WEARABLES IN RETAIL

Time to take action?
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THE EVOLUTION OF WEARABLES

It’s reasonable to say that wearable devices first caught the attention of consumers across America in the Dick Tracy comic strip in 1946, in which the title character wore a radio wristwatch. Later on the 1980s, the sci-fi television hit Star Trek took a more futuristic spin on wearables with Geordi La Forge’s VISOR. While technology has not quite caught up with our imaginations, wearable devices are closing the gap and have already evolved from a fringe accessory worn by Silicon Valley enthusiasts to something fashion-conscious millennial women embrace.

But just how big is the current market for wearables? An estimated 90 million wearable devices were shipped in 2014—from Google Glass to the Pebble Watch (ABIresearch, 2014). Some companies like FitBit and Jawbone have focused oncornering the health-conscious market; others, like Motorola’s 360 Watch and the Apple Watch, aim to appeal to the average consumer with unique or more convenient capabilities that current digital devices such as smartphones are unable to provide.

Corporations are also taking note and beginning to think about how they can leverage wearable technology, from customer experience applications to drive sales and brand loyalty, to operational applications aimed at increasing productivity and efficiency. Key recent trends point to the fact that wearable devices will continue to grow in importance and materially impact retail.

1. Design - Fashion forward

At the 2015 Consumer Electronics Show in Las Vegas, Intel challenged fashion designers to incorporate its new Curie, a microcomputer the size of a button, into their designs. A few major fashion labels have already experimented with wearable devices and this trend will continue. Tory Burch partnered with FitBit to create a series of enclosures for its popular wearable device, helping transform an otherwise geeky clip-on into a fashion-forward necklace. Highly esteemed fashion house Ralph Lauren took its foray into wearables a step further with its Polo Tech shirt, which measures athletic exertion using sensors knitted into the core of the product (Corporation, Ralph Lauren, 2014). The shirt feeds data into a proprietary phone app, which shows that Ralph Lauren has placed a huge bet on creating a more meaningful customer experience. Google Glass has partnered with Italian eyewear maker Luxottica to design a new version of the product, which will allow Glass to capitalize on the latest fashion trends (Mesco, Wall Street Journal, 2015). These luxury brand expansions into technology not only increase the value of their products, but also captures valuable customer data that can be mined for building better customer experiences.

The collaboration of major designers will most likely make wearable devices more appealing to the average consumer that doesn’t want to sport cyborg-like appendages. The fact that some retailers have embraced wearables—offering products that leverage or accessorize them, is a sign that companies are already thinking about how wearables fit into their overall digital game plan. The entrance of a plethora of top designers into the wearables space also signals that the market is evolving to serve customers at a variety of different price points.

2. Affordability - Lowering the barrier of entry

Much like the cost of smartphones has dropped as more players entered the market, the same is currently happening with wearables. Products like Misfit Wearables Shine and entry-level FitBit sensors hover around $50. Mid-market products like the Jawbone UP device lineup fall into the low to mid hundreds and “luxury” wearables like Intel’s MICA bracelet retail for almost $500. Google Glass, priced at $1,500 during its Glass Explorer days, proved too costly for most consumers and are no longer available to the public. Apple has launched three different models at price points for $349, $549 and over $10,000, which will allow the company to capture a larger and more diverse customer segment.

Affordability’s role in helping drive mass adoption will also result in a larger customer base and aid in creating a richer app ecosystem. As wearable utility continues to improve, the devices will graduate from “expensive novelty” to “can’t-leave-home-without-it”.

3. Power - Tackling the battery issue

Short battery life has been one of the major challenges of wearables and plagued high-profile devices like Google Glass. Unlike phones, which are still functional when recharging during daytime hours, wearable devices are unavailable to consumers when docked, interrupting the immersive experience.
experience. Improvements in both software and hardware are extending the battery life of wearables, allowing consumers to use them for more tasks, more often.

While better batteries are being developed, companies are experimenting with other battery-saving approaches in the interim. For example, Jawbone released a firmware update doubling its band’s battery life from 7 to 14 days on a single charge (Chakravarthula, 2014). By allowing consumers to wear its device for as long as possible, the company is most likely hoping to decrease the number of consumers that abandon the device due to non-wear. Wearable-specific hardware like Intel’s low-powered Curie SoC (system on chip) aims to efficiently service “always on” applications (Intel, 2015). This means more efficient use of existing battery life, which is crucial considering most smart watches promise to display calls, texts, calendar appointments and other daily tasks that will take a toll on battery life throughout the day.

