

Problem Statement

Video games consist of so much more than the core gaming product, such as playing virtual football with Madden; there are a variety of supplementary features like leaderboards, messaging apps, login APIs, built-in streaming or recording functions, or features that secure in-game microtransactions. While plenty of products and game engines on the market offer a solution to building the core product, there aren't a lot of great products for building supplementary features that are a) affordable, b) reliable, and c) optimized for gaming. While these might be considered "side" features to the core gaming experience, latency in say, logging in with your Google account will negatively affect the gamer's overall experience. But at the same time, since these features are supplementary, developers and game studios would want an affordable product to develop and test these features before committing significant resources.

Cloudflare Workers currently provides an a) affordable and b) reliable way to solve this problem but without a gaming vertical that optimizes for game development, game developers would not use *Cloudflare Workers* over products by competitors, even with current advantages.

General Market Overview

Globally, gaming is a [\\$150 billion](#) industry with the US as its biggest market. Video games in the US alone account for about [\\$45 billion](#) of the industry. For context, the size of the global movie industry is just above [\\$100 billion](#). Continuous growth in the gaming industry is expected with [fundamental demographic shifts](#) supporting long-term growth. While video game sales and demand generally surge with [console upgrade cycles](#), the emergence of cloud gaming and regular content upgrades will keep growth rates steady. This vertical is an opportunity to tap into a sizable market with big upsides.

Initial Hypotheses/Beliefs

- There aren't that many affordable and reliable products to build and implement the aforementioned supplementary features.
- Affordability with future scalability especially matters more than usual when building these added features. Game developers would want the option to either table/discard such features if they are deemed unpopular, or rapidly scale up if the feature is a huge success.
- A product like *Workers for Gaming* would be especially appealing to single-person game studios, small teams of developers, or even indie game studios, who are especially sensitive to price.

Features and Product Changes

Essentially, the product changes will focus on optimizing for game development while keeping *Cloudflare Workers*' affordable rates:

- Expansion of tutorials and templates to include commonly used Workers by game developers, such as code templates for APIs utilizing Google/FB account information.
- Higher bandwidth capacity than existing products to cope with surges in requests.
 - Games With COVID-19, stay-at-home entertainment has experienced a [surge](#) in users.
 - Games generally involve a lot of graphics, audio, multimedia data than other apps.
- A separate landing page for Cloudflare Workers for Gaming with visual examples on how these supplementary features can be added to classic games like Tetris.

Market Research

Some early questions to explore include:

- Test the hypotheses in the problem statement above (in other words, is this actually a problem).

- What percentage of game developers work in large companies, in smaller teams (~10), or even alone? What is the breakdown in terms of revenue by size of company?
 - According to the GDC survey, when asked how many people work at their company, “the most popular answer was “Over 500” (19 percent), followed by “Myself only” (19 percent) and “2 to 5” (15 percent)”.
- Are there different needs in the development stage for developers in larger teams vs. smaller (~5) teams?

Secondary research can be conducted by accessing surveys such as the annual [State of the Game Industry](#) survey by Game Developers Conference. Another great source would be industry reports from large research firms like Gartner, industry-specific experts like NPD and Sensor Tower or media outlets like gaming [magazines](#). For more experiential accounts, primary research can happen through approaching game developers from specific companies like Riot Games, PUBG, Skybound Games, and so on.

Execution

Pre-release and Early-stage Products

The goal would be to build a minimum viable product early on and test its reception as soon as possible. This can happen in two stages:

- 1) Even before all the product changes are 100% implemented, Cloudflare could approach one of its existing gaming studio clients with a beta product and allow free usage. With only one or two of all the features implemented, we can get valuable feedback without the reputational damage from releasing an ineffective product to the public or souring a relationship with a potential client.
- 2) In addition to directly asking developers through primary research, whether the new product changes would be desirable, Cloudflare has a wide base of free users who are willing to test the product and provide feedback. We should leverage that advantage and release a MVP early on and iterate rapidly.

Key Metrics of Success

What are our objectives with *CF Workers for Gaming*?

- Solving a key problem that game developers face
- Total customer growth (not necessarily restricted to paid customers)
- Increase stickiness of Cloudflare product lineup

How do we measure success?

- Growth in number of Workers function that utilized the newly released gaming-specific templates
- Growth in total number of users over last 28 days
- Number of purchases of other Cloudflare products

Risks

- Publishers asking game developers to use their own in-house version of CF Workers once the game reaches a stage of profitability and is approached by a publisher or larger gaming studio.
- Large customers moving on to more established public cloud services for optimization.
 - Due to the nature of game development involving a heavy data load, developers would deploy their games over a multi cloud or hybrid environment. Cloudflare is well-positioned to thrive within this environment with their integrated solution package.