

Is the arrival of Apple's Vision Pro about to retire the television as we know it?

The launch of Apple's Vision Pro, the world's first spatial computer, promises to introduce a brand new era for productivity, socializing, and entertainment. If the new technology takes off, will traditional televisions become obsolete?

Make no mistake, leading global tech giants have their sights set on retiring the television as we know it, and the latest array of launches focusing on mixed reality, head-mounted displays, and metaverse experiences across firms like Meta, Google, Snap, and Microsoft all point to a future that extends way beyond television screens.

However, no brand appears closer to challenging how we consume entertainment than Apple. The 21st Century has been filled with launches that have transformed how we consume entertainment.

From the runaway success of the iPod transforming the music industry to the launch of the iPhone and iPad which empowered more users than ever before to watch TV and streaming services on the go, Apple has been at the forefront of innovation for many years. Now, with the launch of the Vision Pro, billed as 'the world's first spatial computer,' we may be looking at the next frontier for digital disruption.

Your next television will be on your head

The technical specifications for the Apple Vision Pro blow traditional televisions out of the water. For a 49-inch 1080p HD television, the total number of pixels a viewer will be staring at stands at around 2 million. For larger screens operating on 4K Ultra HD, this figure could rise to 8 million pixels.

The Vision Pro, on the other hand, has a custom micro-OLED display consisting of 23 million pixels alongside 3D capabilities. With a three-element lens within the headset, users feel as though the display is all around them.

This makes for an enriched entertainment viewing experience for users that's fully customizable through the hardware. Viewing environments can be automatically altered in scale by twisting the Digital Crown at the top of the Vision Pro headset to allow users to change how immersed they are within their environment.

At this stage, it's important to note that this transformative experience should be expected for the eye-watering Vision Pro price tag starting at \$3,500.

The expensive cost of this first iteration of the Vision Pro means that it's unlikely to gain much traction outside of the enterprise landscape, but it lays the groundwork for a post-television technological ecosystem.

Will spatial computing replace more hardware?

Let's look quickly at why spatial computing is such a big deal as an emerging technology. The term is used to describe machines that use human interaction to retain and manipulate real-world objects and spaces.

Because of this, there's much potential for spatial computing to undertake several different roles when used by consumers or businesses.

"Spatial Computing differs from related fields such as 3D modeling and digital design as it requires the forms and spaces it deals with to pre-exist and have real-world valence", summarizes X Reality Safety Intelligence (XRSI) on its website.

"It is not enough that the screen is used to represent a virtual space—it must be meaningfully related to an actual physical place".

Because of its vast potential, some tech commentators believe that the Vision

Pro may one day replace the smartphone and traditional PC, as well as the television.

“Eventually, we’ll be living in a post-smartphone world where all of these technologies will converge in different interfaces,” explained Cathy Hackl, web3 strategist and futurist.

“Whether it’s glasses or humanoid robots that we engage with we are going to find new ways to interact with technology. We’re going to break free from those smartphone screens. And a lot of these devices will become spatial computers.”

Could the Vision Pro be a flash in the pan?

With the brief furor over the metaverse still fresh in our minds, it’s worth asking whether the transformative potential of the Vision Pro will be capable of building momentum.

Tech giants like Meta bet big on the metaverse in 2021, but following recent comments from Meta vice-president Vishal Shah that the metaverse was in a “hype cycle”, evidence suggests that the company is actively scaling back its plans for the new technological landscape that appeared to offer so much.

Dwindling NFT activity and a cryptocurrency bear market throughout 2022 saw enthusiasm for the metaverse wane due to the ecosystem’s perceived reliance on both technologies.

There’s even a danger that the Vision Pro becomes caught up in a weakening virtual reality headset market which Circana suggests fell almost 40% in 2023.

Apple’s key challenge is to break ground in markets that have long been skeptical of headsets and eyewear.

This unease about head-mounted displays stems from a consumer desire for convenience and spatial awareness. The level of sensory deprivation that users experience when placing a bulky headset on their heads has presented tech firms with a long-term challenge to overcome.

Then there’s the limitations of the technology itself. Although the Vision Pro breaks new ground in spatial computing, optical efficiency has long been a major challenge. For manufacturers to offer a sufficient level of display brightness for users across expansive screens, battery capacity, and thermal management is likely to suffer.

Apple has confirmed that the Vision Pro can be used while charging, which is just as well considering the headset's 2.5 hours of battery life for video playback wouldn't be enough for viewers to make it through a viewing of *Oppenheimer* without needing a recharge.

Can the Vision Pro feed the appetite of VPN enthusiasts?

Then there's the issue of accessing streaming services themselves. Would the Vision Pro be able to offer the same level of access to the shows we want to watch online as our current hardware?

Virtual private networks (VPNs) have become a core component when it comes to browsing and accessing entertainment online for many online users.

Many of the users who spend big on the Vision Pro will expect to still receive the same access to global content and privacy that can be offered by a low-cost Amazon FireStick VPN. For instance, the device may support Apple TV and Netflix as an app, but will it be possible to view geo-locked content with the Vision Pro? And will we be capable of browsing in privacy when using the headset?

Thankfully, the Vision Pro does cater to virtual private networks, and the function can be switched on in the device's settings menu—although the range of VPN providers that will be available for Vision Pro users remains to be determined.

Waiting for the 'Ultimate Entertainment Device' to mature

Although its path from launch into a force that's ready to retire the television will take some time, there's little doubt about the Vision Pro's technological credentials.

"Apple Vision Pro is the ultimate entertainment device," said Greg Joswiak, Apple's SVP of Worldwide Marketing.

"Users can turn any place into the best seat in the house, enjoy personal concerts and adventures with Apple Immersive Video, interact with lifelike prehistoric creatures in Encounter Dinosaurs, and even land on the surface of the moon using Environments. It's unlike anything users have ever seen before and we can't wait for them to experience it for themselves."

With lingering concerns over practicality, convenience, and an eye-watering price tag, the Vision Pro may not be the disruptive force that the entertainment industry has been waiting for, but as the technology matures we're likely to see far greater use cases in how the device will improve the lives of its users.

The Apple Vision Pro has all the right ingredients to change how we consume entertainment forever, but its future will depend on its ability to win over public acceptance.

Article by REBECCA BARNATT-SMITH