



"IT'S THE REAL WORLD – ONLY BETTER." –JAY WRIGHT, QUALCOMM

## Overview

Gen X was introduced to the mouse and keyboard. Gen Y mastered the touchscreen. Now Generation Z (See Curve Report, Volume 3) is going to have the opportunity to conquer the no-touch interface. Couple this with increasingly advancing facial recognition software, we will live in a world where interaction with technology is no longer characterized by 10 fingers, but the body as a whole; the human becomes the remote. Think X-men without the bad guys and big mansion.

Augmented Re-App-ity (AR) is the digital complement to real-world physical things. It's growth leaves consumers with the same power as before, but with a more seamless interaction. For example, imagine you're baking a batch of cookies and your phone rings. You know it's important. Do you rush to the kitchen sink to rinse off the cake batter and hope you can make it back before the answering machine? That's so 2012. Enter a world where answering the phone is done by waving your hand, a *no-touch interface*.

This newfound capacity for consumers to achieve more with less will revolutionize society into an age of multitasking similar to how baby boomers wondered how their kids could watch TV and do homework at the same time, and how parents today seem to constantly bespeak the ability for modern teenagers to simultaneously text, peruse the Twittersphere and write a research paper. However, the traditional idea of multitasking focuses more on a sort of mental juggling act. AR will introduce a physical aspect into the mix. This means interacting with your phone while baking, feeding the baby while writing an email, and putting together a presentation while brushing your teeth.

No doubt, much of today's innovations are a reflection of society's desire to perform more and more tasks at once. Researchers have long asserted that the satisfaction of multitasking isn't that people are actually getting more done. Rather, that people simply think they are getting more done. It is a psychological gratification. There are already things like Bluetooth and the iPhone app, Type n' walk, which supposedly lets people text while still being able to see the sidewalk and obstacles in front of them.

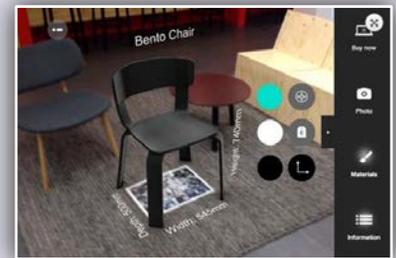
However, new technologies will take the concept of multitasking to a whole new level. For instance, The Google Glass is designed in a way where the digital screen is confined to only the top corner of the frame so as to not interfere with the physical realm. Commenting on this phenomenon, Google Designer Isabelle Olsson says "we created Glass so you can interact with the virtual world without distracting you from the real world."

Along the same lines, the new Samsung Galaxy S4 is outfitted with no-touch features such as adaptive screen scrolling and automatic video pausing based on the user's eye movements. And the new Eye Control TV by Chinese consumer electronics manufacturer, Haier, allows buyers to change the channel at the blink of an eye...literally. By erasing the physical aspect of actually holding the remote, consumers can allocate their attentiveness towards other tasks.

Similar to how Gen Z's ability to recollect past experiences will evolve as a result of digital photographic memory, AR will cause a universal rewiring of their minds to allow them to process more bits of information at a time. Cognition

By: Julio Stuart

## BRAND EXAMPLES



### Sayduck

*Sayduck* is an app optimized with Google Glass that allows users to see exactly what certain pieces of furniture will look like in their home. The consumer scans and prints a code specific to the item they are interested in. The app projects a scaled, customizable image right inside the user's home so shoppers can mix and match colors and styles.



### Samsung

The new *Samsung Galaxy S4* is equipped with several no-touch features. Smart Scroll tracks the user's eye movements allowing the phone to scroll up and down automatically according to where the user is looking. Along the same lines, Smart Pause detects when you fall asleep or look away from the screen while watching a video, and subsequently pauses it.

See Page 2 for more examples

will adapt to accommodate the shift towards the desire for increased productivity. Once these technologies switch from novelty gifts to widespread embrace, society will either attempt or succeed at becoming more efficient and connected consumers.

In late September, NTT Docomo, a Japanese mobile company unveiled their Translating Glasses catered to traveling restaurant-goers unfamiliar with the local cuisine and language. The glasses magically translate the indecipherable menu right before the user's eyes. While the company admits that the final product will not be consumer-ready until 2020, the sheer ability for this technology to be demonstrated, even at the proto-type level, implies a massive change right at our doorstep.

But quirky looking glasses aren't required when it comes to Augmented Re-App-ity. Many features of this technology can be exhibited simply

through mobile phones and tablets. For instance, the Nokia App, Internship Lens, lets job seekers point their phones towards a building to see within are hiring.

According to a study by Juniper Research, AR apps on mobile will produce revenues of nearly \$300M by the end of this year. The report goes on to say that by 2017, 2.5 billion AR apps will be downloaded annually.

Its potential lies in the fact that it is not industry specific. AR can span across all sectors, from travel and gaming to education and healthcare. The uses are (virtually) infinite. When the Internet was first introduced, critics asked "do we really need that?" Today, it is as ubiquitous as TV and radio, perhaps even more so. Augmented Re-App-ity is a natural (and inevitable) transition. The pioneers are going to be the brands who are not afraid to experiment.

**Implications**

- ❖ No-touch interfaces will allow society to enter new age of multitasking i.e. answering the phone while cooking.
- ❖ The traditional mouse-keyboard interaction will not be replaced, but rather, extended for more intuitive and intimate experiences. Brands will have to be more nimble and dynamic in developing new products.
- ❖ There will be no need to physical decipher the world. Perhaps the end of billboards as we know it?
- ❖ Mass adoption will depend on developers' ability to create interfaces that are smoothly integrated into consumer lives.
  - Current AR interfaces can seem a bit tedious. After the hype dissipates, pointing a mobile phone in order to access content may seem more like a chore than a convenience.
- ❖ Advancing technology will always be coupled with the issue of privacy (Google Glass allows users to record any conversation. As always, brands will have to keep consumer privacy in mind when implementing AR.
- ❖ There will be continued shift from advertising to "sponsored entertainment."



**Opportunities**

- ❖ Brands must be prepared to create more interactive, personal experiences for shoppers as the balance scale between online and brick-and-mortar continues to change.
- ❖ Companies should take small steps in implementing AR into their products. The game is not about the quick win, but rather about picking the low-hanging fruit before the climb. That being said, AR should be applied in an intelligent way, not simply because it's cool.
- ❖ Transform your shop window, catalogs, and packaging with AR to allow consumers to obtain supplemental content about the product.
- ❖ Use AR and location-based services to deliver hyper-local information and discounts.



**Haier**

The Chinese consumer electronics and home appliance manufacturer, *Haier*, has developed the Eye Control TV. Simply put, viewers are able to change the channel at the blink of an eye...literally.



**Oculus Rift**

The *Oculus Rift* is a game console worn entirely on the user's head. It has raised \$16M, \$2.4M of which were generated via Kickstarter. Developer kits are currently available, and the first consumer versions are scheduled to be released in Q3 2014.



**Heinz**

Users who have downloaded the free app, Blippar, can point their mobile phones to any *Heinz* Ketchup bottle and instantaneously access an interactive recipe book that appears to pop out of the bottle itself.



**Upload**

*Upload* uses webcam technology to scan a shopper's body and tell him or her how different articles of clothing will fit, right from the comfort of home.