# All ABOARD the Data Science Train: Predicting Long-Term Boardgame Success With Kickstarter and BoardGameGeek Data

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March 13, 2020 Miguel Martin Menez

General Assembly - DSI-10-DC Instructors: Adi Bronshtein, Chuck Dye





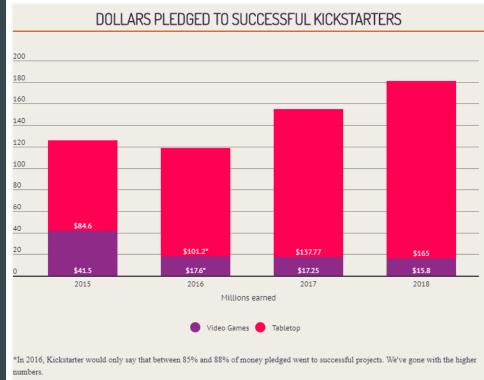
## KICKSTARTER

"Kickstarter campaigns make ideas into reality. It's where creators share new visions for creative work with the communities that will come together to fund them.

Some of these creators, like Critical Role, TLC, and The Smithsonian Institution already had huge fanbases. But many projects have been as small-scale as a limited run of silent meditation vinyls or as up-and-coming as early versions of Issa Rae's Insecure and Phoebe Waller-Bridge's Fleabag."

## Kickstarter (KS) has raised 4.56 billion USD as of Oct. 2019

Tabletop Game Kickstarters made up at least \$600 million of that (13%)





#### Dinosaur Island: Back from Extinction



Dinosaur Island: Back from Extinction.

Dinosaur Island X-treme Edition, Totally Liquid

Expansion and Duelosaur Island 2 player

game!

Late Pledge

Created by

Pandasaurus Games

**18,301 backers** pledged \$2,045,463 to help bring this project to life.

Last updated September 25, 2019

# long-term success of a Kickstarted Board Game, measured by it landing in the top 2000 (top ~10%) games on BoardGameGeek?

What combination of features help predict the



## "Gaming Unplugged Since 2000

BoardGameGeek is an online board gaming resource and community. The site is updated on a real-time basis by its large and still growing user base, making the 'Geek the largest and most up-to-date place to get gaming information!"

### **Data Collection:**

2015 - 2018 Kickstarter Data from Web Robots

27 gb of data

2017-2018 BoardGameGeek data from Kaggle

☐ Scraping BGG is great for personal use

## Data Assembly - Factors Under Your Control

#### Categories

• Theme - what a game is about: sci-fi, farming, murder/mystery, fantasy, zombies.

• Key components - dice, miniatures.

#### Mechanics

- Rules how you play the game:
  - Dice rolling
  - Role playing
  - Worker Placement

#### KS and BGG Features

- BoardGameGeek:
  - Weight /Complexity
  - Average game time
- Kickstarter:
  - Pledge goal
  - Pledge amount

## Categories

- 1. Miniatures
- 2. Negotiation
- 3. Zombies
- 4. Puzzle
- 5. Civilization
- 6. Murder / Mystery
- 7. Fantasy
- 8. Economic

## **Mechanics**

- 1. Variable Player Powers
- 2. Worker Placement
- 3. Action Points
- 4. Voting
- 5. Simulation
- 6. Variable Phase Order
- 7. Area Movement
- 8. Hex and Counter

## KS and BGG Features

- 1. Weight / Complexity
- 2. Average Time
- 3. Funding Goal

## **Final Features**

- 1. Miniatures
- 2. Negotiation
- 3. Zombies
- 4. Variable Player Powers
- 5. Worker Placement
- 6. Action Points
- 7. Weight / Complexity
- 8. Average Time
- 9. Funding Goal

## **Results and Recommendations**

Logistic Regression: 67% / 65% vs.

Baseline of 42%

- Minis? Yes.
- Get more recent BGG and KS data
- Get board game sales data to better represent long-term success.



### **Ethical Considerations**

#### Representation of Data - BGG 2018 Poll:

- 87.6% Male / 11% Female
- 67% between 26 and 45
- 56% from the United States







A beautiful combination of rules, artwork, and interpersonal interaction that produce unique experiences and memories.

## The Team



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Edward CFO

kibbles pls

## printing "Hello Wordl" as your first program

