

The Opportunity in Gaming:

Increasingly, gaming is moving to the cloud. However, bandwidth and latency continue to be a barrier to greater cloud adoption by game developers because of the high concurrency of logged in users for MMORPG (e.g. World of Warcraft) and Battle Royale (e.g. Fortnite) style games. This causes lags and poor resolution that destroy the dynamic and real time gameplay environment.

If Cloudflare could adapt Cloudflare Workers to manage the bandwidth and latency issues specific to game developers, Cloudflare would be poised to capture a significant upstream portion of the US\$150 billion global video game market.¹ Google Cloud is already pursuing cloud gaming through Stadia, their cloud gaming service, and a partnership with Activision.²

Target Market:

- Segmenting the game development industry to initially target immersive and multiplayer games as well as esports, since they are more impacted by latency issues than other segments like mobile gaming.
- Targeting the gaming DevOps buyer initially

Next Steps to Learn About the Gaming Vertical:

- Increased research into the competitive landscape for game development, including:
 - Further research into the total addressable market of video game creators
 - Understanding more granularly how game publishers, game developers, and gaming DevOps providers work together and who is the typical decision maker for purchasing decisions
- Further segmentation of the game development market to identify early adopters or other segments that are eager for a new technical solution
- Customer interviews with existing Cloudflare customers in the game development market
- Interviews with prospective game development users who evaluated Cloudflare but ultimately did not purchase
- Interviews with churned Cloudflare game development users

Cloudflare Workers for Gaming Product:

Cloudflare Workers are available today to help game developers run their games faster, scale with demand, and avoid maintaining infrastructure. However, by creating a verticalized “Cloudflare Workers for Gaming” solution, Cloudflare could position itself as being uniquely in touch with the game developer market.

From a product perspective, the challenge that cloud gaming developers face is dynamically adjusting to deliver an optimal game experience on a given device while minimizing bandwidth

¹<https://www2.deloitte.com/us/en/insights/industry/telecommunications/future-of-cloud-gaming.html>

²<https://www.prnewswire.com/news-releases/activision-blizzard-and-google-enter-into-multi-year-strategic-relationship-to-power-new-player-experiences-300993016.html>

usage, especially when competing for bandwidth with communications channels players are simultaneously using (chat, audio, video).

Cloudflare Workers for Gaming would include:

- Increased access to edge network in gaming geographies specifically
- Workers templates for the gaming use case specifically to help game developers start using Cloudflare Workers faster
- Volume discounts for game developers

Validation & Product Improvement:

Before committing these changes to the product roadmap, we would want to:

- Do individual user research and need finding with existing game development users of Cloudflare Workers
- Interview game development users that are relying on alternative technology to Cloudflare Workers
- Assess the technical difficulty and feasibility of these features and changes from an engineering perspective

These steps would enable us to prioritize the needs of the gaming user with an eye to the level of feasibility from the internal team to refine the product roadmap.

From research, it seems that Cloudflare typically launches products with a freemium model and monetizes through additional features or increased volume. The Cloudflare Workers for Gaming product should follow a similar model, but prior to launch there should be enough product roadmap development to identify potential upgrade levers. Alternatively, the dedicated Cloudflare Works for Gaming solution could be an enterprise level product to meet the needs of high latency, high concurrency games as a further upgrade from Cloudflare Workers unlimited.

Metrics & Goals:

- Customer Focused Metrics:
 - Measurable reduction in latency for end users against a benchmark threshold of latency without Cloudflare Workers for Gaming
 - Success rate (%) of Cloudflare Workers for Gaming users meeting or below the benchmark threshold
- Adoption & Usage:
 - % of existing Cloudflare gaming users that switch to using the dedicated Workers for Gaming Solution
 - # of weekly active (WAU) or daily active (DAU) Workers for Gaming users

Risks:

- Lack of adoption as game developers rely on other more comprehensive cloud service providers or build their own infrastructure as a competitive advantage at scale
- Cost of development to meet the needs of a specific market
- Workers for Gaming influences the Workers product roadmap unduly
- Lack of differentiation from the Cloudflare Workers product creates customer confusion