Web Traffic: Turning Wheels in the Free-to-Play Market

Jillian Tracy

Interactive Games and Media, Rochester Institute of Technology

IGME 110: Intro to Interactive Media

Professor Elizabeth Lawley

September 24, 2020

Web Traffic: Turning Wheels in the Free-to-Play Market

Problem Statement

Do you ever feel scatterbrained, or do you find yourself drawn to quick and easy solutions over long-term success? If so, you are not alone. In fact, the human attention span is now shorter than that of a goldfish (McSpadden, 2015). So why would consumers want to download, purchase, and run a console game if they can get more instant gratification scrolling through TikTok or playing a free-to-play mobile game? While console and downloadable PC games are incredibly successful, one example being the *Dark Souls* series selling over 27 million copies (Tolbert, 2020), a download is necessary as the game requires a minimum of 8 GB of available storage space (Dark Souls™: Remastered, n.d.). For more casual gamers looking to pass the time semi-mindlessly, the best approach is a quick and easy, low-commitment experience. Eliminating the longer download time necessary for larger game files by hosting the game through a browser or mobile app creates a quick and streamlined gaming experience.

By introducing a free-to-play game with iOS, Android, and web browser compatibility, I am focusing on accessibility and addictive qualities as the most important factors of customer interest and retention. In the following paragraphs, I will explore the successes of games with a similar focus and describe how simplicity can be charming and contribute to a game's popularity. Additionally, my game will have content generated by web traffic analytics alongside competitive aspects, fueling the player's motivation to win and helping my game stand out from the competition.

Background

Firstly, the most successful browser games are usually accompanied by a mobile application. One example of a successful iOS, Android, and web browser game is *Slither.io* (2016), in which the player controls a snake and competes with others with the goal of survival. The mechanics are point-and-click driven, and since the game is free, it is accessible to a broader audience. At its height, the game garnered around 130 million players, and developer Steven Howse earned about $100,000 a day from advertising revenue (Soni, 2016). Furthermore, Palmer (2016) describes how the app "hit the top 10 most downloaded list, right next to giants like Facebook and YouTube, shortly after hitting the market" (para. 1). After exploding into the gaming atmosphere, *Slither.io* (2016) proves that simplicity and accessibility can be the strongest factors in a game's success.

Additionally, free-to-play games encompass more than half of Wikipedia's "List of most-played video games by player count" (2020) and the entirety of the top-grossing mobile apps on the U.S. App Store ("Top grossing games apps", 2020), with the exception of *Minecraft* (2011). This attests to the positive correlation between popularity and free-to-play games, and how a free-to-play aspect can increase the likelihood of players downloading a game without financial loss accompanying it.

Proposed Solution

The gaming market is ready for an Android, iOS and browser-compatible endless runner game with a twist. In "Web Traffic", the player tries to survive on the road in an environment of their choice, and the traffic level is determined by a chosen website's popularity, potentially creating a traffic jam for busy destinations or a rural drive for lesser-known sites. The goal is to

survive without crashing, and high scores are kept on a leaderboard to compete globally, with friends, or against oneself. However, a player's session is completed individually, and the other cars on the road are AI representations instead of other players. So in other words, the web traffic volume is represented by the number of cars on the road, instead of attempting to match players with other active players. The competition element is within high scores instead of real-time winning because there is no determined "finish line" for players to reach. This also creates a choice element for players: would you rather be an aggressive, chaotic driver in a traffic jam or cool down on an empty, winding road?

First, the player has the choice to type in a website or choose from a list of popular destinations. Once a website is selected, the game gathers traffic data and determines which tier it belongs to: low, medium, or high traffic. Within all the tiers, the goal is to drive for as long as possible and avoid crashing. The changing variables within the tiers are whether the distractions are other drivers or environmental factors. For instance, Amazon.com is number 12 in global engagement (*Amazon.com competitive analysis, marketing mix and traffic - Alexa*, n.d.) and would be categorized into a high-traffic area. In the high-traffic tier, the player's objective is to weave between cars and avoid aggressive AI drivers for as long as possible. In a low-traffic tier, the obstacles would be sharp turns in the road or animals running into the street. A medium-traffic tier would combine elements of the other tiers and serve as an intermediate between the two.

Scores are determined based on the amount of time the player survived, and bonus points are awarded based on narrowly missing obstacles or time-limited powerups. There are three separate scoreboards related to the three separate tiers, and among those are time-related filters

of all-time, weekly, and daily. Players can filter to see their score against the global scoreboard or just their friends, which contributes to the competitive aspect of gameplay. The element of competition is crucial to customer retention and game replayability, as Butler (2013) found that "players encountering competition (a winning or losing condition) replayed the game at least once approximately 50% more often than those with the neutral condition" (p. 134). Within that study, players were more likely to replay the game regardless of negative or positive outcomes due to a competitive aspect. Therefore, including a score-based leaderboard ranking players incentivizes them to continue spending time playing the game.

