Review: Google Glass needs lots of polishing

September 2 2013, by Troy Wolverton

Google Glass is an innovative - if unpolished - technology. But it has what I think is a fundamental flaw: Designed to be worn on the face throughout the day, Glass is a barrier between users and the real world around them.

For those who have somehow avoided the hype, Glass is the new

computer from Google that's shaped like an eyeglass frame. I recently got my first chance to experience Glass. I didn't have enough time to thoroughly evaluate it, but was able to get a strong first impression.

Glass does some very cool things and shows what a wearable computer might look like and how it might work. But both the hardware and the software need a lot of polishing, and no matter how much Google improves Glass, I'm dubious it will find a sizable number of consumers who want to constantly wear a computer on their head.

Glass is designed around a display that's contained in a small, clear box connected to the device's frame just above a user's right eye. Users interact with Glass either by talking to it or by swiping or tapping its touch-sensitive temple. Glass responds by displaying information on its screen or by transmitting sounds and words to your ear through a speaker that uses bone-conduction technology.

Google designed Glass to alert users to new information - a new email, say, or the latest news story - and then allow them to view and respond to it quickly.

For certain applications, this streamlined approach is a welcome innovation. For example, checking a new email message can be a multistep process with a smartphone - you have to pull out the phone, unlock it, call up the email program and find the particular message. With Glass, it's much simpler: You get a beep alerting you to a new message and when you turn on the device, it's the first thing you see.

Google has incorporated into Glass a version of its excellent voice search technology. Using this feature, I asked Glass how to say "good morning" in Swahili, and it quickly gave me the translation, both speaking it to me and displaying it on its screen.

But Glass' streamlined interface can also be frustratingly limited. Each thing you do on Glass - each picture or video you take, each word you translate, each Web page you surf to - is represented by a separate full-screen page that's placed on a timeline that users can scroll through.

This arrangement makes it easy to see the text message you just received or the picture you just took. But to find an email you received yesterday or a picture you took last week, you may have to scroll through dozens or even hundreds of pages. And because it generally doesn't allow you to call up individual apps, Glass makes it difficult to do many of the tasks you might do on your smartphone, such as deleting a swath of email at once or diving into and out of your Twitter stream or Facebook news feed or viewing all of your appointments for the next day.

I found other things problematic with Glass. To use the touch-sensitive temple, you have to master a collection of one and two-finger gestures, none of which are intuitive. If you do the wrong one, you can end up on the wrong page.

Although Google representatives say they designed the display so it won't block your direct line of view, it still occludes a significant portion of your peripheral vision. I found myself lifting my head to look under it, as one might do with reading glasses.

Google placed the screen in a clear box in part to help alert others that the Glass display is active. But the design makes it hard for the user to find Glass' screen against a bright sky or while looking at a "noisy" scene, like a tree swaying in the wind.

And it was clear from my test why some authorities are talking about banning the use of Glass while driving. When you are using Glass, your mind blocks out pretty much everything else. It seems to severely constrain your peripheral vision, even more so than when you walk and

look at a smartphone.

That shortcoming points to a potentially bigger issue for Glass, one that's inherent in its design. Regardless of whether you have it turned on, Glass stands between you and the world around because, unlike a smartphone, you generally don't take it off.

That can make interacting with someone wearing Glass awkward. Setting aside how silly people can look wearing Glass, there's always going to be the question of whether the Glass wearer is focusing on you or on their ever-present screen. Conversely, while wearing Glass, with a screen so close to your eye, there's an ever-present temptation to tune out the world around you.

I'm sure Google will fix some of Glass' more bothersome bugs as it develops version 2.0. But I'm doubtful the company can solve the experiential, social and psychological problems that come with placing a display in front of a users' eye at all times.

GOOGLE GLASS WEARABLE COMPUTER

-Likes: Ability to conduct searches, take pictures, even translate words with just a voice command makes it easier, faster to use than a smartphone for some activities. Ability to share a user's perspective with others offers interesting possibilities for journalists, doctors, teachers and more.

-Dislikes: Interface makes it difficult to review anything but your most recent activities or to do things like delete a lot of email at once. Gestures used to control the device are numerous and nonintuitive. Display blocks peripheral vision and can be difficult to view in bright light. Nature of device can inhibit social interaction.

-Price: $1,500

-Web: google.com/glass" target="_blank">www.google.com/glass