

The big picture

In 2013, Google released a new product called 'Glass' – a hands-free, voice-controlled computer device designed to be worn as a pair of glasses. The technology was welcomed by some – including some medical professionals – and many companies and developers built applications for Glass. Glass also used several of Google's own applications.



Figure 1. Google executive Amanda Rosenberg wearing Google glasses. Glass was not a successful product and raised significant ethical concerns.

Source: Max Braun from San Francisco

(https://commons.wikimedia.org/wiki/File:Google_executive_Amanda_Rosenberg_modeling_the_Google_Glass_face_mounted_wi

USA, CC BY-SA 2.0 (<https://creativecommons.org/licenses/by/2.0/>), via Wikimedia Commons

However, many people have raised significant ethical concerns about Glass (<https://www.wired.com/story/google-glass-reasonable-expectation-of-privacy/>). Some of these concerns relate to the ethics of using a device that can record people without their knowledge and permission. Other concerns relate to the use of facial recognition software for Glass. Some organisations even banned the use of Glass before the product was released to the general public.

Although it still exists, Glass is now much less prominent than it was initially. Google is reportedly continuing to work on augmented reality headsets; its ongoing research should support its product development for the metaverse, a virtual-reality space in which people can interact with computer-generated environments and other people.

Google's efforts to develop new hardware to meet the new needs and wants of consumers in augmented and virtual reality highlight the ethical challenges of marketing in times of rapid change.

Theory of Knowledge

The development of the metaverse provides businesses with an interesting opportunity to find new markets and develop new products. Many technological leaders such as Google, Apple and Facebook/Meta, as well as many smaller companies, are racing to develop hardware and software for the new metaverse markets.

However, the growth of the metaverse raises significant ethical concerns around privacy, human rights, equity and social networks. Many businesses are effectively needing to deal with emerging ethical questions before developing products for the metaverse.

- How can businesses manage the tensions between their desire to earn large profits while also supporting human wellbeing in the metaverse markets?