Welcome

Healthcare workers are burned out
(Laschinger & Fida, 2014)

67% works more than 40 hours a week in NL
(MedicalFacts.nl, 2021)

The employer pays as insurance does not cover
(Mindimpact, 2020)

There are 69 hospital organizations in NL
Ziekenhuiszorg | aanbod | Instellingen, 2023)

High turnover rate in hospitals
(Why you need to worry about employee burnout, 2023)
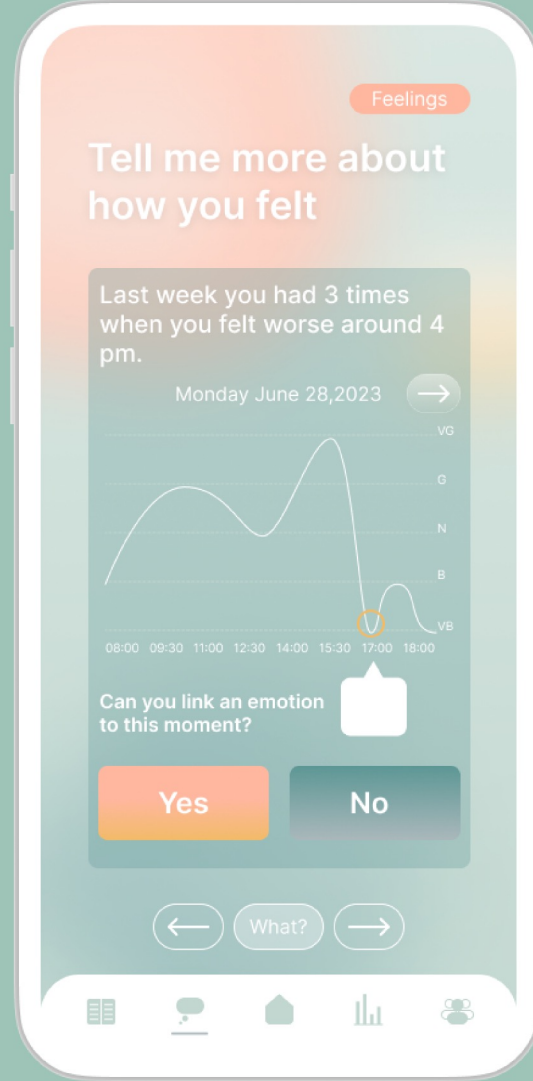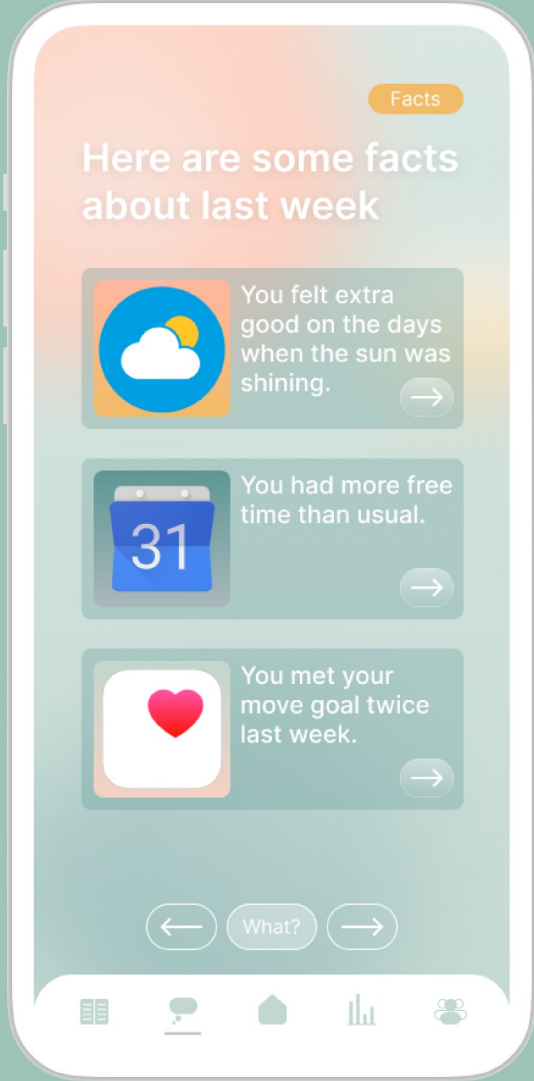
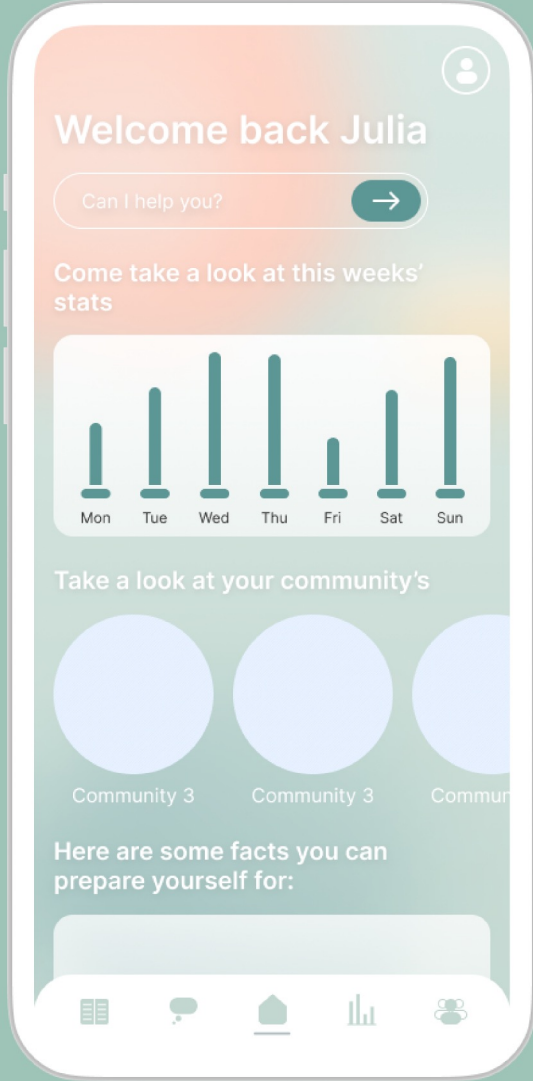**In 2019 we spent 277,9 million euros on burnout**
(Overspannenheid en burn-out | Zorguitgaven, 2022)

The device

USP

Low threshold
Discrete placing
Reflect in context
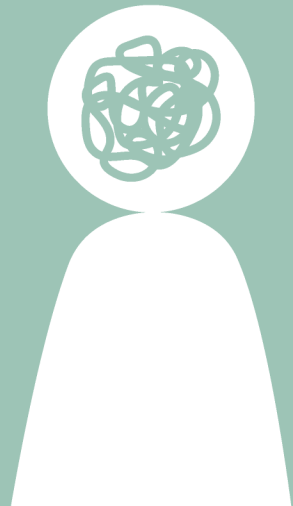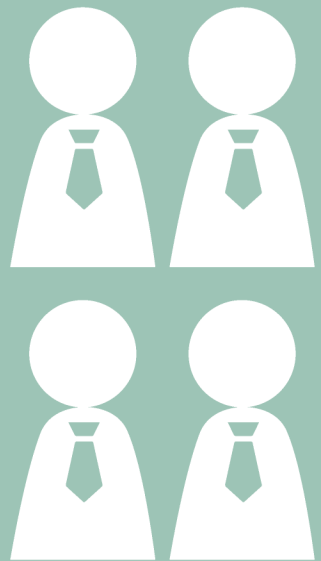
Quick funding
Expertise

(Ganti, 2023)

Long-term funding
Support

(Hayes, 2023)

Meet the team

Data Analytist
Jinze Wang

UX Designer
Vere Vreeswijk

Marketing Manager
Alicia Poels

Program Manager
Karthikeyan Sudarsan

Questions

Feelings

Tell me more about how you felt

Last week you had 3 times when you felt worse around 4 pm.

Monday June 28,2023

08:00 09:30 11:00 12:30 14:00 15:30 17:00 18:00

Can you link an emotion to this moment?

Facts

Here are some facts about last week

You felt extra good on the days when the sun was shining.

You had more free time than usual.

You met your move goal twice last week.

← What? →

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- Why you need to worry about employee burnout. (2023, 5 september). business.com. Geraadpleegd op 20 september 2023, van https://www.business.com/articles/why-you-need-to-worry-about-burnout/
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Welcome

Lim-It

Team Lim-It

Data Analytist
Jinze Wang

UX Designer
Vere Vreeswijk

Marketing Manager
Alicia Poels

Program Manager
Karthikeyan Sudarsan

Problem statement

Young medical doctors
in residency program
(Korsten et al., 2022)

27.7% more likely to
get burn-out compared
to seniors
(Van Dievoort, 2015)

Burn-out rate raised
10% in 2 years
(Korsten et al., 2022)

44% experience high
work pressure

54% of young doctors
work without break
(Korsten et al., 2022)

More medical errors
and reduced
healthcare quality
(Van Dievoort, 2015)

Risk on patient care
(Korsten et al., 2022)

Problem statement

Spend on new hirings
(Nederlandse Vereniging van Ziekenhuizen, 2021)

Sick leave is increased
(Moss, 2021)

Two year of salary paid to affected ones during off-duty
(Nederlandse Vereniging van Ziekenhuizen, 2021)

Increased expenses on sick leave
(Moss, 2021)

Solution

Self-monitoring wearable device to track your stress level to manage stress and prevent burnout
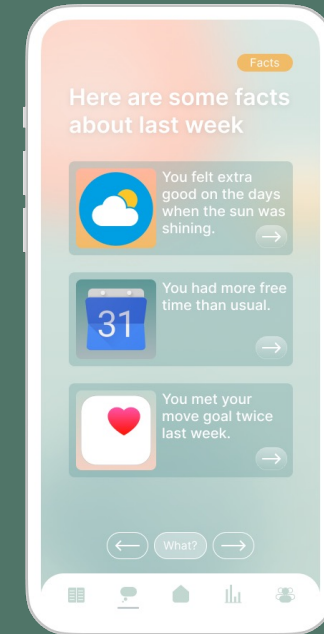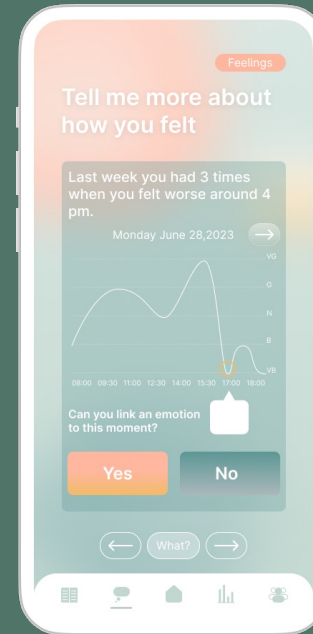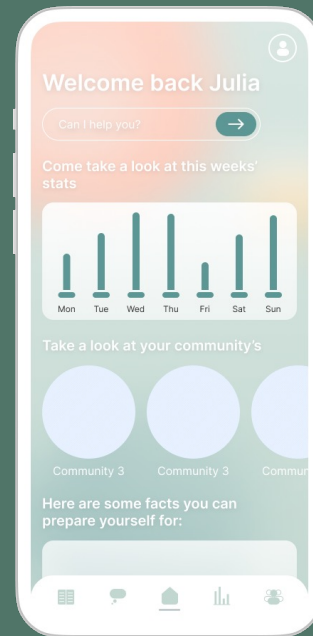
Value proposition

Prevent burnout
at early stage

Collaborations with
teaching hospital

Data visualization

Long term impact and
stress management

Healthier and sustainable
work environment

Data and ethics

Peer and work pressure

Weekly report of their stress map

Stored on the cloud

Personal account two- or multiple factor authentication

Competitive Advantage
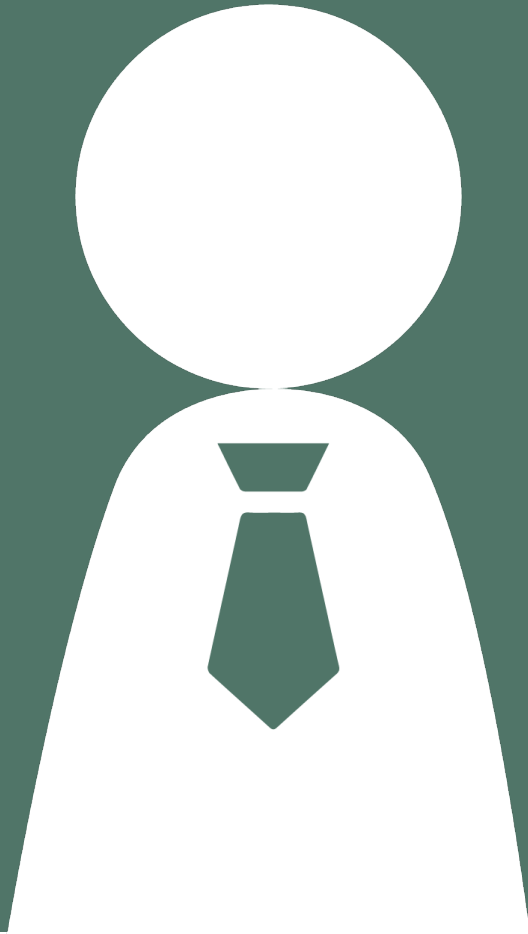
Personalized

Real data

Traceability

Efficient

"Prevention is better than cure"

