

Project Presentation
8.October 2020
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Kickstarter success prediction

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DO THIS!

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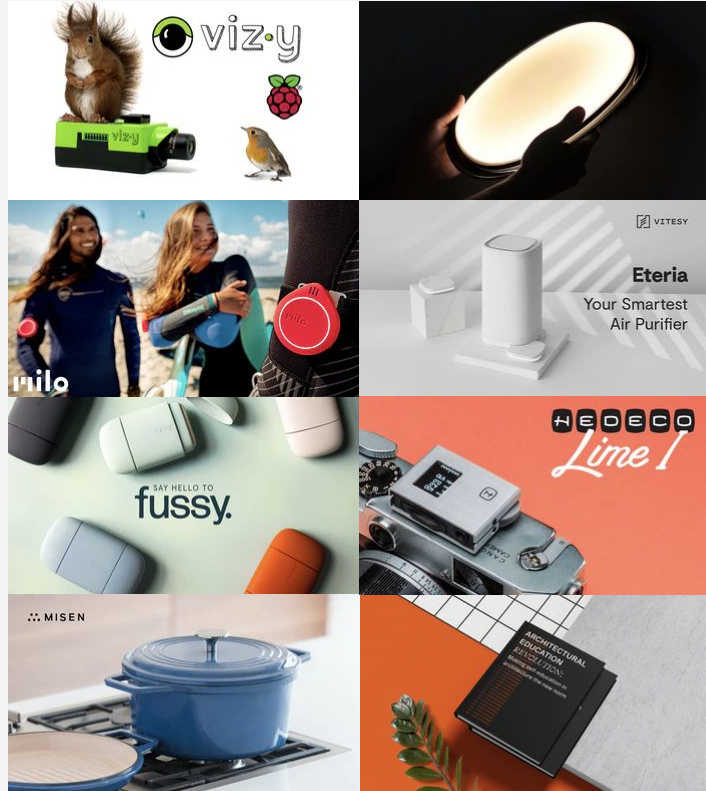
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INITIAL SITUATION

I INITIAL SITUATION



About Kickstarter

- Global crowdfunding platform
- Mission: **“Help bring creative projects to life”**
- launched in 2009
- Projects only receive funding if the goal is reached
- \$4.6 billion in pledges (Dec 2019)
- about 17.2 million backers funded 445,000 projects

I INITIAL SITUATION



Our Data Source

- Data comes from a scraping service:
<https://webrobots.io/kickstarter-datasets/>
- Snapshot of “all” project (scraped 18.11.2019)
- about 185.000 projects after removing duplicates

I INITIAL SITUATION – TASK



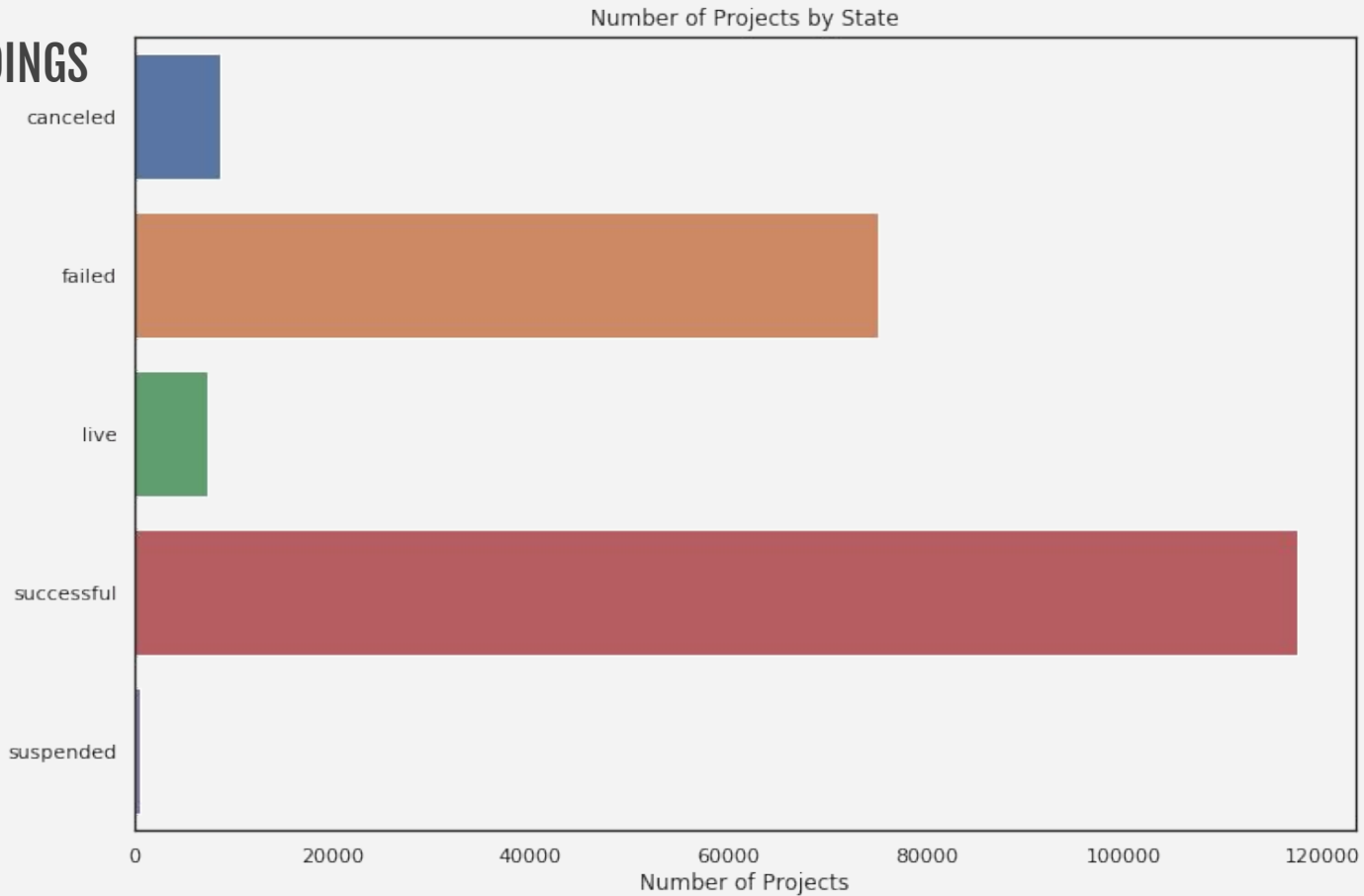
Creation of a model to predict the success of a campaign (based on known project data)



