

The background of the slide is a photograph of a desert landscape. A paved road with a white center line curves from the bottom center towards the right side of the frame. To the left of the road, there are several large, rounded mounds of reddish-brown earth or sand. Sparse, low-lying green and yellow desert shrubs are scattered across the foreground and middle ground. In the distance, a range of mountains is visible under a hazy, overcast sky. The overall tone is muted and naturalistic.

# KICKSTARTER

## Campaign Success Predictor

Interim Presentation, July 2<sup>nd</sup> 2020

Christian Robledo  
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**01** BACKGROUND

**02** FINDINGS

**03** NEXT STEPS



# 01 BACKGROUND

Why are we here today?

## 02 FINDINGS

## 03 NEXT STEPS

# OUR TASK IS TO ESTABLISH A MODEL TO ACCURATELY PREDICT CAMPAIGN SUCCESS

## BACKGROUND



### Situation

- In recent years, many creators have voiced the **need for a better way to evaluate their campaign's success beforehand**
- You approached us to **establish a way to support creators** in optimizing their chances of project success



### Core Question

- Given the data created during project set-up, **is the campaign likely to succeed or fail?** (classification)
- Based on the data created during project set-up, **what would be a reasonable goal recommendation for creators?** (regression, out-of-scope for this meeting)



# 01 BACKGROUND

## 02 FINDINGS

What have we achieved so far?

## 03 NEXT STEPS

# THE CURRENT MODEL WILL ENABLE YOU TO INDICATE SUCCESS TO PROJECT CREATORS

**KICKSTARTER** ← Music Project

PreviewSave

captions and subtitles so your project is more accessible to everyone.

💡 80% of successful projects have a video. Make a great one, regardless of your budget. [Learn more...](#)


### Funding goal

Set an achievable goal that covers what you need to complete your project.

Funding is all-or-nothing. If you don't meet your goal, you won't receive any money.

Goal amount


|    |       |                            |
|----|-------|----------------------------|
| \$ | 15000 | This goal looks reasonable |
|----|-------|----------------------------|

[Use our calculator](#) to estimate total costs, including taxes and fees.

### Target launch date (optional)

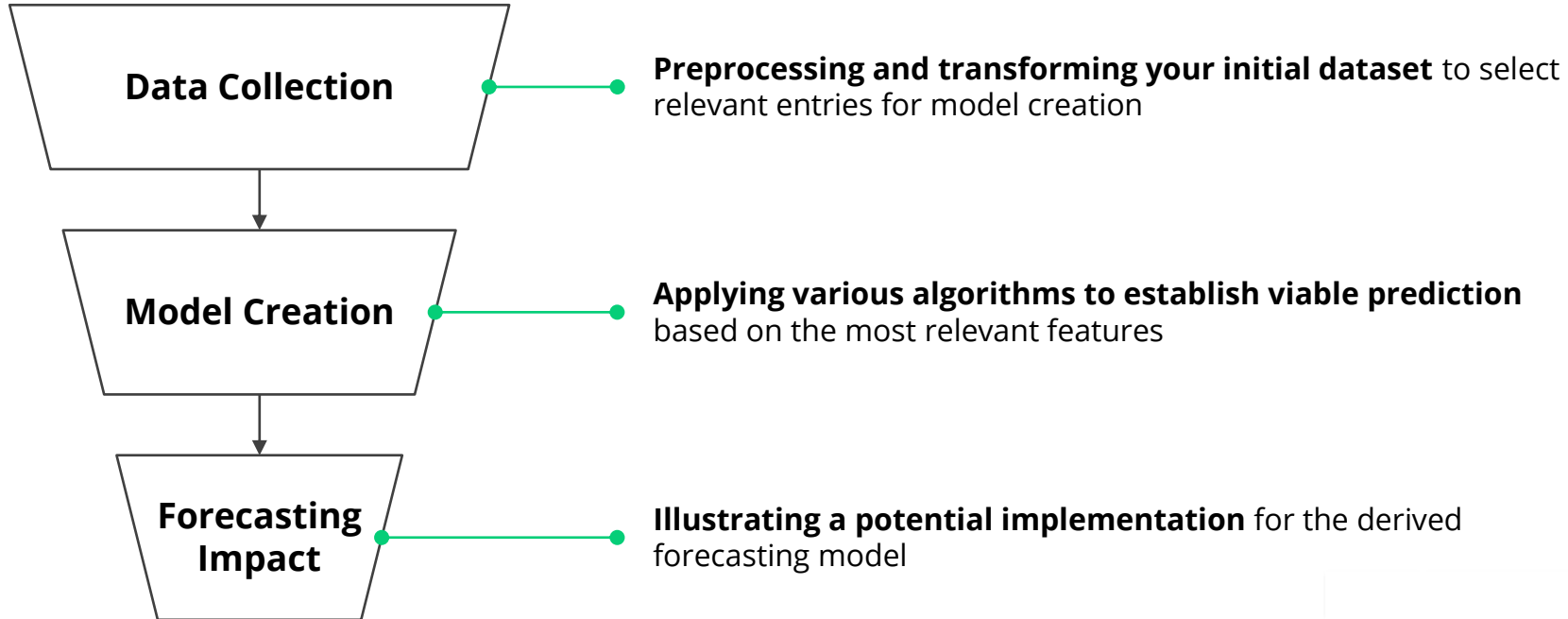
Enter a date when you plan to launch—you can always return to this after you've built out more of your Kickstarter project