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Appendices

Interview results

We read that there are a lot of burnouts in the medical sector. Do you agree? Why yes or no?
P1: Yes, there are many burnout complaints among medical students. I have three friends who have dropped out with burnout complaints, and I know more (all interns).
P2: Yes, I also see relatively many people with burnout around me.
P3: Yes. Own experience and experience from the environment

What do you hear about burnout during your own studies?
P1: At the beginning of the master's degree, a lecture was said that it is important to recognize stress, but that it is also a sign that you have the opportunity to learn something new. It was also said that, for example, you can call your friends instead of visiting them if you are stressed. This way you can still spend time on your studies. I thought that was a very strange statement.
P2: Information, leaflets, subject during intervision
P3: Discussed twice during working group

What kind of help can you get if you have burnout complaints during your studies?
P1: You can report to the study advisor and the student psychologist.
P2: Study advisor and psychologist
P3: From study, stop study with partial reimbursement of paid months via the board of directors. Further contact with study advisor and coach

Interview results

What kind of help can you get if you have burnout complaints at work?
P1: No experience with it
P2: Mentor, colleagues, company doctor
P3: Reduced paid hours with io partly reimbursed

Can you briefly describe what a working day looks like for you? Are there specific moments that stand out to you?
P1: My working day starts at 8 and usually lasts until half past five/six o'clock in the evening
P2:

- 8-8:30 am reading patient files
- 8:30-9am transfer of service
- 9-11.30 nurses consult, assess patients, visit the department, work out administration
- 11.30-12.30 supervision
- 12.30-13 lunch
- 13-14 multidisciplinary consultation
- 14-16 family conversations
- 4-5:30 PM working out conversations, assessing patients, transferring evening shift

P3: Internship. Internship from 8:30 AM to 5:00 PM. Half hour break. Maintaining patient contacts.

Interview results

Could you wear Lim-It at work? Why or not?
P1: Yeah, I don't see why not. You just couldn't use it if you were **sterile** (for example, OK). You should also put it away when talking to patients where you absolutely **do not want to be disturbed**.
P2: In the department and emergency department, **not in the operating complex**
P3: Yes, at the moment I expect the supervisors to be open to this on internship day

Would you like to wear Lim-It at work? Why or not?
P1: **If everyone did that**, I would wear it. There is a work culture in healthcare where work-related stress is not always taken seriously, so you may receive comments about it (reason not to wear it).
P2: I don't think so, I don't experience any complaints now and it is still a device on your jacket that you have to do something with in addition to everything else.
P3: Yes. Good assessment of mood.

What would you change about Lim-It? Why?
P1: If that is not yet possible, it would be nice to be able to take notes in the app yourself. This way you could see why you felt bad at that moment. In this way, you could eventually see a pattern of which types of events cause you to feel less comfortable in your own skin. I wouldn't change much about the design. It is important that the device can be **thoroughly cleaned** with alcohol for disinfection.
P2: Can you **adapt it to your service**? For example, where it normally does not vibrate during the night, it may vibrate during night shifts, but you can switch it off again after the shifts.
P3: **Smaller** device.

CJM User

- The Customer Journey Map for the user (young doctors)

- Central question: How to make people wear and use Lim-It?

- Conclusion: Challenge is stimulate people to keep wearing Lim-It and to keep registering their mood.

Journey Steps
Which step of the experience are you describing?

	Awareness	Consideration	Purchase	Retention	Loyalty
	Awareness First contact with product/service	**Consideration** ~~Communication USP's~~ Will I wear this?	**Purchase** ~~Where to buy~~ Making the decision to wear	**Retention** ~~Delivery~~ Service after start wearing it	**Loyalty** Long-term relations

Actions
What does the customer do? What information do they look for? What is their context?

Awareness	Consideration	Purchase	Retention	Loyalty
Lim-it is handed out by the management. The user is asked to wear this	The user needs to know how the device works / Needs to know how to keep it clean / Understand the privacy element of their data	Decides to try it for a day / Install the app / Make an account / Clip to uniform	Interact in the app / Reflect on data / Read the FAQ in the app	User delivers feedback for app / If device breaks it is replaced / Customer service is accessible via app

Needs and Pains
What does the customer want to achieve or avoid?
Tip: Reduce ambiguity, e.g. by using the first person narrator.

Awareness	Consideration	Purchase	Retention	Loyalty
I want to reduce my burn-out symtomps / No clear idea what Lim-it is?	Find information on Lim-it on the company itself. / Read reviews online. Discuss with co-workers / No clear idea what happens with the gathered data	Easy and fast onboarding in the app / Time investment in setting up the device / Easy attachement and syncing the device	Good app onboarding and maintenance / Guide reflection / Well designed UI	Room to make suggestions / Quick service if device breaks / Quick response from customer service

Touchpoint
What part of the service do they interact with?

Awareness	Consideration	Purchase	Retention	Loyalty
Interaction is with the device Lim-it, not with the app.	Website / Device / Google?	Device / App	App	App / Customer service

Customer Feeling
What is the customer feeling?
*Tip: Use the **emoji app** to express more emotions*

Awareness	Consideration	Purchase	Retention	Loyalty
🤯	🤔	🙂	😁	☺️

Backstage

Opportunities
What could we improve or introduce?

Awareness	Consideration	Purchase	Retention	Loyalty
Provide a clear overview of what lim-it is and how it can help the user	Inform user about the benefits of Lim-It. Show transparency in what is done with the data	Create an easy onboarding in the app, make the set-up very simple/minimal effort.	Improve the reflection. Find strategies on how to keep people engaged	Ensure a good customer service

Process ownership
Who is in the lead on this?

Awareness	Consideration	Purchase	Retention	Loyalty
Communication/marketing /UX designer	Data analyst	UX designer	UX Designer	Marketing

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CJM Buyer

- The Customer Journey Map for the user (hospitals)

- Central question: How to approach and sell Lim-It?

- Conclusion: Challenge is to get in touch and to maintain loyalty overtime.

Customer Journey Map

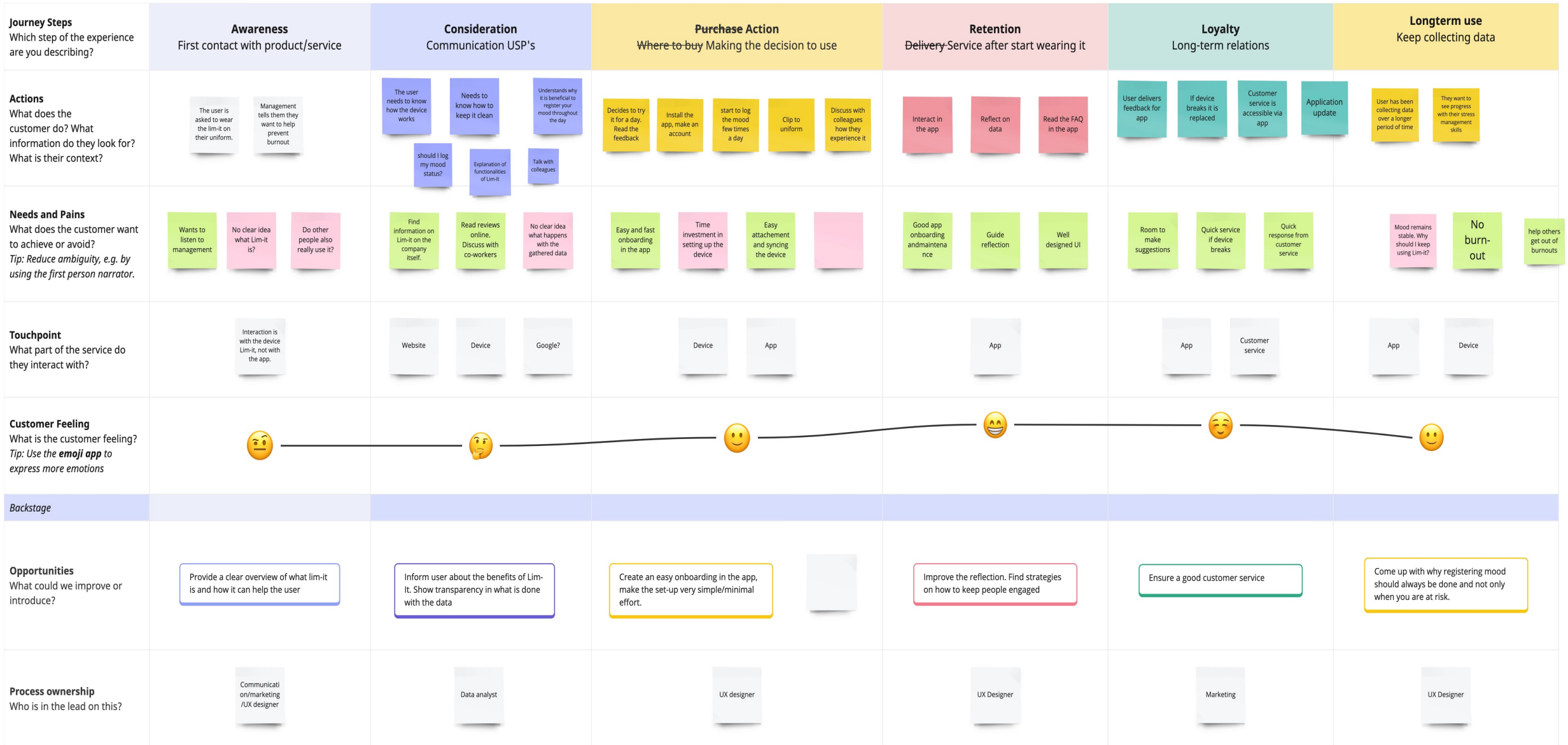| Journey Steps — Which step of the experience are you describing?	Awareness — First contact with product/service	Consideration — Communication USP's	Purchase — Where to buy	Retention — Delivery	Loyalty — Long-term relations
Actions — What does the customer do? What information do they look for? What is their context?	Information on Lim-It is received via sales-reps. The management is informed about the benefits of Lim-it.	Considers if Lim-It is necessary (does the hospital struggle with burn-out?) / Research online for reviews of other hospitals / Consider the investment vs benefits	Direct contact with Lim-It company / Meeting with Lim-it / Decide on how many to buy / Contract with Lim-it company for the purchase	The company will deliver to the hospital / The hospital will be kept updated on how the delivery is going / The company supports the hospital in delivering it to the customer	Possibility to expand to other departments / If device breaks it is replaced / Customer service is accessible via platform
Needs and Pains — What does the customer want to achieve or avoid? *Tip: Reduce ambiguity, e.g. by using the first person narrator.*	Clear instruction on what Lim-It entails / Not be too overwhelmed with information	Clear insight in benefits of product / Read reviews online. Discuss with co-workers / Could be seen as a large investment	Accessible contact with comapny / Concern if it will help? / Clear insight in what they are buying + costs /	Updates on delivery / Clarity on how it will be delivered / Help with handing out devices	Information on costs for expanding / Quick service if device breaks / Quick response from customer service
Touchpoint — What part of the service do they interact with?	Sales-representative	Website / Device / Google	Device / App / Company	Delivery service / customer service	Platform / Customer service
Customer Feeling — What is the customer feeling? *Tip: Use the **emoji app** to express more emotions*	🤯	🤔	🙂	😁	☺️
Backstage					
Opportunities — What could we improve or introduce?	Provide a clear overview of what lim-it is and how it can help the employees	Inform hospitals about the benefits of Lim-It. Show why the investment is worth it	Have a convincing story on the costs and benefits. Have an expert on this in the company.	Come up with clear delivery strategy	Ensure a good customer service
Process ownership — Who is in the lead on this?	Communication/marketing/UX designer	Data analyst	UX designer	manager	Marketing

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CJM User (after workshop)

- The Customer Journey Map for the user (young doctors)

- Central question: How to motivate people for long-term use?

- Conclusion: Challenge is to keep showing the benefits of long-term use.

