

GLASS

By Ilya Shapiro

A glimpse of the future through Google Glass



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An Introduction

For almost half a century computers have put the world on our desktops. Almost anything we could need is searchable, viewable, recordable, savable, and shareable. With the advancement of laptops we could leave our desktops behind and take that same technology on the go. When smartphones and tablets were invented that same technology was compacted and put into the palm of our hands. Though through all of the advancement that same technology has been in our way...until now.

Rewind to the beginning of the decade before the world had ever heard of Google Glass. No one could have known that the tech giant was working on a project that would not only change the way we view mobile technology, but would also alter our perception of reality and the way we interact with our environment. Fast-forward to today and the company is on the verge of releasing it's greatest and most innovative product yet. While the world may not see Glass replacing mobile phones and tablets just yet, it is clear that Google is nipping at the heels of the mobile industry with its innovative wearable computer.

Glass In Focus

Current State

Scheduled for a late 2013 - early 2014 release date, Project Glass takes the same features and applications that people are familiar with on their mobile devices and eliminates the screen. Instead, all of the information is available on a heads-up display (HUD)

attached to what is most easily described as an eyeglass frame. When you put them on, the "glasses" display information right in the users field of vision. This allows the wearer to use mobile applications such as calling, texting, navigation, and much more right in their line of sight via the HUD.

The device is controlled using voice commands and a touchpad on one arm of the frame. You can select what you want to do with a brief gesture or by talking to the device, and Google Glass will interpret your commands. The internal microphone and earpiece allow the wearer to make and receive calls when the device is wirelessly tethered to their phone. The front facing camera lets you instantly take pictures and videos and allows others to see what you are seeing through video chat.^[1]

There are plenty of obvious implications of not having a phone in your hand yet still being able to use it. Just like your smartphones allow you to check traffic updates, public transit schedules, and give live navigation, Glass will have those same features beamed right to your eyes. While it takes time to pull out a phone or camera and focus in, Glass allows you to take a picture of exactly what you're

seeing with a simple verbal command. In essence Google Glass will have the same technology that already exists but, in a way so seamlessly integrated that it finally get's out of it's own way.^[1]

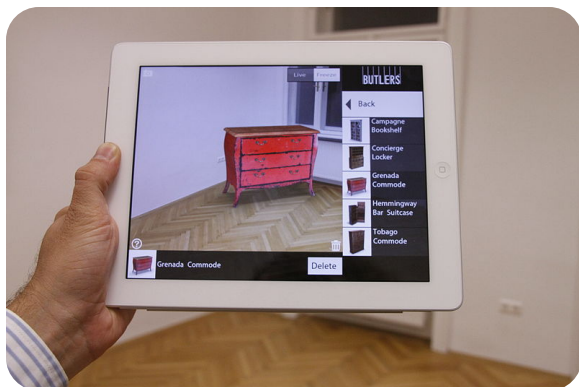
Trends & Consumer Use

Technology seems to always be at the forefront of societal trends these days. From security and privacy issues to location-based social networking no technological advancement is immune. Google Glass will play at many of these, but a few big one's will stand out. One of these trends is augmented reality. The idea of augmented reality (AR) has been around since science fiction films first hit television screens. While some industries such as sports telecasting and gaming have found uses for it, AR has not been particularly common outside of commercial use. As of 2012 only 11% of high school and college students have used AR applications and of

Only 11% of high school and college students have used augmented reality applications

those only 34% think the apps have been useful or easy to use.^[2]

What Glass brings to the table is a platform almost entirely based on augmented reality. Imagine sitting at the 50-yard line of a football game and seeing the same yellow “first down” line overlay you see on television, only now, it’s right in front of your eyes. How about seeing what that new dresser you



found online will look like in your bedroom before ever purchasing it. The uses for AR are endless and need only to be realized.

