Russell Johnson

SER415

Dr. Nouh Alhindawi

2 September 2024

Milestone 2: Elaboration
Producer Submission

Core Features

Overview

Our team will produce a trend analysis tool for the video game market that is intended to bridge the gap between players and developers by providing expert consultation services.

The software, named *IndieWatch*, has the following main features:

1. Optimal game release window consultation

2. Niche adjustment consulting for upcoming games

3. Playerbase expansion consultation for existing games

4. Gamer polling & Developer Contracts

IndieWatch works by scraping data from online game store like Steam. Steam collects data not only on sales, but on which hardware is being used by players, as well as a detailed breakdown of what genre and features a game has.

IndieWatch will then analyze this data for trends and train a Machine Learning algorithm against historical data. Once this algorithm has been shown to accurately predict spikes in game sales this information will be marketable to game developers.

Optimal Game Release Window Consultation

In the world of pc games sales, there is no longer a traditional store-front marketplace. There are no more small or hard to find games that are only sold in certain brick-and-mortar stores that keep a few copies of obscure game cartridges. With global online marketplaces all games are essentially released to the entire world as soon as they are uploaded to a digital storefront.

Because of this unifying of the market there is much less room for competing similar games. In the 90s there may have been room for dozens of Street Fighter II clones that all had exclusive distribution deals with smaller physical store chains, but now everyone is just a few mouse clicks away from virtually every game ever released. This gives a huge advantage to whichever game comes out first and has enough time to establish its player base.

This concept is illustrated by the competing games *Dead by Daylight* and *Friday the 13th*. Both games are online multiplayer games with uneven sides where players play as either the monster or as the survivors trying to escape or thwart the monster. *Friday the 13th* has better graphics and is overall more refined than *Dead by Daylight* and could easily be considered the superior game. However, because *Dead by Daylight* was first to market and had time to get its player base established it went on to be a massive success while it is very difficult to even find people to play *Friday the 13th* with today.

IndieWatch would address this problem by providing release date consultations to developer customers. It would be able to advise developers to shift their release windows to avoid a massive game
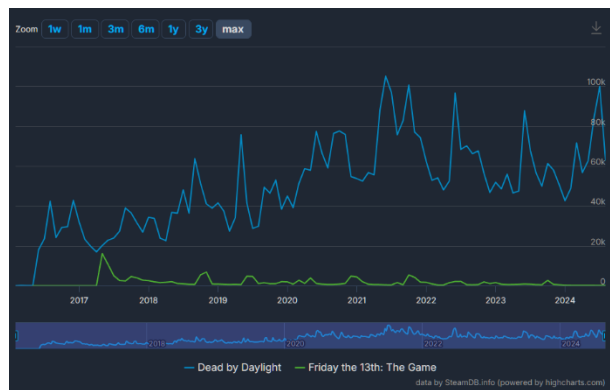
that is expected to eat up all of the gamer dollars the month of its release. Additionally, it will inform developers that a niche is about to become saturated.

Niche Adjustment Consolation For Upcoming Games

All games can be divided by categories into which consumer niches they service. The niche is a combination of the overall genre or subgenre a game is in as well as its gameplay features. For example, one of the most popular indie games ever released is Stardew Valley, which is a Farming sim with pixel graphics, role playing, and Zelda-like combat. When Stardew Valley was released in 2016 its niche turned out to have a broad appeal that drove it to $163 million on sales and, at the time of this writing, still has 77,000 people currently playing it this moment.

An independent game developer who is in the planning stages of product development does not really have any idea of how well his or her product will be received by the market.

This is where IndieWatch comes in. By submitting a questionnaire listing genre, planned features, and estimated release window, our customers will be able to receive a report on expected sales trends. This report will explain how features or sub-genres could be added or adjusted to best serve anticipated game consumer demands at the project release time.

For example, here is a scenario where Concerned Ape, the developer of Stardew Valley used IndieWatch. In 2014 he contracted our service and filled out a questionnaire stating that he was going to release an anime art style farming game in 2 years. IndieWatch, having analyzed massive amounts of sales and user data and armed with a predictive knowledge of trends would respond with a report that recommends to avoid drawn art styles and that a retro-art style would be in demand. Additionally, though it might be unintuitive, it would also say that the farm game would sell better if it included swords and magic wands, because those thematic elements are predicted to make a comeback.

