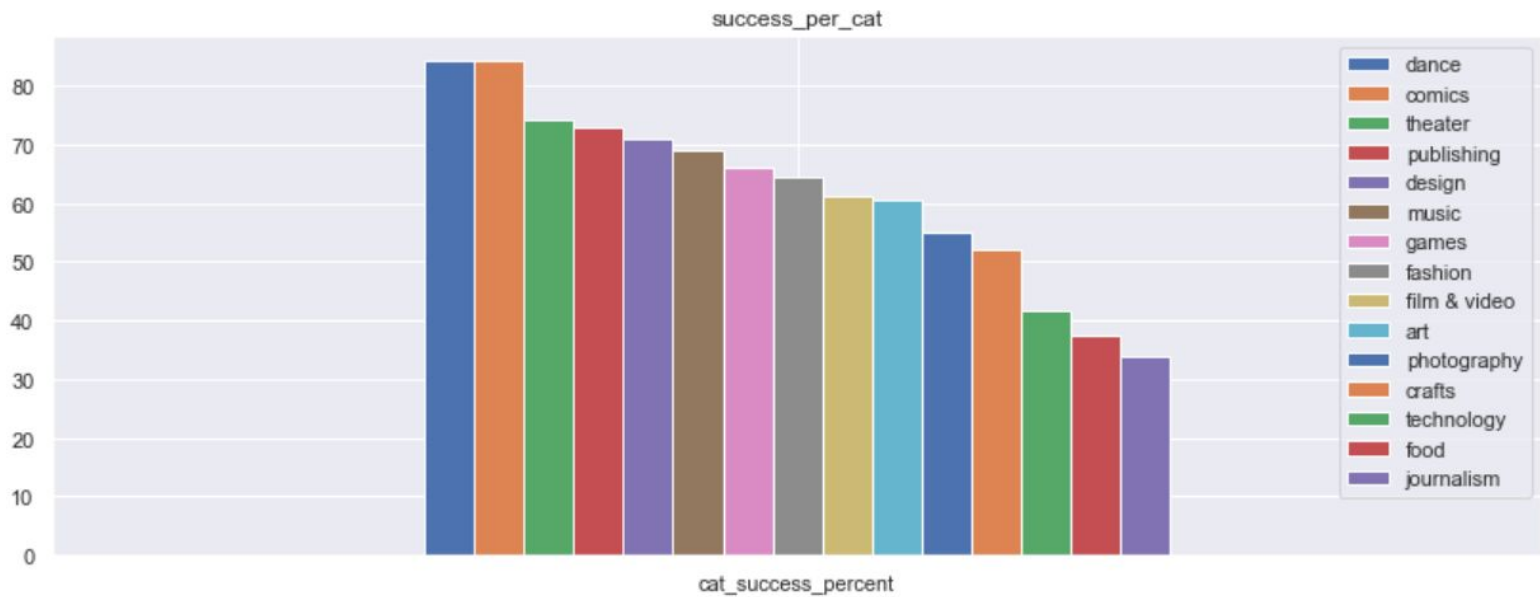
- 16% of the projects will be picked by staff to get featured
- 90% of featured projects succeed
- On average, these projects received \$25,000 more than expected
- Also on average: 400 more backers and \$16 more per backer



