The Metaverse Is Just a Software Layer …

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The Metaverse is now just a software layer, and Neal Stephenson has nothing to say about it …

The dream of all company CEOs/CFOs is that somehow, some magical thing will be created that diminishes the need for strong programmers. Strong programmers are expensive. There aren't many available. And universities have mostly abandoned project-based courses where programming skills can be exercised and strengthened, and consequently, graduates of those programs have an amazingly difficult time getting positions that require strong programming skills. So, many of those CEOs/CFOs are loving the move toward the Metaverse as they see it differently than most of us tech people—CEOs/CFOs see the Metaverse as a software layer, a layer that hides the complexities of actually programming a game engine, reducing the requirement that the programming engineers have to spend a massive amount of time not only learning the application programming interfaces of the game engine and even more beneath that (Figure 1).

FANTASYLAND—THE METAVERSE IS NOW JUST A SOFTWARE LAYER, AND NEAL STEPHENSON HAS NOTHING TO SAY ABOUT IT …

Maybe the C-suite-ers, pronounced C-sweeties, are right, that maybe we will be better off when the game engine layers are buried beneath another layer that is actually usable by people primarily interested in building an application for their subject-matter domain rather than acting as deep tester/debuggers of the Unreal Engine's intricacies that originated in some historical 1998 code written by programmers either gone or promoted out of coding-for-a-living to something grander like point-of-the-spear

agravats against secure app stores. Or maybe they have even called-in-rich and have changed their mobile phone's country code so that not even their relatives can find them.

And Neal Stephenson had nothing to say about all this change as he is perhaps tired of talking about Snow Crash, the Metaverse and the origin of the word Avatars ... Maybe he just wants to stay home for a

article I saw on Meta said 20 M Quests sold. Historically, a game console that has only sold 20 M units is usually canceled as a failure with respect to games, and game developers usually stop building for it under that number. Twenty million is like the Occam's razor number for the "will we or won't we" build games for this platform. The Nintendo Wii U was canceled with only 13.56 M units sold, for example.

are also other companies like Athanos focusing on how you experience the Metaverse without a bulky headset. On the software side, there are game engine companies building that layer above their game engine to hide their engine's complexities. There are Metaverse developers building tools for the film production industry and there are Metaverse application companies building apps for brands. So, the Metaverse is not dead—it's just become this magical software layer for the unlimited-pleasure of the C-sweeties ...

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change and finish that impossibly long trilogy about the writer caught in a ground-hog-day loop in an online world he created in a previous trilogy, now implemented by college school dropouts that has become the bad-Zoom equivalent of Reddit without any moral bounds ... Something to think about ...

MAIN STREET U.S.A.—THE METAVERSE IS NOT DEAD JUST BEING RENAMED ...

In our last article of the games column, I tried to convince you that the Metaverse Industry was not dead despite Meta's lack of success in sales and game development. Meta's biggest issue with respect to being a first-rate player in the game-console industry is that they just haven't sold enough headsets to convince AAA-title developers to build games for their platform. The last news

And probably I did not convince many of you of that, because of the innate hardware focus our investment community primarily supported, we ended up with too many choices and not enough sold of the top choice for there to be a viable game industry in the Metaverse as hardware defined. But what is the Metaverse Industry really doing? There is some hardware happening—we all just finished waiting for Apple's announcement, and we are trying to pick our jaw off the floor because of its price. At its current price, there is no way forward for Apple in the games industry at the price point they are shilling. And, of course, Apple showed nearly no game development for the Apple Vision Pro, a horrendously clunky name that no one will remember or use in five years.

The Apple Vision Prowhatever may change things dramatically but there

FRONTIERLAND—WE DON'T REALLY NEED A HEAD-MOUNTED DISPLAY FOR THE METAVERSE

So, I mentioned Athanos, and I need to say that I am an advisor for Athanos. The founder of Athanos is Peter Giokaris, the first engineer hired by Oculus. Peter had the opportunity to call-in-rich with the Oculus acquisition by Facebook-nee-Meta. And, an excellent thing to do in my mind, Peter took the year off after the acquisition and thought about was there a way to build hardware and software support for the Metaverse that was somewhat more palatable for users than a bulky headset. Peter's idea was a lightweight pair of digital light processing (DLP) glasses and a lightweight headtracker. Peter even placed another tracker on the display screen in case we could get an iPad-sized screen at some time in the future that we could move around and tilt, like "looking through a window into a virtual world."[1]
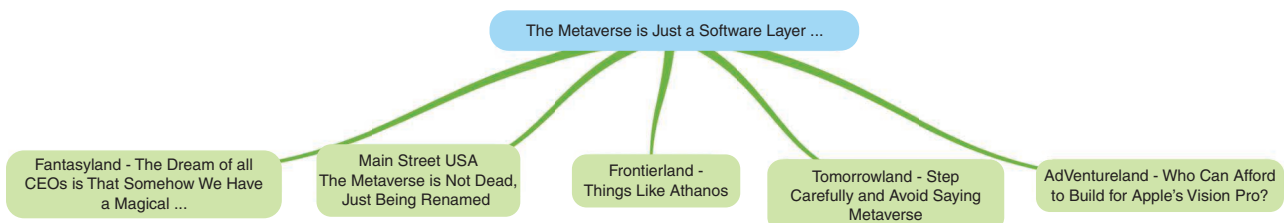

FIGURE 1. Outline of this column.