Customer Journey Map

	Awareness — First contact with product/service	Consideration — Communication USP's	Purchase Action — ~~Where to buy~~ Making the decision to use	Retention — ~~Delivery~~ Service after start wearing it	Loyalty — Long-term relations	Longterm use — Keep collecting data
Journey Steps — Which step of the experience are you describing?						
Actions — What does the customer do? What information do they look for? What is their context?	The user is asked to wear the lim-it on their uniform. / Management tells them they want to help prevent burnout	The user needs to know how the device works / Needs to know how to keep it clean / Understands why it is beneficial to register your mood throughout the day / should I log my mood status? / Explanation of functionalities of Lim-It / Talk with colleagues	Decides to try it for a day. Read the feedback / Install the app, make an account / start to log the mood few times a day / Clip to uniform / Discuss with colleagues how they experience it	Interact in the app / Reflect on data / Read the FAQ in the app	User delivers feedback for app / If device breaks it is replaced / Customer service is accessible via app / Application update	User has been collecting data over a longer period of time / They want to see progress with their stress management skills
Needs and Pains — What does the customer want to achieve or avoid? *Tip: Reduce ambiguity, e.g. by using the first person narrator.*	Wants to listen to management / No clear idea what Lim-it is? / Do other people also really use it?	Find information on Lim-it on the company itself. / Read reviews online. Discuss with co-workers / No clear idea what happens with the gathered data	Easy and fast onboarding in the app / Time investment in setting up the device / Easy attachement and syncing the device	Good app onboarding and maintenance / Guide reflection / Well designed UI	Room to make suggestions / Quick service if device breaks / Quick response from customer service	Mood remains stable. Why should I keep using Lim-it? / No burn-out / help others get out of burnouts
Touchpoint — What part of the service do they interact with?	Interaction is with the device Lim-it, not with the app.	Website / Device / Google?	Device / App	App	App / Customer service	App / Device
Customer Feeling — What is the customer feeling? *Tip: Use the **emoji app** to express more emotions*	🤨	🤔	🙂	😁	😌	🙂
Backstage						
Opportunities — What could we improve or introduce?	Provide a clear overview of what lim-it is and how it can help the user	Inform user about the benefits of Lim-It. Show transparency in what is done with the data	Create an easy onboarding in the app, make the set-up very simple/minimal effort.	Improve the reflection. Find strategies on how to keep people engaged	Ensure a good customer service	Come up with why registering mood should always be done and not only when you are at risk.
Process ownership — Who is in the lead on this?	Communication/marketing /UX designer	Data analyst	UX designer	UX Designer	Marketing	UX Designer

COM-B model - User

Capability		Opportunity		Motivation	
Psychological		**Physical**		**Reflective**	
Don't notice their own symptoms		No tangible help		Put others first Their issues impact the team	
Physical		**Social**		**Automatic**	
No self-care & external support		No consistency Don't show feelings in public		They continue working while being annoyed.	

COM-B model - Buyer

Capability	Opportunity	Motivation
Psychological	**Physical**	**Reflective**
Don't know that preventing burn-out can lower costs educate through sales representative and promotion	Don't have the resources to help Enablement	Reduce burn-out costs Modelling
Physical	**Social**	**Automatic**
No tools Enablement	Mental health is important Environmental restructuring	money - turn over rate. Incentivization

Workshop learnings

From CJM user

- The hospital needs support from us with explaining why and how to use Lim-It

- Device is used during working hours, but the app afterwards

- Users will probably discuss it with colleagues

- Can we support them in the community feeling?

- Do they even want community feeling?

From CJM buyer

- Managers need to be involved in the process of implementing Lim-It with support from us

- Hospital needs to take moment to reflect on if it is helping after a few months

- How will they support the reflection part of the app?

Workshop learnings

From the other things

When will users and buyers use it and where still needs to be checked

Primary task support

Device is tailored to the usage context and user group

App is personalized after self-monitoring

Dialogue

Device uses reminders to achieve goals

The app gives suggestions where behavior can be changed

Social

Social facilitation > Recognize others with the same target behavior? From hospital perspective?

Cooperation > make people cooperate to reach target behavior

Trustworthiness

Device & app developed with H&S services

Team behind it experienced with design, users and marketing

Third-party endorsements > show stories of people before and after using

Authority > use KOLs to approach hospitals

Verifiability > show numbers of current situations

Workshop learnings

Behavior weel

Education > when they get Lim-It, they get an information folder on the why, what, how

Education > hospital get information folder how to support employees in using app and reflecting

Training > workshop for employees to reflect and practice with app and device

Training > managers how to support employees with Lim-It

Environmental restructuring > Posters in hospitals

Changing culture by letting everyone wear Lim-It and open the conversation about mental health

Service provision > deliver community & app

Communication/ marketing > Via media campaigns targeted to hospitals

Communication/ marketing > Use posters in hospitals with Lim-It explanation

Guidelines how to use Lim-It as employee and as hospital

Modelling > For future, when already having a trial hospital, show how great that is going

Enablement > reduce barrier to track mood

Problem-Solution Fit canvas

Purpose / Vision

Version:

1. CUSTOMER SEGMENT(S) — CS

Define CS, fit into CL

Who is your customer?
eg. working parents of 0-5 y.o. kids

- Dutch hospitals → Hospital boards → 69 hospital organizations *(Ziekenhuiszorg | Aanbod | Instellingen, 2023)*
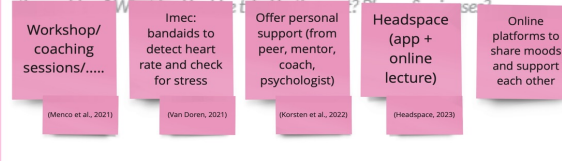
(Menco et al., 2021)

6. CUSTOMER LIMITATIONS — CL
EG. BUDGET, DEVICES

What limits your customers to act when problem occurs?
Spending power, budget, no cash in the pocket? Network connection?
Available devices.

- accessibility for mood management (employer cannot wear watches etc) *(Maharjan et al., 2014)*
- Careworkers first focus on others before thinking of themselves *(Veel burn-outs onder jonge zorgmedewerkers, 2019)*
- Do not spot early symptoms of a burnout *(Van der Toorn, 2023)*

5. AVAILABLE SOLUTIONS — AS
PLUSES & MINUSES

Explore AS, differentiate

Which solutions are available to the customer when he/she is facing the problem?
What are the pluses & minuses of them?

- Workshop/ coaching sessions/..... *(Menco et al., 2021)*
- Imec: bandaids to detect heart rate and check for stress *(Van Doren, 2021)*
- Offer personal support (from peer, mentor, coach, psychologist) *(Korsten et al., 2022)*
- Headspace (app + online lecture) *(Headspace, 2023)*
- Online platforms to share moods and support each other

2. PROBLEMS / PAINS — PR
+ ITS FREQUENCY

Focus on PR, tap into BE, understand RC

Which problem do you solve for your customer?
There could be more than one, explore different sides.
eg. existing solar solutions are not considered a good investment (1).

How often does this problem occur?

Young doctors (user)

- Doctors in training: 44% experiences a high work pressure. 35% is unsatisfied with work-life balance. 54% can almost never take a break without spending their break on work related tasks. *(Korsten et al., 2022)*
- 24% has burn-out symptoms. in 2 years from 14% to 24% while work circumstances do not change. *(Korsten et al., 2022)*
- Hospitals do not know how to solve burn-out problems among health care givers. *(Moss, 2021)*
- Burn-out symptoms over the years *(Korsten et al., 2022)*
- Work-life balance is mentioned (41%) as cause for burn-out symptoms *(Korsten et al., 2022)*

Hospital

- 95% of the costs made for burn-out in hospitals are made by the occupational health and safety services *(Overspannenheid En Burn-out | Zorguitgaven, 2022)*
- Sick leave is increased by burn-out. Sick leave has a large price tag for employers. *(Moss, 2021)*

→ €277,9 million *(Overspannenheid En Burn-out | Zorguitgaven, 2022)*
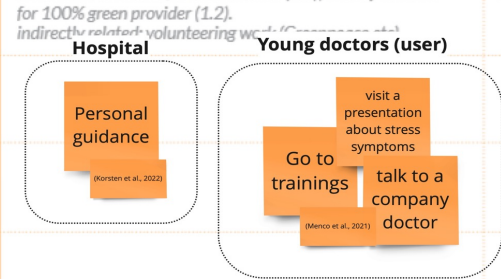
9. PROBLEM ROOT / CAUSE — RC

What is the root of every problem from the list?
eg. People think that solar panels are bad investment right now, because they are too expensive (1.1), and possible changes to the law might influence the return of investment, so they rather wait, than enjoy the benefits (1.2).

Young doctors (user)

- Employee shortage *(Ministerie van Volksgezondheid, Welzijn en Sport, 2022)*
- No time or guidance for reflection to prevent burn-out *(Van der Toorn, 2023)*
- Bad work-life balance *(Korsten et al., 2022)*

Hospital

- Hospitals do not know how to help employees *(Moss, 2021)*

7. BEHAVIOR — BE
+ ITS INTENSITY
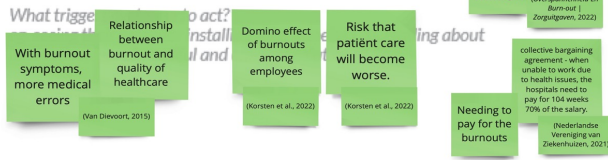
Focus on PR, tap into BE, understand RC

What does your customer do about / around / directly or indirectly related to the problem?
eg. directly related: tries different "green energy" calculators in search for the best deal (1.1), usually chooses for 100% green provider (1.2).
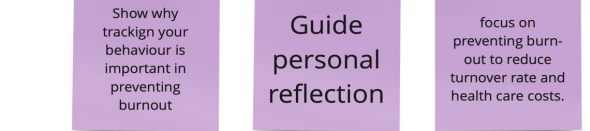indirectly related: volunteering work ("Greenpeace", etc)

How often does this related behavior happen?

Hospital

- Personal guidance *(Korsten et al., 2022)*

Young doctors (user)

- visit a presentation about stress symptoms
- Go to trainings
- talk to a company doctor *(Menco et al., 2021)*

3. TRIGGERS TO ACT — TR

Identify strong TR & EM

What triggers customers to act?
eg. seeing neighbours installing solar panels, reading about a competitor in the news etc.

- With burnout symptoms, more medical errors *(Van Dievoort, 2015)*
- Relationship between burnout and quality of healthcare
- Domino effect of burnouts among employees *(Korsten et al., 2022)*
- Risk that patiënt care will become worse. *(Korsten et al., 2022)*
- Needing to pay for the burnouts
- collective bargaining agreement - when unable to work due to health issues, the hospitals need to pay for 104 weeks 70% of the salary. *(Nederlandse Vereniging van Ziekenhuizen, 2021)*

4. EMOTIONS — EM
BEFORE / AFTER

Which emotions do people feel before/after this problem is solved?
Use it in your communication strategy.
eg. frustration, blocked (before it) & Secure (after it) - be smart, be an example for others (made a smart investment).

- Before: *Lost* because there are no good solutions
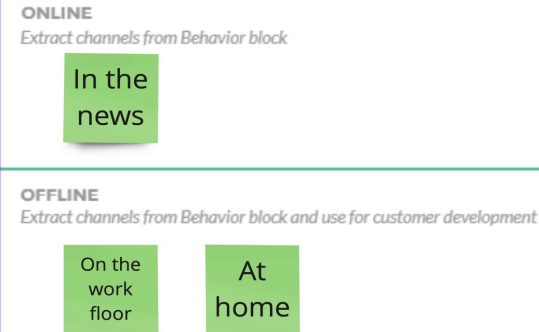- After: *Secure* because they have a way to solve the problem

10. YOUR SOLUTION — SL

If you are working on existing business - write down existing solution first, fill in the canvas and check how much does it fit reality.

If you are working on a new business proposition then keep it blank until you fill in the canvas and come up with a solution that fits within customer limitations, solves a problem and matches customer behaviour.
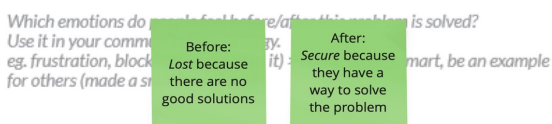
- Show why trackig your behaviour is important in preventing burnout
- Guide personal reflection
- focus on preventing burn-out to reduce turnover rate and health care costs.

8. CHANNELS of BEHAVIOR — CH

Extract online & offline CH of BE

ONLINE
Extract channels from Behavior block

- In the news

OFFLINE
Extract channels from Behavior block and use for customer development

- On the work floor
- At home

Problem-fit Canvas

Data requirements

Cloud storage is possible but there are a few rules.

two- or multiple factor authentification

data communication between device and cloud needs to be encrypted.

Cloud server needs to be on european crowd.

Data needs to be compliant to GDRP.

(ICTRECHT, 2019)

Business Value Proposition

Planning

	Week 4		Week 5		Week 6		Week 7	
	By Tuesday	By Thursday	Tuesday	Thursday	Tuesday	Thursday	Tuesday	Thursday
Design & Prototype		Revised Design Finish Week 4 Study Modules	Updated Prototype Presentation Slides & Pitch Preparation			Design Revision (if Needed) Finish Week 6 Study Modules	Final Product Prototype Final Presentation Slides & Pitch Preparation	
User Research		Customer Journey Mapping	Service Blue Print Coaching Meeting 13:00 to 13.30 Business Ethics Research on Environmental Sustainability & social responsibility				Coaching Meeting 13:00 to 13.30	
Market Research		Target group	Stakeholder Benefits Voice of Health & Safety Service					
Finance & Costing			Finalise Subsidies			Product Costing		Product Launch

PRESENTATION & FEEDBACK (PRODUCT PITCHING)

FINAL PRESENTATION & FEEDBACK (PRODUCT PITCHING)

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Veel burn-outs onder jonge zorgmedewerkers: 'Soms is het nodig om even egoïstisch te zijn.' (2019, 4 juni). Algemeen Dagblad. Retrieved September 20, 2023, from https://www.ad.nl/werk/veel-burn-outs-onder-jonge-zorgmedewerkers-soms-is-het-nodig-om-even-egoistisch-te-zijn~a9b3fad3/#:~:text=Mensen%20zijn%20heel%20zorgzaam%2C%20willen,%2C%2CNiet%20meer%20continu%20doorgaan.