| Month | Day | Year |
|-------|-----|------|
| MM    | DD  | YYYY |



# WE FOLLOWED A STRUCTURED APPROACH FOR CREATING A ROBUST FORECASTING MODEL

## APPROACH



# YOU PROVIDED US WITH EXTENSIVE DATA FROM THE PAST DECADE



## DATA COLLECTION | PREPROCESSING AND TRANSFORMING

> **209.000** unique project entries

● **146.819** creators

● **15** categories

● ~ **\$22.000** pledged on avg. to successful projects

● **Reduced „states“** (kept successful and failed)

● **Removed low-return projects** (< \$1.000 pledged)

● **Reduced projects per creator** to limit influence, as well as **per project id** to eliminate duplicates

● **Balanced dataset** (previously successful vs. failed ~85:15)

~ **74.000** entries processed in final model

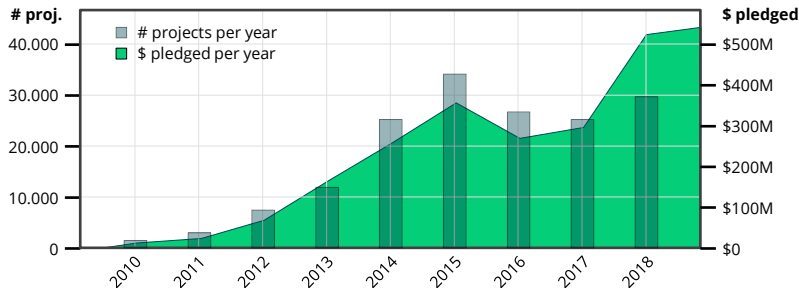


# THE DATA GIVES FIRST INDICATIONS ON WHICH PROJECTS MIGHT BE SUCCESSFUL

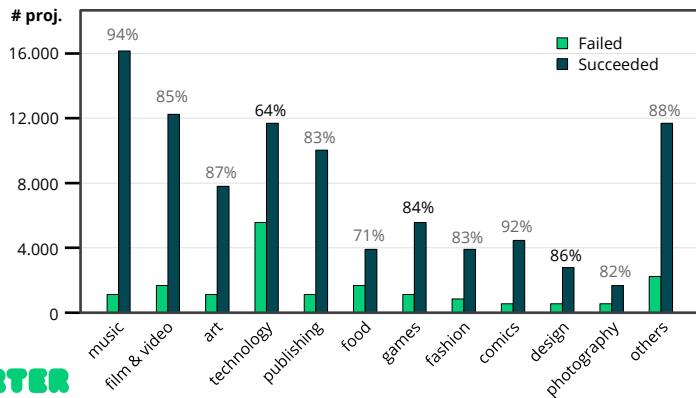