As a free-to-play game, monetization would be based on advertisement revenue and microtransactions for exclusively cosmetic enhancements. This model is already commonplace among free games and services, so users are accustomed to advertisements and microtransactions in digital media. In 2019, *Candy Crush* accumulated over $250 million in profit, while competitors such as *Homescapes* and *Gardenscapes* followed with $175 million and $139 million respectively (Williams, 2019). All the titles listed are free-to-play games not profiting from an initial purchase of the game but instead inclusive of advertisements and in-app purchases. This system would be sustainable for "Web Traffic" because the simplicity of the game encourages a truly free-to-play experience, and in-app purchases would not contribute to a pay-to-win concept. The cosmetic enhancements would be decorations for the vehicle the player drives with no impact on the gameplay itself.

While there are other similar games to this idea, such as *Subway Surfers* (2012) or *Crossy Road* (2014), both games have an avatar who navigates the roads as a pedestrian instead of a driver within the traffic. This is contrary to "Web Traffic", in which the player operates a vehicle

within the traffic flow itself. Additionally, the vehicles in both the former titles are presented at random and do not correlate with real-time data, whereas the number of "Web Traffic" vehicles represent real web traffic analytic data. Yet "Web Traffic" is also an endless runner, which it has in common with *Subway Surfers* (2012) and *Crossy Road* (2014). That aspect could contribute to the game's success, as the scoring and neverending mechanic is something that the demographic would already be familiar with.

Additionally, there is a demographic that enjoys mobile, casual, and free-to-play games: women. According to a 2017 report from Google Play, 64% of women prefer mobile gaming over other platforms, as opposed to only 38% of men. This astounding number signals that the female demographic's attention to mobile games should be recognized, as they encompass over half of the active market. In 2019, the Entertainment Software Association determined that female gamers ages 18-54 play casual games most often (pp. 8-9). This is important to note because it highlights the desirability of a game with less complexity or intensity since casual games are easy to acquire, learn, and play. Finally, women are more selective with spending money on video games, since "men are more than three times as likely to make gaming purchases than women" (Morris, 2018, "Essential Facts"). Therefore, creating a free-to-play, casual, mobile game opens a space for women to enjoy the gaming experience that the majority is not only searching for but proven to enjoy.

Conclusion

The mobile and browser video game market is ready for the content that "Web Traffic" promises to provide. Integrating a visual representation of the popularity of websites that the user-base recognizes by name, coupled with familiar endless-runner game mechanics, balances a

unique component with game elements that are proven to succeed. Plus, including the

score-based leaderboard serves as a cornerstone for customer retention and incentive to play

another round after losing, creating an addicting repetition to maintain the fast-paced momentum

of gameplay. Given the widespread appetite for instant gratification, coupled with the female

demographic inclined toward casual, mobile, and free-to-play games, there is an audience

waiting for a new game fulfilling that criteria. That game has been conceptualized in "Web

Traffic", and the next step is to actualize the idea into a reality.

References

Amazon.com competitive analysis, marketing mix and traffic—Alexa. (n.d.). Retrieved

September 13, 2020, from https://www.alexa.com/siteinfo/amazon.com

> This website is relevant to web traffic analytics because it gives a thorough
>
> breakdown of a desired website's engagement and compares information to
>
> competitor statistics with easily understandable graphs. When looking at
>
> Amazon.com, the "Alexa Rank 90 Day Trend" was most helpful because it
>
> showed the site's rank in global engagement, which would be helpful in the
>
> implementation of web traffic statistics in my game.

Butler, C. (2013). The effect of leaderboard ranking on players' perception of gaming fun.

In A. A. Ozok & P. Zaphiris (Eds.), *Online Communities and Social Computing* (Vol.

8029, pp. 129–136). Springer Berlin Heidelberg.

https://doi.org/10.1007/978-3-642-39371-6_15

> In this paper, Butler examines the relationship between fun and success as
>
> compared to other game players. The findings in the paper contributed to how I
>
> integrated a leaderboard into my game idea, and it helped me determine that the
>
> competitive aspect is something I would like to include. The subjects in the
>
> experiment had an increased chance to replay the game if their score was
>
> compared to others in the leaderboard, and replayability is something important
>
> to my concept.

Dark Souls™: Remastered. (n.d.). Steam. Retrieved September 16, 2020, from

https://store.steampowered.com/app/570940/

The Steam page for *Dark Souls^{TM}: Remastered* was useful for finding credible

information about the system requirements for downloading the game. I used

the requirements to give an example of how a more complex game is not always

the most accessible for casual players, which is not to discredit it as a successful

game but to give an example of a game with a large file size that requires

commitment.

Google Play. (2017). *Why we play*. Change the Game.

https://play.google.com/about/changethegame/research/why-we-play/

In researching the demographic for mobile game players, I came across this

white paper from Google regarding the inclusivity of women in mobile gaming.

