

# MARKETING RESEARCH AND DESIGN METHODS

## ASSIGNMENT 1 REPORT GROUP 11

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# 1. WHAT DID WE FIND?

At the start of the course we got the opportunity to try the Miband for ourselves. The first thing that stood out about the band was its minimalistic design. It consists of a simple rubber band that holds the actual device, a small oval aluminum bar with 3 small led indicator lights on it. The Band fits nicely and does not stand out too much, but putting it on was a bit of a struggle because you use only one hand.

The device uses Mifit app to connect to your phone. Connecting the device is very easy and got us started in no-time. The app however is not very user

friendly as it is very chaotic. The “status” tab shows a lot of different information ordered in a counter intuitive manner. The “Activities” tab works nicely for the four activities shown. The app has another function called “behavior tagging” which can be found in the “Profile” tab. This is a strange feature as it seems to be no more than a timer for a lot of different activities, the app does not have the ability to share data to your desktop for in depth analysis. However, the device manages to give the feeling that you are in touch with the processes in your body.

# 2. WHO IS OUR TARGET GROUP?

For some people starting to workout is a large threshold, not due to lack of motivation, but due to lack of confidence. These people are chosen to be the target users of our product. Main characteristics that they share are: fear of failure, lack of physical skill set, insecure to join a sporting team/gym. This user hopes to build self-esteem, cut down the unhealthy habits and improve his social skills by working out, but can't gather the confidence to start. This aspects most oftenly are typical for students. The persona which we created to represent our target user can be seen at Appendix IV.

## *Coaches*

Due to the sensitivity of the topic, we couldn't face the user directly because the user might give bias information. That is why we had to initially interview an expert observer of the target user: a sport coach. We interviewed Susan Lambriks and Ramses Rongen. Susan is a coach and personal trainer at the Student Sports Center TU/e (SSC). She manages a organisation focused on working with people that fall in our target group. Ramses is a squash coach, also at the SSC.

Susan Lambriks shared with us that as a coach she also encounters the psychological aspects of the profession. She is not a psychologist, but has to support people mentally when she recognizes psychological problems that people can't deal on their own. The most shocking result from this interview is that the students she mentors used to sit for 12-15 hours per day. Which shows that the students are unaware of the health risks that they are taking simply by studying.

Ramses Rongen fits in the more the traditional image of a sports coach, but also gave us useful insights such as that the students are often struggling with some personal problems, which can for example be related with stress or school problems. Most of them are sent by psychologists to the sport center because they have such a negative self-image that they believe to be less than everyone else.

# 3. WHAT DID THE USER FIND?

We found a high school student who matched our profile and wanted to participate in our research. We asked him to use the Miband and track his daily activities, afterwards we asked him a few questions about the experience which can be found in appendix III.

He follows the most difficult form of dutch high school education and spends a lot of time studying. He is a bit insecure and finds it difficult to be social and make friends. During his school days, he is often very tired. He works out sometimes, but wants to be more active in order to lose weight and get in shape. He shared that reminders and exact progress results would motivate him to do sports

more often.

The student mentioned he got really motivated by the band and actually choose to exercise after school when he had not reached his goal yet. We also asked him what he found of the new design of the app. He really likes the fact that a virtual coach helps to motivate you, which also gives sport suggestions. The fact that the app enables you to pick a coach to your liking makes him more open to his advice. He also mentioned that the coach should be there to motivate during exercises as well to motivate you and push you to the limit.

# 4. CUSTOMER JOURNEY

Figure 1, which can be found in appendix I shows the many aspects of the buying process and usage for the selected target group. One of those aspects is the emotional experience, giving indications in how their mood can influence their decisions. For example: satisfaction after receiving and using the product increase the likelihood of the customer buying the next generation of the product.

Figure 2, which can be found in appendix II, shows one day in the life of the target user, with their moods during the performed activities and an

explanation. At 15:30 the user indicates that he knows he should be exercising, which means the awareness is there, but he still delays the exercise half an hour. At this moment of the day the user can easily be motivated to perform his exercises, since the awareness is already there. The redesign of the Mi Band will achieve this motivation through the new sport dating function, the virtual coach and the motivation through self-competition. How this motivates the user will be stated later in part 8 on page 6 of the report. 16.00 is the decision point at which he decides to start exercising.

# 5. DESIGN METHODS

In order to get knowledge about how to improve the Mi band, different kind of methods have been explored and applied. Firstly, two interviews were conducted with the coaches involved with the specific user group to create a new and better understanding of the problem space. This gave some very interesting and useful insights of the target group. Furthermore, the user was asked to try out and experience for two entire days the Mi band and write

down relevant information, thoughts, problems encountered during the process. This was written in a diary in order to have an overview of every reason, motivation or thought of the user about taking decisions. The diary and the tryout for two days gave enough information to create a customer journey. This guide the improvement of the design and the addition of several functionalities.