Lim-It

Managing stress and preventing burn-out

By group 3

Lim-it aims to **manage stress and prevent burn-out** amongst health care employees.

By providing a tangible, low threshold way to **track mood and deliver personal insights**.

The problem

The buyer
Hospitals

The user
Doctors in training

Do not know how to solve struggles
(Moss, 2021)

Needs to cover burn-out costs
(Mindimpact, 2020)

High turnover rate
(Why you need to worry about employee burnout, 2023)

"Not enough time to make structural changes"
(Interview HR)

No visible, personal attributes allowed
(Maharjan et al., 2014)

Hard to say no to experienced colleagues
(Why you need to worry about employee burnout, 2023)

Less time for breaks
(Korsten et al., 2022)

"Little reflection when intense situations arise"
(Interview employee)

The solution

The solution

By managing stress, burn-out can be prevented

Tool is unnoticeable and fits uniform

Individuals learn how to manage their mood

Individual and personalized data gathering and reflection

Low threshold tool for all kinds of employees

Only a few seconds to register mood

Not dependent on others to reflect

No need to make structural changes to the organization

Easy, low threshold reflection questions

Market opportunities

Maxima Medical Centre

12 teaching hospitals
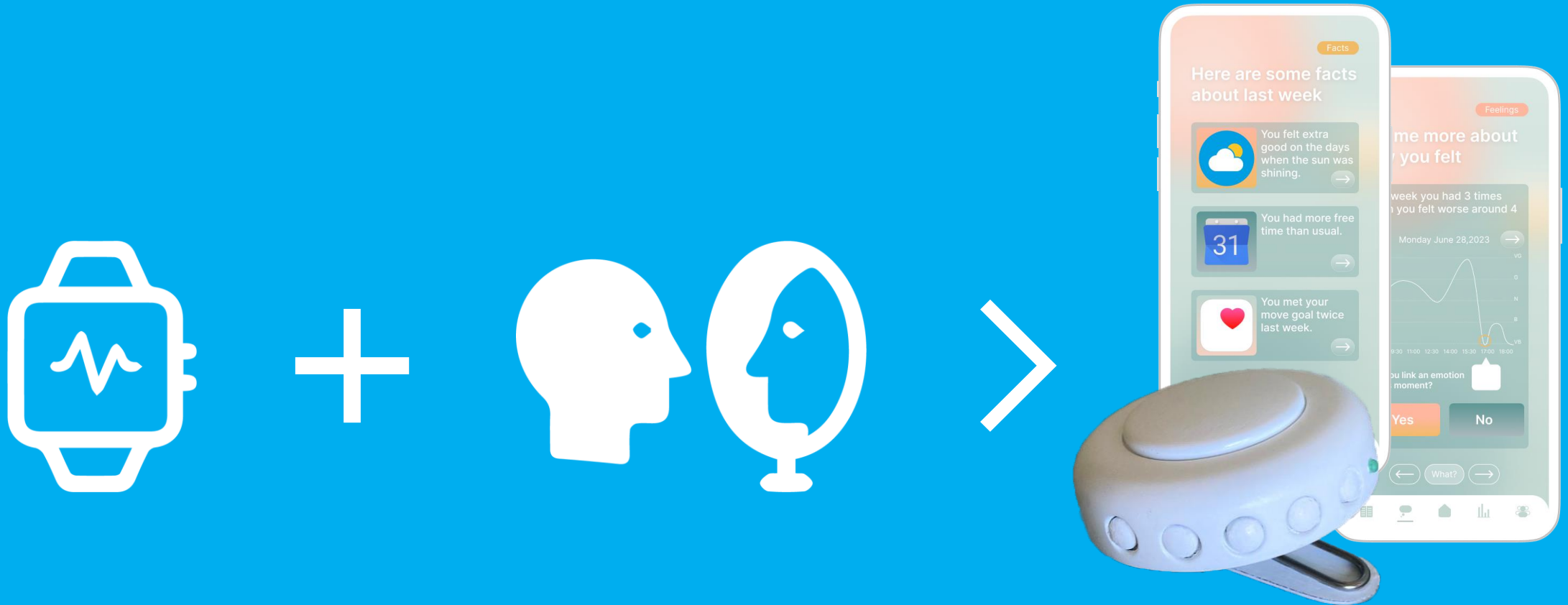*(Wikipedia contributers, 2018)*

69 hospital organizations
(vzinfo, 2023)

113 locations
(vzinfo, 2023)

Outside of the Netherlands
(vzinfo, 2023)

Market opportunities

Market strategy

- Directly to hospitals

- Rent on a yearly basis

Phase 1: Develop Lim-It

Phase 2: Run pilots

Phase 3: Improve Lim-It

Pha

Finalize first version of app, device, technology and data storage

Contact with hospital organizations & managers through KOLs

Marketing campaign focused on teaching hospital

Get subsidies

Start pilots in teaching hospitals, such as MMC

Process feedback on app and device

Handle questions and complaints from users and customers

Get investors

Improve app, device, technology and data storage

Contact other hospital organizations

Improve explanation materials

Implement marketing campaign targeting all hospitals

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Improve ...It

...vice, technology

...spital

...tion materials

...eting campaign
...itals

Phase 4: Implement Lim-It

Next version of app to share data with third parties

Include new features

Continue contacting new hospitals

Phase 5: Expand Lim-It

Contact new sectors, such as educational, or hospitals outside of NL

New version of device and app for other sectors

Look into data management in other countries, such as Belgium

Ethical consideration

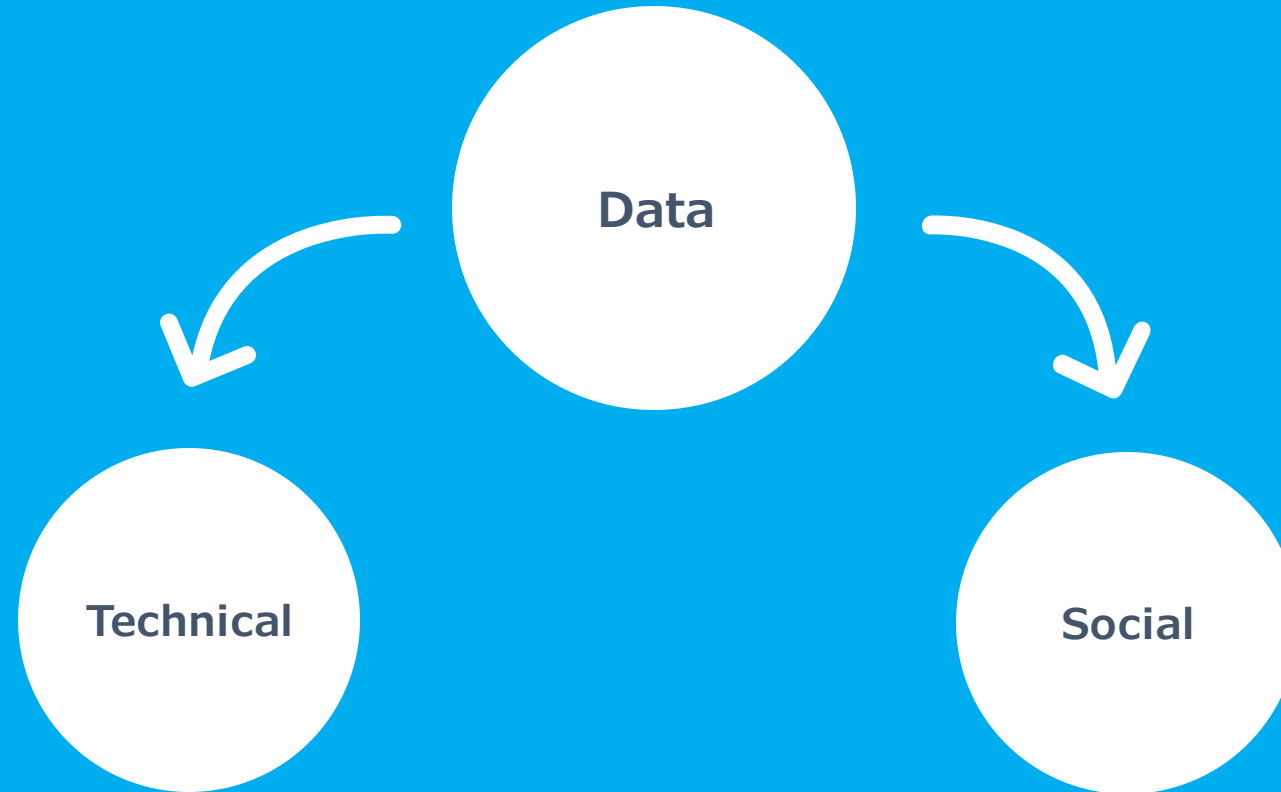
Data

Technical

Social

The team

Vere Vreeswijk

Karthikeyan Sudarsan

Alicia Poels

Jinze Wang

We are committed to helping others manage stress and prevent burn-out, will you join?

Thank you

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Icons are from Microsoft Teams Presentations (2023) and self-made

Appendices

Survey 3 – HR

What problems surrounding burnout occur in the hospital?
1. We are dealing with a high psychological burden within a large group of our employees, on the one hand this has to do with the work and on the other hand also with their private situation.
2. Quite high absenteeism, workload is perceived as high, many changes are necessary in the future, but difficult to discuss without increasing pressure on the workload.
3. All known problems, in case of actual burnout problem for hospital -> absenteeism, extra workload of colleagues, loss of concentration and reduced productivity

How do you support people with burnout (financially, mentally, etc)? Does this happen when the burnout occurs or is it preventive?
1. We have various options in which we support employees both preventively and curatively. Our starting point is that the employee also has control over his/her health. As soon as it enters the curative spectrum, customized solutions are often sought on the advice of the company doctor, with or without the use of our provider arch.
2. Career coaching, coaching, support is possible in stressful financial private situations, first aid course for discomfort (1 coaching session if it all becomes too much for you), collective labor agreements that support less work, massage in the workplace, help with healthy living, exercise, etc.
3. Preventive central from Vitality program offering further at department level own approach. Curative approach in consultation with company doctor

Survey 3 – HR

Do you feel like you are missing something to support people around burnout? Why?

1. We believe that we can focus even more on prevention, which is something we are now increasingly committed to. The theme of vitality, including mental health, is an important topic of discussion.
2. Ultimately, it still comes down to the following: there is now too much work for too few hands in healthcare. This will not develop positively in the future, so it is important that we as healthcare organizations organize services differently so that more work can be done by fewer people.
3. In case of burnout, someone has actually dropped out, and from a prevention perspective we are continuously looking for extra support

What would it take to convince you to use Lim-It? Why?

1. - Scientific research has proven that this method actually works -> we work in a medical setting where people are often asked what the basis of a tool is.
- To what extent employees are open to participating in this -> we think it is important that we, as HR professionals, do not impose anything on our employees, but above all we look at the extent to which they are open to this and feel it is useful and necessary.
- What costs are involved -> we already have several tools that we use, so depending on the investment in this tool, it may or may not be interesting for us.
- User-friendliness of the device/tool.
2. To be honest, after reading the information and watching the video, I have a lot of doubts. I wonder whether focusing on your mental well-being by having to think about it 5 times a day contributes to the goal you strive for, namely preventing burnout.
3. It is not clear to me what it does besides registration; How do you actually prevent burn out with this?

Survey 4 – HR

Who would make the decision to give Lim-It to the staff?
1. This would be a joint decision by the People & Development department in consultation with the managers. It could also be that the Board of Directors and Works Council should also be involved.
2. That would be the hospital MT for the entire hospital, but a department manager could run a pilot with a limited group of people.
3. widely supported; pilot may have been initiated by the People & Development department

If you were to implement it, how would you introduce it to healthcare workers? Why?
1. First, always in the form of a pilot in one or more departments where the manager(s) and employees are enthusiastic about using this tool. Only once the pilot has been running for a number of months and figures are known can we consider how to further implement this in the organization.
2. -
As a pilot

Would it be important to view your employees' data? Why or not?
1. In the context of privacy legislation, the question is whether this is at all possible. Of course it is nice for our organization to be able to monitor things, but if it harms the privacy of our employees, it will probably not be possible to view this data.
2. I would rather introduce it as a monitor and separate it from burnout. Burnout is really a very heavy term for a very serious condition, the term is used too easily when someone has tension complaints. So a neutral introduction would be better. Measuring mood + tips and direction on what you can adjust in your daily life to achieve a mood improvement.
3. The big picture is interesting, but not at a personal level from my perspective, but perhaps department managers think differently

Survey 4 – HR

At what level would you like to view the data?
1.An entire department, A team, By profession, Otherwise
2.A team, By profession
3.An entire department, A team, By profession

Is there something else you would like to tell us?
1.I would like to delve a little more into the decision-making procedures within the hospitals. In addition, further investigate how the privacy of employees is guaranteed. Scientific research/literature studies etc. are also always interesting to add.
2.Be sparing in using the term burnout. As previously indicated, this is used too quickly. Tension complaints or fatigue complaints be are also possible. Perhaps you can label it more positively. Good luck!
3.keep us informed

Interview 3 – Doctor in training

You are doing some nice research and I think it is certainly important for doctors. I think the general trend is that we put the patient first and sometimes sell ourselves short. **If you work as a doctor in a nursing ward or emergency room, you are expected to be available at all times (including during lunch, for example) and during busy periods, breaks are often missed.** In addition, **there is little reflection when intense situations arise** with very sick patients, although more and more attention is being paid to this in the MMC. Your working day is also often not finished at 5 p.m., but you still have to complete things for the patients you care for, so that you don't saddle the evening shift with a mountain of work. Even if you can work efficiently, you unfortunately cannot prevent new problems from arising with your patients just before the evening transfer, which you then have to deal with yourself.