## DATA COLLECTION | INSIGHTS (SELECTION)

\$ pledged over time vs. # projects



# projects per category

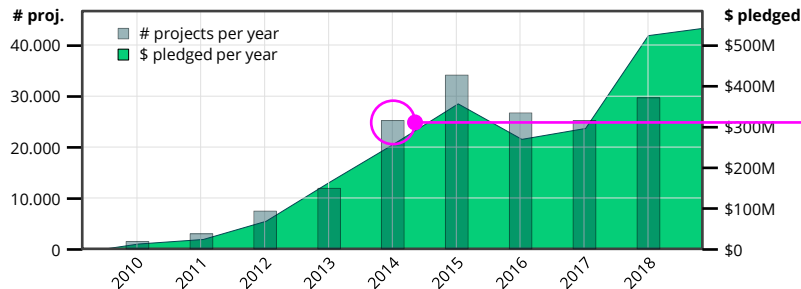


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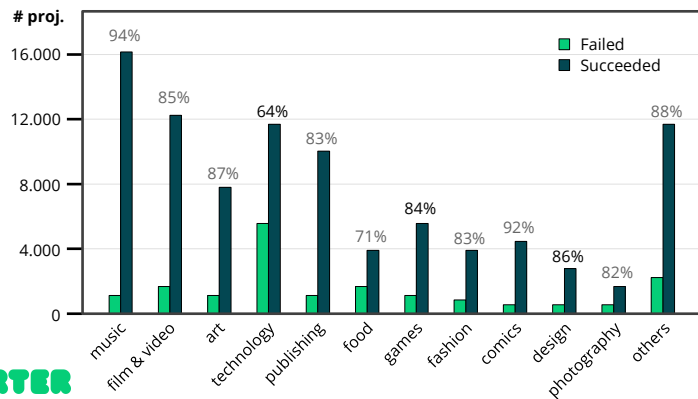
## DATA COLLECTION | INSIGHTS (SELECTION)

\$ pledged over time vs. # projects



High growth in # of projects in early years, but \$ pledged were still relatively low compared to today

# projects per category

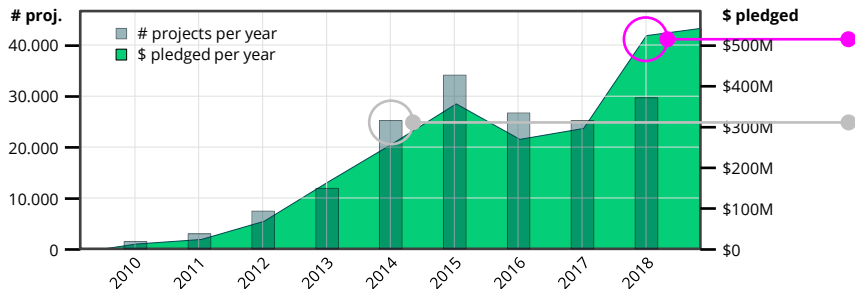


# THE DATA GIVES FIRST INDICATIONS ON WHICH PROJECTS MIGHT BE SUCCESSFUL



## DATA COLLECTION | INSIGHTS (SELECTION)

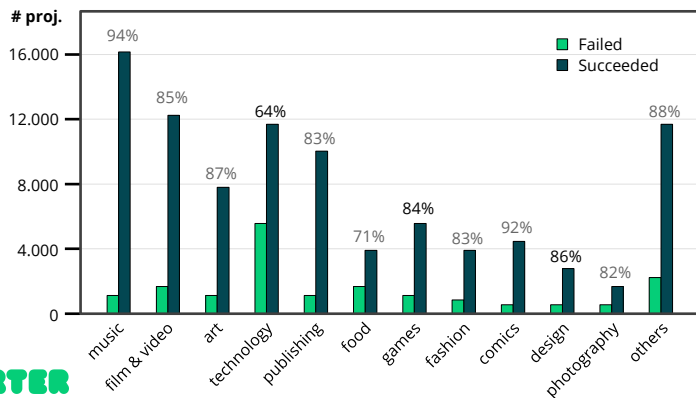
\$ pledged over time vs. # projects



**Sharp increase in \$ pledged** relative to # projects, indicating a higher average pledge amount per project

High growth in # of projects in early years, but \$ pledged were still relatively low compared to today