Another movement Glass will be involved in is voice recognition and most importantly “Natural Language User Interface” (NLUI). Currently, the most well known use of this technology is in Apple’s Siri software. Google Glass

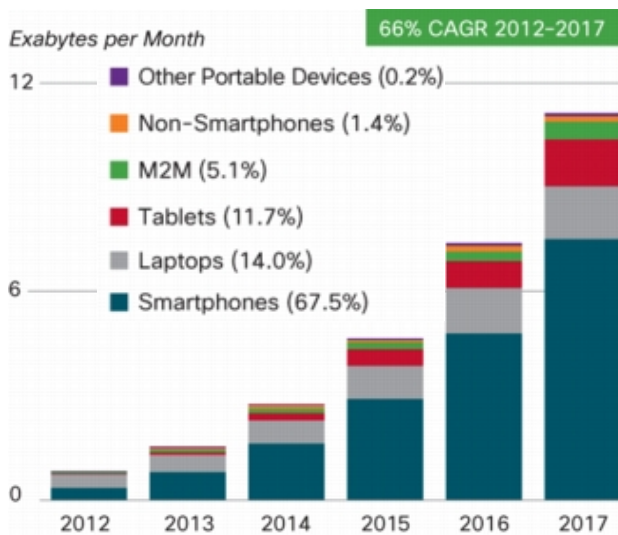
will be able to understand a user’s natural speaking patterns and interpret commands making it easier and more natural to interact with. Even today, of the 87% of iPhone 4S users that currently use Siri, over one third use the NLUI app to make phone calls, text, or look up information on an almost daily basis.^[3] A vital use for the technology can be found while behind the wheel of a car. About 25% of automobile accidents are a result of texting and cell phone use while driving.^[4] NLUI implementation can reduce this number by allowing drivers not only hands free voice interaction, but also by understanding less distracting, natural speech.

Although it may take some time before Google Glass goes mainstream, there are some niche consumer markets where it may make a bigger splash. For adventurers and hobbyists who use wearable helmet cams, Glass may be a reliable substitute. Not only will it enable wearers to record

their experiences, but it will also allow others to see them first person through live video chat. From there they can also upload and share pictures and videos instantly. In reality any one who relies on a smartphone's capabilities to integrate multiple services and applications will find a use for Glass. With the worlds' ever increasing use of mobile technology, now seems the perfect time for Google Glass to blossom. To put it in perspective, in 2012 there was an 81% growth in smartphone usage alone, and by 2017, smartphones and even newer mobile devices will own the majority of wireless web traffic. In fact, by the end of 2013, active mobile devices will surpass the world's population.^[5]

Competition in the Industry

While Google Glass may be the most well known for developing augmented reality glasses, competitors are not far behind. A UK based research team, The Technology Partnership (TTP), is working on a device similar to Glass. The device will look more like a traditional pair of eyeglasses with a micro-projector beaming an image via the lenses into the users eye.^[6] Outside of wearable devices, Merclar, an AR company based out of Montreal has developed games, mobile applications, movie posters, album covers, and other types of media that incorporate AR.^[7] Even around the world, AR is enhancing user experiences. This year, Ogle, a Middle Eastern AR platform partnered with Getty Images at The Dubai Lynx International Festival of Creativity. They featured a display of images that when viewed with the "Ogle It" app triggered a video to play as an extension of the image, creating an interactive gallery.^[8]



Marketing Implications

While Glass has not been released to the mass public yet, the concept of AR becoming mainstream is already being realized. In fact 62% of B2B and B2C marketers are already considering using AR technology. However, the majority of companies have still not fully embraced the potential that the technology can provide. Possible marketing related uses for AR are...

- **Events and exhibitions**
Competing for attention at events is crucial. Large AR screens can draw crowds to your display by creating exciting and immersive experiences. Likewise they can also cause crowds to linger longer.