Answers to your questions below.

Frequency

You have Lim-It on your uniform all day and the app is not at hand. At the end of the day, you return Lim-it to the charging station and you can find the answers you collected throughout the day in the app.
When would you think would be a good time to reflect?
These could be different times, for example at the end of a shift, so it could be at different times depending on the shift you work (day-evening-night). Reflecting once halfway through the shift can also be good, so that you gain more insight into how the first part of your shift went and how you can anticipate this in the second part of the shift. Another, perhaps best, option is **at the end of the day**, because you may have done relaxing things after your shift that will reduce your stress level somewhat. **Sleep quality and nutrition are of course also important**. That should be taken into account when reflecting.

Interview 3 – Doctor in training

How often would you like to reflect?
Max 2x per day, otherwise it might be a lot (so it also depends on what the reflection looks like exactly in terms of duration, etc.).

How much time would you like to put into registrations?
By registrations do you mean indicating how you feel 4 times per shift using the buttons? Preferably as short as possible, **1 minute**? If you have to do this 4 times during a shift and it takes, let's say > 5 minutes each time, then it might only cause more time pressure/stress instead of less. I wonder a bit how extensive the app can reflect on button presses, very good to bad. If the app has to reflect on this, I think it needs **more data**? I think feeling good or bad depends on many things (see also answer to question 1). In addition, those buttons are on the Lim-it device on your uniform, right? I'm not sure whether you should only ask how someone is feeling during working hours? **Shouldn't you also ask this during the free time that follows**? I can imagine that if you have a busy shift and you feel mediocre because you have not had a break, for example, you can compensate for this mediocre feeling by going out for a nice meal or exercising in the evening.
Some people may not be able to compensate for this because, in addition to their work in the hospital, they also have children or, for example, have to work on their promotion. It is often **a combination of things that determine whether your stress level exceeds your maximum limit**.

Interview 3 – Doctor in training

Contents

Throughout the day you record how you feel about 4 times. The options for this registration are very good - good - neutral - bad - very bad.

How would you like to reflect on the submitted registrations?
I think you mainly want to know **why a certain service makes you feel bad**. I think that if you reflect on this, you can also do something about it in the next service.

Would you like to reflect per registration/per day/per week? Why?
Initially I think **per day**. That you can look at why you felt bad or good every day. By gaining insight into this, you can take this with you to the next shift/day. Ultimately, I think it should be more of **a kind of alarm/signaling**. So if it goes well, it's fine. But if, for example, you have indicated that you feel worse for several days, you will receive a reflection in the app.

Do you think it is important to reflect on positive and/or negative registrations? Why?
See above, initially **both positive and negative**, so that you get a better idea of why you felt bad or good on certain days. Ultimately, **only an alarm if things seem to get worse** in a few days.

Would you also like to think about things you could possibly change?
Yeah of course. The question is **whether you can change a lot during work** to make it less stressful. Our system is set up so that, for example, you are expected to always have your signal with you, even when you have a break, etc. But becoming aware of how you deal with these situations is always good and you may have to do it during a stressful day. also **focus on how to deal with your free time** --> what do you do in it to relax again?

Survey 2 - doctors in training results

Would you wear the device during work?
1.Yes, I'm curious about what things have an effect on my mood.
2.Yes, provided this is provided by management.
3.Yes, it is useful to know whether work affects your mood
4.Not because it is an extra burden at work and can be distracting.
5.I don't know if I would use the device, but I think wearing such a device would cause little inconvenience.
6.Yes, because then I can find out what my mood is when I'm at work and whether that varies from day to day.

Would you use the app?
1.Yes, I think there is something that can be done to reduce or prevent possible burn out complaints
2.Yes
3.Yes, so you can see what your mood is doing throughout the day
4.Not because it is an extra burden at work and can be distracting.
5.I don't really know. I think there are better ways than pressing a button a few times a day to map your stress level. I believe that expressing your feelings to colleagues and listening to your own feelings and boundaries works much better. If people have difficulty gaining insight into when they are stressed, then this is a good starting step.
6.Yes, because suggestions for changes are also indicated. And you can do something with that to improve your mood at work.

Survey 2 - doctors in training results

How many times per day would you like to fill in your mood?
1. 4, Four moments during the day when you can see what influences the mood.
2. 3, Maybe early morning, lunch and time. I don't think anything more is necessary
3. 4, If it becomes more frequent, it will also bother you during your work
4. Less than 2, Not because it is an extra burden at work and can be distracting.
5. More than 7, Maybe 8: your shift is 8 hours. So you measure it every hour. Although I don't know whether pressing 8 times contributes to the motivation of healthcare providers because then you have to do it quite often.
6. 4, I think four moments in a day is enough. And you can then distribute that during your shift.

With whom would you share the information from the app?
1. Friends/family, colleagues, Share experiences and perhaps see what can be done differently during the day.
2. Company GP, managers, They can do something with it
3. Friends/family, colleagues, Useful for them to know what effect work has on your mood
4. No one, Not because it is an extra burden at work and can be distracting.
5. Psychologist, My manager or HR does not need to know this. I will let you know if things don't go well. The same applies to colleagues, my team does not need to know all this either. I think it is up to you, when you notice that you are under a lot of stress, to report this to the people you feel comfortable with.
6. Company doctor, managers, friends/family, With friends and family because they are close to you and you can discuss it with them. With the manager of my department, because she can then refer me to a company doctor and see with me how we can change this. And a company doctor, because she can help me see how we can improve this in the workplace.

Survey 2 – Young care givers results

What data from the app would you share?
1. Suggestions, daily reports, Seems useful to me
2. Summary, Only things that are special are important
3. Summary, Daily reports are too many and too often to share with people
4. Nothing, Not because it is an extra burden at work and can be distracting.
5. Summary, I think that's the most important
6. Suggestions, daily reports, Because everyone can see what my moods were during the services. And what the suggestions were. And so we can look together at how we can improve this.

Ethics (in data)

Ethics: Highers 'risk' in data management and sharing

— Technical → Risks: Data leak, hack, accessibility of data.

Data will be only stored on personal account

Can be from NFC tag (in device) to phone or AH system)

— Social → Risks: Sharing data with management in hospital > how to keep it anonymous

How do people feel comfortable sharing their data, what is the boundairy.
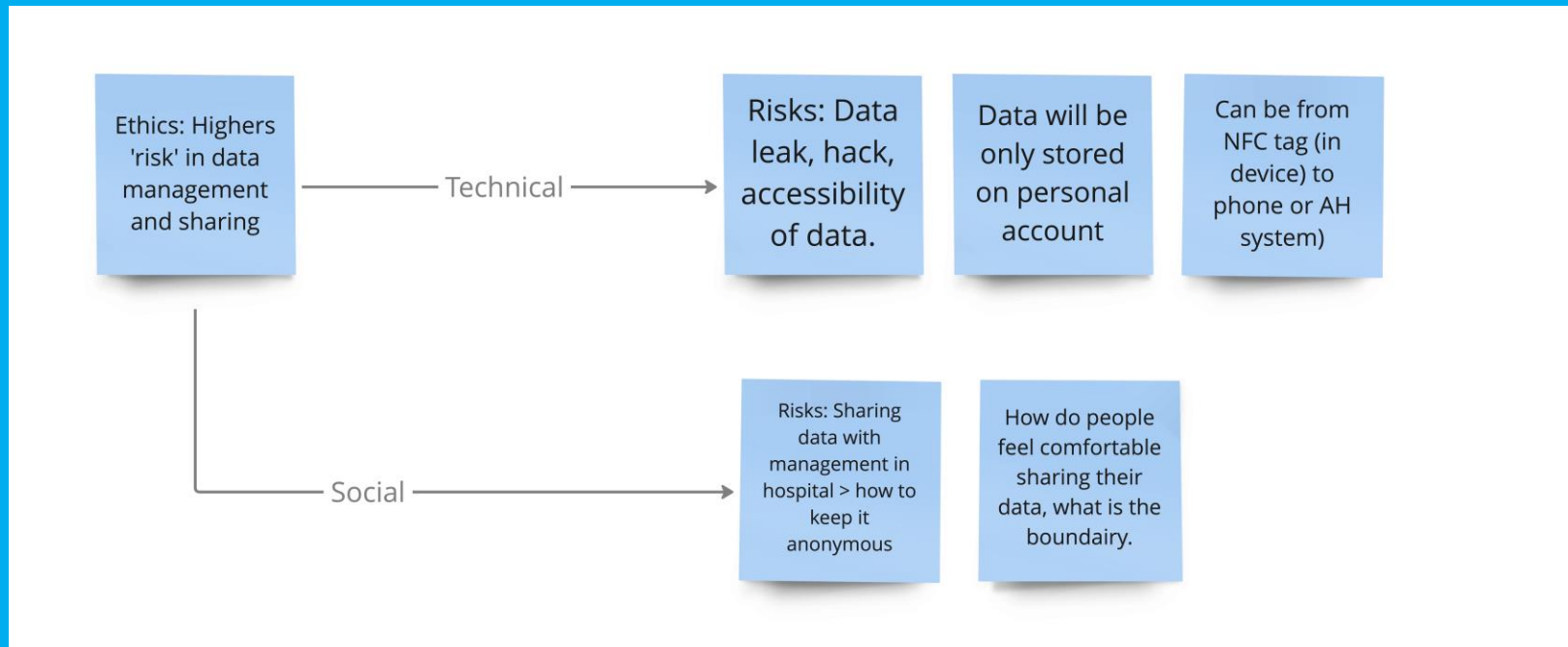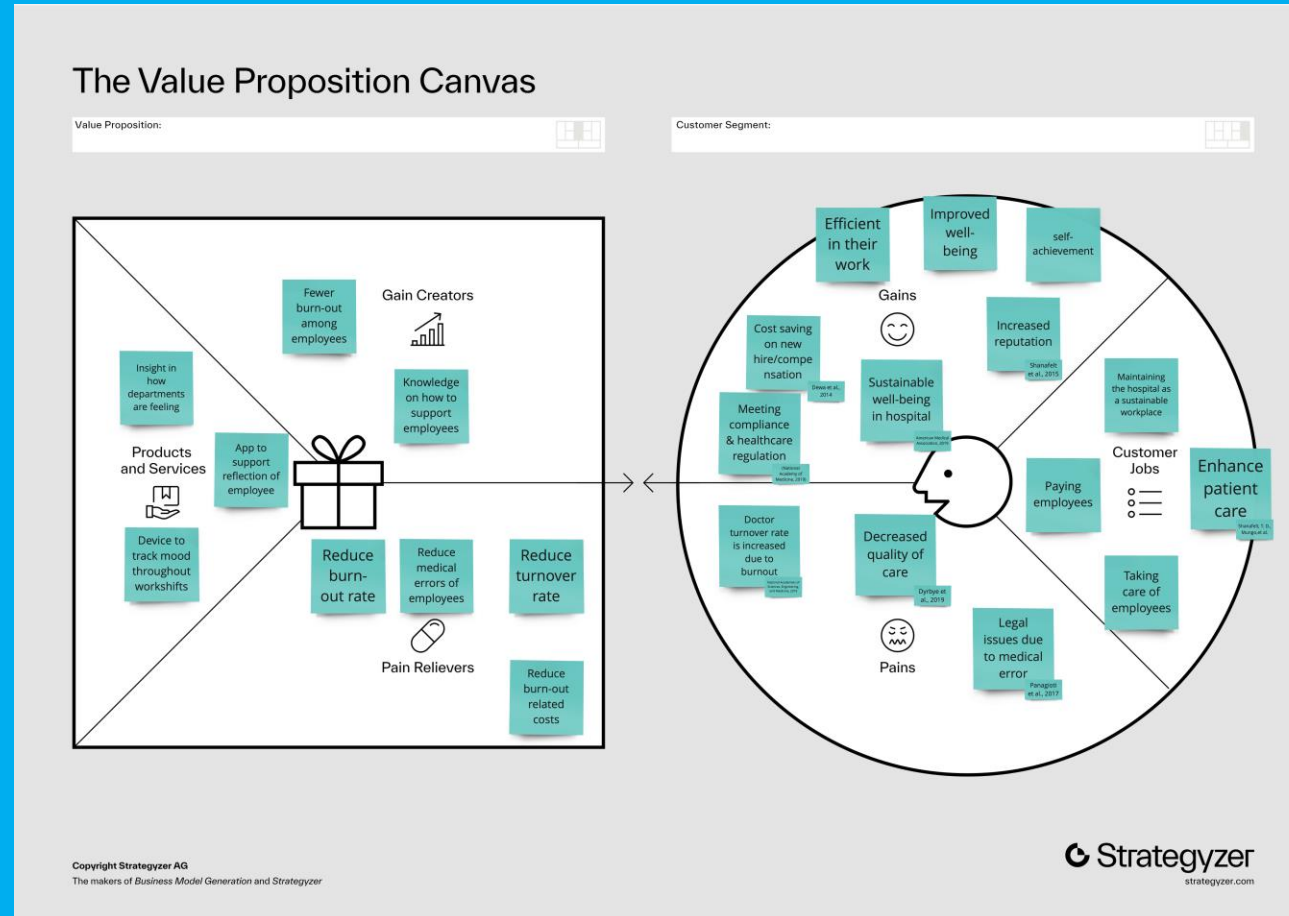
VPC - Buyer