Now, when Athanos started, one of the things we needed was a television or monitor that could support stereo display. Unfortunately, the time period for televisions all coming with stereo had long since passed, so our initial first demos were technically interesting but utilized an old television that you could tilt if you were strong enough to lift it. Our demos to potential investors with this were clunky, to say the least, and the onset of the COVID-19 work-at-home era quashed early and quick success.

So Athanos/Peter had to figure out how to get stereo display out of modern televisions, and this is where I greatly appreciate working with a super smart engineer. Peter was able to create a box that sits on the corner of an organic light-emitting diode (OLED) screen, a box that detects a sync signal and allows the programmer to turn just about any OLED screen into a stereo-capable display! I always like this type of "one-man-against-the-world" technology win! It's called *Modern 3D* by the people at Athanos—see the Athanos website[2] to see what a demo

of this all looks like. In Figure 2, Peter is holding a game controller because Athanos thinks that games ought to be the focus of this path to the Metaverse. On his head he is wearing a lightweight tracker

in a stylish headband designed by Tundra Labs and a lightweight pair of DLP glasses. The demos of this system are quite spectacular and are way nicer than any head-mounted display we have ever seen, BUT that is our opinion because it is our company. Try and get a demo from Athanos. It is very cool and startling, makes a lot of sense.

TOMORROWLAND—STEP CAREFULLY AND AVOID SAYING METAVERSE

On the fifth of June 2023, Apple's Tim Cook presented Apple's Vision Pro

completely without ever saying the word Metaverse (Figure 3). We all immediately thought AppleVerse, GoggleVerse, or some similar barb. The Vision Pro (VP) seems daunting at first

> It lets you navigate simply by using your eyes, hands, and voice and, if it's still Siri, we know it's going to be unreasonably bad in the voice domain.

with the amazingly crazy price that "starts at US\$3,499." My wife always told me that once you bought the Barbie, the next thing you needed was all the outfits and the Dreamhouse. She always says computers are kind of like Barbies. Well, I am sure that once you put the larger memory, the larger flash drive, and the extra two-hour-only battery, that "starts at US\$3,499" will look like something that would have been a good stopping point, BUT you gotta have it all if you're going to Apple.

Let's see if we can justify what's inside this "adverse to the Metaverse purse."

FIGURE 2. Athanos Modern 3D Demo.

FIGURE 3. Apple Vision Pro, courtesy of Apple Computer, Inc.

So, Apple is using the term *spatial computing* in an interesting way. Apple has rethought the desktop we are all familiar with and turned it into something we can interact with from the quiet comfort of our sometimes-see-through goggles. We have floating 3D panels

COMMENTS?

If you have comments about this article, or topics or references I should have cited or you want to rant back to me on why what I say is nonsense, I want to hear. Every time we finish one of these columns, and it goes to print, what I'm going to do is get it up online and maybe point to it at my Facebook (mikezyda) and my LinkedIn (mikezyda) pages so that I can receive comments from you. Maybe we'll react to some of those comments in future columns or online to enlighten you in real time! This is the "Games" column. You have a wonderful day.

(tabs) that can hold web pages at good enough resolution so that we can read text, 4K each eye. That's pretty cool. It looks like we could even play eight movies at a time simultaneously, though not sure for what reason. It lets you navigate simply by using your eyes, hands, and voice and, if it's still Siri, we know it's going to be unreasonably bad in the voice domain. So, let's just say it's going to have eye and hand interaction capability and, for some crisp speakers, speech recognition that borders on mostly useless. The VP lets you watch movies that are shorter than the two hours the battery gives and lets you squirm around so that the screen also squirms around as you do. Neat. So, you can have a completely mobile office attached to your head, and you don't have to carry your iMac to Starbucks with you anymore, just an extra battery pack or two.

Now Tim's presentation showed about one game done up right for the VP and mentioned that things that run on the iPad will run on the VP. Pretty cool. He also mentioned strong collaboration with Unity to get other games onto the platform. BUT "starting at US$3,499" is the gamer price for a fully outfitted, high-end nVidia card

ladened PC, a PC that is plugged into the wall and runs forever unless you are in a PG&E service area.

The VP has a 3D version of Zoom but again with flat rounded-off video squares that look like live Polaroids. They let you show your eyes to people, so they know you are watching them from inside GoggleRama. Apple has developed a spatial operating system to carry this all out.

So, has Apple managed to do anything meaningful with the VP? Well, they have created a standardized user interface that every app can utilize. If you compare this to the Meta Quest, this is great. On the Quest, each app developer creates their own user interface, and a new interface has to be learned for each app built. So, what Apple has done is a good thing, maybe even a great thing.

Now the price, the Apple Vision Pro "starting at US$3,499," is a ridiculous price, even for Barbie.

ACKNOWLEDGMENT

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