# projects per category

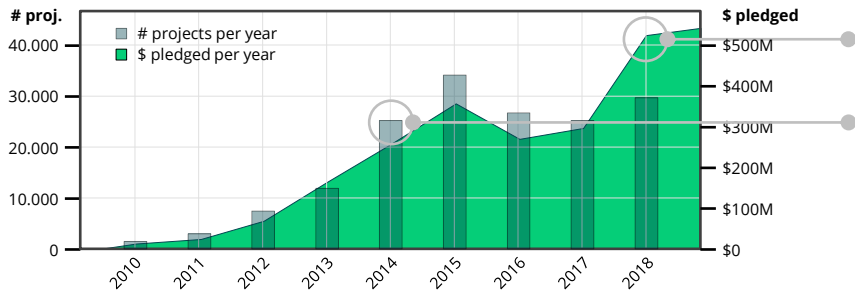


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## DATA COLLECTION | INSIGHTS (SELECTION)

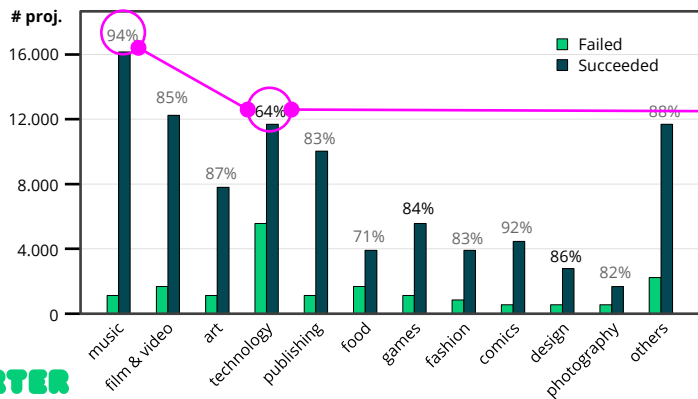
\$ pledged over time vs. # projects



Sharp increase in \$ pledged relative to # projects, indicating a higher average pledge amount per project

High growth in # of projects in early years, but \$ pledged were still relatively low compared to today

# projects per category

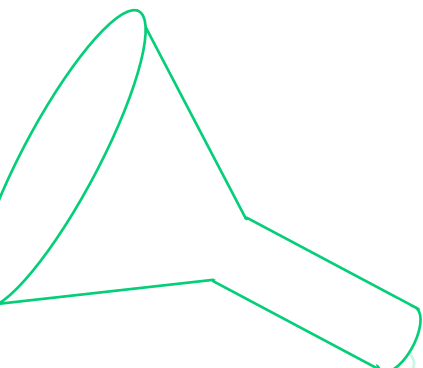


Success rate varies substantially depending on category, but is not the only important measure (e.g. Technology has a high mean pledged amount of \$70,000, music only \$8,000)

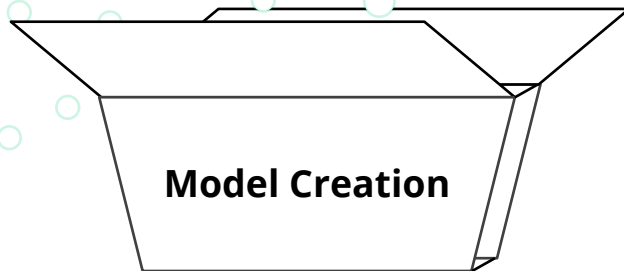
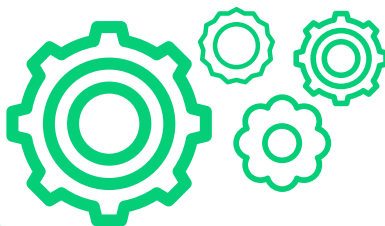
# DATA AND INSIGHTS COMBINE TO FORM A PREDICTIVE MODEL VIA ML ALGORITHMS



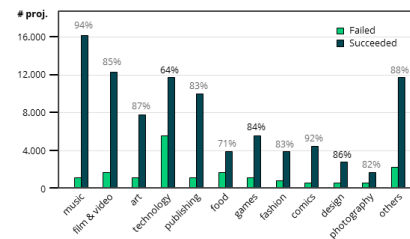
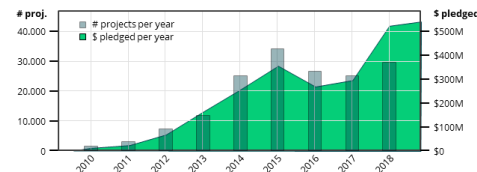
## APPROACH