# 6. HOW DID WE CHANGE THE BAND?

For the Mi band, only the app has been improved by introducing a few functionalities.

When starting the app, the user gets a motivational interview and afterwards a coach can be chosen based on the coach's characteristics. He or she will follow the user during the entire process, giving most of all motivational support besides the physical support.

The app consists of three different tabs, a coaches tab, a progress tab and a matching tab.

The coaches tab gives the opportunity to interact with the coach, get motivational support and share personal problems.

The progress tab shows a kind of competition with the user itself, since these kind of students would mostly feel intimidated by a group competition.

Instead, frequent notifications such as "hey you improved 10% this week" would be very motivating. Also, from the interviews resulted that students like to see graphics about their progress.

For this reason, a weekly graphic progress is shown. To conclude, these students find it often difficult to choose a sport because there are many different sports available. For this reason, we created the app in a way that it works similarly to a dating matching app. So there is a tab where they can click on their interests and based on how many individual or social activities are selected, the system will suggest to the user when there is nearby a training or tryout available which matches.

The pictures in appendix V show the three different tabs of the improved app.

# 7. WHY DID WE CHANGE THE BAND?

We have changed the app of the mi band for multiple reasons. We have changed the app such that people can get psychological support too start and keeping sporting. Users, especially users with a low self-esteem need psychological support. Research shows multiple groups such as youth swimmers [1] or rehabilitating athletes[2] need the psychologic support. We found that this is also the case for students with a low self-esteem. Secondly we removed the peer competition and introduced the competition with the user itself. We found that the user is not interested in sharing his progress, because he is

insecure about it. Thirdly the user is unaware about the possibilities too sport and were to start. This is easy to solve by giving more information about this. As mentioned before the user likes to know the progress he makes every day, we make this visible. While research has not yet decided whether apps such as the Mi Fit are helping to promote a healthier lifestyle [3] It is known that "Frequency of activity and changes in physical fitness, body fat, and self-efficacy were related to improvements in esteem perceptions relative to attractive body, strength, and physical condition "[4].

# 8. HOW DOES THIS MOTIVATE THE USER?

The mi band and the app mi fit do motivate the user by the personalization of the introduction of the coach in the app. This Coach is the same coach as in the sport centre and therefore the user can feel the personal link with the coach. This virtual coach in the app also gives the psychological support that the user needs to start and keep getting motivation to sport. Thirdly, the exact progress result give a

good insight in the physical behavior of the user. This helps the user to get a better self-esteem [4]. As last the app helps the user to find a sport that suits him. So the user could find peers in sports that will motivate him to go. We know that peer pressure is one of the big influencers of the body self-esteem of the user[5], but this could also help the user to build a more healthy self-esteem.

[1] Coatsworth, J. D., & Conroy, D. E. (2006). Enhancing the self-esteem of youth swimmers through coach training: Gender and age effects. *Psychology of Sport and Exercise*, 7(2), 173-192.

[2] Robbins, J. E., & Rosenfeld, L. B. (2001). Athletes' perceptions of social support provided by their head coach, assistant coach, and athletic trainer, pre-injury and during rehabilitation. *Journal of Sport Behavior*, 24(3), 277.

[3] Naimark, J. S., Madar, Z., & Shahar, D. R. (2015). The impact of a Web-based app (eBalance) in promoting healthy lifestyles:

randomized controlled trial. *Journal of medical Internet research*, 17(3).

[4] McAuley, E., Blissmer, B., Katula, J., Duncan, T. E., & Mihalko, S. L. (2000). Physical activity, self-esteem, and self-efficacy relationships in older adults: a randomized controlled trial. *Annals of Behavioral Medicine*, 22(2), 131-139.

[5] Sheldon, P. (2010). Pressure to be perfect: Influences on college students' body esteem. *Southern Communication Journal*, 75(3), 277-298

# 9. MARKETABILITY

Miband has the lowest price of the whole range of body tracking bracelets. So Miband has low competition when it comes to price. As students tend to live a more economic lifestyle, this aspect brings Miband to the front when choosing a body tracking bracelet on budget. It would be more appealing than other products as the cost and the purchase risk are low. Added to this, the Mi band, gives great psychological value through providing support and motivation for progress. The product has good

marketability and is appealing to the students. It would get much better reach to the target user in 2 possible ways. The first one is getting promoted as a product supported by the educational institution. For example, the way TUE supports HP laptops and provides them at better price to students. Another approach would be to recruit coaches or therapists to promote the product to their students/trainees.

