

# Wearable Market: Initial Insights for the Hospitality Industry

By Ajay 'AJ' Aluri, Ph.D.

As smart watches, glasses and other wearable technologies go mainstream, consider current consumer perceptions and interest level



Several mainstream technology companies in the last three years have aspired to capture the consumer market and to establish themselves as an early participant in the wearable technology movement. Some of the key players include Samsung, Google and Apple, but many more have been following developments, looking for a way to make their own entrance into mainstream markets. According to PwC (2014), 21 percent of consumers in the U.S. own a wearable device and 10 percent of them wear them every day. To put this in perspective, approximately 1,260 attendees at HITEC 2015 own some type of a wearable device, and around 600 of these individuals will be wearing them during the conference. With the expected surge in wearable watch sales in 2015, especially Apple Watch, these numbers will probably rise. Gownder and McQuivey (2014) of the Forrester Research firm found that a significant percentage (68 percent) of global technology and business decision-makers consider wearables a big priority in 2015. They even predict that consumers will readily adopt smartwatches, which will open the door to other wearables that can be clipped to or embedded in clothing, ear buds and headphones, and smartglasses. Where hospitality educators and

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practitioners are concerned, it is vital to keep up with wearable computing research and market trends, to see how this technology will influence guest usage and business.

### The Smartwatch Market

In September 2013, Samsung launched its Galaxy Gear, a smartwatch wearable device that could “capture daily life from your wrist,” but the product failed to meet consumer expectations and performed poorly in the commercial market (Gibbs, 2013). What did these and other commercially available wearables teach us about how consumers receive this new technology? Perhaps we have seen that it is too soon to call this race. According to PwC (2014) and Gartner (2014)

studies, two million smartwatches were sold by March 2014, and 3.3 million fitness trackers were sold in the U.S in the same year. In fact, fitness trackers appear in more U.S. households than smartwatches. However, according to Adams and Koenig (2014) of the Forbes and Smartwatch Group, 40 companies launched smartwatches in 2013, the market share of the smartwatch industry was \$700 million in 2013, and the market was projected to grow to \$2.5 billion in 2014. In fact, the 2014 numbers have surpassed the 2013 projections. In 2014, 6.8 million watches were sold, with a market volume of 1.291 billion — an 82 percent increase from 2013 — and the number of companies selling them have increased to 89

(Smartwatch Group, 2015). The top five manufactures of smartwatches include Samsung, Lenovo/Motorola, LG, Pebble and Garmin.

The year 2015 is a trendsetting year for smartwatches. With the launch of Apple Watch, market researchers and practitioners should now consider learning the market and studying consumer behavior before and after the Apple Watch launch. According to Slice Intelligence (2015), Apple sold 1.7 million watches through pre-order. In fact, there are thousands of consumers still waiting for their watches to ship, because most of the models have a waiting time of six to seven weeks. According to other sources, as of early May 2015, Apple may have sold 3.1 million units, and may

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ultimately sell close to 15.4 million units by the end of 2015 — double the total sales for smartwatches in 2014 (Tibken, 2015). These current and projected sales of Apple Watches would make them the leaders in the smartwatch market in 2015. It should be noted that smartwatches are designed to integrate with mobile devices and can never have their own market. Even fitness trackers may be wiped out as these applications are integrated with smartwatches.

By contrast, smartglasses can stand alone in their own market as a hands-free, voice-activated device, and therefore have fewer limitations and a greater capacity to revolutionize the way we use technology. The current market success of smartwatches and fitness trackers is a good indicator that we need to be looking into comparable kinds of wearable technology, particularly smartglasses, although so far, that kind of in-depth market research hasn't been done.

### The Smartglass Market

When it comes to commercial smartglasses, Google is one of the first innovators with its Glass Explorer program. In the Google+ Glass Explorers (2015) community, there were 46,519 users as of February 2015. Unfortunately, this community only represents a portion of the Explorers in the program. According to Sacco (2014) of *CIO Magazine*, an “admittedly unscientific” estimate of 10,000 Glass units were sold in 2012, and the program creators predicted they might have as many as 40,000 official users by the end of 2013. All totaled, it can be guessed that there may be around 300,000 Glass Explorers in the program. On January 15, 2015, Google notified its Glass explorers that they were closing the Explorer program on January 19. Several news channels and magazines, as well as the

online community responded by criticizing Google's decision and its Glass team. To be fair, Google never launched a commercial version of Glass; it was an Explorer “beta” version. It was always legitimate to test innovations such as Glass and other eyewear wearables before a mainstream market launch.