## Machine Learning Algorithms



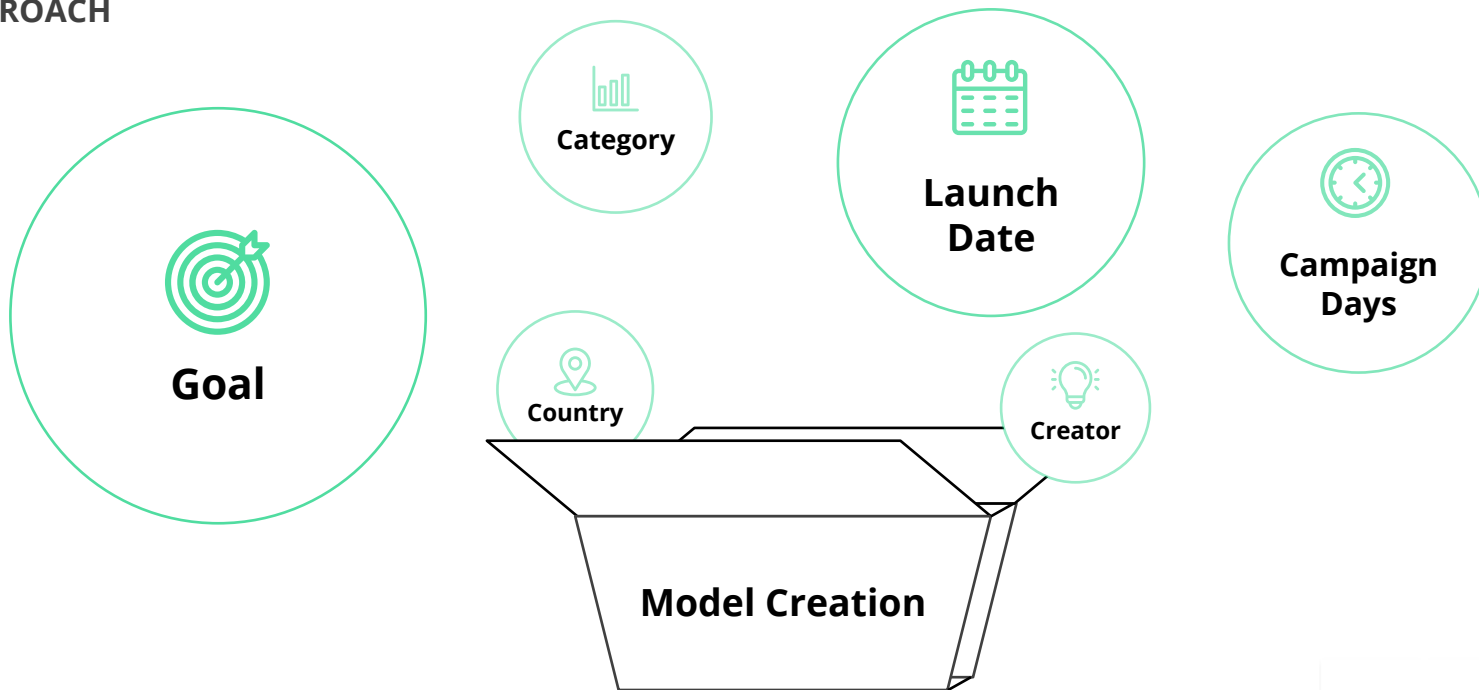
Model Creation



# THE KEY DETERMINING FEATURES CAN ALL BE DERIVED AT PROJECT CREATION



## APPROACH



Bubble size indicates relative feature importance

# AT THIS STAGE THE MODEL IS ALREADY A SUBSTANTIAL STEP FORWARD



## APPROACH

|                                 | Predicted Correctly | Predicted Incorrectly |
|---------------------------------|---------------------|-----------------------|
| Succeeded Campaigns<br>(21.376) | 85%                 | 15%                   |
| Failed Campaigns<br>(3.639)     | 58%                 | 42%                   |

# IT IS SUGGESTED TO INCORPORATE THE PREDICTION AS A SOFT FEATURE



## ILLUSTRATIVE EXAMPLE

KICKSTARTER



1 of 3

First, let's get you set up.

Pick a project category to connect with a specific community. You can always update this later.

Select your category



Your first project! Welcome.

Next: Project idea



# IT IS SUGGESTED TO INCORPORATE THE PREDICTION AS A SOFT FEATURE



## ILLUSTRATIVE EXAMPLE

KICKSTARTER



1 of 3

First, let's get you set up.

Pick a project category to connect with a specific community. You can always update this later.