# 10. GROUP REFLECTION

In the beginning of the course we almost immediately started off on the right foot. We were content with the members of the group and got a helpful design coach, which answered to our questions almost immediately. Despite some unclarities in the beginning we managed to get deep and useful target group insights by talking to two different sports coaches, of which one also supported the students in a psychological way.

Through using those insights and the skills learned during the lectures, we managed to successfully

improve the Mi Band. All of us agreed that through being the user, interviewing the user and looking at the user's surroundings, we got a much better understanding of what the Mi Band needed to become a market leading product. This is also the most useful concept that we learned; looking at the broader picture.

The task division changed per week, but everyone in the group contributed about equally, so the teamwork and communication went very well.

# 11. INDIVIDUAL REFLECTION

## GUUS JANSSEN 1015825

At the start of the course I hoped to get more theoretical knowledge on marketing a new product, and determining it's success beforehand. This course taught me to emphasize users' needs better and implementing them in the product. The beauty of this course is that it lets you think of possibilities of a product without directly realizing them and see of this would fit a consumer. This would logically be one of the first steps when developing a product. Still I think this is an undervalued step in realizing new products in many studies, like my own study, mechanical engineering. Even though I feel like I did not gain any theoretical knowledge, I do feel more creative in adjusting to users' needs.

The group worked very smoothly, and we had fun

while working. We were lucky with 2 talented Industrial design students who made very nice video's for the presentations. These videos were also a big contribution to the high grades we got for the presentations.

As I tested the Miband as first I had more knowledge about the product at the start of the course. Which made me able to clearly state pros and cons of the product, on which we could elaborate our research. I did a big part of the first presentation and presented it. For the second presentation I contacted my squash coach for an interview. Stephanie and I interviewed him and got some great insights for our target group. One week I could not work so to compensate I did a big part of the final report.

# 12. INDIVIDUAL REFLECTION

## MARTIN IVANOV 0979443

In the beginning I stated that I wanted to get more theoretical knowledge on how to develop a brand/product in a more structured way. I partially achieved this goal. I achieved it, because I managed to learn how to perform a user-centered approach of developing/modifying a product. Although the course was more practical, than theoretical, I still managed to make a much clearer distinction between the different entities in the development process, like the different roles of the user in different phases of the development process. However, I consider that my goal is partially achieved, because although I might have learned as much as possible from this course, I still have much more to learn about this type of approach when developing a product.

All of this was achieved mainly with the help of my group members. Each one of them is from different department and has different approach of work. Observing these differences and trying to make them work together, gave me a broader view of how can a problem be tackled. Moreover, using ideas from different members of the group gave our project an interesting and fun approach that also achieved

very good results in getting insights about the Miband and the user.

The only aspect of work that was confusing for me was missing some information. This was mainly because some information was shared with everyone only in Dutch. Despite this occurring from time to time, it wasn't a big problem for me or the group, it is just an aspect that I should try to have in mind in the future, when working with people from the same nationality.

Overall, the work of the group was going smoothly. I think we owe this to the good decision making process. The group was able to identify fast which is the better decision to take next and who is the best person to tackle a certain task. This lead to having an efficient group where everyone enjoys the assigned task. Therefore, the core aspect of our success was that we had fun doing the project and learning interesting insights about the possible users. Despite this, we should give credit to the 2 other aspects that were making our work stand out: the quality of the videos (thanks to Sophie) and the idea of selecting the "insecure" as a target group (thanks to Stephanie).



# 13. INDIVIDUAL REFLECTION

## ROBIN KAELEN 0992935

At the beginning of the course, I had a few learning objectives. Since I had little marketing knowledge, improving this was one of the objectives. Another objective was learning how to launch a product. Both objectives have been completed in the form of gathering customer insights, which in my opinion are one of the most important insights when launching a product.

My main contribution to the group has mostly been in gathering customer insights. I mostly worked on creating the design process, diary template (for the contextual design), customer journey and interviewed the sports/psychological coach. I also contributed in the standard things like the group review etc.