Categories



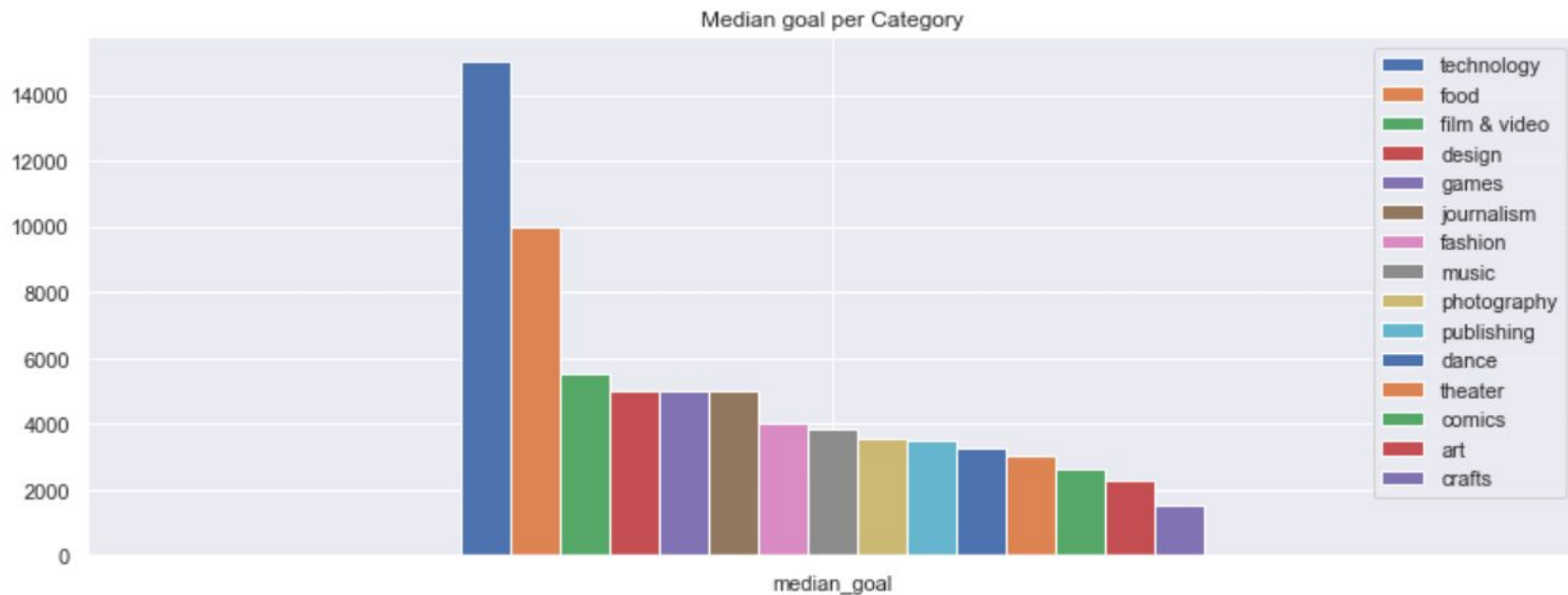
Categories



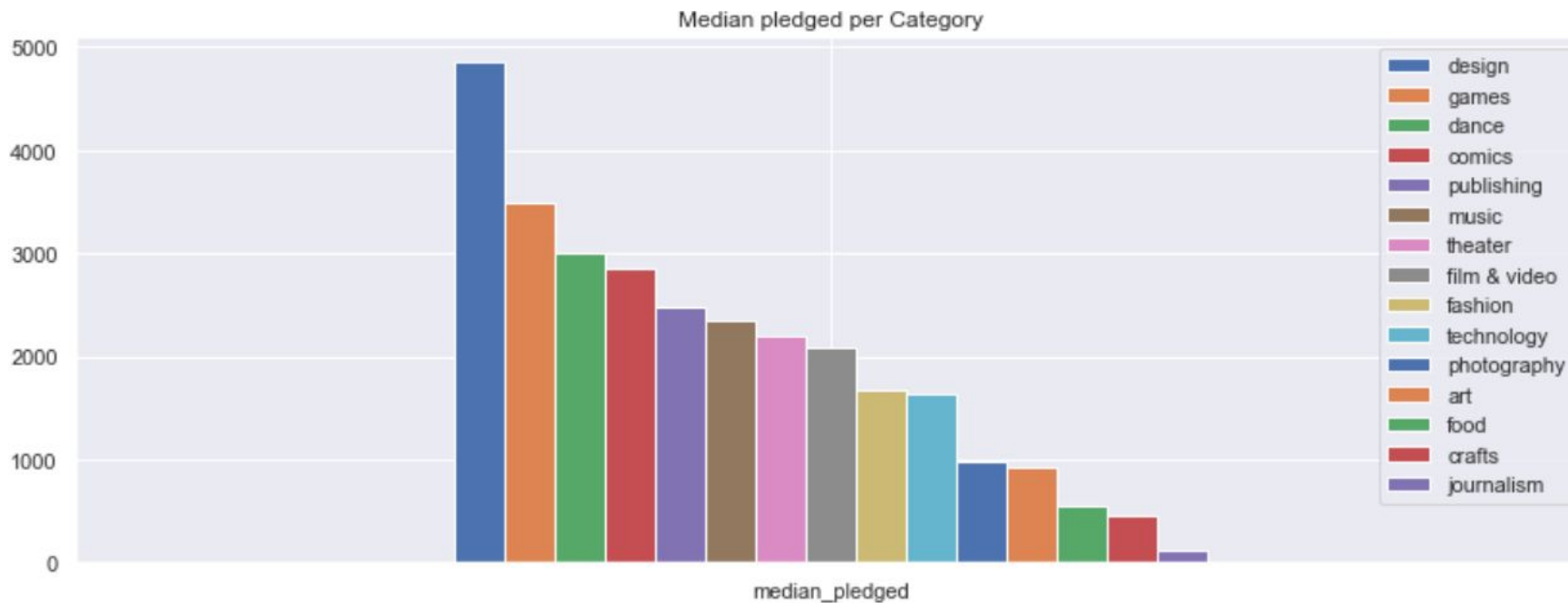
dance comics theater publishing design music games fashion film & video art photography crafts technology food journalism