The Value Proposition Canvas

VPC - User
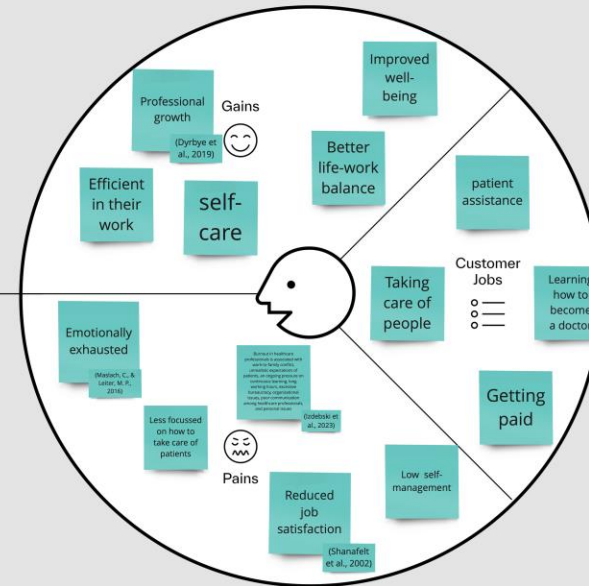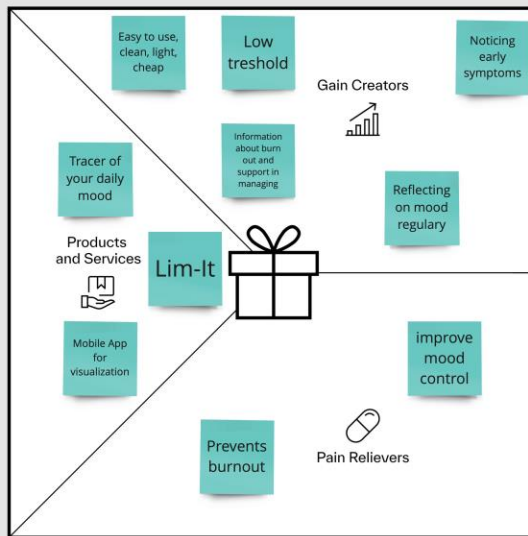
Business growth map

Stakeholder map (workshop)

Production calculations

FINAL BUDGET PLAN

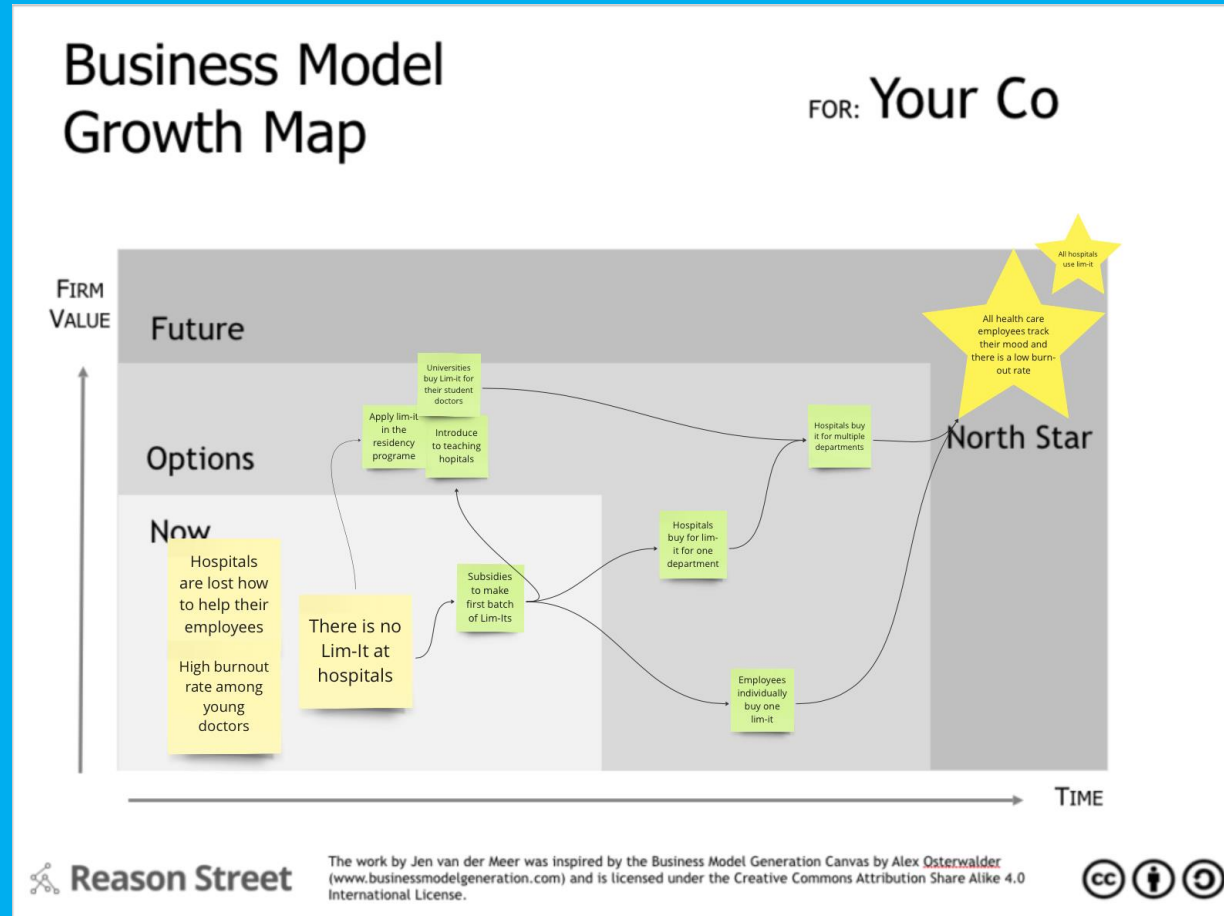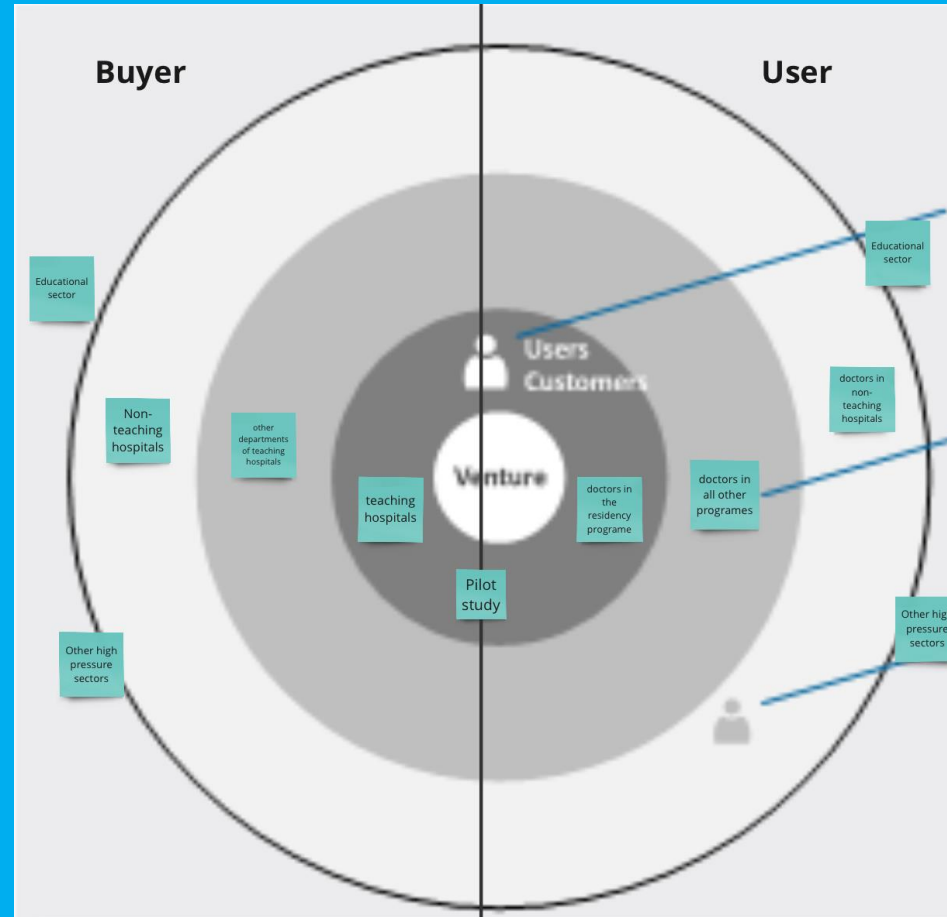|	ONE-TIME COST	In Euro		EXPENSES	MONTHLY In Euro/month	% of Total	ANNUAL In Euro/year	% of Total		Product Cost/30 units				
FC	Mould Cost	25000	FC	Regulatory Compliance	835	0,615247453	10020	0,615247453		Vaccum mould cost				
FC	Prototyping & Testing	5000	FC	Material Cost	1800	1,326281934	21600	1,326281934			OneTimecost/sales volume + Annual cost/sale volume			
VC	Website development	15000	VC	Salaries	65242	48,07182553	782904	48,07182553						
FC	Data Security Software	30000	VC	Data Analysis & AI algorithm	12500	9,210291211	150000	9,210291211						
FC	IP Fee	8000	VC	IOS app fee	8,25	0,006078792	99	0,006078792						
VC	App Development	40000	FC	Manufacturing cost	45620	33,6138788	547440	33,6138788		Estimates Sales Volume	50000	Expecting in next 5years		
VC	Software Development	100000	VC	Office space (inc. w/g/e)	5000	3,684116484	60000	3,684116484						
VC	Google App store fee	25	VC	Utilities	700	0,515776308	8400	0,515776308		Device Price	Software cost	Total	Device %	Software %
FC	Office Space Advance	5000	FC	Company Insurance	325	0,239467571	3900	0,239467571		12,1408	26,10896	38,24976	31,74085	68,25915
FC	Office Equipment & Utility	35000	FC	Software Licenses	387,5	0,285519028	4650	0,285519028						
FC	Business License	549								Fixed Cost	Variable cost			
FC	Accounting & Legal fee	301	FC	Legal & professional	1800	1,326281934	21600	1,326281934		718060	1174428			
FC	Emmergency Fund	20000	VC	Miscellaneous Cost	1500	1,105234945	18000	1,105234945						
FC	Advertising & promotion	11% of Revenue												
	SUBTOTAL	283875		**SUBTOTAL**	135717,75	100	1628613	100						

Final Budget Plan   Salary Background Cal   Other cost Cal   Sheet1   Cost for 10000units per month   +

There is more in an excel file (see all the tabs below in the image).