What went well is the collaboration with other group members and creating/giving the presentations. Interviewing the coach with Stephanie was a big success, she gave us deep insights in what holds insecure students from starting to sport according to her experience, and gave us feedback on our improvements of what would work and what wouldn't. I found it not too difficult to come up with solutions

for the app/ Mi Band, but the visual showing of these improvements went less well, since my graphical designing skills are less than the Industrial Design members of our team. But since we covered each other's skill gaps, we managed to collaborate very well. Next time I would spend more time in interviewing different people. I would not only interview the coaches and insecure students, but also their parents to get different and deeper insights. I definitely find that the interviewing helped the most in the design process, because finding a solution was one thing, but finding out exactly what you need to solve turned out to be way more difficult. I think we performed very well as a group, we got good grades because we exploited all the individual strengths, saving useful time enabling us to put more effort in getting the right target insights. The solutions that we came up with could definitely be implemented in the Mi Band, showing that our work as a group was quite good. I played a big part in gathering insights and thinking of possible solutions, and therefore believe that I contributed well within the group. Others also contributed well and I think that overall we performed very good.

# 14. INDIVIDUAL REFLECTION

## RONALD WARMELS 0901060

At the beginning of the course I didn't really know what to expect of the course as a whole. The previous course of this USE-package was already a long time ago. So I had to dig deep for my knowledge. I already have a lot knowledge about qualitative and quantitative research methods. I was interested how to apply this in this course and how I could use this skills in researching the new innovating ideas. I also never really used creative skills during a course and was interested how this would work out for me. I also was interested in the industrial side of innovating ideas, how corporations would deal with innovations.

Some learning objective's I have thought of in the beginning of the course are fulfilled, some are not. First of all I could use my knowledge of behavioural sciences and technology really good in this course, especially when we started focussing on users with a low self-esteem. I also had to use creative skills, such as creating a movie. I never really used voice over in a video, but Sophie gave a good example and later I tried it myself. We also had to come up with more beautiful slides then the slides of the TU/e template, also a new experience for me. My contribution in the group was mostly been

thinking of how we could present the gathered information in a good way. So I spent some time in brainstorming and helped Sophie and Stephanie out with the video. I also gave two presentations and thought with this about the content of the presentations. Next to this I tried to come up with scientific proof in the final report. Although I missed the most part of the first week, I think I caught up really quick by participating actively and showing initiative. Next time I would like to do more in the research part of the course, in which I have experience and knowledge. Also we could have started earlier for the assignments, because the deadline came really fast after the weekends.

We performed really well as a group. It was also quite sociable within the group, which made it more likeable to work together. We divided the work efficiently and all agreements were met. All members communicated well (also via digital media) and this helped us to get good results in the short time we had. There was a clear focus on the design aspect of the assignments, in which I have to thank Sophie and Stephanie for sharing their skills with the group.

# 15. INDIVIDUAL REFLECTION

## STEPHANIE SLEE 1023792

I decided to follow this course because I'm very interested in the process of introducing successfully a designed product in the market. As a designer, I want to develop myself in the area of expertise of business and entrepreneurship because I believe this is necessary for designing profitable products. As part of my use learning trajectory, this course offers to me a very interesting combination between my study and the direction I want to follow.

During the first assignment of this course, I was assigned to a group of six students, with which I had immediately a good collaboration. Tasks were equally divided and the meetings were generally very productive and engaging.

My biggest contribution to the group was certainly conducting the interviews with our user group. Since our target group consisted of sensitive students, we decided to interview the coaches, who probably would give us more relevant information. Actually, I was aware of an organization of the student sport centre (SSC) of Eindhoven, which involved specifically sensitive students who struggle with personal problems and often are assigned to external psychologists. After contacting two coaches of these students, I enjoyed being present at both interviews. I felt very involved because the coaches went very deeply into sensitive conversations about these students. Listening to the stories they were telling, made me aware that this user group is very interesting and delicate at the same time.

I enjoyed giving the second presentation with my fellow student in order to share with the class the insights and the consequent redesign based on the

conducted interviews.

Besides, I contacted a student, part of the user group, and gave him the band and a diary to follow. This gave us some more specific knowledge, in order to prepare the final presentation.

Unfortunately, this student gave us very late the information we needed, causing the postponing of the making of the video. For this reason, we had to make the video actually very late, which might limited the quality of the final result.

From all these experiences, I learned that interviews can give the biggest insights of a target group. This is because often we are limited by bias or precognition about topics, while the user itself, or in this case the coaches of the students, can give much more valuable information, due to experience.

Also, I learned that giving a presentation of two minutes can be very difficult when there are lots of aspects relevant to the story. Knowing how to select only the most relevant information, is something I learned from giving the second presentation.

In the future, I would still do some things differently. For example, since it was difficult to find a student of our user group who wanted to experience the band for two days, we could probably have searched for him in advance. This would allow us to put more time and effort in the final video.

To conclude, I believe this course has been useful for the direction I want to follow. It gave me some very interesting insights from combining design research and marketing, which will be helpful in future projects.