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

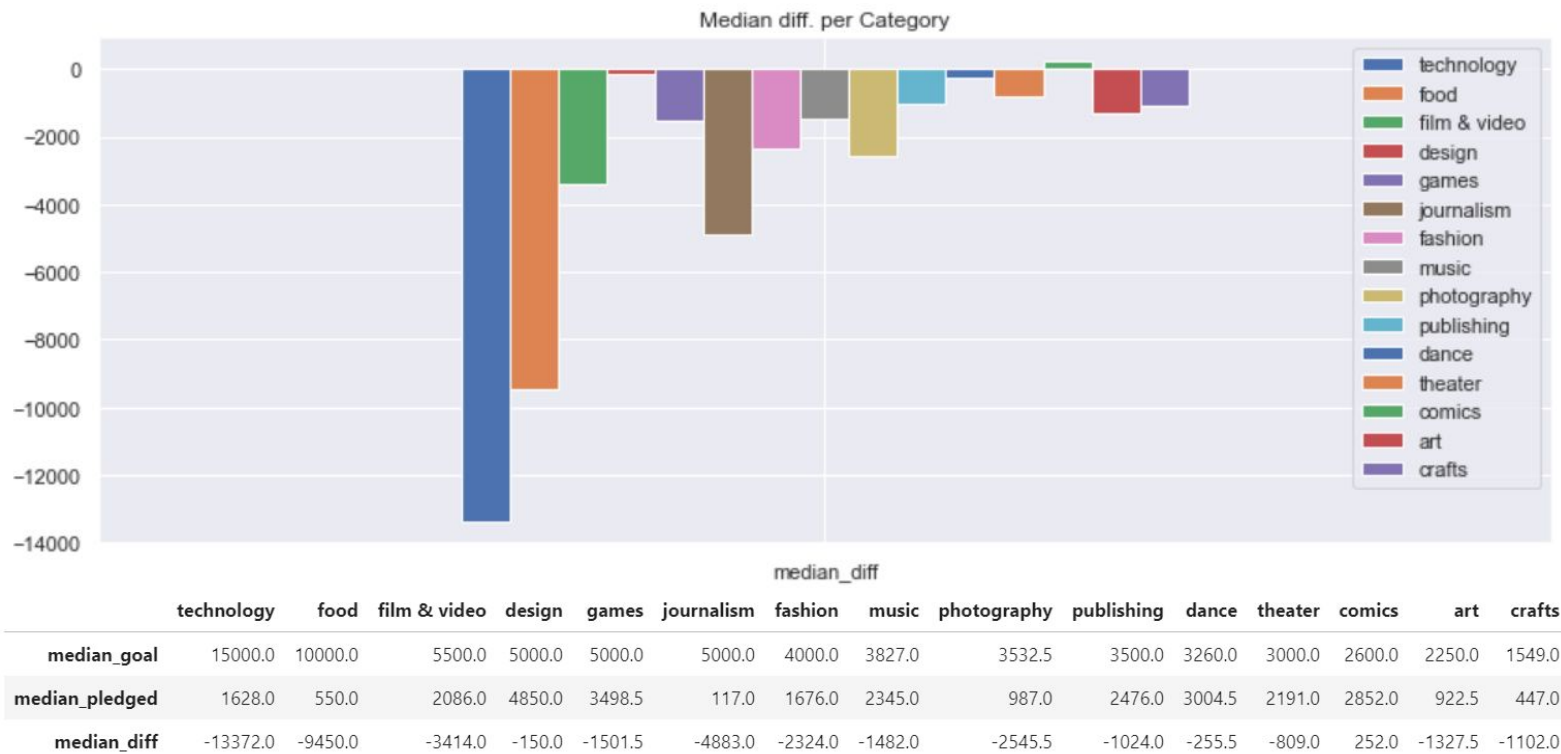
Categories



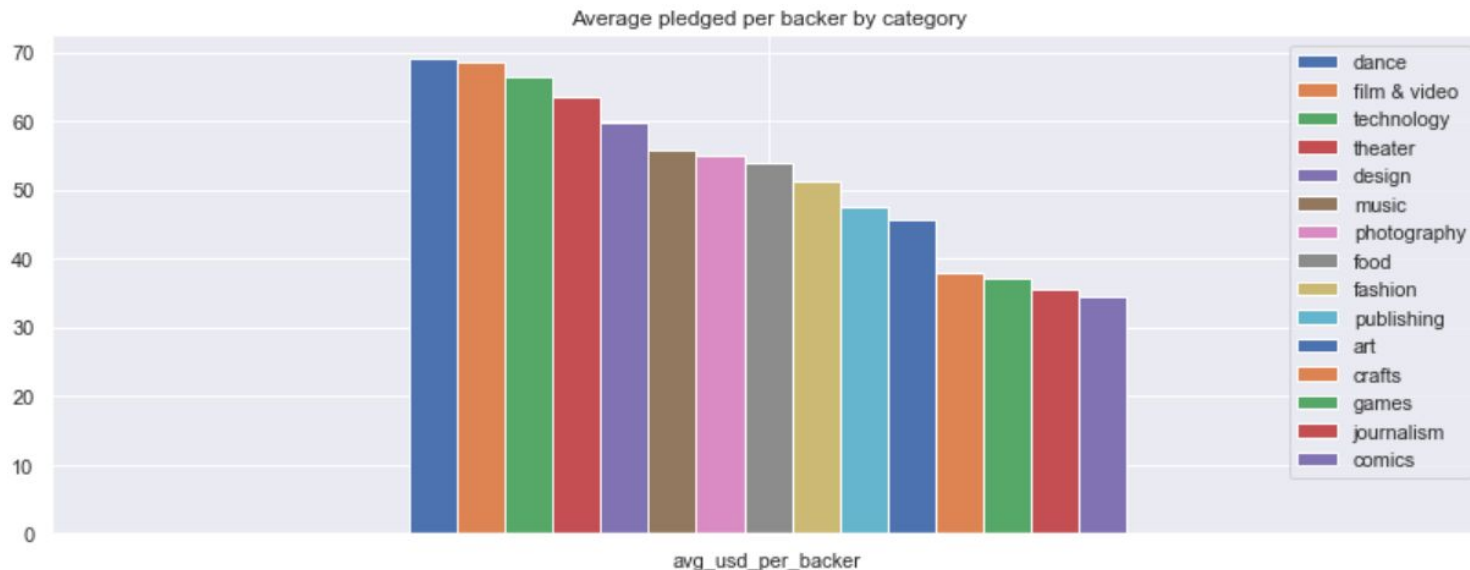
Categories



Categories



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



Machine learning algorithms

- KNN
- Decision tree
- Random forest
- Logistic regression



Evaluation metrics

- Minimize False-Negatives (high recall)
- High recall is easily achieved, so we need a metric to balance it out
- 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 depending on the category
 - ◆ Less \$ per backer → more investment needed to pull in more backers
- Projects are less visible in major categories
 - ◆ Investment is more expensive
- Try to get featured (hints: <https://www.kickstarter.com/blog/how-to-get-featured-on-kickstarter?lang=en>)

Future outlook



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