Playerbase Expansion Consultation For Existing Games

Beyond advising small game developers who do not have access to market trend data, IndieWatch will also service larger, live-service game developers. A live-service game is one that has regular updates that adds to it long after it is originally released, intending to have players play it continuously instead of finishing it.

IndieWatch will be able to advise developers of which features can be added to an already existing product to increase its player base.

Perhaps the best example of a live-service game expanding into a new market is the online 3rd person shooter FortNite. Originally, FortNite was a multiplayer cooperative shooter where players would build and defend forts against zombies. After a few years of moderate success the developers of FortNite decided to copy a feature of another game, PUBG, and include a battle royal mode. Battle royal is when every player is out for themselves in a continuously shrinking play area and the game ends with only one player left standing. Now, 6 years later, FortNite is the largest shooter ever at $26 billion in revenue and most players have forgotten that it ever had zombies or fort building.

One of IndieWatch's core features would be to provide consultation to developer customers as to which features to add to a live service game. It would accomplish this by gathering data from the customer's with a similar questionnaire to the Niche Consolation process. It would then look for possible

feature modifications with a two-step process. IndieWatch would analyze other games with large playerbases that are only 1 or 2 features away from our customer's game. Additionally, it would rely on market research derived from IndieWatch's 4th core feature.

Gamer Polling & Developer Contracts

IndieWatch's final core feature is Gamer Polling and Developer Contracts. This feature works with both the game developers and the individual players themselves. This has two parts.

The first part is an online petition system in which individual gamers can pay a fee to start a feature request for a change they would like to see in one of the games participating in this system. Once a feature request petition is started other users can view a list of the pending petitions and, if they see a feature they want added they can pay a nominal fee to endorse that petition.

The second part is that participating developers of live stream will sign a contract stating that they will incorporate suggestions from this system into their game's regular updates. Feature petitions that reach a certain level of endorsements will be considered "successful" and will be incorporated. The game developer will assign the endorsement thresholds that a petition needs to reach before it is considered successful.

Currently the only direct way developers receive this kind of feedback at this scale is from online forums such as reddit. However, due to the reddit voting system, forums of this kind are generally negative complaints that overvalue minority opinions on the state of a game and ignore the general consensus of consumers. Additionally, just because someone on reddit complains that a game has some perceived issue there is no guarantee that reacting to that issue will cause an increase in sales. Some people just like to complain.

With the IndieWatch system, the only suggestions that are being considered are suggestions that people feel strongly enough about to pay money to become stakeholders. For every person who is willing to pay to see a feature added to a game there exists additional people who want to see that feature adopted. Additionally, because there is a threshold that needs to be reached there is a guarantee of some level of popular support behind the suggestion.

UI Mockups

IndieWatch is intended to interface with its customers through a series of forms and reports that will be accessed by a web browser.

Questionnaire for Upcoming Game

Genre   Features   Planned Release Date

Feature Suggestion Page

Competing Games

Remove these Features   Recommended Earliest Release

+ 18%
+ 3%
+ 10%

Add These Features   Recommended Latest Release

+ 105%
+ 20%
+ 4%

For customers who have games in development the above pages will be used. The top diagram is the questionnaire where they will list out all of the features that they intend to include in their final product while also selecting one or more genres that describe their game.

The second diagram is the output after IndieWatch has analyzed the proposed game and looked at how it will fit in the forecasted market. Customer Developers will be presented a list of features that are predicted to hurt their game sales and should be remove as well as a list of suggestions for things to be added to the game. With each suggestion there is an estimation of how much it may effect sales.

Customers will also be provided a predicted best release window in the form of an earliest and latest date of release.

Gamer User Page

Current Feature Petitions

Start New
Petition

For the customers who are individual game players there will be a screen where they can review existing game suggestion petitions and create a new petition with their own suggestion.

Dev Page

Genre Trends

Recent Poll results

Successful Petition

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu

For the live-service game developers who are part of the Gamer Polling & Developer Contracts system, they will get a report like this. It will detail the results of petitions as well as provide information about features that could be adopted to expand their games.