# 16. INDIVIDUAL REFLECTION

## SOPHIE BAARS 1006616

After more than a year of studying Industrial Design, I have discovered that I am most interested in the creative- and business sides of the study. I specifically find Marketing interesting. I want to learn what would be a reason for a customer to buy a certain product and become a loyal customer. I want to learn how to build a strong brand and company. These learning objectives were partly achieved in the first part of the course 'Marketing research and design methods.' I do not believe I can learn how to do these things within four weeks, but I think I am heading in the right direction and have already learned quite a lot when it comes to these things.

This part of the course was something close to my expertise and close to things I have learned within my study. This may be the reason why I took on the role of leader within the project and why I feel like I may have done more than others. However, I did not mind this, because I enjoyed every part of it. I enjoyed making the videos, presentations, paper prototypes, I liked presenting, interviewing users, determining the marketability of a product, etc. As I predicted, this project was up my street and I discovered that I find marketing in combination with design even more interesting than I initially thought.

I also discovered that I have more knowledge about marketing and user testing than I originally thought. I had a discussion with Martin in which he thought the target group should be established after designing the product, while I thought it was much more effective to involve the user within every step of the design process. This course, once again, confirmed

that the user is much more important than most people think.

Even though I feel like I worked hard, I do believe that our group functioned well. The communication was good, we were all willing to meet, help each other and work on the project and everyone did their part of the project. I did notice there was some friction when it came to speaking English. I am used to speaking English with team members, but find it difficult to respond in English when people talk to me in Dutch in order to involve international members. In the future, I would like to be more persistent when it comes to speaking English when international members are around.

Additionally, I would have preferred if everyone would have met the deadlines better. We had made the agreement that all work should be handed in on Tuesday morning, to make sure I could manage to finish the design of the report in time. Martin found that the text needed to be changed, which meant that our personal deadline was not met. In the future, we should make clearer agreements about how tasks are divided and when work needs to be handed in.

In the next part of the course, I will try to give the others a bit more space and give them more of a chance to lead the group if they want. Moreover, the next part does not fall within my expertise as we will have to use R to analyse data. I hope my teammates are willing to help me wherever I fall behind, like I helped them in the first part of the course.

# 17. APPENDIX I

Customer journey figure 1

Stage	Awareness	Consideration	Decision		Delivery & use			Loyalty and advocacy	
Customer activities	Hear from friends, see an ad	Compare & evaluate alternatives	Add chosen MiBand to shopping cart	Order MiBand	Receive order	Contact customer service	Wear MiBand	Order newer version	Share experiences with others
Customer goals	No goals	Find a way to get motivation for exercise, get fit and gain confidence	Find where to order the MiBand	Order effortlessly	Receive orders effortlessly when needed	Receive help if problems appear, request for refund	Have a good quality and functioning MiBand	Repeat good customer experience	Share feelings and give feedback
Touchpoints	Mouth-to-mouth, media, social media	Mouth-to-mouth, online, social media	Online, via web or mobile	Website, app, order confirmation email	Delivery service, packing, messages (via email, text of phone)	Phone or email	MiBand, packaging	online, via web or mobile, email, website, phone (repeat previous touch-points)	Mouth-to-mouth, social media
Experience	3 Interested and curious	3 Requires effort but excited	2 Excited	3 Payment is painful	2 Requires effort but happy	4 Frustrated	2 Satisfied	3 Easy	1 incredibly satisfied
Business goal	Increase awareness and interest	Increase number of website visitors	Increase conversion rate	Increase sales	Deliver on time and minimize a delivery window	Increase customer service satisfaction, minimize waiting time	Match product expectations	Increase order value and frequency	Make sure experiences are positive
KPI	Number of people reached	New website visitors	Conversion rate	Sales	On time delivery rate, average delivery window	Customer service success rate, waiting time	Reviews	order value and frequency	customer satisfaction
Organisational activities	Create marketing campaigns and content, PR	Create marketing campaigns and content	Optimize shopping experience	Optimize purchase	Delivery	Organize customer service	Develop product	Target marketing, make re-ordering easier	Social media, chance to share
Responsible	Marketing & communications	Marketing & Communications	Customer service and online development	Online development, warehouse, logistics	Warehouse, logistics	Customer service	Product development and purchasing	Marketing, online development	Customer service and online development

# 18. APPENDIX II

Customer journey figure 2, important points

7:20	Cycling to school	Depressing	It is cold, which means I don't want to cycle.
15:00	Cycling home	Tiring	Long day at school, back on my bike with a lot of wind.
15:30	Come home and relax	Bored	I know I should exercise but I feel like relaxing now
16:00	60% of step goal reached	Motivated	Motivated to reach the goal by performing exercises.
17:00	Done with exercise	Tired	Heavy exercise which made me tired