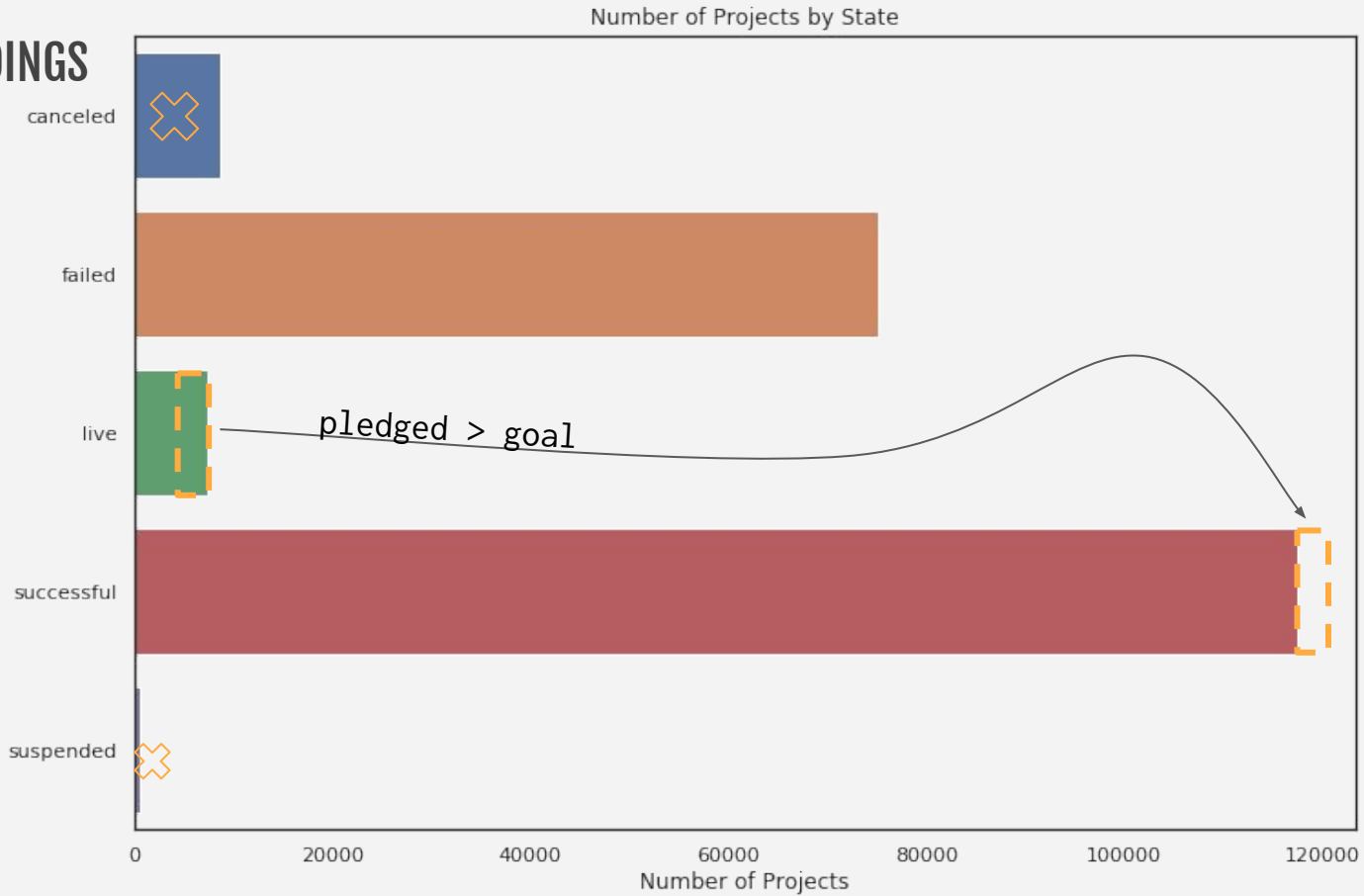
Recommendations of how to optimize a project for success

