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Game Shuffler: Research Project

PROBLEM STATEMENT

People have access to too many options, specifically when it comes to board games, making it difficult to choose what to play. We want to help the user organize and decide on what game to play based on their own boardgame collection while minimizing decisions.

GLOBAL IMPLICATIONS

To understand the global implications of the problem, we must first understand hyper-consumption and market capitalism and how they go hand in hand when considering decision paralysis. Due to international trade and an increase in disposable income globally, “Even people in developing countries living in abject poverty are subjected to the same market-driven forces that advance a culture of consumerism” (Perez and Esposito 86).

There is an abundance of board games to choose from due to an ever-expanding market worldwide, with the most sales happening in countries in North America, Europe, APAC, and Africa (Maida). This abundance leads to consumer overchoice, a debilitating mental block that occurs when you have too many alternative options to choose from. As Manolica points out in an academic journal about sustainability, “The abundance of choices can be a drawback in the supply-and-demand process” (1). Because of this, our solution will focus on eliminating consumer overchoice in the board game industry by providing aid in determining what game to play.

MARKET ANALYSIS

While everyone struggles with choice overload, we want to focus on board games because of the uniqueness of the industry. Firstly, when it comes to board games, there is a unique sense of ownership involved. In our current day and age, movies, music, and even video games are constantly streamed rather than owned. With board games, the ownership and physicality of the product makes it easy to visualize one's entire collection at once, which can be overwhelming. By cataloging these games, we can make the vast collection less overwhelming and daunting, and then can help users better make decisions.

Additionally, board games are meant to be played more than once as opposed to movies or books. While some people may rewatch a favorite movie or reread their favorite book, board games are intentionally created to be played and consumed repeatedly, allowing them to never age out of one's collection. Even if you have played the game before, there is the novelty of the specific game session that makes it interesting and memorable.

For this reason, our target audience would be avid board game players. We are specifically targeting people who play board games regularly and as a primary method of entertainment, not the average family who plays Monopoly on occasion. These are people who own a lot of games and like to play a variety of them often. The board game industry is a billion-dollar industry worldwide, suggesting that there are many people in this target market (Bar 1). This market also likely adds to their game collection regularly, so our proposed solution would need to be adaptable to receiving new information easily.

DIVERSITY

When thinking about diversity, it is important to consider what key factors of board games are, such as strategy, competition, and decision-making, and how universal they are.

Board games are a global activity because they unite groups of people in a unique and interactive way. Throughout history, countries all around the world have used board games as an educational tool as well as a form of entertainment and play. According to a research article by Raskurazhev, “Several studies have shown the efficacy of EG (educational games) in medical education” (2).

A unique aspect of board games is that they are cross-generational, providing physical interaction and social connection to a variety of users. The diversity of users, in the age category and in the global category, expands our target audience and broadens our reach.

POTENTIAL SOLUTIONS

One potential solution would be what we would call the “Game Shuffler,” which is an app that would take user-inputted data about the type of game they want to play, compare it against their current collection of board games, and select a game that fits the parameters given. The user will input this data using a form and the app will compare the form data with the user’s BoardGameGeek (BGG) account and any games they have marked as “owned.” BGG is a popular board game database and forum that allows users to browse board games and add them to their “collection” with various tags. The BGG API contains user information including the username and the games marked as “owned” (BoardGameGeek).

To use the app, first the user would sign in using their BGG account, which would allow the app to find their username in the API. When searching for a game, the app will only select games that the user has marked as owned. Once logged in, the app will remember the user.

Then, whenever the user wants to play a game, they will enter in key information concerning the type of game they want to play. They would answer questions about the number of players, the play time of the game, and the difficulty of the game. They will also toggle

between displaying all games that fit the parameters or if they want the app to decide on a single game for them. Upon submit, the app will display the game(s) that fit the parameters.

FINANCIAL PROJECTIONS

The cost of our app solution would include a few upfront costs as well as ongoing costs of upkeep and maintenance. With the board game industry being a multi-billion-dollar industry that is expected to accelerate at a CAGR of 7.30%, it is safe to say that the market for our solution is large (Maida). Therefore, any development or maintenance costs will be balanced out by a high retention rate on our app due to the nature of board game play (i.e. meant to be played more than once).