Select your category ▾

Games

Journalism

Music

Photography

# IT IS SUGGESTED TO INCORPORATE THE PREDICTION AS A SOFT FEATURE



## ILLUSTRATIVE EXAMPLE

KICKSTARTER



1 of 3

First, let's get you set up.

Pick a project category to connect with a specific community. You can always update this later.

Music



Your first project! Welcome.

Next: Project idea

# IT IS SUGGESTED TO INCORPORATE THE PREDICTION AS A SOFT FEATURE



## ILLUSTRATIVE EXAMPLE

KICKSTARTER



2 of 3

Describe what you'll be creating.

And don't worry, you can edit this later, too.

A novel written in three languages.



0/135

← Category

Next: Location

To create a project, you're required to provide your location, age, national ID, banking and tax information, email, and mailing address. This information is necessary to prevent fraud, comply with the law, and — if your

# IT IS SUGGESTED TO INCORPORATE THE PREDICTION AS A SOFT FEATURE



## ILLUSTRATIVE EXAMPLE

KICKSTARTER



2 of 3

Describe what you'll be creating.

And don't worry, you can edit this later, too.

Collection of influential Data Science Song Hits.  
Triple Bam!  
The album will feature songs from ...

99/135

← Category

Next: Location

To create a project, you're required to provide your location, age, national ID, banking and tax information, email, and mailing address. This information is necessary to prevent fraud, comply with the law, and — if your

# IT IS SUGGESTED TO INCORPORATE THE PREDICTION AS A SOFT FEATURE



## ILLUSTRATIVE EXAMPLE

KICKSTARTER



3 of 3

Finally, let's confirm your eligibility.

Tell us where you're based and confirm a few other details before we proceed.

the United States

Spain

Sweden

Switzerland

the Netherlands

the United Kingdom

# IT IS SUGGESTED TO INCORPORATE THE PREDICTION AS A SOFT FEATURE



## ILLUSTRATIVE EXAMPLE

Tell us where you're based and confirm a few other details before we proceed.

the United States ▼

🔗 What if my country isn't listed?

- ✓ I am at least 18 years old.
- ✓ I can verify an address and bank account in the United States.
- ✓ I can verify a government issued ID.
- ✓ I have a debit and/or credit card.

← Project idea

Continue

# IT IS SUGGESTED TO INCORPORATE THE PREDICTION AS A SOFT FEATURE



**KICKSTARTER** ← Music Project Preview Next: Rewards

Basics

Rewards

Story

People

Payment

Promotion

## Start with the basics

Make it easy for people to learn about your project.

**Project title**

Write a clear, brief title that helps people quickly understand the gist of your project.

**Title**

**Subtitle**

# IT IS SUGGESTED TO INCORPORATE THE PREDICTION AS A SOFT FEATURE



KICKSTARTER

← Music Project

Preview

Next: Rewards

captions and subtitles so your project is more accessible to everyone.

80% of successful projects have a video. Make a great one, regardless of your budget. [Learn more...](#)

## Funding goal

Set an achievable goal that covers what you need to complete your project.

Funding is all-or-nothing. If you don't meet your goal, you won't receive any money.

Goal amount

\$

0



[Use our calculator](#) to estimate total costs, including taxes and fees.

## Target launch date (optional)

Enter a date when you plan to launch—you can always return to this after you've built out more of your Kickstarter project

Month Day Year

MM

DD

YYYY





# IT IS SUGGESTED TO INCORPORATE THE PREDICTION AS A SOFT FEATURE



KICKSTARTER

← Music Project

Preview

Save

captions and subtitles so your project is more accessible to everyone.

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Set an achievable goal that covers what you need to complete your project.

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Goal amount

\$

15000

This goal looks reasonable



[Use our calculator](#) to estimate total costs, including taxes and fees.

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KICKSTARTER

← Music Project

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captions and subtitles so your project is more accessible to everyone.

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## Funding goal

Set an achievable goal that covers what you need to complete your project.

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Goal amount

\$

50000

It's up to you, but you might want to lower this a bit



[Use our calculator](#) to estimate total costs, including taxes and fees.

## Target launch date (optional)

Enter a date when you plan to launch—you can always return to this after you've built out more of your Kickstarter project

Month Day Year

MM

DD

YYYY





01 BACKGROUND

02 FINDINGS

03 **NEXT STEPS**

Where are we heading?

