What Went Wrong With Horizon Worlds? Former Meta Devs Share Surprising Insights -- And A Solution To Still Save It

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After writing about Meta's highly misguided $50 million bounty for developers to create content in Horizon Worlds, a former software engineer at Horizon Worlds reached out to me. They had read my latest book, where I devote a chapter to Meta's many missteps in trying to build the Metaverse.

But this engineer had even more surprising details to share.

By request, I'm keeping their breakdown anonymous, but it rings true to everything other Meta employees past and present have told me, both on the record and off. For good measure, I also just gut checked it with two other developers who have recently quit working on Horizon Worlds. (Meta itself has declined to respond officially to my many requests for comment, beginning in 2023, after my book interview with Zuckerberg fell through.) And at least one of them believe Horizon Worlds can still be saved -- read their solution at the end.

It's an important story to share. For one thing, it helps explain why Horizon Worlds is floundering, with far less active users than Second Life (now 21 years old), let alone VRChat and Rec Room, which are far more popular on Meta's own Quest headset. Despite billions spent in development and marketing, including a literal Super Bowl ad, Horizon Worlds has roughly 300,000 users, versus Second Life's 500,000.

For another, it helps explain why the Metaverse "failed" in the general public's eye, since most people assume Meta was the leading developer of the technology.

I've always believed the fundamental problem is that Meta leadership never truly understood the Metaverse, and simply treated it like a 3D version of Facebook. In interviews for the book, it also became clear to me that most of the people working on Horizon Worlds weren't themselves experienced or passionate about virtual worlds.

Indeed, in 2022, Meta leadership sent out an internal memo requiring employees to dogfood Horizon Worlds more (i.e. actually play it).

It was actually worse than that, this ex-developer tells me. Required to dogfood their own virtual world, the engineer tells me, many Meta staffers automated their dogfooding:

> Before I left they were mandating that employees spend a certain number of hours per week in the game actively playing it. So therein started an automation war where all the people with 200 hours a week never actually played the game once. People just had to launch the game with an Android

command over USB, then make sure the proximity sensor on the headset was taped to keep it on.

Yes: Instead of playing Horizon Worlds, developers of Horizon Worlds at Meta figured out a hack where they could just pretend to do so.

As this anonymous developer further explains, Meta's assumptions were evident even on the code level, with Meta treating the Metaverse as a 3D version of a mobile app:

Horizon Worlds / Workrooms, etc. is a pretty awful codebase with hundreds of people working on it. They grabbed a bunch of people from the Facebook/Instagram half of the company because they knew React. [A popular code base for building mobile apps.] Horizon Worlds uses a VR version of that called "ReactVR".

What this effectively means is that most of the people developing Horizon Worlds (HW) are 2D app developers driven by engagement metrics and retention numbers.

So... HW became flooded with a ton of 2D developers who never put on the headset even test their menus, all competing to try to create the most "engaging" menu that would sell microtransactions, or drive social engagement, or make some other number look good - because that's WHAT THEY DO at Facebook/Instagram.

There are about 15 people in HW that could make the entire project again in a day, who I stand by, and who deserve all the money and things coming to them. They work on the core or the interactions or dev experience.

But most people working on Horizon Worlds were not only not interested in playing in the virtual world, they didn't even want to use Meta's Quest headsets to do so. That's partly because VR tends to make over half the population nauseous -- a problem Meta and the VR industry at large has not sufficiently investigated -- but it's difficult to launch a VR-centric platform if its own developers aren't actively interested in testing their code in VR:

The development team "forced" people to do two things as designers or other programmers:

Actually try the feature in VR together, allowing hundreds of little settings to be tweaked live in the game for fast tuning.

Periodically try to make fun content using the in-game programming and creation systems.

The guy that was put in charge of Horizon Worlds needed help learning how to don the headset and launch the game after being in charge of it for 3 months.

All this helps explains why Horizon World lacks many of the features we take for granted in leading virtual worlds. But the ex-Meta dev tells me little was invested on actually innovating the platform:

I think that programming in HW will never work because it lacks so many of the everyday necessary features programmers need, and the spatial element gives it almost no advantage. I cannot easily work with someone on a script... it's all scratch-style building blocks. I believe they came out with a typescript version -- but I gave up on the entire thing after I left.

They were actively denying pull requests (code changes) that were awesome features; features that VRChat eventually put in, or Second Life already had to begin with 15 years ago.

I see it misreported a lot of the time that Mark Zuckerberg spent 10000000 billion dollars on his metaverse (and then they show Horizon Worlds the game). I feel like that's a little misrepresentational.

I think that a majority of that money went to the hardware R&D and hiring all the research/PhD types that made the headsets possible. Also the system software, and libraries they had to write to support other developers (like Unity/Unreal/Link, etc.)

Horizon Worlds' expenses are engineers, server time, and not much else!

There's no ground breaking tech there and the codebase is split functionally so that [Horizon] Workrooms got a lot of the same features copied to it.

Meta has more recently attempted to create a mobile/web version of Horizon Worlds, but my ex-Meta dev believes that's made the platform's problems worse:

The death knell was trying to split the entire organization into two parts: one working on VR, the other on a web browser version. The web browser version was a nightmare because it would just fake the VR inputs.

Between "React experts" putting 200 flat menus in the game and not testing a single one themselves, the web version split, the monetization race, and the lack of reasons to play it -- there is NO way it comes back from the dead unless they toss it to a 2nd/3rd party developer that completely writes it from scratch and forgets every decision they made about metric-driven engagement.

It's no surprise this dev thinks there's nothing the company can do to save Horizon Worlds:

It was dead as soon as they released it. Not a single developer thought it was ready, then when it dropped no one played it. Then, Facebook just tried to keep pumping it with "features" like little microtransaction stuff so they could say it made money.