# 19. APPENDIX III

Customer journey figure 2, full user diary

Time	Activity	Mood	Mood intensity	Mood explanation
6:30	opstaan	Uitgerust	1	Goed geslapen.
7:20	Naar school fietsen	Deprimeren	2	Het was koud waarmee je wat minder zin er in hebt.
8:45	College	Verveeld	2	Ik had geen zin in college.
10:30	pauze	Opgelucht	2	Lekker kletsen met vrienden.
10:45	College	Relaxed	2	Rustig lesje
12:30	Pauze	Benauwd	3	Hier was het druk en warm en was het moeilijk elkaar te verstaan.
15:00	Naar huis fietsen	Vermoeid	3	Lange dag school en het weer op de fiets zit niet mee, met wind tegen.
15:30	Thuis komen en even ontspannen	Verveeld	3	Ik weet dat ik eigenlijk actief aan de gang moet maar ik had even zin in wat rust
16:00	Pas 60% gelopen van dagelijkse hoeveelheid stappen	Gemotiveerd	2	Ik wilde dus nu even gaan sporten zodat ik het doel van vandaag had behaald.
17:00	Klaar met sporten	Vermoeid	4	Zware oefeningen waarmee ik uitgeput was.
17:00	douchen	Tot rust	3	Tijdens het douchen raakte ik ontspannen.
17:30	Schoolwerk	Druk	4	Veel verslagen die binnenkort af moeten zijn waaraan goed gewerkt moet worden.
21:30	Gaan slapen	Moe	4	Behoeftte aan slaap na een redelijk drukke dag en veel werk.

1. What did you use the Mi Band for? Did it motivate you to be more healthy (e.g. get more sleep, eat healthier, exercise more often)?

Yes, due to the continuing motivation provided by the band I automatically chose to exercise.

2. Would you like to exercise more often? Please give an explanation.

Yes, so that I'd get in shape and lose some weight.

3. What would motivate you to exercise more often?

Some sort of outside motivation and continuing reminder of the fact that I wanted to exercise more.

4. When wearing the Mi Band, did you experience any (small) changes in behavior and feelings? (for example checking your phone more often, feeling the necessity to walk/exercise more often?)

Not necessary checking my phone more often but when I did I immediately thought about the mi band ant therefore thought about exercising. But besides these no changes in my behavior.

5. Can you describe your sports history/future?  
 Example: I played soccer from the age of 12 till the age of 19, I stopped because I was too busy with university work. I would like to start going to the gym soon.  
 I play tennis once a week and sometimes a match from 12 till now but I used to swim every week when I was 7 but I just lost motivation to continue this.


6. We made some changes to the Mi Band application. What do you like/dislike about these improvements? Can you think of an improvement?  
 I think it's great to have extra motivation in the

form of a coach and also a supply in activities that might interest you, which motivate you to exercise more often. I believe that by picking the coach yourself you are more open to its advice because it almost feels like a real coach which you'd also select yourself. I hope you can also have the coach active during the exercise to motivate you and push you to the limit.

Thank you for your time!