While these software and hardware advancements are small, they go a long way in helping wearables become more useful and ubiquitous.

4. Functionality - More robust features

The first wearables that gained popularity were merely glorified pedometers that tracked a user’s steps per day. These fitness wearables gradually expanded their feature set to include sleep tracking and even heart rate monitoring. However, as more smart watches enter the market, these small fitness devices will be replaced by more fully featured products that include email, voice commands, navigation and sophisticated applications. Nike is betting its digital strategy on its Nike+ running app for Android’s Google Fit and the Apple Watch and no longer on its own device, the Fuel Band, which it discontinued in 2014. Instead, it will focus on bringing the Nike+ phone app experience to a more natural view on the wrist through more powerful smart watch devices. Target is also leading the way for Apple Watch retailer adoption with an Apple Watch app for customers to create shopping lists and use location technology to find products in the store (Johnson, 2015).

This more immersive experiences will likely draw in consumers previously uninterested in wearables and provide a new platform for retailers to reach customers and even improve their day-to-day operations.

This is perhaps the biggest reason retailers should start thinking about wearable technology. Much like Ralph Lauren is using sensors to create a richer customer experience with its products, the marketing potential (think real-time coupons based on where customers linger in a store) and ability for users to have another screen for retail exploration, will entice retailers to creatively to incorporate wearables into their ecosystem.

### Additional Deloitte Research on Wearable Technology

- Wearables: The Eyes Have It
- Wearable tech and a healthier workforce
- Tech Trends 2014: Wearables
- The truth about wearables: What they are (and aren’t)
- Wearable technology and human performance

### THE IMPACT ON RETAIL

Wearable adoption by consumers will open up new and innovative ways for retailers to improve the customer experience. In addition, the unique features of these devices (e.g., hands-free operations) make them a great candidate for applications in the retail operations space.

We envision two big impacts of wearables on the retail industry: Improving the Customer Experience and Transforming Retail Operations.

1. Improving the Customer Experience

In response to the popularity of wearables among key consumer groups, retailers are starting to place a greater emphasis on leveraging wearables to improve the customer experience.

a. In-Store Shopping Experience

One of the more impactful changes driven by wearable devices will be improvement to the in-store shopping experience. The potential of the smart watch has opened up a new spectrum of applications, which directly impacts retail.

Apple’s entry into the payments space with Apple Pay on the Apple Watch will provide a boost to the mobile payment ecosystem. This trend has the potential to disrupt traditional electronic payment mechanisms.

Apple Watch and Apple Pay
Leading thinkers in the industry are envisioning an environment where a customer can walk into a store, pick up what she wants and simply walk out, without the need for checking out, facilitated by technologies such as RFID and mobile payments.

This will result in a future hands-free shopping experience in which the entire journey—from browse to buy—is completed through a wearable device. This means women are no longer digging through their purses to find their wallets or phones and men can leave theirs tucked away in pockets or briefcases. These small time savers will eventually create an expectation that anything from boarding a plane to buying a cup of coffee should be done with a tap on the wrist. When a customer’s favorite wearable app is not available, the corresponding experience will seem like grave inconvenience, as consumers grow to demand immediate and efficient experiences as the status quo.

A slightly less mature, but fast upcoming area of impact will be driven by line-of-sight wearables, such as Google Glass, Epson Moverio, Microsoft Hololens and Vuzix M100, which will allow retailers to provide customers with an improved visual in-store experience. Some potential initial applications are highlighting on-sale or popular products and providing navigation capabilities for customers looking for a product within a store.

b. Personalization and Real-time Marketing

Consumer’s wide-scale adoption of wearables has the potential to disrupt visual advertising, which will evolve from static to personalized messaging aimed at drawing higher foot traffic to retail stores.

Personalized marketing will be enhanced through visual messaging or targeted offers and coupons based on the data obtained from consumer wearable devices. The simplest application of real-time marketing will be to notify customers of ongoing relevant promotions on their wearable devices as they walk near or into a store.

Dynamic messaging will utilize available data such as customer location within the store, products in line-of-sight, visually displayed barcodes and the like, to display customized messages and offers to shoppers.

