Kickstarter Video Games Keys to Success Analysis

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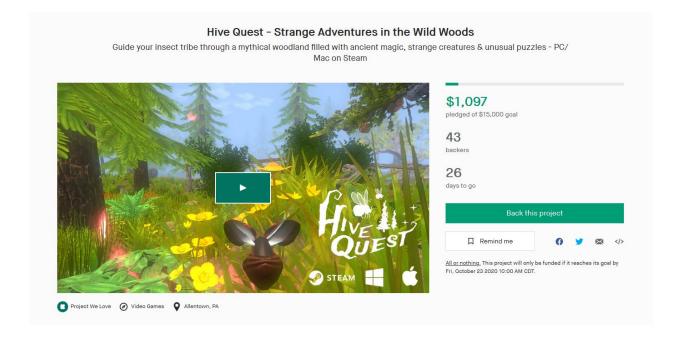
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Abstract

Kickstarter is a crowdfunding platform that allows individuals and groups to develop and bring their creative projects to life. Inside of this platform, a community that focuses on developing indie video games for different types of gamers around the world. Below is an example of a Kickstarter video game called Hive Quest that is currently attempting to raise funds.



Hive Quest Kickstarter Project Page - Appendix A

With each of these projects, someone can set a funding goal that will allow their passion to be distributed to those around the world; however, with each project, there is a possibility that it will not be successful in reaching its goal. By analyzing the data generated by the platform, this analysis attempts to determine the leading factors of a successful video game Kickstarter project which can then be used for future video game developers who have a desire for using this platform to raise funds for their passion projects. By analyzing the data generated by the platform, this analysis attempts to determine the leading factors of a successful video game

Kickstarter project which can then be used for future video game developers who have a desire for using this platform to raise funds for their passion projects. To complete this analysis of success, I utilized a Random Forest Classifier to determine the most impactful features as well as the success rate of a project since it allows for a simple binary yes or no if a project will reach its funding goal. For a project to be considered a success within Kickstarter and the data set, it must reach its funding goal at the least.

Across the sub-category of video games under the games category, they typically do not have a high success rate compared to other projects such as music and art. A main contributing factor to this is the goal that is set for video game projects and since it is a team of people that are in the process of developing the game. Even if a project has a strong following, it may be the goal that ultimately prevents it from being able to be developed for the future. Based on the results of this analysis, it will present the importance of certain aspects of a Kickstarter project such as the funding goal that is set, the time allotted to reach the goal, or the actual category of the project.

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Background

Kickstarter is an American public benefit corporation that maintains global crowdfunding platform based on creativity. When people donate to a certain project of their desire, they are often offered tangible rewards or experiences in exchange for their pledges. Within the last year alone, projects received \$4.6 billion in pledges from more than 17 million backers across the world.

In the case of video games within this platform, they have increased in popularity over the last decade which have opened the doors for many more small teams to take the chance of raising

funds for their projects. However, when it comes to projects on Kickstarter especially video games, they must all be able to build trust with possible backers of the project by providing content and demonstrations of the product that they hope to one day released to the public. Looking at the Hive Quest game mentioned before, below is an example of content for an audience which in this case is a playable demo of the game that is in production.



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Hive Quest Demo Example – Appendix D

At the same time, video games typically have more than a year timeline for completion meaning that this communication must remain constant depending on the funding window that they had initially set.

Within this window, the individual or team that has created the project has set a funding goal that they would like to reach or believe will allow them to commence further development in completing the project. However, to receive these funds and for a backer to have their funds

taken, the project must at least reach its goal that it had initially set in the beginning within a set time frame. If this goal is not reached, the creators of the project will not receive any of the funds and the backers will not have any funds withdrawn from their accounts. Because of this minimum limit, it has led many projects to fail even if there was a small following for the product. Even though some projects never reach their goal, many indie video game developers use this as a tool to determine if there would be any following or interest in their game at all.

A pivotal reason that indie video game develops utilize this platform is because it allows for them to work on their own timeline for the mast part as well as have free reign on how they would like their video game to be designed and told for the audience. With large video game studios, many developers do not always have a voice in how they wish the game would be developed or perhaps how a story within the game is playing out. Aside from development restrictions, at this moment, there are various video game communities that prefer smaller brand name games to play instead of the most popular games that are released every year, or they have a specific interest in video games that only indie developers are focused on creating for these communities.