FINDINGS

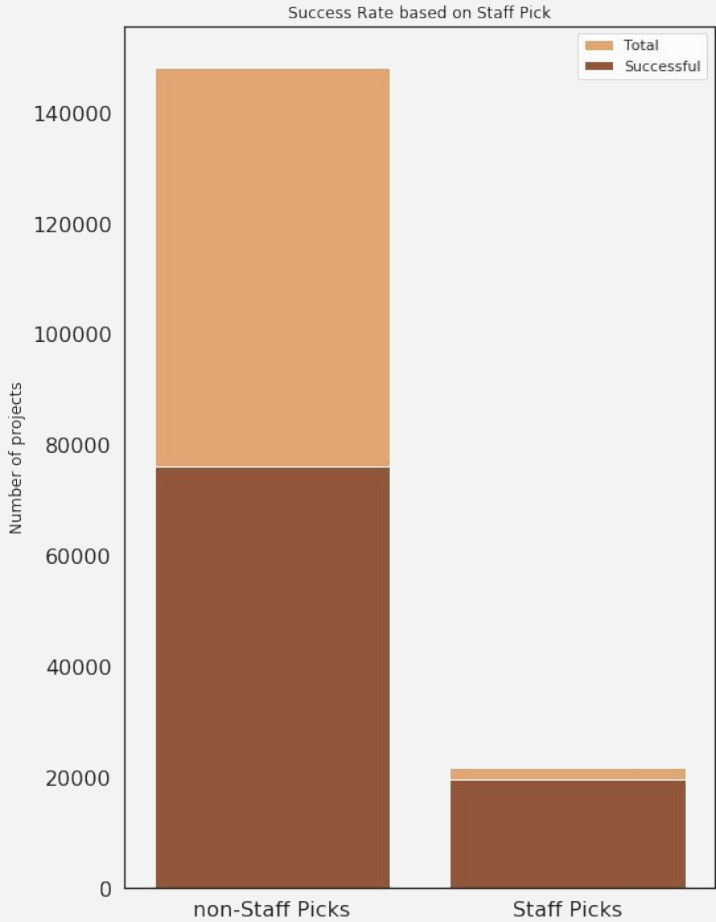
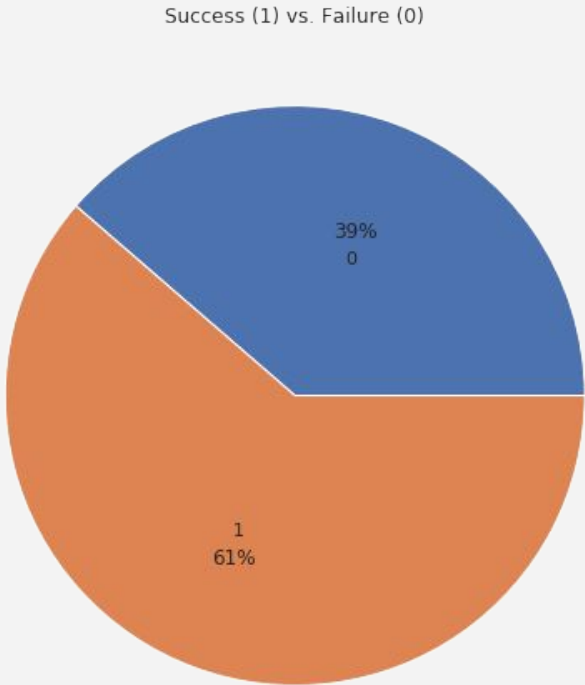
II FINDINGS