## 20. APPENDIX IV

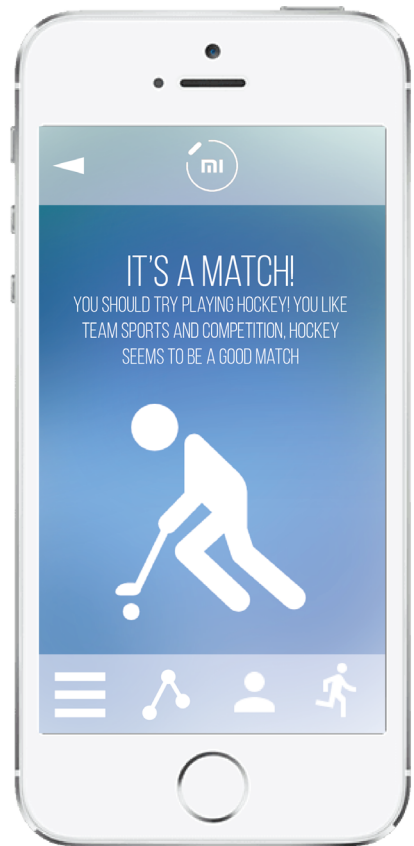
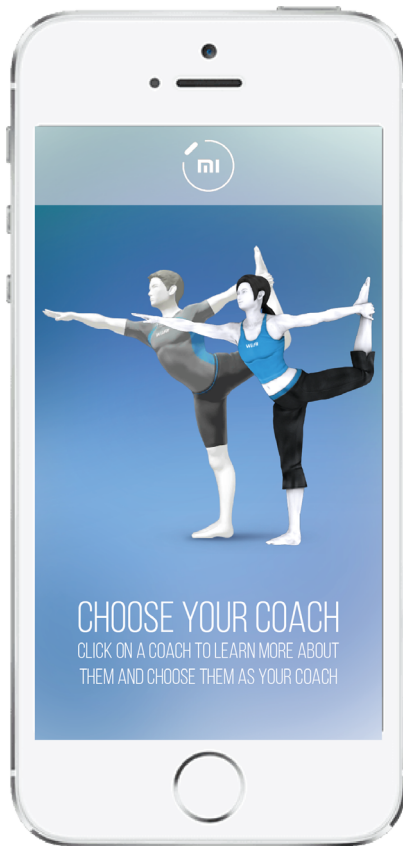
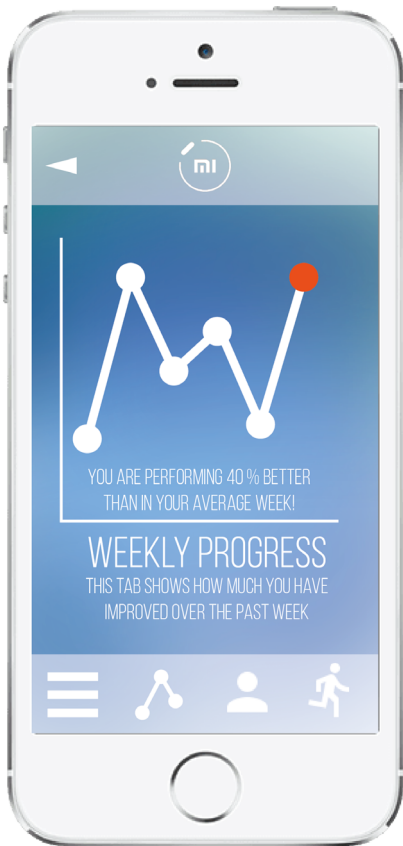
### Persona

<p>Goals:          Build self-esteem,          Cut down unhealthy habits,          Improve social skills</p> <p>Frustrations:          Manual tracking is time consuming,          Peer pressure,          Personal physical condition</p>	<p>Strengths</p> <p>Intelligent,          Organized,          Knowledgeable about mobile devices,          Desire for personal growth</p>	<p>Weaknesses</p> <p>Social anxiety          Physically inactive lifestyle          Lack of psychological support</p>
	<p>Opportunities</p> <p>Easy access to sports and other physical activities</p>	<p>Threats</p> <p>Public exposure          Public humiliation</p>
	<p>Name: Tom          Gender: Male          Age: 21          Occupation: Student          Status: Single</p>	
		

Persona

# 21. APPENDIX V

Pictures redesign app





# 19. APPENDIX IV

## USER

Number: Tom  
 Age: 21  
 Occupation: student  
 Relations: single  
 Living Arrangements: alone/  
 with parents

From: Empathy Map  
 (Gay, Bow, & Macanuto, 2010 empathy map)

<b>Say</b>	<b>Do</b>
"I'm okay",	Study, Stay at home, NO sports
"Oh, look at those handsome guys"	People doing sports, Stronger people, Not liking self-appearance
<b>Hear</b>	<b>See</b>

<b>Goals / Opportunities</b>	<b>Fears / Pain Points</b>
Easy access to sports, Environment: informal, suitable for socialising; To get more social, Cut down unhealthy habits, To get a partner, To be more accepted	Personal physical condition, Peer pressure, Public exposure, To be considered unhealthy, To be forever alone, Public humiliation

## Think

"I don't look good."  
 "The people will laugh at me at the gym."  
 "The others are better than me."  
 "I am weak/ fat."  
 Diverse insecurities/problems, Unawareness of inactivity

## Feel

Lonely, Excluded, Emotionally hurt, Self-pity, Weak/obese, Overall low self-esteem, Unhealthy

## Self-efficacy

Does the user believe they can achieve the change? What outcome do they expect?

Fear of starting sports, Initially very skeptical, But in case they manage to achieve the results, the user expects to increase his self-esteem and social connections

From: Social cognitive theory (Bandura, 1986, 1997)

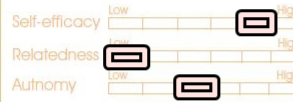
## Design Goal

Describe the ideal interaction between your concept and your user

Miband gives the support and motivation the user needs when pursuing sports, while keeping accurate track of his body measures. It also allows him to get more social overall and within sports.

