

Future Wearable Devices

Executive Summary

Wearable devices have attracted considerable attentions recently after the age of the Internet and smartphones. As a type of smart devices, wearable devices share the common property as smartphones and PCs but make significant improvements on portability. In today's market, there are plenty of wearable devices coming out from almost every technology company, which as a result are tending to influence individuals' life to a great extent. In this project, we researched the development history of wearable devices and looked into the wearable devices in the current market. After analyzing two business cases we proposed our own recommendations and provided some future actions for the companies in this field.

The first product introducing the "wearable" idea appeared in the year 1961, at which time a MIT professor Edward Thorp invented a portable computer to help him cheat in roulette. After that time, the idea kept expanding and due to the technology evolution, the recent explosion of wearable devices made the wearable age we have today. In today's market, the products are designed and manufactured for different purpose, by which we classify the products into three categories: fitness and health, entertainment and work. After the classification we evaluated the impacts upon both scientific field and daily life. Moreover, some of the advanced technology applied was discovered and discussed.

In order to understand the market and the wearable principle, we researched two cases in the market: i) GoPro; 2) Google Glass. We compared the products from the aspects of design principle, target customers and marketing strategies, the evidence of which were analyzed to provide instructions and information for us to give recommendations.

Based on our research of the current wearable devices and business case studies, we gave our own recommendations and designs for the future companies to follow, which consisted of three steps: 1) idea discovery; 2) technology identification; 3) business

strategy choosing. From our point of view, it was extremely important in the upfront phase that the company identified the target customer and had the right idea to form the design principle, in which case we proposed a deaf-mute communication system for people with disability to communicate. Then we discussed in detail the potential technology that could be applied in the future products and finally analyzed business strategies including positioning and diffusion.

Ideas, appropriate technologies and business strategies are all essential for companies to succeed, and the lack of any factor could result in a bitter failure. In order to survive the cruel market, not only should the company consider the current balance of these key factors to sustain, but also the future improvement of the factors to disrupt. The wearable devices surely have strong potentials in the market which are both challenges and opportunities for the future companies, and they should follow the steps to achieve the success.