Microsoft, Snap, Facebook, Google, Apple, Amazon and the race to 'something that can replace smartphones': the glasses

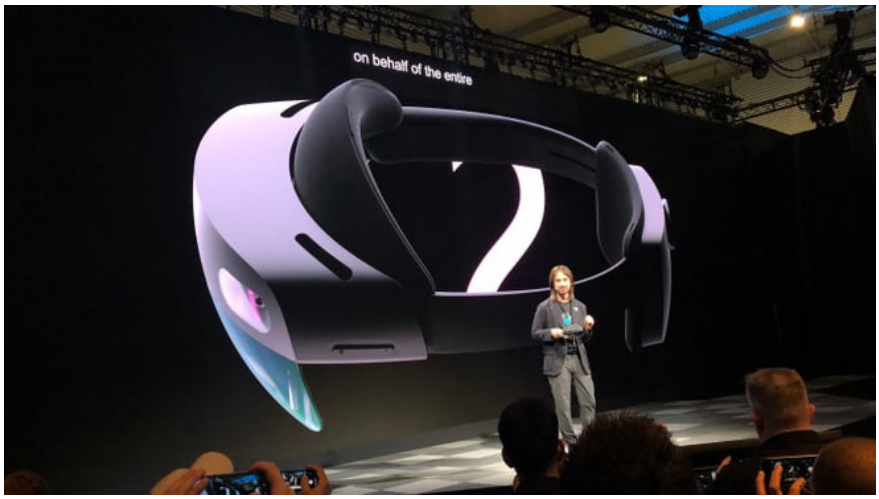
The next big trend in the field of technology will be the smart glasses that we can wear everywhere and have the ability to replace the phone.

Most of the biggest names in the tech world are racing to create smart glasses that will change the way people see the world around them. In the future, instead of taking your phone out of your pocket to talk to people or interact with apps, we can do these just by talking and looking through a pair of glasses.

In this race, in addition to technology, designers must ensure their products have enough fashion and sleek elements to allow users to wear them all day and everywhere. And this is also an opportunity to start a new market, where those who are more agile and have better resilience will rise to the top. Opportunities are leveled for everyone, be it a trillion-dollar corporation or a startup company.

But users will probably have to wait a few more years. Existing models today are still too large in size, expensive in price and have no practical effect in life. However, let's take a look back to see how much the tech companies have tried.

Microsoft



Microsoft launches HoloLens 2.

Microsoft is working on advanced augmented reality glass products. Its HoloLens 2 was sold last week and a modified version is being tested by the military to help soldiers operate more effectively on the battlefield.

Called IVAS (Integrated Visual Enhancement System), the military version of this model can place digital objects, such as maps or video screens, onto real-world images in front of them. the anvil. Soldiers can use it in training to interact with the environment and their allies, in simulation battles.

In commerce, HoloLens 2 is capable of displaying computer programs in sight, so users don't always have to sit in front of a computer to work. It can help technical workers identify problems and fix and solve them without having to read the manual.

However, HoloLens 2 is still too bulky and at $ 3,500, too expensive for most consumers. But as technology develops, these devices will become smaller and more powerful.

Snap

Smart glasses of Snapchat.

Snap's Spectacles 3, recently sold for $ 800, allows users to take photos and videos, then add effects to upload to the Snapchat app.

Currently, users cannot see any information through the glass, but the company is said to be working to add augmented reality images. The new report says Snap is building a fourth-generation version, codenamed Hermosa, with smart lenses capable of displaying AR effects.

However, Snap's strategy is very different from its competitors. The company started with a radius and planned to add a hardware system later. And other companies make bulky equipment systems initially but not in radius.

Google

Google Glass Enterprise Edition 2

Google is still selling its Google Glass product line, capable of displaying information but without AR integration. However, the first version launched too early (2013) with the feature of recording images anytime anywhere, making users uncomfortable. Google soon removed it in 2015.