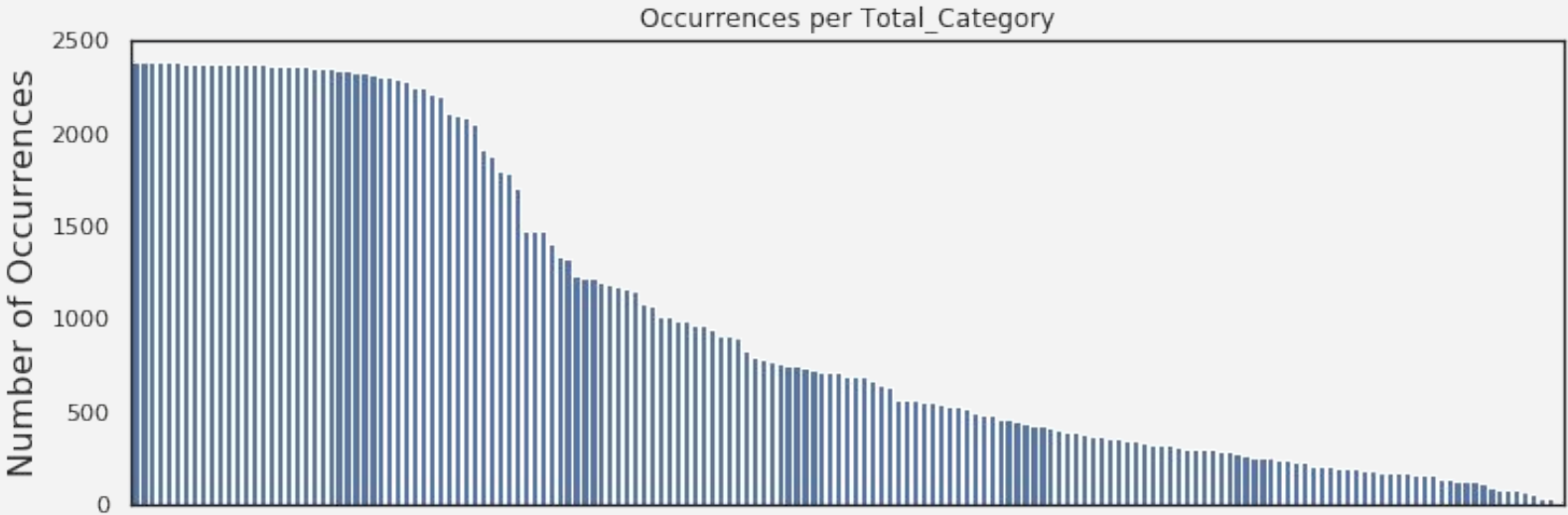
II FINDINGS



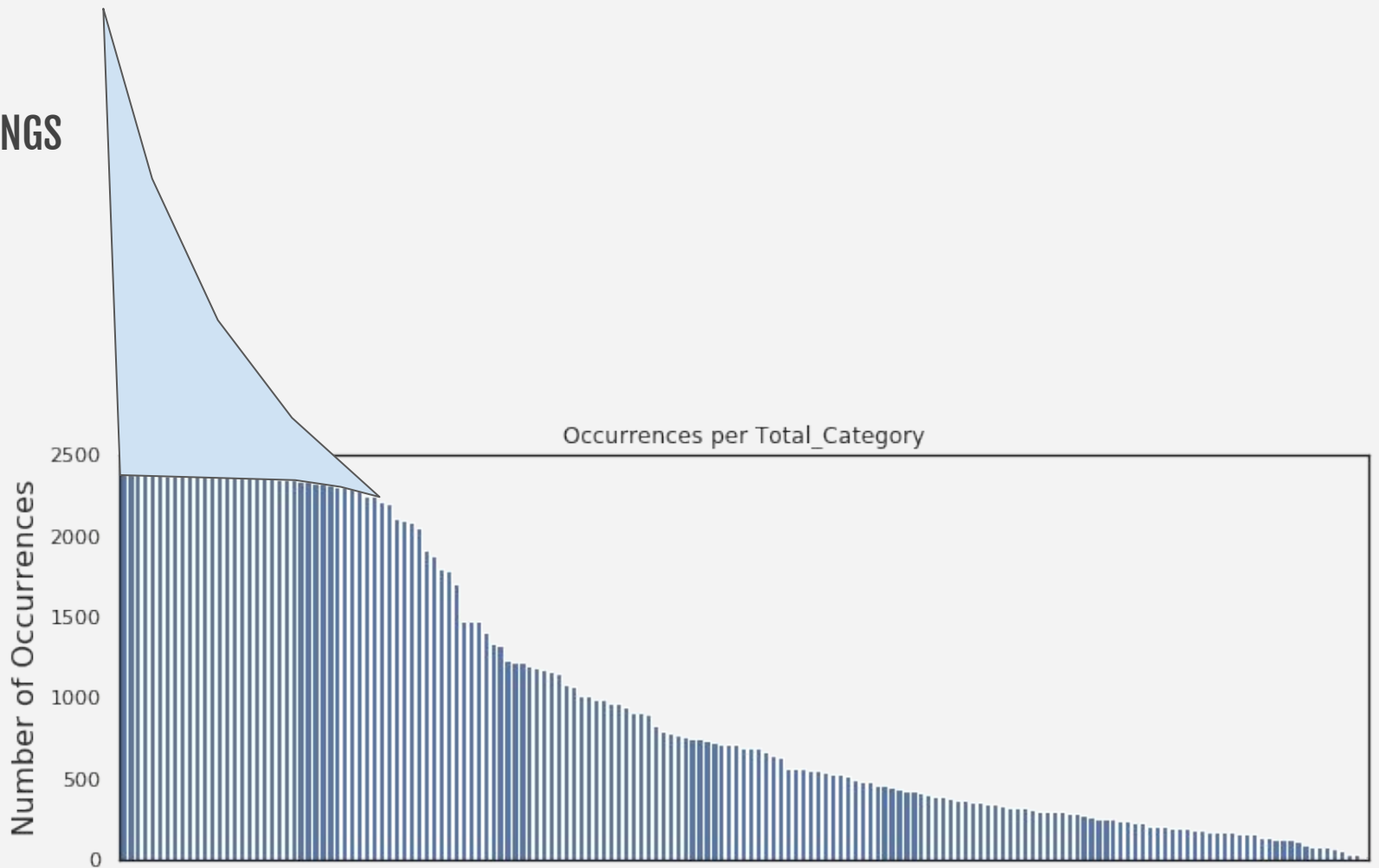