## INTRINSIC MOTIVATION

Rate the persona's need of the following:



From: Self-determination theory (Ryan & Deci, 2000)

## REGULATORY FOCUS

Describe users promotion or prevention focus:

The user has more of a prevention focus. The user is doing well as a student, in order to ensure his future. His insecurities don't allow him to have so much of a promotion focus. This further demotivates the user of starting physical activities. He is always concerned he is not prepared for going to the gym. Feels need of support within sports in order to pursue goal of becoming more athletic and social.

From: Regulatory Focus Theory (Brockner & Higgins, 2001)

## ATTITUDE

Map and explain the user's attitude toward change.



From: Stage of Change (Prochaska & Velicer, 1997)

## Design Goal

Describe the interaction between your concept and your user

User keeps track of body measures frequently: during studying to check inactivity, after sport to check progress. The user consults the app to see how far he is from his personal goal.

## CONCEPT

Name:  
 Coach band

Value added for the user:

achievement,  
 balance,  
 challenge,  
 community,  
 self-respect

Brand:

Xiaomi Mi band

## EXTRINSIC MOTIVATION

Describe how your concept speaks to the user's motivation?

Bad results, such as lack of progress or long inactivity periods, make the user aware of his inactivity. In the case when the app shows good results, such as significant progress from last training gives more positive and motivating attitude to the user to resume sports. So in both cases the data visualization serves as a reminder of the need of being active. The more active the user is, the more positive results he gets, the more motivated he is.

From: Persuasive Systems Design (Oinas-Kukkonen & Harjumaa, 2009)

## TRIGGER INTERACTION

Describe how your concept triggers your users. How does your concept address the user's attitude?

The main purpose of the device is to remind of the need of activity. The virtual coach in the app adds a personal aspect to the reminders. This way the user feels supported and not judged, which increases the likelihood that he'll do sports, as it decreases the treats that concern him. Moreover, the user is pushed to achieve his goal of establishing sports as a habit by giving him the opportunity to achieve one more goal within sports - being social. This increase of opportunities and decrease of treats is quite appealing to a person with low self-esteem.

From: Fogg (Fogg, A Behavior Model for Persuasive Design, 2008)

## CAPABILITY AND OPPORTUNITY

Describe the concept's barriers and opportunities to interaction.

As already mentioned, the 2 main opportunities that the device gives are: achieving the social goal within sports, getting personal treatment like from a real-life coach. Despite this, there is a limit on the extent to which we can realize these opportunities. The virtual coach may give an additional personalization to the app, but he is still limited to not being able to support conversation. Moreover, the data visualization and tracking is limited only to few activities such as running, walking, sleeping, as there lack methods to distinguish between different activities.

From: Fogg (Fogg, A Behavior Model for Persuasive Design, 2009)

How does it work?:

A device keeps measure of movement in your body and visualizes your activity levels. This is supported by a virtual coach, giving motivational reminders to sport, and by sport events suggestion, that give you the opportunity to find diverse sports around you and even socialize.

Illustrate the context of use:

This device is used when you want to keep track of how much you move. Being aware of your habits, gives motivation to make change in lifestyle.

## Persuasive Principles Used:

Persuasive Systems Design (Oinas-Kukkonen & Harjumaa, 2009)

- |                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                        |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Primary Task Support</b> <ul style="list-style-type: none"> <li>o Reducation</li> <li>o Tunneling</li> <li>o Tailoring</li> <li>● Personalization</li> <li>● Self-monitoring</li> <li>o Simulation</li> <li>o Rehearsal</li> </ul> | <b>System Credibility Support</b> <ul style="list-style-type: none"> <li>● Trustworthiness</li> <li>o Expertise</li> <li>o Surface Credibility</li> <li>● Real-world feel</li> <li>o Authority</li> <li>o Third-party endorsements</li> <li>o Verifiability</li> </ul> |
| <b>Dialogue Support</b> <ul style="list-style-type: none"> <li>o Praise</li> <li>o Rewards</li> <li>● Reminders</li> <li>● Suggestion</li> <li>o Liking</li> <li>o Social role</li> </ul>                                             | <b>Social Support</b> <ul style="list-style-type: none"> <li>o Social Learning</li> <li>o Social Comparison</li> <li>o Normative Influence</li> <li>o Social Facilitation</li> <li>o Cooperation</li> <li>o Competition</li> <li>o Recognition</li> </ul>              |

Illustrate the context of use:

Personalization - through picking your own virtual coach;  
 Reminders - literally + through data visualization and virtual coach;  
 Suggestion, cooperation - the sport events suggestions;  
 Real-life feel - the coach has more of a psychological role as support during sports;  
 Trustworthiness - accurate data visualization; personal aspect through coach