And the new version was launched by Google in May. Named Glass Enterprise Edition 2, it's like the first version, only a small projector in front of an eye, built on the Android operating system, for enable device configuration synchronization with applications and services on phones and tablets. Google says Glass is used in logistics, manufacturing and service industries. The greatest initial effect of this device is to be able to give directions.

While Google hasn't publicly talked about new AR glass projects, it's clear the company is building a platform where AR makes more sense when it comes to glasses, rather than phones.

Magic Leap

The first Magic Leap device, launched in August 2018, looks a lot like Microsoft HoloLens 2, which is a relatively bulky wearable. It has the ability to display games, 3D animation, virtual video screens and many other digital content.

When worn, users can still see everything in front of them. AR apps let you watch TV, work with computer programs, while still seeing the ordinary world.

But like HoloLens 2, the Magic Leap is very expensive, with a starting price of $ 2,295. The company will need to make its products smaller and more affordable, if it wants to attract more audiences. Besides, it will need more new capabilities and applications. IOS and Android have provided thousands of augmented reality applications for phones, which can be easily put on wearables if properly integrated.

Apple

Apple AR technology demo of 2017.

According to sources, Apple's smart glasses are supposed to launch in 2022, but the first model will be about the same size as Facebook's Oculus Quest. But a smaller version could launch in 2023, allowing users to take it with them anywhere, all day.

Like Google, Apple's iOS platform has thousands of augmented reality applications. Apple may have added AR support to its iPhones and iPads first in order to teach people more about the technology, by showing how games and information will function when they're covered. hidden in front of the user. And like Google, this strategy helps it build a massive library of applications for the future.

Siri works on wearables like AirPods and Apple Watch, allowing users to request directions, play music or copy messages without picking up the phone. Those functions can all work on a set of smart glasses.

Facebook

Oculus Quest VR of Facebook.

Facebook's strategy is different from most competitors. The company is selling virtual reality products that allow users to take them out of the real world and into a whole new digital world where you can't see anything around. But Facebook is also interested in augmented reality.

Recently in September, Facebook partnered with parent company of Ray-Ban glasses to develop augmented reality glasses. The company plans to launch wearable devices, internally known as Orion, from 2023 to 2025. They are designed to take calls and allow users to stream videos to others. Hundreds of employees are working on this project. However, the problem to handle first is to make them small enough for consumers to feel attractive.

Like Apple, Facebook has a media platform that can easily be transferred to a wearable device. For example, Facebook Messenger and WhatsApp allow users to call or chat with each other, or Facebook's Portal products allow users to video chat on platforms.

Facebook has augmented reality developer tools called Spark AR. It is currently being used to track faces and effects in video chats on the Portal hardware. But theoretically, it could be used someday on a set of smart glasses. And not to mention, Facebook has a huge user base of 2.45 billion monthly active users who may be interested in smart glasses, in case the company can sell them at affordable prices.

Amazon

Smart Glasses Echo Frames

Amazon doesn't say much about its own augmented reality glasses, but in September the company revealed a bit of the product, showing it wasn't completely indifferent to this trend. Echo Frames is now just a pair of glasses with integrated speakers and Amazon Alexa voice assistant.

But users can talk to Alexa at any time. This virtual assistant can tell you about the weather, make phone calls, read a short message or do anything else that smart speakers like Amazon Echo can do, right on top. your. Amazon can improve these glasses by adding AR technology, but it will need more screens to display information.

Amazon also has many services that can be easily applied to AR glasses. Prime Video can show movies and TV shows in the future, if Amazon decides to build a pair of glasses in that direction. Or users can shop through Amazon and browse the shopping cart without taking out their phones.

The future of smart glass

Amazon, Google, Magic Leap, Facebook and Microsoft all have platforms to put chips, screens or computers on the user's face. This technology race is ongoing and the ultimate goal is to create a fashion product that is reasonably priced for mass users.

It is still a few years away before these products become popular, but applications, smart voice assistants and software are ready. Once these companies can make the controller hardware small enough, we can think of the need to take the phone everywhere, because the glasses were able to do everything.

Refer to *CNBC*