

Industry Analysis: Wearable Fitness and Wellness Technology

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The following white paper will give an overview of the rapidly growing wearable technology market, with a specific focus on devices in the fitness and wellness category. Wearable technology has been utilized by the military for many years in uniforms and on helmets, but mass market appeal did not come about until companies were able to apply the same technology to cost-friendly consumer products.¹ According to ON World, a global technology research firm, 1 in 5 Americans will own some type of wearable technology product by 2015.² People are finding numerous ways to incorporate wearable technology into their daily lives.

For a device to be classified as wearable technology, it must be capable of processing and communicating a user's data and ultimately benefit the user's experience.³ There are a number of categories of wearable technology that include healthcare and medical, infotainment, industrial, and military.⁴ This paper will be narrowly focused only on the fitness and wellness sector, because it is currently the most popular category of wearable technology.^{5,6}

Products in the fitness and wellness category, must be capable of monitoring "activity and emotions," this includes products such as activity monitors, heart rate monitors, pedometers, smart clothing, and sleep sensors.⁷ The Fitness and wellness industry experienced a 10% growth in revenue in the last three years and forecasts show continued growth. The increased interest in personal health helps explains why wearable fitness technology, which helps users understand their own bodies, has achieved mass market success.⁸ Demand for the technology is coming from a number

¹ TMC. (4). Fitness and Sports Wearable Technology Expo II Reveals Agenda Filled with Latest Trends, Tech and Demos. In *Business Wire (English)*. Retrieved from Ebsco.

² PR Web. (2014, April 30). ON World: 1 in 5 Americans will own a wearable technology product by 2014. In PR Web. Retrieved from <http://www.prweb.com/releases/2014/04/prweb11803485.html>.

³ IHS Electronics & Media (2013, Sept.) Wearable Technology – Market Assessment: An IHS whitepaper. In *IHS Electronic Media*. Retrieved from <http://www.ihs.com/pdfs/Wearable-Technology-sep-2013.pdf>

⁴ IHS Electronics & Media (2013, Sept.) Wearable Technology – Market Assessment: An IHS whitepaper. In *IHS Electronic Media*. Retrieved from <http://www.ihs.com/pdfs/Wearable-Technology-sep-2013.pdf>

⁵ PR Web. (2014, April 30). ON World: 1 in 5 Americans will own a wearable technology product by 2014. In PR Web. Retrieved from <http://www.prweb.com/releases/2014/04/prweb11803485.html>.

⁶ Walker, S. (2013, April 30). Sports and Fitness Monitors Report – 2013. In *IHS Technology*. Retrieved from <http://technology.ihs.com/425914/sports-fitness-monitors-report-2013>.

⁷ IHS Electronics & Media (2013, Sept.) Wearable Technology – Market Assessment: An IHS whitepaper. In *IHS Electronic Media*. Retrieved from <http://www.ihs.com/pdfs/Wearable-Technology-sep-2013.pdf>

⁸ PR Web. (2014, April 30). ON World: 1 in 5 Americans will own a wearable technology product by 2014. In PR Web. Retrieved from <http://www.prweb.com/releases/2014/04/prweb11803485.html>.

of different types of consumers including professional athletes, the recreational fitness community, disease patients and corporate wellness programs.^{9,10}

Fitness and wellness technology is popular because it is changing lives on a personal level, as it empowers users to learn and track more about their own body's needs and abilities.¹¹ Ultimately the technology assists all types of people reach their own health goals. The most common metrics tracked with fitness and wellness devices include: distance, calories burned, targets, speed, heart rate, and time elapsed.¹² The major devices driving the industry are: Nike+ FuelBand, Fitbit, Pebble, Sony Smartwatch, Jaybird, Casio G-Shock, netamo, LG Lifeband Touch and MIO.

The market is quickly becoming saturated, as companies in the fitness and wellness industry are in an “arms race” to attempt to enter in and make their mark.¹³ For example, Under Armour recently purchased MapMyRun and MapMyRide for \$150 million to compete against industry giants like Nike.¹⁴ The latest company to announce entry is Apple, who has reportedly sent the long awaited iWatch into production.¹⁵ The most common type of fitness and wellness wearable is a watch style product, but electronics have also been implemented into clothing, ear buds, jewelry, and eyewear.¹⁶

In some cases this technology is shifting beyond just wearables to “body-adaptable” technology.¹⁷ There are now tattoos tracking health vitals and shoes emitting GPS direction through vibrations. In a sense, this technology is blurring the boundary lines between humans and technology. The newest generations of products are designed to be less intrusive and conform to the shape of the human body. For companies to achieve significant success they must continue to create less-intrusive products that consumers can easily incorporate into their lives, but also differentiate themselves and

⁹ Walker, S. (2013, April 30). Sports and Fitness Monitors Report – 2013. In *IHS Technology*. Retrieved from <http://technology.ihs.com/425914/sports-fitness-monitors-report-2013>.

