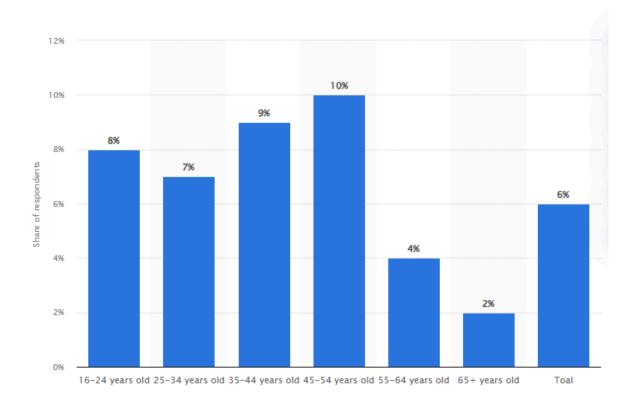
## **User Experience**

Our users will be between 16 and 50, as shown by a survey conducted in September 2024 (Statista, 2024).



Users look for an immersive and reactive virtual reality (VR) experience, with high-quality environments that replicate a sense of being in the virtual space and real-time feedback and interaction. These are standard requirements when using VR, demonstrated in real-world applications such as VR usage in healthcare, education, and entertainment (ResearchGate, 2024).

The access requirements to get into VR are currently priced at around £300, with the Meta Quest 3 being one of the most accessible VR headsets available (Argos, 2024).

The hardware required for VR includes a headset and controllers, with some setups including boundary boxes to define the physical space and prevent obstructions. While traditional VR setups are common, there are mobile VR applications that offer a cheaper alternative, requiring only a cheaper headset but have limitations such as motion blur and latency (ResearchGate, 2016).

VR also significantly impacts user behaviour, influencing how individuals interact within virtual environments. One notable effect is the Proteus Effect, where an individual's behaviour aligns with the characteristics of their virtual avatar (MIT Press, 2024).

Our users should look to experience a VR concert similar to the Hatsune Miku VR concert in 2023, featuring high-fidelity sound, effects, and an immersive and reactive virtual space that mimics a real concert (Miku Expo, 2023).

## References

- Argos. (2024). Virtual Reality Headsets. Retrieved from <a href="https://www.argos.co.uk/browse/technology/video-games-and-consoles/virtual-reality-headsets/c:30283/">https://www.argos.co.uk/browse/technology/video-games-and-consoles/virtual-reality-headsets/c:30283/</a>
- Miku Expo. (2023). Miku Expo 2023 VR. Retrieved from https://mikuexpo.com/vr2023/index\_en.html
- MIT Press. (2024). A New Meta-Analysis of the Proteus Effect Studies. Retrieved from <a href="https://direct.mit.edu/pvar/article-abstract/doi/10.1162/pres\_a\_00392/116650">https://direct.mit.edu/pvar/article-abstract/doi/10.1162/pres\_a\_00392/116650</a>
- ResearchGate. (2016). Challenges with Virtual Reality on Mobile Devices. Retrieved from
   https://www.researchgate.net/publication/300101932\_Challenges\_with\_virtual\_real ity\_on\_mobile\_devices
- ResearchGate. (2024). Assessing User Experience in Immersive Virtual Reality
   Environment: A Review of Interconnected Terms and Meanings. Retrieved from
   https://www.researchgate.net/publication/381559070\_Assessing\_User\_Experience\_in\_Immersive\_Virtual\_Reality\_Environment\_A\_review\_of\_interconnected\_terms\_and\_meanings
- Statista. (2024). Share of VR Headset Owners by Age (UK). Retrieved from <a href="https://www.statista.com/statistics/1362661/share-of-vr-headset-owners-by-age-uk/">https://www.statista.com/statistics/1362661/share-of-vr-headset-owners-by-age-uk/</a>