- **Point of sale**
Through AR retailers can bring to life elaborate sales promotions. It becomes

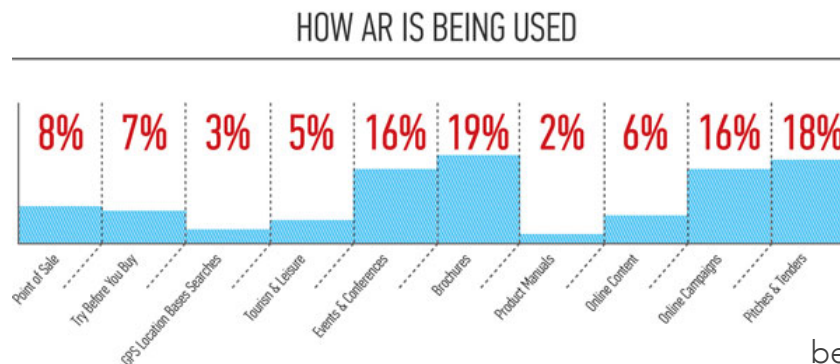
an additional tool to engage consumers and create sales.

- **Interactive Installations**
Kiosks can use AR to immerse consumers in their product or service. Uninteresting products may become more fascinating once you get beyond the surface.

- **Web and Digital Marketing**
Aside from using AR to increase the time spent on websites, physically demonstrating a product or service over the Internet can have a huge impact on sales.

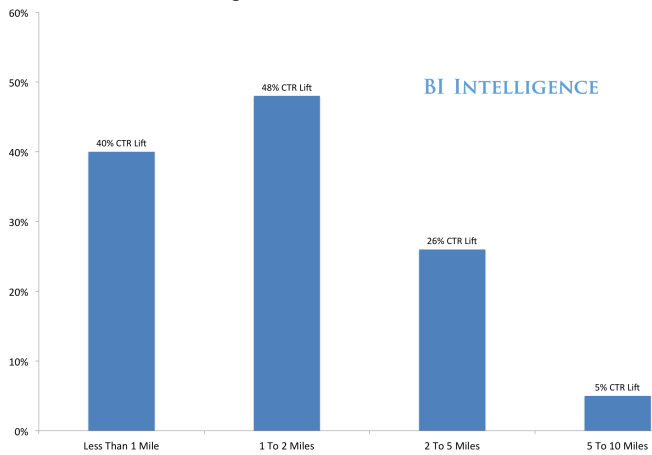
- **Mobile Commerce**
With mobile technology quickly taking over, mobile devices will become powerful platforms for AR experiences that can translate to sales.^[9]

Another useful marketing trend more specific to Google Glass is



location-based marketing. Many businesses are already attracting smartphone users by offering promotions when they are within proximity of their location. Consumers passing by receive alerts on their smartphones such as discounts or freebies to incentivize them to stop in.

The Closer Users Are To A Business, The More Likely They Are To Click Through A Mobile Banner Ad For That Business



Source: YP, Q4 2012 Local Insights Digital Report

The same idea paired with AR glasses will enhance that experience by allowing consumers to pan around the street and see what's being offered.

Simply put, AR can be a highly effective way to attract and engage customers. If used properly they can add to a company's bottom line and enhance the way users interact with products and services.

Looking Ahead

It's difficult to tell what the future may hold for Google Glass, especially being a technology in its early infancy. Based on the arguable predecessor, the smartphone, Glass can only get smarter. The key to successful emersion of AR into mainstream society is infrastructure. Just like the railroad, the landline telephone system, and the World Wide Web, the advancement of such technology is dependent on the groundwork laid out for it. While there may be pockets of use for AR technology like Glass it will never be truly effective until a system exists that will support and interact with the information around it.

While we may not see an "Iron Man"-like helmet in the near future, it's not far out of reach. In the meantime, regardless of whether the "Google Glass" ends up being half full or half empty, it will have played a generous role in the new age of technological revolution.

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About The Author



Ilya Shapiro is a recent graduate of The University of Akron. He earned a Bachelors degree in Marketing Management with honors from $\Sigma\Lambda\Lambda$. He is pursuing a career in Advertising & Branding