II FINDINGS



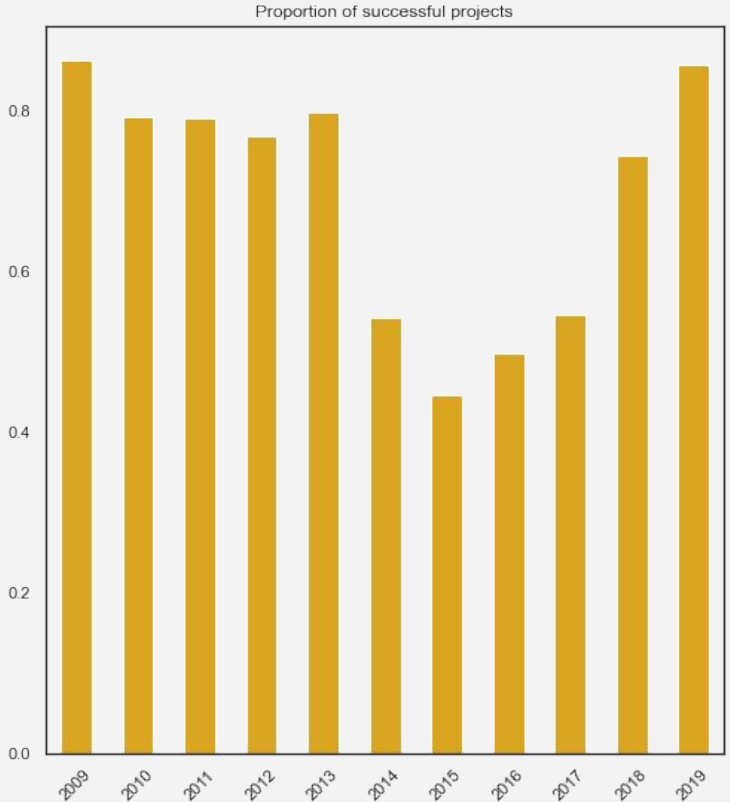
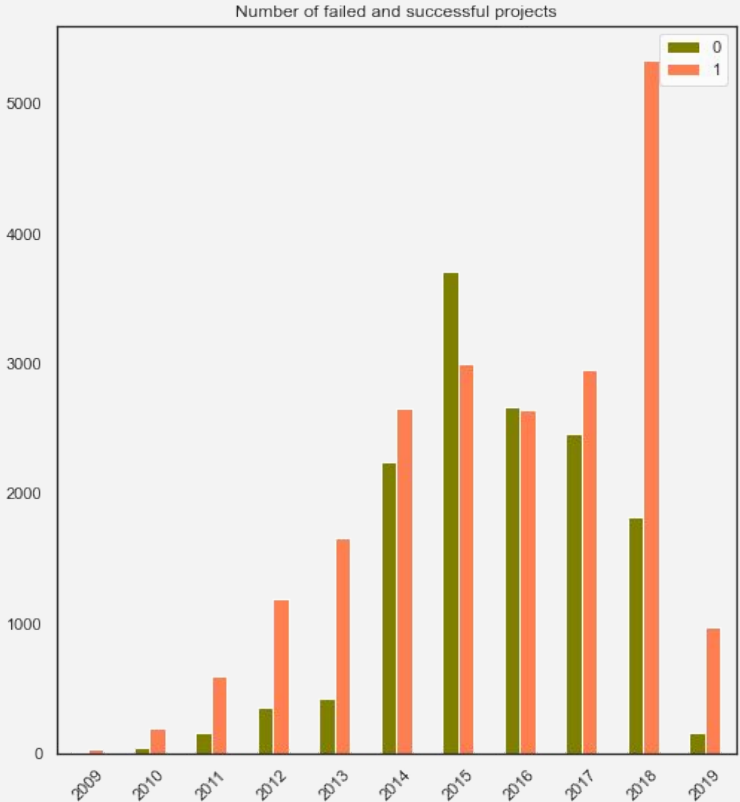
II FINDINGS



