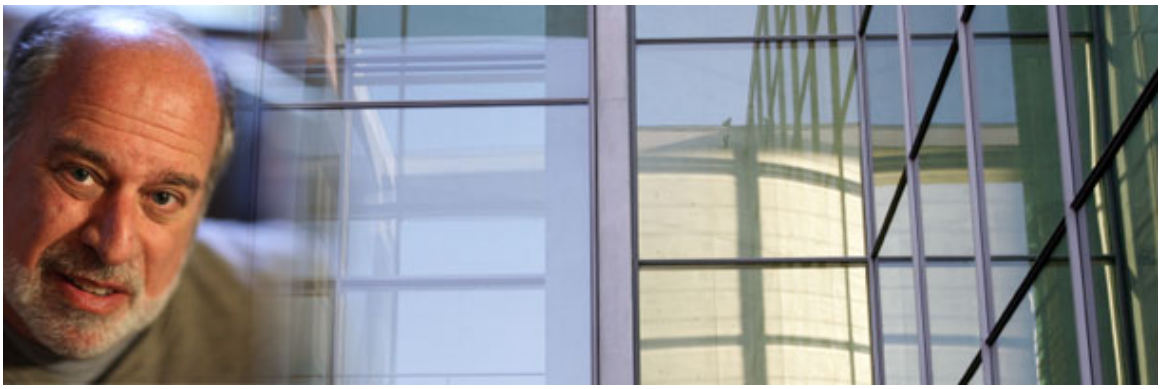
Google Glass as Wearable Performance Support (Jun 13)



by Marc Rosenberg

June 6, 2013

The geek elite are gaga over Google Glass. But there are skeptics. While some call it innovative and revolutionary, others say it's intrusive and disturbing. A natural evolution from Google Goggles, the most paranoid among us probably see the end game as some Borg-like merger of human and machine.

Figure 1: **The evolution of assimilation**

(Just for you *Star Trek* fans: Want a "less evil," more promising example? Think of Geordi La Forge's VISOR.)

Humanoid drones with cybernetically enhanced ocular implants aside, does Google Glass hold any opportunities for us? Maybe, especially for performance support. But proceed with caution.

Does Google Glass work as performance support?

Here are four features that might make Google Glass a viable performance-support technology:

1. It's *mobile* (actually, it's *wearable*). It goes anywhere. That's great for having access to information and other resources at the moment of need.
2. It's *non-burdening*; it doesn't seem to be a hassle to use. This is important; we know that if using a performance support tool takes more effort than not using it, forget about it.
3. It's *connected* to the Internet, enabling real-time information sharing *to* and *from* users.
4. Over time, it could be relatively *low cost* to produce in bulk, allowing all who want one to have one.

How might Google Glass be used?

Given the potential of Google Glass as performance support, here are some opportunities where it might be of benefit (you can probably think of many more):

- *Manufacturing* offers lots of potential. Plant workers could get instant access to training, inventories, and production statistics, and they could record problems as they happen for review and correction later.
- *Health care* workers could have access to medical information unique to a patient and could send images (for example, at triage sites or in emergency rooms) to specialists in real time.
- *Tourists* in an unfamiliar country can use Google Glass to provide information on historical sites, restaurants, shopping, local customs, and, of course, instant translation services—just look at something and have it translated on the spot.
- *Scientists* across the globe can collaborate in real time, each seeing what the other sees.
- *Engineers and repair technicians* can solve on-site problems and interface with experts back at headquarters, resulting in shorter repair times and lower costs.
- *Mentors and mentees* can have a closer relationship even though they work at a distance.
- *Construction workers* of all types can be connected to engineers, architects, clients, and even government agencies, so that construction issues can be resolved quickly. Apprentices on worksites can have access to information in a variety of formats that help them master tasks more quickly.
- *Law enforcement professionals* can connect the street officer with a host of information on criminals, forensics, and other resources faster than radioing in and waiting for a response.
- *The military* is probably already working on applications for Google Glass. The ability of war fighters to have access to important information, and the ability of commanders to get information to individual units, could make a big difference on the battlefield.

Not to mention what Google Glass might do, good or bad, in the *training and education* realm: public, higher education, and corporate training. I'll let you think about this one.

A radical transformation or just the Next Big Thing?

As this year's most buzz-worthy gadget, Google Glass may be a game-changer in wearable computing. But is it a *revolution* in mobile performance support, or simply an *evolution*? I'm not sure. Today, many retail and restaurant chains equip their people with radios to improve customer service and share information. Tablets and other hand-held devices are increasingly assisting workers on the go. Is Google Glass really any different?

In one way, perhaps it is. How would we feel if someone was walking around our business—or our home or school—with this device on? How would we know what was being recorded, analyzed, and shared? And of course, there is the whole corporate and industrial spying thing. If someone were using an iPad or smartphone to record things, for example, it would be pretty obvious. Not so much with Google Glass.

As devices get smaller and more powerful, we see vast potential for using them for learning and performance improvement. But are we also getting too close to the button cameras used by spies or the wires used by police informants? Time will tell if the benefits outweigh the concerns. I do believe, though, that we will never fully recognize the potential of Google Glass until we grapple with the privacy and security issues it presents. Ignoring them will make our current arguments over Facebook privacy seem laughable.

Of course, all of this begs the question: cool or nerdy (think Bluetooth headsets)? Would you actually wear one of these things?