# Cloudflare Workers for Gaming By Surbhi Chaturvedi

#### What is Cloudflare workers?

Cloudflare workers is a serverless platform created to help the users build apps and deploy the code seamlessly. Among competitors of workers are AWS, Azure, and Google which are the three main cloud providers and are the most common. They get an advantage due to the investment done by Microsoft, Amazon, and Google in infrastructure and product development. However, Cloudflare worker already stands out in the context of Have I Been Pwned (HIBP). Moving the caching and request-response to the edge greatly reduces the HIBP cost. While Cloudflare's free tier serves numerous request it also eliminates almost 500 GB of Azure network traffic. This is just one of the benefits of using the serverless platform.

Cloudflare workers standout as the developer platform that provides site security, load balancing, scalable and manageable. But how can we make it a chosen developer platform for gamers and to be in a run with the top competitors. To do so, we need to continuously understand the market needs and review our business model.

#### Vision

Make Cloudflare workers the chosen development platform by gamers and create an impact beyond its competitors.

# **Market Research and Analysis**

# 1. Opportunity Matrix:

Cloudflare workers is already in the market and it has established itself as a unique product. At the same time, it's still young and we have an opportunity to better understand the market and create a matrix that helps us weigh the strong and weak features of the product and take measures to improve the product's market presence.

Generally used to conduct market segment analysis, the opportunity matrix helps align the vision for your business with the values and to understand which market segments align your vision.

The way to create the opportunity matrix is by answering the following 4 questions:

- A. What is pain or passion? Ask "Why do they have these problems?" to get deep.
- B. What impact will solve the problem or exciting the passion has on the customer? How does your product change customers' life?
- C. Where do the customers hang out? Where do you find the customers, online, offline, in-store, events, etc?
- D. Who influences them?

Create a persona of the ideal customer, who will be most passionate about your product. Then create use cases, antisegment, and segment matrix. Choose the most important characteristics and evaluate them. For example:

	Depth of Pain	Budget	Ease of Reach	Ease of MVP	Size of Market	Values
Segment 1						
Segment n						

You can weigh each criterion. For example, "depth of pain" is most important, so the weight is 4 out of 1- 4, but "ease of MVP" only weighs a 2. Then, you can score the criterion for each agency 1-4, 4 being positive and 1 being negative. Finally, use the mathematical formula to determine which agency scores highest. The score of each row will be:  $(score_{B} \times weight_{A}/(sum \circ weight)) + (score_{B} \times weight_{A}/(sum \circ weight)) + (score_{B} \times weight_{A}/(sum \circ weight)) + (score_{B} \times weight_{A}/(sum \circ weight))$ 

### 2. Business Model Canvas:

If not created before, it's a good step to create the Business Model Canvas that reflects systematically on your business model, so you can focus on your business model segment by segment. This also means you can start with a brain dump, filling out the segments that spring to your mind first and then work on the empty segments to close the gaps.

Although there would be segments that have been already addressed, since this is an iterative document, this shall change as we make discoveries. The 9 segments are - Key Partners, Key Activities, Value Proposition, Customer Relationship, Customer Segment, Key Resource, Distribution channel, Cost Structure, Revenue Stream.

The value proposition of Cloudflare workers is already described; which is to create a serverless platform for game developers, which provides a JavaScript-based platform, load balancing, and site security.

Use the opportunity matrix to update the business model canvas which will evolve as new features are added.

# Methods to improve the quality of offering and measure success

## Validated Learning using Agile development:

Validated learning is to create a "Build-Measure-Learn" feedback loop. We use the MVP from the business model and create a loop that is revisited periodically. The above two tools are used in every successful organization to understand the market and make changes or additions using the validated learning. The iterative approach keeps the Cloudflare workers, customers' choice of product. Use the tools to experiment with the pretotype, measure the results, analyze them and introduce the learning back for the next implementation. A good way is to have an agile approach to release new features and learn from them as quickly as possible and collaborate this in the next development cycle. This is a great method to improve the quality of products and re-structure requirements as and when needed.

# **Risks and Mitigations**

The lack of understanding of customer needs and new challenges will lead to failure. Many times, products become redundant without customer validation. Therefore, it is necessary to continually evolve and determine customers' opinions of the product based on validated learning. This will allow creating new customer which will lead to improved sales and eventually allow to scale up.

### Conclusion

In the end, Cloudflare workers could be made as a SaaS offering with Cloudflare's other products which will put it in par with its competitors like AWS and Google. As a secure service provider over the internet and with robust internet-based features, it will become only stronger. Using the Business Model Canvas and taking revenue-based measures will lead to greater technical capabilities of the platform and user adaptability. Cloudflare workers should synchronize the values of Cloudflare as an organization has (i.e.) of building the infrastructure and reliable connections with external resources while keeping the platform easily manageable. The business model canvas along with validated learning can be a compass to help move forward instead of in circles making Cloudflare workers be the chosen platform for gamers.