II FINDINGS

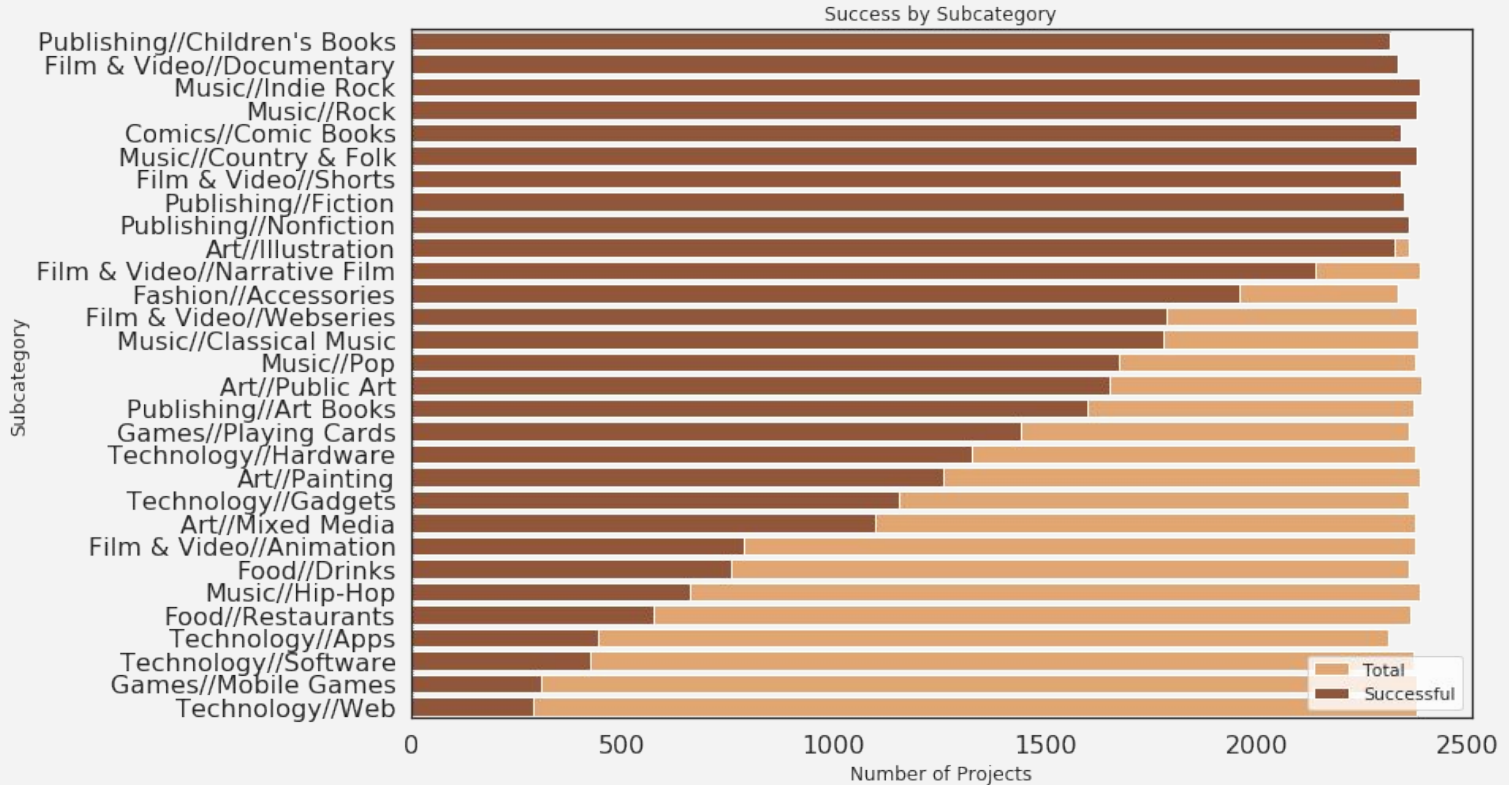


II FINDINGS

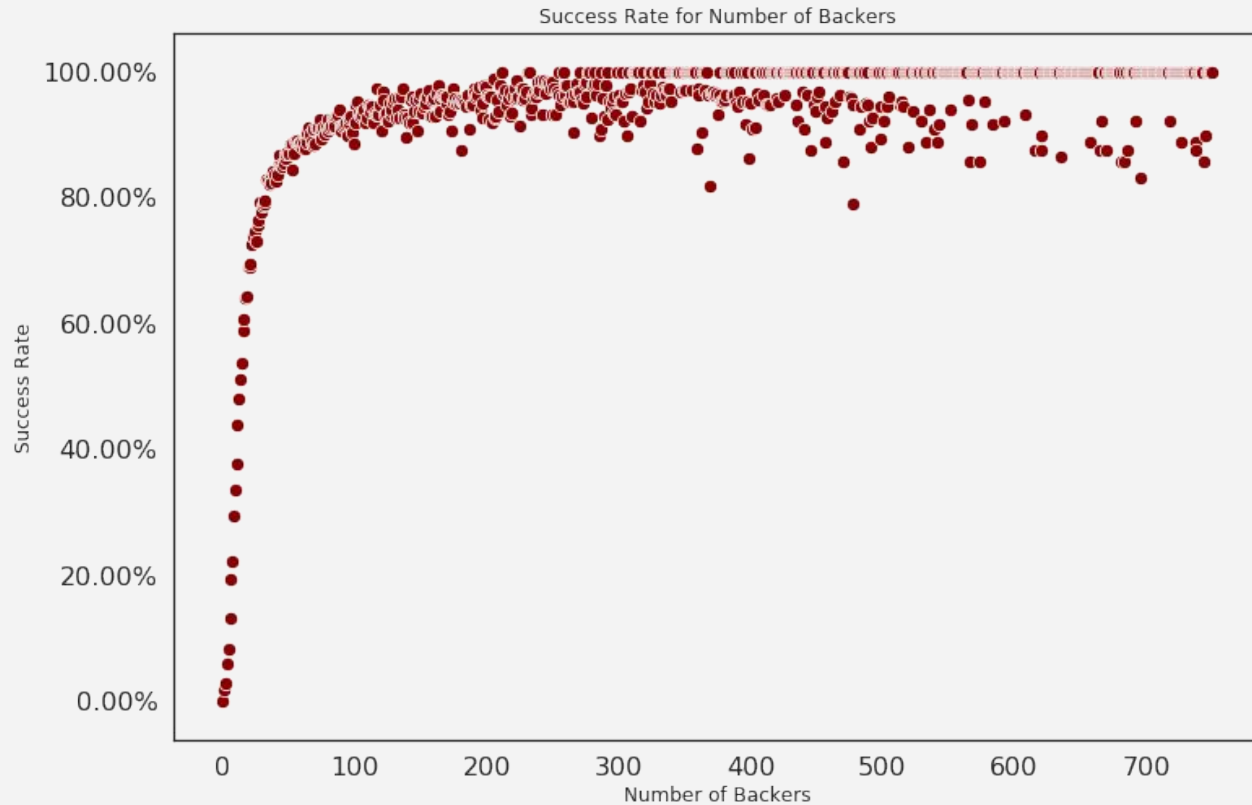


RECOMMENDATION

III RECOMMENDATIONS



III RECOMMENDATIONS

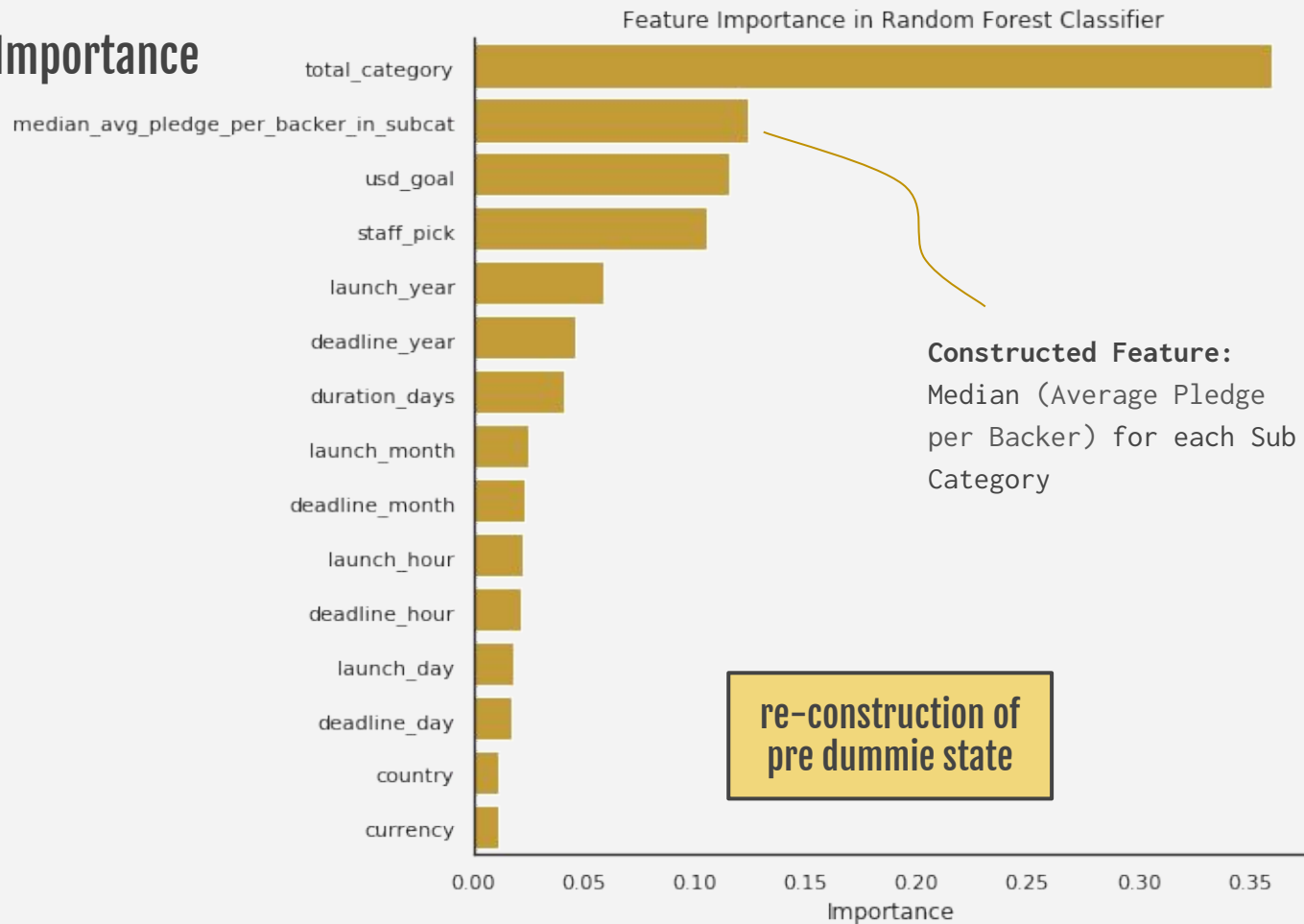


SUCCESS PREDICTIONS

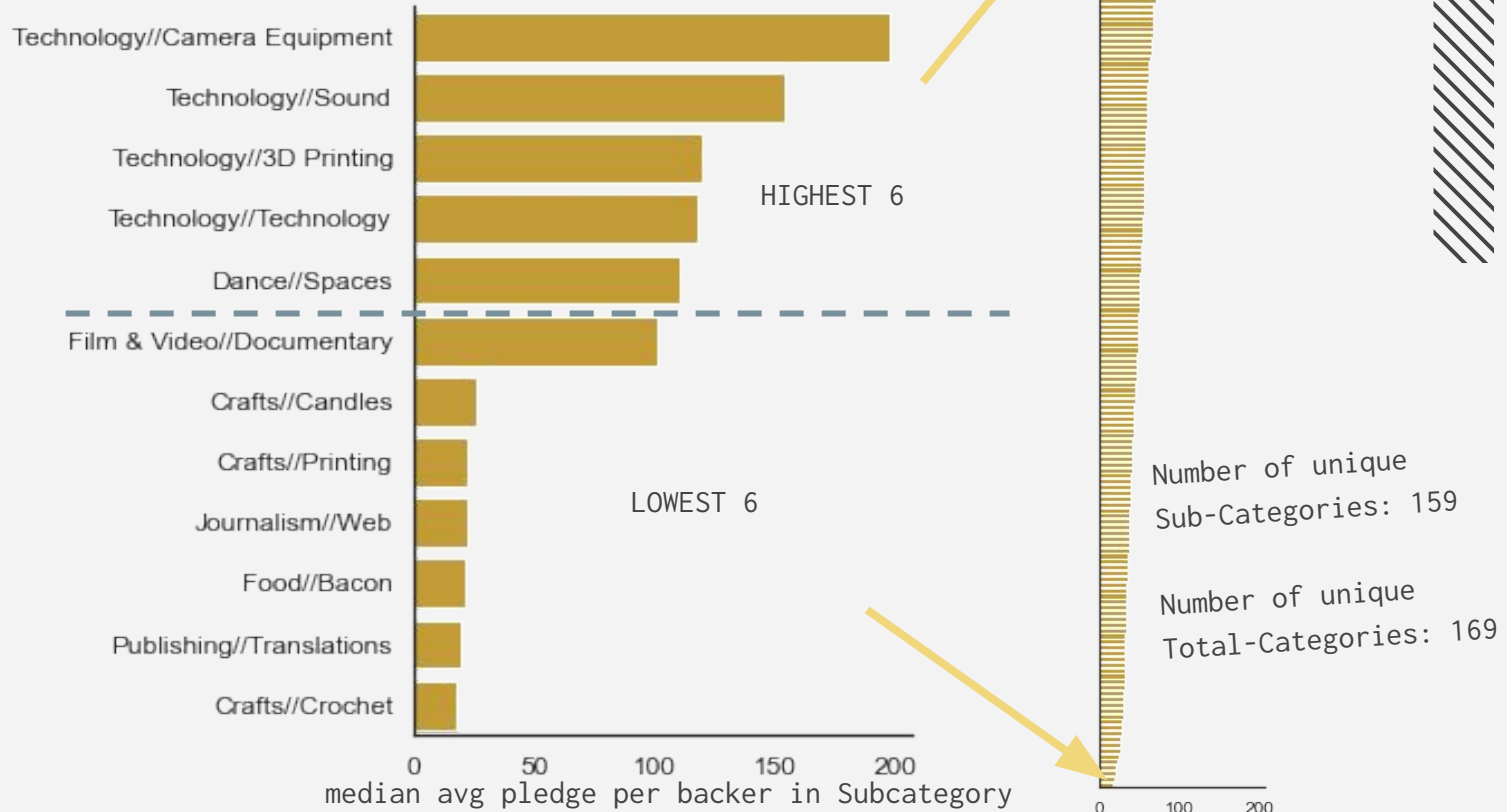
IV Feature importance, 244 features



IV Feature Importance



IV MODEL EVALUATION



IV MODEL EVALUATION

"118": "A tarot deck set in a post-apocalyptic world, with a gothic western style, and diverse bodies, genders, races, ages, and sexualities.", {"id": 22, "name": "Illustration", "slug": "art/illustration", "position": 4, "parent_id": 1, "color": "16", "http://www.kickstarter.com/d", "US", "1503611269", {"slug": "pixelocult", "is_registered": null, "chosen_currency": null, "avatar": {"thumb": "https://ksr-ugc.imgix.net/assets/018/053/861/468a802be49f167cc66fccf12c635efe_original.jpg?ixlib=rb-1.1.0&w=40&h=40&fit=crop&v=1533529197&auto=format&frame=1&q=92&s=1d43db4cb6cef7706a41b9b7f2a648ec", "small": "https://ksr-ugc.imgix.net/assets/018/053/861/468a802be49f167cc66fccf12c635efe_original.jpg?ixlib=rb-1.1.0&w=160&h=160&fit=crop&v=1533529197&auto=format&frame=1&q=92&s=5f94739f6779b301d05152150fe328f1", "medium": "https://ksr-ugc.imgix.net/assets/018/053/861/468a802be49f167cc66fccf12c635efe_original.jpg?ixlib=rb-1.1.0&w=160&h=160&fit=crop&v=1533529197&auto=format&frame=1&q=92&s=5f94739f6779b301d05152150fe328f1", "urls": {"web": {"user": "https://www.kickstarter.com/profile/pixelocult"}, "api": {"user": "https://api.kickstarter.com/v1/users/1692660189?signature=1552624358.ef165b92f0ce4b94c39c726f5911b4f2781387cfff"}}, "USD", "\$", "true", "USD", "1509037488", "false", "1", "5000", "789231166", "false", "1506445488", {"id": 2475687, "name": "Portland", "slug": "portland-or", "short_name": "Portland, OR", "displayable_name": "Portland, OR", "localized_name": "Portland", "country": "US", "state": "OR", "type": "Town", "is_root": false, "urls": {"web": {"discover": "https://www.kickstarter.com/discover/places/portland-or", "location": "https://www.kickstarter.com/locations/portland-or"}, "api": {"nearby_projects": "https://api.kickstarter.com/v1/discover?signature=1552595045.662db466c3cd56e88b5b1d83c53e41a6cc5a56d&woe_id=2475687"}}, "Sinking Wasteland 0", "project_id": 3119580, "state": "active", "state_changed_at": 1509039095, "name": "Sinking Wasteland Tarot", "blurb": "A tarot deck set in a post-apocalyptic world, with a gothic western style, and diverse bodies, genders, races, and sexualities.", "background_color": "000000", "text_color": "ffffff", "link_background_color": "ffffff", "link_text_color": "000000", "link_text": "pixelocult.com", "link_url": "http://pixelocult.com/sinkingwastelandtarot/index.html", "show_feature_image": false, "background_image_opacity": 