

## Cloudflare Workers for Gaming Product

For Cloudflare Workers for Gaming to succeed in the market, it needs to offer superior value to current solutions and be easily integrated into the tech stack. In addition, Cloudflare Workers for Gaming needs to be adaptable to changing market trends to continue being the top choice for developers.

### **Market** (Time: 1-2 weeks)

To learn more about the needs of workers, it is necessary to get information directly from those that will be users. Doing this would result in two major wins for Cloudflare:

- Direct collection of information, without any bias that may occur from 3<sup>rd</sup> party data
- Cloudflare can establish a relationship with developers who will use the product. This would be beneficial in not only creating a core user base to beta test the product, but also would help Workers for Gaming gain traction via organic growth.

When conducting surveys or interviews with game developers and DevOps teams, it is essential that high-level questions are asked. If we directly ask what solutions will fix the user's need, it will be difficult to understand the reason root reason they want these solutions implemented. Sample questions include:

- How is the game development workflow and tech stack set up in the company?
- What are the steps in the game development process and what tools are used?
- What takes the most amount of time or is the most difficult part of the deployment process?

After these interviews, by comparing responses of the teams, the most pressing pain points will be known, and it will become clearer as to which solutions offer the best opportunity for Workers to break into the game development space.

### **Product** (Development time: Depends on available resources, will need discussion with engineering team)

To find changes that will better the release, it is most useful to look at the hierarchy of pain points established after the interviews. Through the research I have done, I have found that one of the most important parts of the game development process is the need for continuous integration and deployment. To build capabilities for this in the stack, developers often use CI tools like Jenkins, which can be integrated with many other tools across game development's agile methodology. Such tools help with test automation, which allows for game companies to deliver 'quality with speed'. To tackle this area, one part of Workers for Gaming should be optimal integration with such CI/CD tools. To increase quality, it would be necessary to keep in touch with the users of the product and see where they still face issues, which would allow for constant improvements to be made.

Workers for Gaming would need to connect directly into the stack, through integration with a tool like Jenkins, and allow for automatic deployment of the game under conditions set by the consumer. This could be as soon as all the tests are passed or after the game is manually tested, both are possibilities. As many developers communicate from around the world, the Cloudflare serverless network would allow for peerless speed when deploying the game around the world, hastening the development process.

### **Value Proposition**

In a fast-paced work environment like game development, CI/CD tools are essential. Thus, it makes sense to choose the best tools with the lowest costs, resulting in benefits to both profits and the tech stack. Many other companies have already launched game specific serverless products, like Amazon's Lambda Edge or Microsoft's Azure for gaming. However, looking at the price and speed differentials of these two, they are much inferior to Workers. Based on Troy Hunt's analysis from late 2018, 99.62% of requests, when using both Azure and Workers, never reached Azure and instead were dominated by Workers. In addition, for 141M+ requests, using

Workers cost tens of dollars while Azure would cost hundreds. In this view, Workers has a supreme edge in the market and having Workers for Gaming operate at the same level would be an invaluable value proposition.

In addition, with pure online gaming experiences, like Nvidia GeForce Now and Google Stadia, becoming more common, fast deployment around the world is a necessity. These two gaming platforms are some of the major faces of online gaming right now, but in the future this market is set to grow. Thus, it is important to establish Workers in the market for game development right now, so it will become a staple as time goes on.

### Metrics (Judged during and after trial of 2 months)

To see if Workers indeed works and is addressing a pain point in the market for game development, it is necessary to look at user metrics:

- **Churn:** If Workers proves itself to be a step above competitors and can be easily fitted into the tech stack, then it would be possible to minimize the churn of users. The churn should be less than 5%/month, as judged by the industry standard for tech companies.
- **Speed:** Compare the speed of the deployment and of the gaming experience itself. For this, it is necessary to set an industry benchmark through research or communication with gaming firms that use other solutions. Goal: Be faster than competitors by 15%.
- **Reduced:** time spent on deployment: If the solution works, then there should be a speed boost in the development process. To measure this metric would require data from the consumer. Time reduced goal would have to be decided after the interviews with the gaming firms.
- **Satisfaction:** This metric is more subjective to the user. However, by sending out a survey to users and calculating the Net Promoter Score, it will be easy to analyze the results. The NPS is the metric I chose for satisfaction as if a person is likely to recommend it, then they must believe in the product and have gained lots of value from it. An NPS score >50 would be the goal, as it would mean excellent service.

### Risks

- The space for game development technology, even for just deployment, is highly competitive and fractured. There are many serverless options, like Azure or Lambda
  - If Workers for Gaming targets a small niche and grows from there, this risk would be mitigated to a high degree
- Cloudflare Workers for Gaming does not fit the needs of developers
  - In this case, the initial product would be considered a failure. However, using the data gained from the product run and by looking deeply into the reasons for failure, it would be possible to launch a better version.
- Workers for Gaming has a high price point compared to alternatives
  - Different from breaking into the space, to compete with other firms, Workers needs to keep cost in mind. If the cost is too high, as could be seen from churn and satisfaction metrics, then it would be best to pare down Workers to core, essential functions and launch at a lower price point.

### Sources:

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