

CloudFlare PM Challenge

A business report on the adoption of Cloudflare workers to augment videogame development processes.

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Market Overview

The video game industry has been expanding at a rapid pace, with revenues growing annually at a rate of 7.7%. This year, analysts predict the industry will generate revenues of more than \$160 billion, and \$300 billion by the year 2030. Since the early 2000s, Internet capabilities ushered in the age of online gaming. Multiplayer online franchises like Fifa, Call of Duty and League of Legends have become increasingly popular since the turn of the Millenia and will continue to grow going forward. These games, like most online games in the market, are competitive, require fast reflexes as well as fast internet connectivity. With that, we believe that the deployment of CFW will be a game-changer in the online gaming world; CFW will facilitate better latency for consumers [through Cloudflare Edge Network] and scalable infrastructure for developers making it a win-win for all parties involved.

Performance Metrics

The adoption of Cloudflare's workers for gaming would be successful if it excels in both the business and the client-side.

Performance metrics for business-side success:

1. The number of game developers using CFW
2. The year over year growth of CFW adoption in the gaming industry (acquisition of new clients)
3. Profitability

Performance metrics for client-side success:

1. Improvement in network latency for clients
2. Changes in user retention and revenue (for the game developers)
3. Cost savings for clients with scalable resources

Market Needs

Latency:

Latency is an enormous concern for game developers. Online gaming customers are *twice as likely* to abandon a game when they experience a network delay. Players of League of Legends that play cross-server play often experience network delays of 100ms-500ms which makes the game unplayable. This problem can be handily solved by adopting CFW technology as Cloudflare's Edge Network and isolate model has the ability to connect global Internet users at around 10ms, regardless of server locations.

Scaling:

With Video games getting larger by the day, game developers need scalable resources in order to keep costs low and keep the quality of their product high. Smaller to midsize game developers lack the computing infrastructure of their larger counterparts. CFW would be the optimal solution for this segment of the market as our solution requires little investment, and is scalable with their users; ie they pay for what they use.

APPROACH

1) Continued Market Research (1-2 months)

- Continue researching the gaming industry; requirement analysis of different game companies and the competitive landscape of online gaming.

2) Reach out to potential clients and create a prototype (4-8 months)

- Using the market research conducted, reach out to potential clients and inform them of the CFW solution for their companies
- **API:** Work on creating an API for CFW specific to the needs of game developers. This API should reduce the time our client's developers spend integrating our product into their game by abstracting tasks like authorization and event handling

3) Closed Beta Stage (8 months)

- With a small group of clients, start a closed beta program. Instruct half of the clients to integrate CFW technology into their games and instruct the other half to leave their games unchanged. Run regression testing against the CFW group and compare results to the unchanged group. From this testing determine the viability of the solution using the following performance indicators:

1. Did clients with CFW technology perform better across all metrics? (network, scalability, overall game performance)
2. How much faster did the CFW group complete the game compared to the unchanged group?
3. Do developers of the CFW like the technology? Would they continue using it?
4. Was the adoption of CFW tech easy? What can be improved?

4) Open Beta (12 months)

- After assessing the results of the closed beta program and the performance indicators, release the CFW into an open beta program. In the open beta program determine whether the product scales with larger game developers, whether the performance of CFW with an increased number of clients is stable and check for any bugs in the product.

5) Public Version 1.0 release

- After a year of the public beta of CFW for gaming, release the first public version. For the release, we aim to capture a large percentage of the smaller to medium-sized market. In order to incentivize adoption in this target client base, we shall provide discounted rates for the first year to all potential clients and 24/7 technical support for CFW in gaming.

Timeline



Potential Risks

Competition:

- Big players in this space include AWS gaming from Amazon and Azure Gaming from Microsoft. Although both of these solutions focus more on scalability rather than integration and ease of use, these big players command a large market share of the industry,

Hesitation to Adopt CFW:

- Game developers may be hesitant in adopting a new technology in such a competitive market. Developers may not be convinced that the serverless architecture is right for them