0.8, "should_show_feature_image_section": true, "feature_image_attributes": {"image_urls": {"default": "https://ksr-ugc.imgix.net/assets/018/372/122/737f47a1d6d0bf6e26ead95e4ca645a0_original.JPG?ixlib=rb-1.1.0&crop=faces&w=1552&h=873&fit=crop&v=1505706573&auto=format&frame=1&q=92&s=3a51e9c6d0287414347580f40cfa5a37", "baseball_card": "https://ksr-ugc.imgix.net/assets/018/372/122/737f47a1d6d0bf6e26ead95e4ca645a0_original.JPG?ixlib=rb-1.1.0&crop=faces&w=560&h=315&fit=crop&v=1505706573&auto=format&frame=1&q=92&s=4b3eb440788968fd97d4aeb9c69945"}}, "sinking-wasteland-tarot", "https://www.kickstarter.com/discover/categories/art/illustration", "tr

Best performing model:

Random Forest

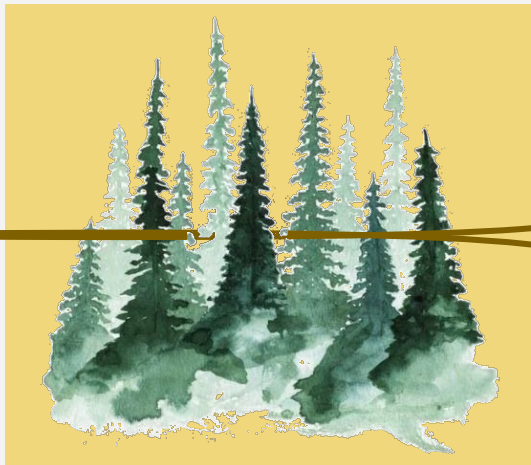
f1_score: 0.812

accuracy: 0.823

precision: 0.867

recall_score: 0.764

roc_auc_score: 0.823



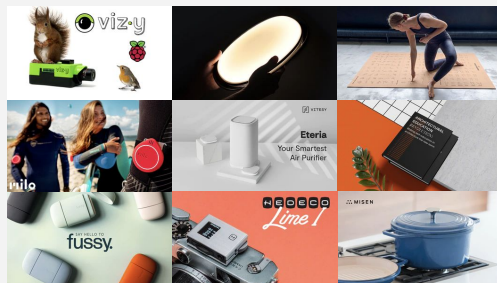
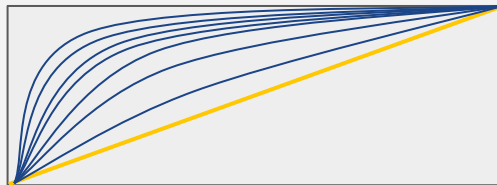
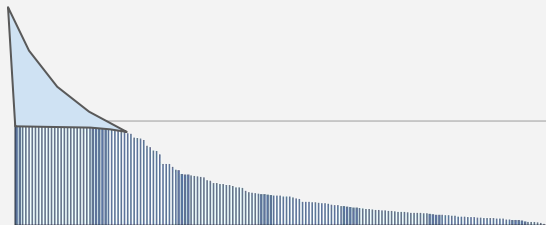
SUCCESS

FAILED

other models considered:
XGBoost, SVM, Logistic Regression

FUTURE WORK

V FUTURE WORK



Low Hanging

Full-data-view, we are looking at roughly 45% of the potential data.

Investigating **ROC curves** to visually compare different models and improve upon them.

High Hanging

Pictures for many campaigns are available. Do their colors and displayed objects correlate with success?



**WOULD YOUR PREDICT
SUCCESS OR FAILURE?**



ASKED FOR \$7,000.
GOT \$ 46,000.
IN 2016.



vor 6 Tagen

Pandemic? More like PANdemic, amirite?

FINISH OUR PANS, MAN.

Or, you know, give me my money back.

END