Production calculations

IT Team	No. of employee	Salary/year in Euro	
Senior Software developers	1	64000	https://www.linkedin.com/pulse/what-ideal-size-development-teams-onix-systems/#:~:text=Once%20you%20have%20determined%20the,larger%20and%20more%20complex%20projects.
Junior Software developers	1	44349	https://www.evolve-consultants.co.uk/2020/09/22/how-to-build-software-development-team-startup/#:~:text=For%20example%2C%20a%20Scrum%20Guide,team%2C%20communication%20becomes%20more%20difficult.
Software Tester	1	36625	https://www.wearedevelopers.com/magazine/software-developer-salary-in-the-netherlands
Product manager	1	66820	https://www.payscale.com/research/NL/Job=Software_Developer/Salary
Software Architect	1	49000	https://www.payscale.com/research/NL/Job=Software_Tester/Salary
Product Designer	1	42489	https://www.payscale.com/research/NL/Job=Product_Manager%2C_Software/Salary/0cdaa150/Amsterdam
			https://www.payscale.com/research/NL/Job=Software_Architect/Salary
Total		303283	https://www.payscale.com/research/NL/Job=Product_Designer/Salary
Customer Service team	No. of employee	Salary/year in Euro	
			https://www.payscale.com/research/NL/Job=Sales_Manager/Salary
Sales Support Specialist	1	32846	https://www.payscale.com/research/NL/Job=Inside_Sales_Representative/Salary
Total		32846	https://www.payscale.com/research/NL/Job=Sales_Support_Specialist/Salary
Finance Team	No. of employee	Salary/year in Euro	https://www.payscale.com/research/NL/Job=Financial_Analyst/Salary
			https://www.payscale.com/research/NL/Job=Financial_Accountant/Salary
Finance Analyst	1	48772	
Accountant	1	40707	https://www.payscale.com/research/NL/Job=Marketing_Manager/Salary
			https://www.payscale.com/research/NL/Job=Analytics_Manager/Salary
Total		89479	https://www.payscale.com/research/NL/Job=Senior_Data_Analyst/Salary
			https://www.payscale.com/research/NL/Job=Junior_Data_Analyst/Salary

Sales Team	No. of employee	Salary/year in Euro	Total
Sales Manager	1	50267	50267
Sales Rep	2	36466	72932
Marketing Manager	1	51232	51232
Total			174431

Outsource	No. of employee	Salary on Demandin Euro
Designer	1	3360
Total		3360

TOTAL SALARY/year		603399
TOTAL SALARY/month		50283,25

Data Analysis Team	No. of employee	Salary/year in Euro
Data Analyst Manager	1	83000
Senior Data Analyst	1	64000
Junior Data Analyst	1	32500
TOTAL SALARY/year		782899
TOTAL SALARY/month		65241,58333

Final Budget Plan   Salary Background Cal   Other cost Cal   Sheet1   Cost for 10000units per month   +

Production calculations

Accounting and Legal Fees	One time Cost			
One-off registration fee	51,95			
Startup capital requirement	0,01			
Notary/Legal fee	250			
Total	301,96			
Cost	Monthly Expense	Annual Fee		
Accounting cost	300	3600		
Legal Consulation cost	300	3600		
Annual bookkeeping or accounting fee/administration cost	1200	14400		
Total	1800	21600		

https://www.usemultiplier.com/netherlands/company-registration
https://www.42workspace.com/guide/setting-up-a-company/#section-2

Software Licensing	Euro per month	1 year/person	15 person	Per Organization
Microsoft	12,5	150	2250	
Accounting Software +Payment Tracking software	200			2400
Total			4650	
Sales, Marketing, PR software	Future Investment			

https://www.microsoft.com/en-us/microsoft-teams/small-medium-business#chooser
https://www.zoho.com/books/pricing/?network=g&device=c&keyword=accounting%20software&campaignid=9709850356&creative=609245404691&matchtype=p&adposition=&placement=&adgroup=97690036725&targetid=kwd-10146431&gclid=Cj0KCQjwm66pBhDQARIsALIR2zCOtQNmwK1rI9LJg6j6MnKMnlvAgEQRfbHXn5spp4gxKUVQaw38zL0aAtfFEALw_wcB

Insurance	In dollar	In dollar	In euro	
General liability insurance	30	360	342	
Commercial property insurance	63	756	718,2	
Inland marine insurance	14	169	160,55	
Cyber liability insurance	123,75	1485	1410,75	
Business interruption insurance	40	480	456	
Workers compensation	70	840	798	
Total average cost:	340,75	4090	3885,5	

https://www.forbes.com/advisor/business-insurance/small-business-insurance-cost/

Regulatory Compliance	Cost with Sprinto/yr	
GDPR Compliance	4900	
Soc2 Compliance	4900	
Total	9800euro	
	~10000 euro	

https://sprinto.com/blog/soc-2-compliance-cost/
https://sprinto.com/blog/gdpr-compliance-cost/

		For 1000 units		
Materials and Manufacturing	Cost Per Unit	1000	Units	
Material Cost (LLDPE C6)	0,18	1193	in Ton	
Machining Cost	0,65	650,00		
Sensor	1	1000,00		
Tactile Switch cost	1,02	1020,00		Included price in BOM
Mould tooling cost	0,025	25	4 cavity tool 25000 euro , 1million+pieces	

Final Budget Plan | Salary Background Cal | Other cost Cal | Sheet1 | Cost for 10000units per month

Production calculations

Materials and Manufacturing	Cost Per Unit	For 1000 units 1000	Units		
Material Cost (LLDPE C6)	0,18	1193	in Ton		
Machining Cost	0,65	650,00			
Sensor	1	1000,00			
Tactile Switch cost	1,02	1020,00		Included price in BOM	
Mould tooling cost	0,025	25	4 cavity tool 25000 euro , 1million+pieces		
Assembly Cost	0,46	460			
excluding Total Manufacturing cost	0,485	485			

https://www.plasticportal.eu/en/cenove-report/
https://rexplastics.com/plastic-injection-molds/how-much-do-plastic-injection-molds-cost
https://www.alibaba.com/showroom/wifi-chip-price.html
https://www.alibaba.com/product-detail/ip67-miniature-waterproof-thin-push-button_62098452392.html?spm=a2700.galleryofferlist.normal_offer.d_title.46882372bIKp5s
https://www.quora.com/How-much-does-it-cost-to-manufacture-a-single-plastic-bottle
https://www.government.nl/topics/minimum-wage/amount-of-the-minimum-wage

BOM Cost +Assembly cost + overhead cost

Bill of Material		Office Utilities			
Device top case & centre button	0,4275				
Device bottom case & 4 button	0,4275				
Sensor	1	Laptops	949	ONI	https://www.mediamarkt.nl/nl/product/_apple-macbook-air-13-3-2020-spacegrijs-m1-256gb-8gb-1681031.html
Tactile Switch cost	1,02	Printer	129	Per month	https://www.konicaminolta.nl/shop/nl/huur-een-printer-met-relaxrate?gclid=Cj0KCQjw4bipBhCyARIsAFsieCzyWXLQ8NANSNxQVhPOasf_Qm7kxbpfdHi8cql9Aai6mh_ly_2DLBEaAmxOEALw_wcB
Screws	0,02				
PCB	0,8				
Manual (Paper) print	0,08		1 printer	129/month	
	3,3475 8% of product		1 laptop/person	949	
Package (separate)	0,2678		laptop for 15	14235	
Total	3,6153 Per unit				
BOM + Manf. Cost	4,1003		Utility ONI		
	HowMany per month		laptop for 15	14235	
Material Cost	1193		Miscellaneous(furnuitures)	0	
Plastic Per ton	1000 1,193		Total	14235	
Per Kg	1 0,17895				
Per unit(150g)	0,15		Utility ME		
Mould Cost per unit			1 printer	129/month	
25000	1000000		Miscellaneous	500	
25	1000		App. Total	700	
0,025	1				
Assembly cost per day					
Labour charge/day	92				
No. of Labour	5				
Total	460				

https://www.usemultiplier.com/netherlands/company-registration
https://www.42workspace.com/guide/setting-up-a-company/#section-2
https://www.microsoft.com/en-us/microsoft-teams/small-medium-business#chooser

Final Budget Plan Salary Background Cal Other cost Cal Sheet1 Cost for 10000units per month

Production calculations

Cash Needed

target 1000 units

	Expense Category	One-Time Costs	Monthly Costs	Yearly Costs	5 Year Cost						Monthly Expenses				Annual Cost
	Research & Development (R&D)														
VC	Materials and Manufacturing	25000		9243		D	Derived				Salaries	53363,25			
VC	Device Prototyping and Testing	5000					Non-Derived				Rent	5000			
FC	Regulatory Compliance		833,3333333	10000		D					Advertising				
											Utilities				
	Personnel										Insurance	325			
VC	Free Lancer Designer (outsource)		3360			D	40/hour	4hours work	3 week deadline		Taxes				
FC	Finance Team			89479		D					Maintenance				
FC	Sales and Marketing Team Salaries			207277		D					Legal & professional	1800			
											Software Licenses	387,5			
	Marketing and Promotion										Data Analysis & AI algorithm	12500			
FC	Website Development	15000				ND					IOS app fee	8,25			
VC	Branding			10000	5-15% 0f total Budget	ND					Regulatory Compliance	835			
VC	Advertising and Promotion Campaigns				need to be 11 percent of revenue										
	Data Security and Privacy														
	Data Encryption and Security Software														
	Miscellaneous Expenses														
FC	Patent Fees	8000													
	Software Development														
FC	Software Development Team Salaries			303283											
FC	App Development	40000		338000											
FC	Data Analysis and AI Algorithms		12500	150000											
FC	App Security														
FC	App Store Fees	25	8,25	99		ND	Non-Derived								
	Operating Costs														
FC	Office Space	5000	5000	60000		D		FC							
FC	Utilities							FC							
FC	Insurance		325	3900		D		FC	VC						
FC	Office Equipment and Furniture							FC							
	Licenses and Permits							FC							
FC	Business License	549				ND		VC							
FC	Software Licensing		387,5	4650		D		VC							
	Financial Planning and Legal							FC							
FC	Accounting and Legal Fees	301	1800	21600		D		FC							
	Emergency Fund and Contingencies				20000	ND		FC							
	Total Estimated Startup Budget							FC							

ONE-TIME COST	In Euro		EXPENSES	In Euro/month	% of Total	In Euro/year	% of Total		Product Cost/30 units				
Mould Cost	25000	FC	Regulatory Compliance	835	0,615247453	10020	0,615247453		Vaccum mould cost				
Prototyping & Testing	5000	FC	Material Cost	1800	1,326281934	21600	1,326281934					OneTimecost/sales volu	
Website development	15000	FC	Salaries	65242	48,07182553	782904	48,07182553						
Data Security Software	30000	VC	Data Analysis & AI algorithm	12500	9,210291211	150000	9,210291211						
IP Fee	8000	VC	IOS app fee	8,25	0,006078792	99	0,006078792						
App Development	40000	FC	Manufacturing cost	45620	33,6138788	547440	33,6138788		Estimates Sales Volume	20000	in next 2years		
Software Development	100000	VC	Office space (inc. w/g/e)	5000	3,684116484	60000	3,684116484						
Google App store fee	25	VC	Utilities	700	0,515776308	8400	0,515776308		Device Price	Software cost	Total		Device
Office Space Advance	5000	FC	Company Insurance	325	0,239467571	3900	0,239467571			30,352	65,2724	95,6244	31,740
Office Equipment & Utility	35000	FC	Software Licenses	387,5	0,285519028	4650	0,285519028						
Business License	549	FC							Fixed Cost	Variable cost			
Accounting & Legal fee	301	FC	Legal & professional	1800	1,326281934	21600	1,326281934			718060	1174428		
Emmergency Fund	20000	VC	Miscellaneous Cost	1500	1,105234945	18000	1,105234945						
Advertising & promotion	11% of Revenue	FC											
SUBTOTAL	283875		**SUBTOTAL**	135717,75	100	1628613	100						

Total Need Amount   1912488

~1.9million

Production calculations

	Units	Units
Per month		10000
JPD		335
Material cost		1800
Total Manufacturing Cost		45620

Bill of Material	
Device top & bottom with button	0,855
Sensor	1
Tactile Switch cost	1,02
Screws	0,02
PCB	0,8
Manual (Paper) print	0,08
	3,775
Package (separate)	0,302
Total	**4,077**
BOM (4.077) + Manf. Cost (0.485)	**4,562**

Roadmap phase 1

	6months 2023 OND- 2024 JFM **Phase 1: Developing Lim-It**			
Team Product	Contact with manufacturer	Finalize technology (NFC tags)	Finalize casing	
Team App	Finalize basic screens	1. Data input from device and calendar	2. Analyse data and see connections	3. Reflect on analysis and see what can change in the future
Team Customer Service				
Team Marketing	Contact with IDNs to approach KOLs in teaching hospitals	Then contact with managers of departments to do pilot	Promotional/ explanation materials for users and hospitals	Set up marketing campaign
Team IT	Data storage	Link between product & app		

R&D app and device

Get in contact with department Mens & Ontwikkeling of MMC

Roadmap phase 2

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Roadmap phase 3

Roadmap phase 4

Phase 4: Implementing Lim-It

	Phase 4: Implementing Lim-It
Team Product	Find next version of technology to share data with third parties, such as psychologist
Team App	Introduce new features such as sharing with third parties, like management, psychologist
Team Customer Service	Continue contact with users and hospitals
Team Marketing	Continue contacting hospitals / Improve educational materials / Improve marketing campaign
Team IT	Help with technical problems of users and hospitals / Guard data management

Expand to other hospitals and highlight new features

Optional sharing

Focus on long-term engagement + reflection

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Roadmap phase 5

Flyer user

Lim-It
Preventing burn-out

Your health is our priority
Currently, one of the biggest problems in the healthcare sector is stress and burn-out amongst healthcare workers. Especially in the Netherlands and in Belgium, doctors work over 40 hours a week [3]. Many don't have time to take care of themselves and (burnout) symptoms often get unnoticed. The symptoms can even be a risk to patient care [1]. A step to prevent burnout and manage stress is to become more aware of your mood and identify early what causes your struggles. This is where Lim-It comes, a way to track your mood and reflect on how you are feeling throughout the day.

About Lim-It
Lim-It exists of a device and an app that work closely together. The device is small and white with 5 buttons. The colour and size make sure you can wear it on your uniform unnoticed. A few times per day, the device will vibrate so you are reminded to give your current state a number. This number ranges from 1 (very bad) to 5 (very good).

