The storyline of the pitch

KOEN SCHAUWAERT
Slide 1:
I am Koen Schauwaert and with these two guys, Nick Cuypers and Peura Ukko-Pekka we form Group 2B. We want to measure the heartrate of sporters with a new product.

Slide 2:
There is a problem that needs to be solved.
You are young and hip. You want to treat your body as a temple, but...
How do you know if you're on the right track?
I mean, you eat your vegetables, sleep on time and sport a lot.
There are a lot of activity apps and trackers which can help you to achieve that goal.

Slide 3:
And you want to sport not only on your own, but also with your friends and even your sports team.

Slide 4:
Polar Electro Oy does this already with it's Polar. This Finnish company sells heartrate measurement devices which you wear around your chest. You can use it on your own or as a team where for example the coach can see the heartrate status of every player.
It uses electrical measurement to measure the heart pulse.

Slide 5:
But this product is expensive and not comfortable to wear.

Slide 6:
Xiaomi recently launched it's MiBand 2 which can measure the heartrate of your own.

Slide 7:
The positive thing is that these wristbands are cheap and easy and comfortable to wear. You wear it around your wrist.

Slide 8:
So. Polar can be used as solo athlete or in a team. It's relatively expensive and uncomfortable to wear.
The MiBand is cheap and comfortable to wear, but useless in a team.

Slide 9:
See yourself as a coach, tracking your team of young ice-hockey talents, all wearing MiBands. You would need a tablet or smartphone for every team member!

Slide 10:
Right. A no go! That's why we need a solution: the ideal balance between cheap and affordable and the possibility to use it with your team.

Slide 11:
We will produce and develop

Slide 12:
A wireless

Slide 13:
Pulse monitor

Slide 14:
To monitor your own heartbeat

Slide 15:
And

Slide 16:
That of your team

Slide 17:
To keep track of your and their health and fitness

Slide 18:
Which data will be stored on your smartphone

Slide 19:
Via Bluetooth Low Energy

Slide 20:
So you can read out it's data

Slide 21:
And share it among friends

Slide 22:
-

Slide 23:
Fitrax will have two sensors instead of one. We will use electrical and optical measurement and beat our competitors.

Slide 24:
Fitrax will be worn around your wrist, instead of around the chest. Therefore it is more comfortable to wear.

Slide 25:
And, maybe one of the most important points, it will be cheap: 45 euro's. Therefore it is more comfortable to use, are the measurements more accurate and will it be affordable for lots of sport fanatics.

Slide 26:
It also will have two modes. A "solo" mode to use on your own and a "team" mode to track your team and wherein you can make your own team between friends. Of course fitrax will be useable for more professional athletes too.

PEURA UKKO-PEKKA

Slide 27:
The hardware will be easy and cheap to produce. The core is a system on a chip which contains the main processing unit, an ARM Cortex M0 (zero). The connection between the device and the smartphone will be established by Bluetooth Low Energy.

Slide 28:
The sensors will be mounted on a wristband like a smartwatch.

Slide 29:
We will make use of two sensors to measure the heart pulse: two optical sensors and an electrical.

Slide 30:
This is a sketch of our device. You can see the two optical sensors and the electrical sensor with it's conductor.

Slide 26:
This is the first data, measured by the first prototype with an optical heartrate sensor. As you can see the graph contains a lot of noise. The data needs to be continuous and fluid.

NICK CUYPERS

Slide 31:
The app will use several sensors on the smartphone and combines all data to get very accurate and extensive data for the user to maintain their health.
The use of the GPS, accelerometer and gyroscope to count the users steps and walked distance.
It will be possible to compose your own teams with friend and challenge each other in weekly or monthly social events.

Slide 32:
See the app as an extension of the band, because the band will work on it's own, without the immediate use of the app itself. You could easily wear the band for a workout and leave your phone at home. When the two are in range, the device will synchronise it's data with the smartphone app.

Slide 33:
Our vision is to release multiple models. Our biggest competitor Polar builds a similar device with GPS build in, but it cost €600!

Slide 34:
Our other models will aim for a much lower price.

Slide 35:
Any questions?

SKETCH

Start w/ problem: sport solo or together
Want to check fitness of yourself of whole team.
Everything is available in a smartphone, except for HRM.
solutions on market expensive (POLAR) (€70) or cheap (€30) and only for 1 person/solo (XIAOMI)
Concurrentie POLAR kan team based tracken - duur + rond borst (oncomfortabel)
XIAOMI kan niet team based tracken, dus coach heeft voor 11 spelersteam 11 devices nodig

The solution fitrax - uitleg
Hardware:
- 2 sensors: optical/electrical
- rond pols ipv. rond borst
- goedkoper
SW:
- multiple devices simultainouosly
- keuze om eigen team samen te stellen (vrienden)

App laten zien
Ook mogelijkheid om GPS en accellero gebruiken

Voorbeelden met graphs

Vision
Toekomst ook devices met GPS uitbrengen.
POLAR doet dit voor €600 per stuk.
Doel om ook onder deze prijs te blijven

Eind plaatje met ondertitel

ECG
EKG