

6. Human Factors Methods



Personal Immersion

Prior to putting the product in the hands of users I tested it myself in various situations - walking places, during several pole fitness classes (avg. 1.5 hr workout) and wearing it all day -- to get a good overall feel for using it. I felt it was important for me to fully understand the product, how I used it and its shortcomings before giving it to others.



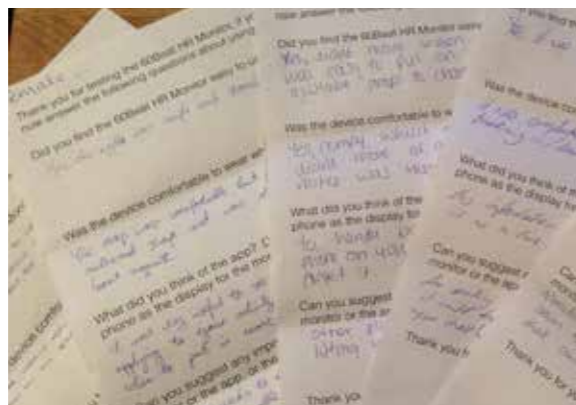
Survey (see Appendix 1)

In order to find out more about my user group I sent out a survey to members of the GUPDC. I wanted a way of gaining a quick response to gain a better understanding of my user. Although the response was quite poor I still gained useful insights. I found that 90% would be interested in using a heart rate monitor during their workout.



Rival Product Testing/ Comparison

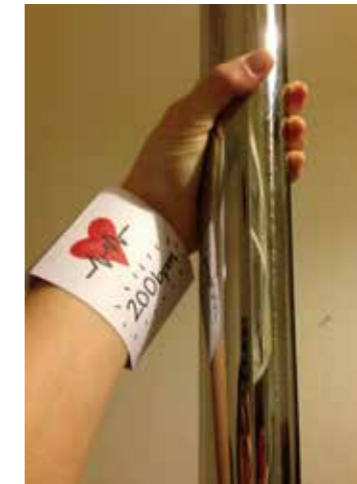
I also tested the Wahoo Fitness Blue HR heart rate monitor with my users to see if a higher priced rival product displayed the same usability shortcomings as the 60beat. In fact the product was extremely well designed shown by how my users interacted with it easily without instruction. See page 6 for my findings from this comparison.



Usability Testing/ Ethnographic Observation

I conducted a usability test with my user group to see how they interacted with the product, what they felt was good about it, and where they felt the issues were. Each user was given the product to test over a 30 minute period in which they engaged in either a warm up and meta-fit style workout or varying skill levels of pole fitness. I observed them over the time and at the end of the test they were asked to fill out a short questionnaire about their experience, containing directed and open questions.

I found that what people wrote in the questionnaire wasn't necessarily what they actually did. For example one user put that they liked the fact that the app gave you a 'live feed' of your heart rate. However whilst using it they had the phone sitting out of the line of sight so had to repeatedly walk over to it to see what their heart rate was, which is inconvenient and a 'live feed' is no use if the person can't see it easily.



Iterative Testing/ Prototyping

After sketching out ideas for proposed changes and consulting with users, I made a sketch model and modified the original heart rate monitor to try and better visualise the ideas to present to users. By letting them try on the wristband I was able to find the optimal position for the screen and see if it would interfere with the pole. We found that for it to work best, it would have to be as flush to the wrist as possible.