Primary Research: As I'm neither a gamer or game developer, the first thing I did was speak to people who were, to understand their needs and problems. I interviewed an avid gamer and engineer at Riot Games and the CTO of Stadium Live, a sports gaming app. Based on my primary research, game developers value latency and security the most. Besides this, maximizing uptime, maintaining update frequency and eliminating "cheating" (abuse) in a game is extremely important. All of which Cloudflare's services are unmatched for. On the other end for gamers, being a part of a strong gaming community keeps them invested and loyal to the title. This, in turn, is also at the top-of-mind for developers as it is a key predictor of a game's long-term success. Stadium Live is a Workers customer. They have one developer but thousands of users spread across continents. The CTO believes that Workers is best at the moment, for stateless application logic (fire-and-forget actions) and asset caching. He found Workers to be less effective for stateful logics, which require accessing and modifying the state of a running application without an additional persistence layer. The greatest value gained from using Workers for Stadium Live, is "the ability to scale applications on Workers globally."

Overall Market (& plans to learn more): As a market that's poised to become a \$300 billion industry by 2025, understanding the video gaming space is crucial to identify and capitalize on any opportunities for Workers. My plan is to conduct further primary research by speaking with large studio developers as well as startup/independent game developers. Furthermore, I aim to research about the entire supply chain of the industry, extending beyond developers (to publishers, retailers etc.) to understand the key players and trends of the entire market.

Delivering Cloudflare Workers for Gaming: I plan to deliver my offering through first **targeting smaller and independent game developers.** These developers are **mobile-first,** shipping mobile games exclusively, as it reaches the most people, the quickest. On its own, mobile gaming is a promising space given factors such as the growth of casual gaming popularity, and average time spent on mobile phones. Consequently, this drives more developers, both first-timers and large studios, to design games that attract players in this \$68.5 billion market. Workers' itself is a strong technical product that is well-suited for game developers' needs, as shown in my research, but its product positioning can be improved to better appeal to the gaming market.

Hypothesis and Goal: We assume that independent game developers are familiar with developing the core game, but lack knowledge/time in building and scaling important features that are non-core functionalities outside of the game itself. These functionalities are just as important to user retention and in-app experience. As a result, we believe that by making these pre-packaged solutions accessible, Workers will attract more game developers on the platform. This resonates with my primary research on Workers being effective for stateless, less-complex events at the moment. Lastly, Workers will utilize these resources to build a community-driven ecosystem that appeals to all types of game developers. We hypothesize that by capturing this important market of upcoming game developers, we can grow Workers' credibility within Gaming to eventually meet wider market needs (outside of smaller and independent game developers focused on mobile, etc).

Countless factors contribute to a game's success, besides the actual game. The goal is to transform Workers into the go-to resource for developers to enrich their app's experience, outside of the actual game itself.

Product Changes & Additions:

1) Template Gallery:

Workers should offer templates that bring social features to games, and help developers scale the app.

Examples include:

- Gamification functionalities such as leaderboards (see exhibit 1)
- Social actions, sharing
- See <u>Firebase Extensions Library</u>

Leveraging general logics that are useful outside of gameplay:

- A/B testing
- Country code (greet users with "welcome" in their language)
- Verification code (user registration process)

2) Workers for Gaming Ecosystem:

To build a community specifically tailored to tackling the needs and problems of video game developers.

Community feedback to help improve Workers' offering as well.

- Content tutorials (blog posts, webinars)
 - How to write dynamic message-of-the-day by <u>AWS</u>
- Tips/hacks from Workers users and game developers
- Building a network of developer advocates
- Additional resources
 - Create and integrate <u>GIPHY Mini-Games</u> in-app (<u>see</u> <u>exhibit 2</u>)

*Aside from above, Workers should be used for game developer's testing, experimenting and iterating on new features quickly.

Rollout of Offerings: This will begin with a small group of select game developers on the app store. We will target single-player and casual games in niche categories that lack social features. These indie developers will form our alpha testing group, becoming the first to implement our solutions. Gradually, we will grow the size of this group before a public launch. During this time, we will create case studies based on testing results: *How did using Workers (i.e. gamifying your app) grow retention and enhance in-game experience?* Finally, we will launch with these user stories to the community, with testers already our advocating partners.

Risks: This plan poses a number of business risks. Firstly, we may not be able to effectively monetize the target group or justify our investment as they are not large enterprises. Secondly, there is a risk to our market positioning if Workers come across as too specific of a solution. This will turn away developers who mistaken Workers cannot be customized generally outside of a gaming use case. Likewise, we must be wary that we do not alter the overall product direction of Workers solely based on gaming needs. On the contrary, due to how unfocused Workers is currently, we run the risk of falling behind niche players that have the advantage of tailoring their offerings to custom-fit target groups. In this case, Workers will end up being known as a "master of none" and fiercely out-competed in gaming.

Measuring Success: # of total requests on Workers (signal customer value and revenue)

of registrations, # of subscriptions, # of functions deployed per customer, # of concurrent users, net promoter score, cross-selling (how does this affect other CF services), interaction and activity levels within community, referral traffic, % of free vs. paying customers