The findings from the Google team gave me an insight into the demographic I

am marketing to and the ways I can make my app gender-neutral. This was

partially the reason I opted for the player to control a car instead of a personified

avatar, to avoid a genderized assumption of the player. This also encouraged me

to research the gaming habits of women and pay more attention to what the

female market enjoys.

Hipster Whale. (2014). *Crossy Road* [Mobile app].

I mentioned *Crossy Road* in my paper as a comparison to the game idea I

created. This title has traffic and endless-runner gameplay elements, so I wanted

to acknowledge the similarities and assure the reader that there are enough

differences between my game and this one.

Kiloo & SYBO Games. (2012). *Subway Surfers* [Mobile app].

> *Subway Surfers* has an endless-runner gameplay system and involves vehicles, so this was another game I compared to my idea and acknowledged the similarities and differences between the two.

List of most-played video games by player count. (2020). In *Wikipedia*. https://en.wikipedia.org/w/index.php?title=List_of_most-played_video_games_by_player_count&oldid=976346186

> Even though this is a tertiary source, I cited it because I focused on the list as a whole instead of a portion of the list. I compared the number of free games to paid ones to demonstrate the popularity of free-to-play titles.

McSpadden, K. (2015). You now have a shorter attention span than a goldfish. *Time*. https://time.com/3858309/attention-spans-goldfish/

> This article supported the claim that attention spans are shortening in the digital age, and it also provided an interesting hook for the introduction. It was important to support the idea of a short attention span because it led to creating the need for a low-commitment and casual game instead of an intense story-driven narrative.

Mojang Studios. (2011). *Minecraft* (Mobile Version) [Video Game].

> *Minecraft* was mentioned because it is the anomaly to the reign of free games in the iOS top charts, which supports the success of free-to-play apps given one single exception.

Morris, C. (2018, April 19). Video game demographics. *Earnest Blog*.

    https://www.earnest.com/blog/the-demographics-of-video-gaming/

        I used a quote from the "Essential Facts" section of the post to compare the game

        purchasing habits of men and women to support my demographic research. Since

        women are statistically less likely to purchase a game, they are the target

        audience for a free-to-play game.

Palmer, D. (2016, June 18). Want to play a mobile game with 500 of your best friends?

    Slither.io lets you do just that. *Digital Trends*.

    https://www.digitaltrends.com/gaming/viral-app-slither-pulls-100k-per-day/

        When examining the success of free-to-play mobile and web compatible games, I

        used Palmer's description of *Slither.io*'s top download ranking to support the

        claim that simple, accessible games can be enormously successful.

Soni, A. (2016, July 26). What gaming industry entrepreneurs can learn from slither. Io.

    Tech.Co.

    https://tech.co/news/gaming-industry-entrepreneurs-can-learn-slither-io-2016-07

        In my examination of *Slither.io*'s success, I paraphrased Soni's description of the

        monetary success the game received after its release. Despite being a

        free-to-play, independently developed project, the game still earned a large profit

        and supported the claim that simple and easy to play games are successful.

Steve, H. (2016). *Slither.io* [Video Game]. Lowtech Studios.

        I mentioned this title as an example of an accessible, intuitively designed game

        that had the main goal of winning, showing that games similar to my idea could

be successful. I focused on the aspects similar to my game to maintain relevancy and supported my claims with external articles.

The Entertainment Software Association. (2019). *Essential Facts About the Computer and Video Game Industry*. Entertainment Software Association. https://www.theesa.com/wp-content/uploads/2019/05/2019-Essential-Facts-About-the-Computer-and-Video-Game-Industry.pdf

When researching the demographic for "Web Traffic", this publication provided an overview of gaming habits based on age and gender, which helped me determine the demographic best suited for a casual mobile app.

Tolbert, S. (2020, May 19). *Dark Souls series crosses 27 million copies sold*. Windows Central. https://www.windowscentral.com/dark-souls-series-crosses-27-million-copies-sold

I included this article to acknowledge the success of the *Dark Souls* series before elaborating on how difficult or intense games are not for every demographic. If I did not explicitly acknowledge that the game is successful, readers may have had the impression that I did not fully appreciate or understand games in this genre. The goal was only to use it as a starting point and contrast to the genre I created the concept for.

Top grossing games apps. (2020). SensorTower. Retrieved September 13, 2020, from https://sensortower.com/ios/rankings/top/iphone/us/games?date=2020-09-13

This website was relevant to my argument because it illustrates the dominance

free-to-play apps have over the top charts, which supports the idea of success in

the category.

Williams, K. (2019). *King's candy crush soda saga surpasses $2 billion in player spending*.

Sensor Tower Blog.

https://sensortower.com/blog/candy-crush-soda-saga-two-billion-revenue

This blog post provided statistics about revenue that free-to-play apps received

from advertisements and in-app purchases, which were two monetization

elements I wanted to include in my game. Statistic evidence of success supports

my interest in the structure and implementation of the system in my program.