# TWO KEY QUESTIONS NEED TO BE ADDRESSED IN THE UPCOMING WEEKS



## NEXT STEPS / FUTURE WORK

### QUESTION 1:

The model allows for certain flexibility in prioritizing different metrics. **What is your focus in terms of success rates?**



We will **adjust our future work** in gradually improving the model accordingly

### QUESTION 2:

We have initiated investigating potential approaches and implementation of a goal recommendation system. **How do we proceed for goal prediction?**



We suggest a **parallel development of the goal prediction model**, adjusting the weight based on your priorities

# THE MODEL CAN BE ADAPTED FLEXIBLY TO YOUR SUCCESS TARGETS



QUESTION 1: WHAT IS YOUR FOCUS?

Predicted Correctly

Predicted Incorrectly

**Succeeded  
Campaigns  
(21.376)**

**85%**

**15%**

**Failed  
Campaigns  
(3.639)**

**58%**

**42%**

# AS A NEXT STEP IT IS SUGGESTED TO SET UP A PROTOTYPE FOR GOAL PREDICTION



## QUESTION 2: HOW DO WE PROCEED FOR GOAL PREDICTION?

Basics

Promotion

Funding calculator

Enter the total amount you think you'll need to make this project and fulfill your rewards. [Build out a budget](#) that includes shipping, materials, research, vendors, and labor costs.

Estimated budget:

\$

12000

Taxes:

0%

40%

19

%

\$

2815

We can't provide tax advice. See a professional adviser for additional guidance.

Kickstarter fee: 5%

\$

823

Processing fee: 5%\*

\$

823

\*Average processing fee—[this number varies](#) based on your location and total number of backers.

Suggested goal:

~ \$ 16.500

We're providing this estimate to help you define your own funding goal. It's your responsibility to set the final amount.

Collection of Influential Data Science Song Hits.

Triple Data [Close](#)

KICKSTARTER

30

# AS A NEXT STEP IT IS SUGGESTED TO SET UP A PROTOTYPE FOR GOAL PREDICTION



## QUESTION 2: HOW DO WE PROCEED FOR GOAL PREDICTION?

Basics

Promotion

Funding calculator

Enter the total amount you think you'll need to make this project and fulfill your rewards. [Build out a budget](#) that includes shipping, materials, research, vendors, and labor costs.

Estimated budget:

\$

12000

Taxes:

0%

40%

19

%

\$

2815

We can't provide tax advice. See a professional adviser for additional guidance.

Kickstarter fee: 5%

\$ 823

Processing fee: 5%\*

\$ 823

\*Average processing fee—[this number varies](#) based on your location and total number of backers.

\$ 16.500

(calculated goal)

Suggested goal:

We're providing this estimate to help you define your own funding goal. It's your responsibility to set the final amount.

~ \$ 35.000

Based on your input, we recommend a slightly higher goal

Collection of Influential Data Science Song Hits.

Triple Data [Close](#)

Project title

Write a clear, brief title that helps people understand the goal of your project.

KICKSTARTER

31

Just an excerpt of what we have  
been analyzing ...

### Miniature Wargaming - Flying Assault Butts

by Joe Broggio

[Home](#) [Updates 1](#) [Backers 15](#) [Comments 1](#)

[Davenport, IA](#) [Tabletop Games](#)



PRODUCT CONCEPT. FINAL PRODUCT MAY VARY.  
PRODUCT WILL BE SUPPLIED UNPAINTED  
CUSTOMERS WILL SUPPLY THEIR OWN FLYING STAND.

[Like](#) [71 people like this.](#)

[Tweet](#) [Embed](#) <http://kok.at/11CpOgh>

I'm going to be creating Flying Assault Butts, a small resin model to be used with tabletop games.

[★ Remind me](#)

**15**  
backers

**\$241**  
pledged of \$150 goal

**13**  
days to go

[Back This Project](#)  
\$1 minimum pledge

This project will be funded on Tuesday May 28, 5:16pm EDT.



Project by  
**Joe Broggio**  
Davenport, IA  
[Contact me](#)

[First created - 4 backed](#)

[Has not connected Facebook](#)

[See full bio](#)

# Thank You!

**Christian Robledo**

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[github.com/Rurbinasal](https://github.com/Rurbinasal)