¹⁰ IHS Electronics & Media (2013, Sept.) Wearable Technology – Market Assessment: An IHS whitepaper. In *IHS Electronic Media*. Retrieved from <http://www.ihs.com/pdfs/Wearable-Technology-sep-2013.pdf>

¹¹ TMC. (4). Fitness and Sports Wearable Technology Expo II Reveals Agenda Filled with Latest Trends, Tech and Demos. In *Business Wire (English)*. Retrieved from Ebsco Host.

¹² IHS Electronics & Media (2013, Sept.) Wearable Technology – Market Assessment: An IHS whitepaper. In *IHS Electronic Media*. Retrieved from <http://www.ihs.com/pdfs/Wearable-Technology-sep-2013.pdf>

¹³ Moor Insights & Strategy. (2014, Jan. 18). CES Fitness Tech Trends. Retrieved from <http://www.moorinsightsstrategy.com/wp-content/uploads/2014/01/CES-2014-Wearable-Sports-Fitness-Tech-Trends-FINAL.pdf>.

¹⁴ Hempel, J. (2013, Nov. 16). With acquisition, Under Armour muscles into wearable tech apps. In *Fortune.Com*. Retrieved from Ebsco Host.

¹⁵ Strange, A. (2014, April 29). Apple iWatch Already in Production, Report Says. In Mashable. Retrieved from <http://mashable.com/2014/04/29/apple-iwatch-production/>.

¹⁶ PR Web. (2014, April 30). ON World: 1 in 5 Americans will own a wearable technology product by 2014. In PR Web. Retrieved from <http://www.prweb.com/releases/2014/04/prweb11803485.html>.

¹⁷ Afeyan, N. (2014, Feb. 26). Top Ten Emerging Technologies in 2014. In World Economic Forum. Retrieved from <http://forumblog.org/2014/02/top-ten-emerging-technologies-2014/#wearable-electronics>

find a distinct target market for their product¹⁸ Continued acceptability and adoption of wearable fitness and wellness technologies will also depend on the privacy and security of these devices.¹⁹

All wearable devices produce vast amounts of data and it will be up to consumers to decide if they're willing to enjoy the benefits to compromise privacy.²⁰ Although some consumers might believe these devices are only tracking body data, each device transmits data to the specific manufacturer of the device. This information can then be recorded and even resold to 3rd parties for profit. It will be up to the consumer to decide how much personal privacy they are willing to exchange for the benefits given by wearable technology.²¹

Fitness wearables are expected follow the same explosive growth and high adoption rates as smartphones and tablets in the next five years.²² Some researchers are apprehensive about the initial forecasts predicting \$2.1 billion in revenue for 2017.²³ Although the predictions may seem "unrealistically high" to some, the overall positive consumer outlook toward the technology bodes well for the sector.²⁴

¹⁸ Afeyan, N. (2014, Feb. 26). Top Ten Emerging Technologies in 2014. In World Economic Forum. Retrieved from <http://forumblog.org/2014/02/top-ten-emerging-technologies-2014/#wearable-electronics>

¹⁹ Afeyan, N. (2014, Feb. 26). Top Ten Emerging Technologies in 2014. In World Economic Forum. Retrieved from <http://forumblog.org/2014/02/top-ten-emerging-technologies-2014/#wearable-electronics>

²⁰ Woda, Tim. (2014). Privacy & Wearable Technology: How much privacy will connected consumer have to trade for the convenience of wearable devices? Retrieved from http://www.uknow.com/wp-content/uploads/2014/03/Location-Services_White_Paper.pdf.

²¹ Woda, Tim. (2014). Privacy & Wearable Technology: How much privacy will connected consumer have to trade for the convenience of wearable devices? Retrieved from http://www.uknow.com/wp-content/uploads/2014/03/Location-Services_White_Paper.pdf.

²² PR News. (2013, September 2). Global Wearable Technology Market 2013-2018: Smartwatches, Tech Clothing, AR Glasses, mHealth, Fitness & Wellbeing. In *PR Newswire US*. Retrieved from Ebsco Host.

²³ Patrick, S. (2014, April 4). Wearable device market 'overhyped,' researcher claims. In *Investors Business Daily*. Retrieved from Ebsco Host.

²⁴ Patrick, S. (2014, April 4). Wearable device market 'overhyped,' researcher claims. In *Investors Business Daily*. Retrieved from Ebsco Host.