Early research found that most consumers prefer wrist-based wearables over eyewear and smartglass wearables (Read the Gownder & McQuivey (2014) study from *Forrester's Research*). If Google had developed Glass secretly, they would not have had such an excellent opportunity to examine current consumer behavior and explore the future of the eyewear wearable market. This Glass Explorer program gave early adopters an opportunity to explore this new technology and learn more about the future of wearables. Furthermore, Google paved the way for several start-up companies to develop cutting-edge wearable devices specifically designed for games, augmented reality, virtual reality, commercial use and personal use. In other words, this is the beginning of wearables (especially smartglasses), not the termination.

### Smartglass Preferences

The attendees at HITEC 2014 were given a demonstration of Google Glass and a research survey was conducted to explore consumer intentions to use and buy wearables. The results of this study are available online at *The Bottomline* magazine, Winter 2015 issue, “Are You Ready for Wearables” article by Aluri (2015).

As a Glass Explorer and researcher in wearable technology, I surveyed 708 respondents between March and November 2014. I asked individuals about their preferences and intentions to use Glass, and here are a few things I learned:

- 88 percent of the respondents said they were familiar with Glass;
- 5 percent of the respondents had already used Glass;
- If given an opportunity, 94 percent said they would like to try Glass;
- At the suggestion that the price was flexible or negotiable, a significant majority, 56 percent, said they would be willing to buy the device if it cost less than \$499;
- Regarding the battery life of Glass when used continuously with video capability, 37 percent of respondents said they were looking for eight hours or more of battery life;
- When using hands-free, voice command activated Glassware applications, 84 percent wanted to use Glass for directions, 82 percent wanted to take pictures, 76 percent wished to record videos, 73 percent planned to send messages, 69 percent would use it to place phone calls, 68 percent would have used it to search, 64 percent would use it to translate and 64 percent would use the device to stream live videos; and
- A 66 percent majority said they would be willing to buy Glass if it was commercially available.

These results reveal that a significant number of consumers are familiar with smartglass wearables, namely Glass, and are willing to try, use and buy them, if available. However, the respondents gave five main reasons why they wouldn't be interested in Glass and wouldn't buy it:

- Cost of the device;
- Glassware apps were not personalized enough or didn't offer features beyond familiar mobile apps;
- Battery life of the device;
- Not personally interested or uncomfortable using Glass wearables; and
- Privacy concerns.

### Going Mainstream?

When it comes to wearable computing, especially smartglasses, there is hope. Consumers are willing to try and even buy the devices, but only if they meet their specifications. Regarding costs, wearables can be designed with multiple price points, each with different battery life and memory options, so consumers can buy them based on their usage and budget. The challenges with wearable batteries continue to diminish as researchers make breakthroughs in nanotechnology that will phase out the lithium-polymer batteries in the market today. Several start-ups in the wearable industry are already offering alpha and beta versions of their own devices. The results of this study reveal that smartglasses should be fascinating, comfortable to use and the design should be subtle

enough that users are comfortable wearing them everywhere. One possible solution for overcoming privacy and security concerns about wearables, especially smartglasses, is a call for universal standards or laws to guide businesses that manufacture wearables.

Google provided an opportunity to examine consumer behavior regarding the use of wearables, which allowed both consumers and businesses to pinpoint their concerns regarding Glass and develop ethical and legal solutions to these problems. Looking ahead, the market for general and daily use wearable smartglasses is now open, and several sources have predicted that wearable computing will be a huge market. This May, Microsoft showcased its new wearable device, HoloLens, a holographic wear-

able computer that runs Windows 10, at the Build 2015 Conference. Now that it is an open competition, wearable smartglasses that can meet the everyday needs of the consumer may come from existing companies like AtheerOne, Aurasma, CastAR, EmoPulse, HoloLens, some future model of Google Glass, GlassUp, Icis, K-Glass, Laster Seethru, Magic Leap, Oculus, Ora-S, OrCam, Meta, Vuzix, or perhaps a new company we have yet to see. It will also be interesting to observe whether Apple Watch and other smart watches will change the future of smartglass wearables. Wearable technology is here, and it will continue to draw attention to itself in the market, until the right technology and device emerges that will improve the way we compute and use technology every day. \*

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