Due to the integration points, app functionality, and a maintenance plan, the cost to develop our app would be around \$150,000. Our app would fall into the “Basic” category since it is data-driven but also multi-featured with an advanced algorithm (Lastovetska). To receive funding for our app, we would rely on the crowdfunding aspect of Kickstarter, which is a funding platform for creative projects. Kickstarter has a large tabletop games category, which saw a 19% increase in money raised from 2017 to 2018 (Hall). On the other hand, the video game category is declining, highlighting the necessity and uniqueness of our solution specifically for avid board game enthusiasts.

Revenue generation for our app would come in a few separate ways. Growth in app downloads have steadily been on the rise over the past few years, however 98% of app revenue worldwide comes from free apps (“Mobile App Download Statistics & Usage Statistics (2022)”). Because of this, our app would be free to download, but we would include incentives for the user to spend money on in-app purchases.

In-app ads would be another revenue source, where we would focus on playable and rewarded ads that the user could interact with since these seem to be most liked amongst consumers. Cost per mille (CPM) and cost per click (CPC) are ad pricing models we would consider using since they are most likely to deliver a return on investment. Another revenue source would be sponsorships with game companies where we would promote an ad of their game to our consumers using banner ads (“Mobile App Download Statistics & Usage Statistics (2022)”).

COMPETITION

When analyzing the competition and how this problem is already being solved, research shows that multiple websites exist with a similar solution to our own. However, no app exists that solves the problem we are tackling. Websites can be unreliable and rely completely on a stable internet connection, whereas we plan to make our app available and accessible while offline as well. Almost 90% of Americans’ mobile usage is spent on apps (“Mobile App Download Statistics & Usage Statistics (2022)”), signifying the need for our solution to be app-based versus web-based.

Websites that exist to solve a problem similar to ours are: Cardboard Butler, Board Game Picker, and Board Game Caddie. These websites all use BGG API to access the user's collection, which is a strength and something we would incorporate in our app solution. This is the easiest and quickest way to get users database since many gamers likely already have a BGG account. Some weaknesses with our competition include functionality and site design. For example, on Cardboard Butler, there are only 3 filter options that don’t narrow the user’s games in a way that is efficient. Our app would focus on user experience (UX) design, so we would incorporate a

preliminary questionnaire that would help our algorithm better decide what options are best for the user rather than what options simply fit the criteria.

LIMITATIONS AND CHALLENGES

Our main challenge for this solution would be competition. As previously stated, there are many websites attempting to solve this problem. However, with Game Shuffler, we intend to create a mobile app that would solve this problem. Hopefully, this unique value proposition will help us stand out from our competitors, however, this is still a considerable challenge to consider.

Another potential challenge to our proposed solution is the inevitability of human and computer error when it comes to buggy software. We would want to ensure that we have high quality developers to ensure that our app runs smoothly. Additionally, since our app retrieves data from BoardGameGeek, it does require users to have a BGG account that they keep up to date and actively use. This would be a challenge to our audience who want to use our app but do not have a BGG account, however we would also have an option to manually input their game data. Furthermore, we would run into a challenge if BGG were to ever shut down. This is unlikely, especially since they have recently hit three million users, but this is still something to take into consideration (Alden).

MARKETING STRATEGIES

Marketing our product would happen in two distinct phases: the Kickstarter phase and the Launch phase. During the Kickstarter phase, our focus would be to draw users to our Kickstarter site so that we can receive funding to continue the project. Many board game developers use Kickstarter to fund their projects, so this platform will be easily accessible to our target audience of board game hobbyists. We can market this with a social media marketing strategy that's

focused on raising funds using platforms such as Twitter, Instagram, and TikTok. This will not only help us raise funds for the project but also begin the early stages of marketing for the final product.

During the Launch phase, the primary marketing focus will be to get users to our product and using it actively. The primary way we will promote our app will be through partnering with influencers on Twitch, TikTok, and other platforms to get them to use our app. Influencers are a highly effective way of promoting products, especially games. “With the help of influencers, companies can raise public awareness of their brands, and potentially increase their willingness to pay for the products being promoted. Studies have also shown that brand awareness can increase brand market performance, especially in terms of increasing purchase intention among targeted customers” (Jiang et al. 333).

Our partnership with these influencers would involve typical ads showcasing the app’s features. Additionally, we would work with some influencers who stream board games and have them demonstrate the app’s features live by using it to choose which game they will play during their livestream.

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