They floundered on actually making anything fun, useful, or engaging. The vast majority of people I met playing it were kids who had their dad's quest on at work. While "Boz" was screaming at everyone in internal posts, "KIDS DO NOT PLAY THIS GAME STOP SAYING THAT. NO ONE IS

ALLOWED TO PERPETUATE THIS ANYMORE". (Horizon Worlds was getting a lot of negative press for having kids who were basically just screaming trolls as their only players.)

There's no reason to play it, because Second Life fills that market for desktop players, and VRChat fills the market for the VR players.

As mentioned, I showed all this to a couple other ex-Horizon Worlds devs, who either found it "spot on", or generally agreed with the majority of the assessment. Interestingly, the former developer does think it's still possible for Meta to save Horizon Worlds:

"They can save Horizon Worlds, or Meta Horizon, whatever it is called now – by open sourcing the technology," as they put it to me. "That is how they get the future they want. They need to let the public make the next call and give the builders in game the tools and abilities to do what they always wanted to, on their own terms, and with their own liability."

I very much agree with this. Meta/Facebook open sourced React, which has since become a standard development platform for mobile. Maybe doing the same with Horizon Worlds is the company's last, best hope for the virtual world to avoid becoming (in the CTO's own words) a legendary misadventure.

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Object 1

Posted on Wednesday, March 12, 2025 at 12:10 PM in Making the Metaverse, Virtual Reality | Permalink

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EPIC FACE PALM
If true then they are not "Builders" they are "optimizers", only technicians create by:
...{snip}... "all competing to try to create the most "engaging" menu that would sell microtransactions, or drive social engagement, or make some other number look good - because that's WHAT THEY DO at Facebook/Instagram."...{snip}...

You can't "optimize" a game that doesn't exist yet. You start with the user then work back to the technology. Anything less in amateur hour.

The first time you do the impossible is Art
The second time you do the impossible is Engineering
The third time you do the impossible is Technique.

I hope this article is not true, but when I attempt to use Horizon ...well....after a while things begin to look like what they are.

Posted by: Shinkaze | Wednesday, March 12, 2025 at 06:28 PM

Once i heard React i knew it was over, Facebook was never a 3D or XR company so that kind of thinking is expected.

Also there's no saving Horizon Worlds. They should think of Worlds as their OS platform, store, avatar and friends system. Push for devs to easily integrate these, force them even.

Posted by: Michael Abia | Wednesday, March 12, 2025 at 11:52 PM

If this was open sourced... who would embrace and put time into it? There are other great platforms to get involved with.

Posted by: Austin | Thursday, March 13, 2025 at 10:50 AM

- Why does Horizon Worlds not succeed in the same way as Facebook did?

- Why is Second Life not able to grow its user base?

- Why do so many talented creators leave Rec Room?

Let me zoom out a bit and look at a bigger picture. Horizon Worlds, Rec Room, Second Life and other metaverse-apps with user-generated content are struggling with growing their user base. One of my favorite concepts to think about some of these problems is laid out in the book "The Big Sort" by Bill Bishop published in 2008. One of its themes is political polarization of neighborhoods in the US. The idea is that there are several feedback loops at work that attract more politically aligned neighbors and push out people who don't "fit" into a neighborhood. This results in increasingly homogeneous neighborhoods.

My hypothesis is that there are analogous feedback loops in many UGC metaverse apps that lead to a rather homogeneous user base of each of these apps. Typically it works like this:

- the app's algorithm recommends content based on what the majority of users are interested in

- content that serves the interests of a minority of users is recommended less often

- UGC creators who care about the success of their content start creating more content that is recommended by the algorithm more often, i.e., content for the majority of users

- the result is that less content is created for users with special interests

- those users with special interests leave the platform, which closes the feedback loop because now UGC creators have even less reason to create content for them

For Horizon World and Rec Room, the majority of engaged users are pre-teen children and young teenagers. If you have other interests than those kids, the app is unlikely to recommend interesting content to you and creators are unlikely to create content that is of interest to you. Sorry. Fare well!

How did Facebook (and many other social media) avoid this feedback loop that leads to a homogeneous user base? By improving their algorithms to personalize recommendations such that users are not pushed out but sorted into fragmented groups based on shared interests. Individual groups might still be very homogeneous (with all the problems that come with that) but Facebook was able to keep the users. This strategy of serving many special interest groups (instead of focusing exclusively on the interests of the majority of users) has an analogy in online stores: "The Long Tail", see the 2006 book by Chris Anderson. (On the technical side, this strategy for online stores is closely related to Web 2.0 and the early success of Amazon.)

Do decision makers at Horizon Worlds and Rec Room understand these dynamics? Here is a recent quote by Nick Fajt (CEO of Rec Room) about how their algorithm ranks UGC rooms (i.e. worlds) when recommending them to users:

For a room to rank, it needs a great thumbnail to convert people into visitors. It needs strong engagement once you're in the room. It needs to be appealing to a wide audience (niche content starts to see its per user metrics degrade with more promotion). If the room has been materially updated recently or newly published - that helps. If the room effectively monetizes – that also helps. Still, it's really about appeal and engagement of a broad audience. (https://forum.rec.net/t/let-s-talk-about-ranking-and-discovery-internal-rr-post/6830)

I guess, if the CEO of Rec Room does not want their algorithm to recommend "niche content" and wants it to promote worlds that are "appealing to a wide audience", the mentioned feedback loop will keep spinning as long as Rec Room can keep the lights on.

Those who cannot remember the past are condemned to repeat it. (George Santayana)