

IS THE GLASS HALF FULL? THE LAUNCH OF GOOGLE GLASS

From its very start, Google has embraced the idea of innovation actively. The founders began their company with the (at the time) totally innovative concept of an online search engine. Then they instituted the “20 percent” rule, according to which all employees had to spend at least one workday per week on creative, off-the-wall project ideas. With such a foundation, Google’s record of innovation is naturally impressive, from Google Maps to Street View to driverless cars, from the Android operating system to Chromebooks. But the innovation getting the most attention these days is, of course, Google Glass.

Although the device has yet to be widely introduced, it seems as if everyone knows what Google Glass is already—and has an opinion about its efficacy, appeal, and look. The wearable product allows users to surf the Internet and gather information simply by looking up and to the right. They can swipe their finger over a sensor behind their ears to pull up a Google map and navigate, take pictures, or initiate the embedded Bluetooth technology to make a call.⁶⁵

The initial rollout of Google Glass was limited, purposefully, by a couple of factors. First, Google set the price very high, at around US\$1,500. That meant that only the most dedicated tech geeks, and those with plenty of disposable income, would be the ones first sporting the headband-like devices. Second, Google required people to register for the chance to receive a set.⁶⁶ Even if thousands wanted to spend the money, Google allowed only a select few to receive them at any one time.

This slow, measured rollout provided several benefits for Google. Because it sought to minimize the supply available, Google created a perception that Glass was extremely popular and stirred up excitement in potential customers. The press buzz and word of mouth spread remarkably far and quickly. Furthermore, it identified a ready-made segment of beta testers. By making sure that those who used the early versions of Google Glass were really interested in it, Google knew that the feedback they provided was more likely to be insightful and related to the underlying technology. Thus it did not have to filter out, initially, complaints about it being too hard to use from people without much technological savvy or other reviews that seemed less important to the developers.

But as Google quickly learned, anytime you give people access to a new device, their feedback is going to include some unexpected elements. Google assumed most comments would be about technology improvements. Instead, much of the information it gleaned involved the look of the device and the alternative uses it could support. For example, although there was never



Google Glass is one of the latest of many significant innovations.

be directly facing anything she or he wants to record. The company also points to similar concerns about cameras integrated into cell phones—a function that people barely worry about anymore.

Still, it's enough of a problem that Google released an official guide on how not to be rude or creepy. Its suggestions include making sure that users ask for permission before recording anyone and taking off the device before entering a restroom. Google also takes the time to explain that "Standing alone in the corner of a room staring at people while recording them through Glass is not going to win you any friends."⁷⁶

Questions

1. At what stage of its product life cycle is Google Glass?
2. What was the go-to-market strategy for Google Glass, and how successful has it been thus far?
3. How is the product diffusing? At what stage is it in the diffusion curve? Explain your answer.
4. Using the diffusion of innovation theory, assess how quickly Google Glass will diffuse based on its relative advantage, compatibility, observability, complexity, and trialability.

any danger that Google Glass would become a high-fashion option, people sought to make them at least a little more attractive. The solution was an easy one: offer Google Glass in several colors, so that fashionable folks could coordinate with their phones, purses, or favorite hues.

In terms of the functions for which people actually use Google Glass, the innovator's predictions again were just a little inaccurate. Google anticipated that Glass would resonate most with busy business professionals who found the act of taking their smartphones out of their pockets too inefficient. But it learned quickly that even these professional segments used Glass in far more casual manners. In one example, a pet lover explained that it was far easier to take funny cat videos when both hands were free to tempt the feline with a toy.⁶⁷

Along with this feedback, Google noted some surprise at the diversity of people interested in Glass. As Leila Takayama, a researcher with Google, explained, "We were expecting the people to be extremely tech savvy—to kind of look like us Googlers. But what we actually saw were people who were much more diverse. They were people who were just sort of curious."⁶⁸ This surprising finding actually bodes very well for Google Glass, because the next step for Google seemingly must be to expand the target market beyond the early adopter segment.

One means of doing so is by adding more functions. Google has entered into an agreement with a nationwide vision care insurer, which covers people who need corrective lenses and allows them to add those lenses to the Google Glass device at a subsidized price.⁶⁹ Thus the market expands to a health care setting, in which Glass is not just a fun technology tool but a means for people to see better while also gaining access to the search benefits inherent to the innovation. Moreover, Google is actively encouraging app developers to expand their related offerings, to make sure Glass users have access to a vast range of relevant games, tools, and uses. A recent addition is a music capability, such that users can tell Google Glass to play music they have loaded into their Google Play accounts.⁷⁰

Moreover, the Internet is filled with predictions of how far the price of Google Glass will drop. One analyst predicts a price cut to \$600 relatively soon, followed by a further reduction.⁷¹ Most estimates suggest that ultimately it will settle in the range of \$300 or so.⁷² Noting that approximately 10,000 users have been willing to pay \$1,500 for the devices, these price predictions also argue that at \$350, Google could have nearly 70,000 adopters within just a few years. And it seemingly will need them: Google has admitted that it plans for Google Glass to account for 3 percent of its total revenue by 2015.⁷³

To achieve that result, Google also needs to address the potential threat associated with its competitors and their alternative versions of wearable smart technology. For example, Apple has reportedly been working with Corning Glass, which has developed a shatter-resistant, bendable glass it calls Willow Glass. Noting that such a product could easily bend around a person's wrist, prognosticators are anticipating the announcement of an Apple smartwatch any day. Their predictions have received some support from Apple's hiring trends, in that its watch division has grown substantially. Perhaps even more worrisome for Google, though, Apple recently filed a patent for an overeye technology device that would send information directly to the wearer's retina.⁷⁴

But all these competitors might have another problem in their efforts to diffuse their wearable technologies globally, to the point that they become ubiquitous. Whether due to privacy concerns or simply because they consider the technology "creepy," some consumers appear to be rejecting the innovations out of hand. Without any legal framework in place, Glass wearers conceivably could record others without their permission or add face recognition software that identifies passersby. Several casinos have banned the devices, and privacy experts worry about the potential abuses in private-seeming locations in public places, such as restrooms and changing rooms.⁷⁵

As Google notes, Glass might not be the best option for spies. A light on the device illuminates anytime it is recording or taking pictures, and the wearer must