Retailers are also experimenting with technology that allows them to determine customers’ profile information or purchase history by synchronizing with their wearable gadgets and then displaying customized messages based on their vicinity to visual displays. Nike recently showcased a large in-store display that used data from a Nike Fuel band or a running watch to synchronize with a customer’s purchase history and workout habits and helped the user pick out the right type of shoes for their needs. Nike has since expanded its application to the Nike+ running app for Android’s Google Fit and the Apple Watch.

Improvements in technology such as Apple’s iBeacon will allow retailers to synchronize with wearable devices and monitor a customer’s location within a store. Wearables open up a new frontier for valuable data collection that retailers will be able to use for continuous customer service improvements.

2. Transforming Retail Operations

Judging from pilot rollouts of wearable technologies by large retailers, improvement in retail operations is taking a back seat to customer experience, but it still has very useful applications. Wearable technology is projected to drive potential operational savings of $18 per year by 2017 (Rivera, 2013). Much like Fortune 500 companies ranging from GE to PepsiCo have embraced enterprise mobile apps, wearables could present the next big enterprise opportunity in the retail industry.

As wearables become more robust, and specialized technology is developed for enterprise applications, the potential to transform operations across the value chain will increase significantly. This will spur adoption by enterprises, which will seek to gain a competitive edge by streamlining internal operations.

a. Streamlining Communication and In-store Collaboration

A crucial factor to run an efficient retail store is seamless communication among employees. Wearables are being used to streamline the way employees communicate within and beyond the store. The Container Store is utilizing a wearable computer manufactured by Theatre that enables in-store and cross-store communication. The device also facilitates location triangulation of employees. In addition to providing a simple, hands-free communication medium, data collected from the device can be used for timework studies and better understanding employee interaction patterns.

b. Store Layout and Backend Efficiency

Another crucial factor for retail store efficiency is the effective use of space, such that customers can easily navigate the store and locate the products they are looking for. Line-of-sight wearables like the Epson Moverio, Google Glass or virtual reality devices such as Microsoft Hololens and Oculus Rift will revolutionize layout planning, enabling planners to visualize merchandise set-up and optimize space utilization to maximize sales per square foot of selling space. The Epson Moverio allows a user to ‘see’ how a showroom layout will look based
on a blueprint uploaded into the device. With the increasing maturity of virtual reality devices, wearable devices may become the new normal for retailers to visualize store layouts. Store associates could also use wearable technology to efficiently locate products for customers in large stores.

On the backend, wearables provide employees with hands-free access to information such as assigned tasks and completed activities, so that they can be more efficient and planning can be optimized. Wearables can also provide easy access to interactive step-by-step instructions for task completion and connectivity with remote team members and help-desks for support, leading to continuous improvement in back office and warehouse operations.

CONCLUSION

It is beyond any doubt that wearables are more than just a passing fad. The wearables market is fast maturing with new entrants coming in, improvements in products on offer and customer adoption on the rise. The intimate and non-intrusive nature of wearables combined with consumer expectations to complete activities as easily and as fast as possible will continue to fuel adoption and growth.

Forward thinking retailers must incorporate this change in consumer behavior and align their customer experience strategy so they are positioned to meet the needs of evolving customer expectations. Retailers should consider investing in pilot programs and proof of concepts to test specific use-cases for the customer and the enterprise. These pilot programs will help retailers gain valuable insights into the impact of wearables to their end user experience, impacts to their business processes, the ability of their own ecosystem to integrate with such technologies and need for internal and external skills to scale up.

As with any disruptive technology, the key to success is to fail fast, learn quickly, and continue to optimize. Retailers with insights into wearable driven capabilities will be able to quickly deliver relevant experiences for their customers and employees as the market evolves. Retailers who are already thinking about wearable technology could potentially capture market share from their competitors and also drive large operational efficiencies in the near future.

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About Angad
Angad is a digital specialist, focused on helping retail organizations envision and implement next-generation business capabilities. His experience spans across design, technology selection, platform implementation, marketing and process optimization in complex omnichannel environments.

In working with a large technology company to help them take their wearable device to market, Angad became fascinated with the possibilities of how wearable technology can influence the retail environment in the future.

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As a digital strategist, Laura is focused on helping companies leverage technology to disrupt and ultimately transform their business—whether through eCommerce solutions, web portals, or enterprise mobile applications.

Laura first became fascinated with wearable technology after hearing the CEOs of Jawbone and Basis talk about their wearable devices at the 2011 GE Health Summit. She is a proud owner of an Apple Watch.
REFERENCES


