Will Wearable Technology be the future of computing?

Wearable technology has always been a thing of "the future". The dreams of such a technology are seen from sci-fi movies [1,2] to scientific papers [3,4] and this dream is slowly starting to be part of the "present". With the release of the GoPro [5] video recorder and the Nike+iPod [6] fitness tracking device wearable devices are now being used by consumers worldwide. This essay will focus on the question if wearable technology is actually the future of commercially used devices.

Smartphones have become a daily part of everyone's life, a computer they always carry with them to help them throughout the day. As people become more dependent on technology they require easier access to it, and the best way to do that is using wearable technology. Introduction of "smartwatches" allowed the user to get fast and quick access to various applications as well as information from their phone [7,8]. To improve this constant access to data, Google developed the "Glass" which is a pair of spectacles designed to create an augmented reality. It constantly displays relevant information through a lens on the upper right. [9] Such a device however is not feasible in the current age, because of the invasion of privacy created due to the device's ability to constantly record. [10] On a survey done by Toluna [11] it found that 72% of Americans say no to Google Glass because of privacy concerns [12].

Although a large part of wearables is its usability, it needs to be fashionable for people to truly adapt to it. The Bluetooth earpiece fell to the problem of not being worn or used because it wasn't socially acceptable. [13] Glass has fallen into the same problem of being useful but not socially acceptable to wear. Companies such as Misfit Wearables are working on making devices that can be worn in different "fashionable" ways. Such as the Mistfit Shine, an activity tracker made to be implemented into wristbands and necklaces. [14] Similarly a company called "Ringly" [15] has created rings which alert you about notifications on your phone, the selling point of these rings being that they don't look like a device but rather just look like jewellery [16].

The selling point for smartphones were their functionality and how they made living daily life easier; for wearable technology to succeed the same way smartphones did it would require more than just fitness apps and good looking designs. Realising this idea Swatch have added NFC payment to their smartwatch, this in addition to the possibility of opening hotel doors, locks allows the user to pay at stores using just their watch [17]. Military/Security services also have applications for wearable technology such as Zephyr BioHarness which is developed to provide fast and accurate collection of physiological data in combat situations [18]. It can be used to monitor soldier's health and assess any possible damage to them in a vital combat mission. Companies such as MC10 using military contacts are developing solar cells that give an alternate source of energy for soldiers to use under long missions. [19]

With such advances in wearable technology, it's not impossible to imagine a world where wearable technologies are the future. And while it may take time for the world to adapt to wearables, it has a huge chance to be as big as the smartphone.

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