For these small indie video game teams that are using this platform for the smaller communities, they will come across the challenges of gaining enough support for their games which will then prevent them from ever being able to create these projects. When it comes to any Kickstarter project, it faces its own challenges it being able to gather enough attention throughout all the projects released on the platform. With video games, they are a small fraction of projects on the platform that are reaching for a slice of the pie of all the potential backers. Therefore, it is important for them to understand what factors that they could use for themselves to be successful and draw this attention.

Methods

This analysis will be using the "Kickstarter Projects" data set by Mickael Mouille from Kaggle. The dataset consists of 379,000 projects of all types of categories that have succeeded and failed on the platform at the end of the 2018 year. The data set is collected directly from the platform allowing the analysis to keep all the terminology and real time results from actual projects. With the landscape constantly changing in the video game industry as well as the rise of the platform, it is important to use the most recent data set that contained of all these projects which was last recorded at the end of the year in 2018.

After importing the data into a Jupyter Notebook by utilizing Python, I first began in determining the number of projects that consisted around video games out of the entire data set. After the subset, I was able to see that there were about 12,000 projects that were released on the platform to raise funds for video games. By exploring the data within each of the subsets, I was able to see the typical success rates and simple correlations of features of all projects as well as video games

State Percent	::		
failed	58.68		
successful	20.17		
canceled	19.97		
live	0.73		
suspended	0.45		

Success Rates of Video Game Projects – Appendix B

		goal	pledged	backers	usd pledged	usd_pledged_real	usd_goal_real
	goal	1.000000	0.029378	0.023742	0.027500	0.027703	0.826637
	pledged	0.029378	1.000000	0.917180	0.975863	0.991814	0.038074
	backers	0.023742	0.917180	1.000000	0.927777	0.929744	0.033584
	usd pledged	0.027500	0.975863	0.927777	1.000000	0.984973	0.038452
u	sd_pledged_real	0.027703	0.991814	0.929744	0.984973	1.000000	0.038776
	usd_goal_real	0.826637	0.038074	0.033584	0.038452	0.038776	1.000000

Correlation of Variables within Data Set – Appendix C

Once the data has been prepared and edited for feature selection and modeling, the data was split by seventy and thirty for training and for testing. After the data has been split appropriately, I initialized the Random Forest Classifier to be able to predict with both sets of data to determine the accuracy of each. The goal of this Classifier model is to see how accurate it could predict whether a project would be successful. Along with the accuracy, it was important to also distinguish the important features and aspects that affect both Kickstarter projects as well as video game projects.

Results

The main goal of this project is to examine Kickstarter data to try to identify the leading factors that influence the success rate of a video game Kickstarter campaign. In order for indie developers to be able to truly complete their project and publish it for the public, their main concern in the beginning is to be able to raise these funds by interacting with the community and building a trust with them that they are creating the intended game.

To no surprise, the biggest influence on whether the project will succeed, or fail is the set funding goal for the project. By splitting the goals into different categories depending on the value of them, it is easy to see that as the goal is higher the less of a chance the project will be funded. For these projects to reach any potential success, they must build that following and understand the actual value that is necessary to succeed rather than trying to collect the most money possible for the development.

Discussion/Conclusion

Even though there is not a high success rate with video games on platforms, this should not discourage future developers from starting campaigns on the platform. For many games, there will always be communities are that are possibly looking into the exact game that you wish to develop or is simply a passion project for you. With each project, a creator can only have so much control over certain aspects of their project and the limitations and goals that they set for themselves. Therefore, from this analysis, I think it will provide an insight on factors that they can control such as the goal amount as well as the time allotted to reach said funding goal.

Acknowledgements

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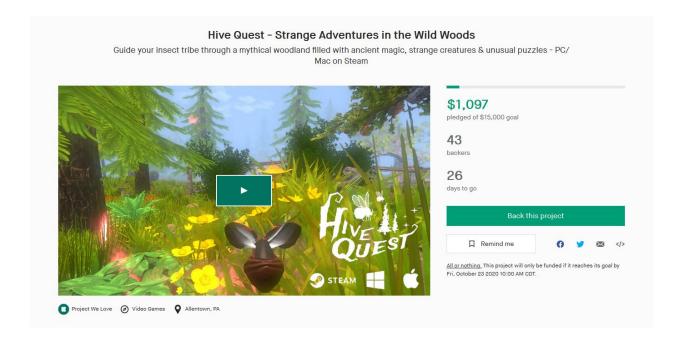
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Appendix A					
Hive Quest Kickstarter Project Page					



Appendix B

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