Common stress and burn-out symptoms [1]

- Often feeling tired, helpless or alone
- Self-doubt
- Negative/cynical thoughts
- Procrastination
- Feeling overwhelmed
- Emotional exhausted
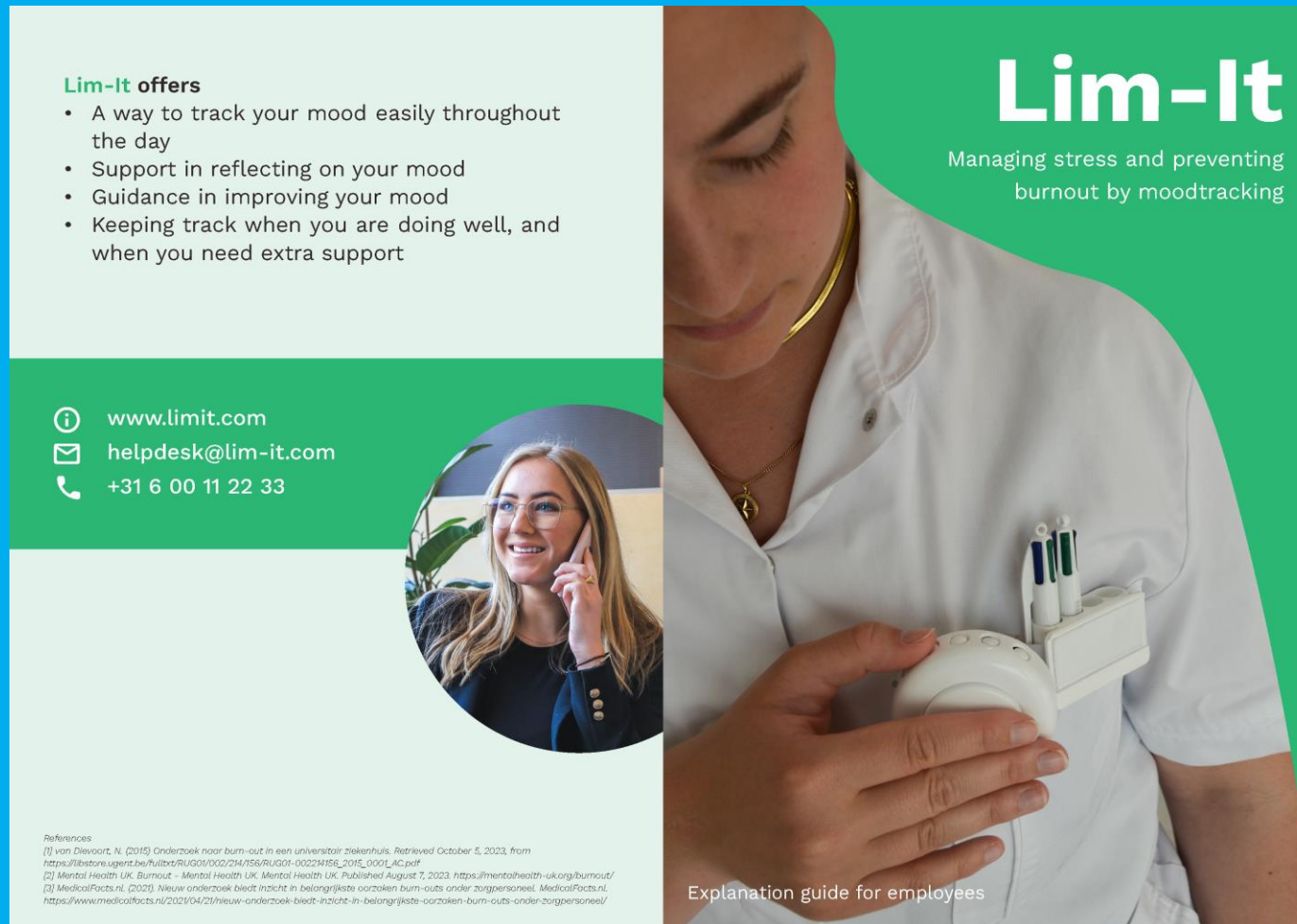
At the end of the day, you can find the data back in the app. Next to this, the app will analyse this data, additional input and your calendar to give more insight in your day. Based on this, you get an overview of how you are feeling and where the positive and negative moments are. It also helps you to think about the next steps with questions.

Reach your goals with Lim-It
The goal of Lim-It is to give you more insights in your mood throughout the day. Additionally, it lowers the threshold to reflect on your mood. You will not only notice when you have a bad day but also when your days are going good and stable. Lim-It supports establishing good habits you have as well. This is why you can always use Lim-It, to prevent burn-out and get to know yourself better.

Flyer user

Flyer buyer

Lim-It

Preventing burn-out

Your hospital is our priority

Currently, one of the biggest problems in the healthcare sector is stress and burn-out amongst healthcare workers. Especially in the Netherlands and in Belgium, doctors work over 40 hours per week [1]. Many don't have time to take care of themselves and (burnout) symptoms often get unnoticed. This leads to a lot of sick leave in hospitals, who cover 93% of the burn-out related costs [2]. Additionally, there are no low physical and uniform approved tools for hospitals to help their employees.

This is why you can make use of Lim-It, the tool to manage stress, prevent burn-out and more. When employees are supported in understanding how they are feeling, they can notice when they are overworked and receive help before it is too late.

About Lim-It

Lim-It consists of a device and an app. The device has 5 buttons ranging from very bad to very good so employees can easily register their mood several times a day. The data will be analysed in the app together with other contexts, such as the agenda. Based on this, the employee gets an overview of how they are feeling throughout the day and reflect on their wellbeing.

In the short term, employees get the means to focus on themselves without spending too much time. In the long term, they will develop habits to easily reflect, identify positive and negative moments and prevent becoming overworked.

The devices can easily be charged in the stations, so you and your employees do not need to worry about this. The data is locally stored to protect everyone's privacy.

Lim-It offers

- Guidance for employees to focus on their well-being
- An accessible charging station for the devices
- Tracking the wellbeing for employees and alarming them when help is needed
- Insights in how departments are doing
- Less burn-out related costs

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Flyer buyer

Survey 1 - Doctors in training results

We read that there are a lot of burnouts in the medical sector. Do you agree? Why yes or no?
P1: Yes, there are many burnout complaints among medical students. I have three friends who have dropped out with burnout complaints, and I know more (all interns).
P2: Yes, I also see relatively many people with burnout around me.
P3: Yes. Own experience and experience from the environment

What do you hear about burnout during your own studies?
P1: At the beginning of the master's degree, a lecture was said that it is important to recognize stress, but that it is also a sign that you have the opportunity to learn something new. It was also said that, for example, you can call your friends instead of visiting them if you are stressed. This way you can still spend time on your studies. I thought that was a very strange statement.
P2: Information, leaflets, subject during intervision
P3: Discussed twice during working group

What kind of help can you get if you have burnout complaints during your studies?
P1: You can report to the study advisor and the student psychologist.
P2: Study advisor and psychologist
P3: From study, stop study with partial reimbursement of paid months via the board of directors. Further contact with study advisor and coach

Survey 1 - Doctors in training results

What kind of help can you get if you have burnout complaints at work?
P1: No experience with it
P2: Mentor, colleagues, company doctor
P3: Reduced paid hours with io partly reimbursed

Can you briefly describe what a working day looks like for you? Are there specific moments that stand out to you?
P1: My working day starts at 8 and usually lasts until half past five/six o'clock in the evening
P2:

- 8-8:30 am reading patient files
- 8:30-9am transfer of service
- 9-11.30 nurses consult, assess patients, visit the department, work out administration
- 11.30-12.30 supervision
- 12.30-13 lunch
- 13-14 multidisciplinary consultation
- 14-16 family conversations
- 4-5:30 PM working out conversations, assessing patients, transferring evening shift

P3: Internship. Internship from 8:30 AM to 5:00 PM. Half hour break. Maintaining patient contacts.

Survey 1 - Doctors in training results

Could you wear Lim-It at work? Why or not?
P1: Yeah, I don't see why not. You just couldn't use it if you were sterile (for example, OK). You should also put it away when talking to patients where you absolutely do not want to be disturbed.
P2: In the department and emergency department, not in the operating complex
P3: Yes, at the moment I expect the supervisors to be open to this on internship day

Would you like to wear Lim-It at work? Why or not?
P1: If everyone did that, I would wear it. There is a work culture in healthcare where work-related stress is not always taken seriously, so you may receive comments about it (reason not to wear it).
P2: I don't think so, I don't experience any complaints now and it is still a device on your jacket that you have to do something with in addition to everything else.
P3: Yes. Good assessment of mood.

What would you change about Lim-It? Why?
P1: If that is not yet possible, it would be nice to be able to take notes in the app yourself. This way you could see why you felt bad at that moment. In this way, you could eventually see a pattern of which types of events cause you to feel less comfortable in your own skin. I wouldn't change much about the design. It is important that the device can be thoroughly cleaned with alcohol for disinfection.
P2: Can you adapt it to your service? For example, where it normally does not vibrate during the night, it may vibrate during night shifts, but you can switch it off again after the shifts.
P3: Smaller device.

CJM User

- The Customer Journey Map for the user (young doctors)

- Central question: How to make people wear and use Lim-It?

- Conclusion: Challenge is stimulate people to keep wearing Lim-It and to keep registering their mood.

Customer Journey Map

Journey Steps — Which step of the experience are you describing?	Awareness — First contact with product/service	Consideration — ~~Communication USP's~~ Will I wear this?	Purchase — ~~Where to buy~~ Making the decision to wear	Retention — ~~Delivery~~ Service after start wearing it	Loyalty — Long-term relations
Actions — What does the customer do? What information do they look for? What is their context?	Lim-it is handed out by the management. The user is asked to wear this	• The user needs to know how the device works • Needs to know how to keep it clean • Understand the privacy element of their data	• Decides to try it for a day • Install the app • Make an account • Clip to uniform	• Interact in the app • Reflect on data • Read the FAQ in the app	• User delivers feedback for app • If device breaks it is replaced • Customer service is accessible via app
Needs and Pains — What does the customer want to achieve or avoid? *Tip: Reduce ambiguity, e.g. by using the first person narrator.*	• I want to reduce my burn-out symtomps • No clear idea what Lim-it is?	• Find information on Lim-it on the company itself. • Read reviews online. Discuss with co-workers • No clear idea what happens with the gathered data	• Easy and fast onboarding in the app • Time investment in setting up the device • Easy attachement and syncing the device	• Good app onboarding andmaintenance • Guide reflection • Well designed UI	• Room to make suggestions • Quick service if device breaks • Quick response from customer service
Touchpoint — What part of the service do they interact with?	Interaction is with the device Lim-it, not with the app.	• Website • Device • Google?	• Device • App	App	• App • Customer service
Customer Feeling — What is the customer feeling? *Tip: Use the **emoji app** to express more emotions*	🤯	🤔	🙂	😁	☺️

Backstage

	Awareness	Consideration	Purchase	Retention	Loyalty
Opportunities — What could we improve or introduce?	Provide a clear overview of what lim-it is and how it can help the user	Inform user about the benefits of Lim-It. Show transparency in what is done with the data	Create an easy onboarding in the app, make the set-up very simple/minimal effort.	Improve the reflection. Find strategies on how to keep people engaged	Ensure a good customer service
Process ownership — Who is in the lead on this?	Communication/marketing /UX designer	Data analyst	UX designer	UX Designer	Marketing

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CJM Buyer

- The Customer Journey Map for the user (hospitals)

- Central question: How to approach and sell Lim-It?

- Conclusion: Challenge is to get in touch and to maintain loyalty overtime.

Customer Journey Map

Journey Steps Which step of the experience are you describing?	Awareness First contact with product/service	Consideration Communication USP's	Purchase Where to buy	Retention Delivery	Loyalty Long-term relations
Actions What does the customer do? What information do they look for? What is their context?	Information on Lim-It is received via sales-reps. The management is informed about the benefits of Lim-It	Considers if Lim-It is necessary (does the hospital struggle with burn-out?) • Research online for reviews of other hospitals • Consider the investment vs benefits	Direct contact with Lim-It company • Meeting with Lim-it • Decide on how many to buy • Contract with Lim-it company for the purchase	The company will deliver to the hospital • The hospital will be kept updated on how the delivery is going • The company supports the hospital in delivering it to the customer	Possibility to expand to other departments • If device breaks it is replaced • Customer service is accessible via platform
Needs and Pains What does the customer want to achieve or avoid? *Tip: Reduce ambiguity, e.g. by using the first person narrator.*	Clear instruction on what Lim-It entails • Not be too overwhelmed with information	Clear insight in benefits of product • Read reviews online. Discuss with co-workers • Could be seen as a large investment	Accessible contact with comapny • Concern if it will help? • Clear insight in what they are buying + costs •	Updates on delivery • Clarity on how it will be delivered • Help with handing out devices	Information on costs for expanding • Quick service if device breaks • Quick response from customer service
Touchpoint What part of the service do they interact with?	Sales-representative	Website • Device • Google	Device • App • Company	Delivery service • customer service	Platform • Customer service
Customer Feeling What is the customer feeling? *Tip: Use the **emoji app** to express more emotions*	🤯	🤔	🙂	😁	☺️
Backstage					
Opportunities What could we improve or introduce?	Provide a clear overview of what lim-it is and how it can help the employees	Inform hospitals about the benefits of Lim-It. Show why the investment is worth it	Have a convincing story on the costs and benefits. Have an expert on this in the company.	Come up with clear delivery strategy	Ensure a good customer service
Process ownership Who is in the lead on this?	Communication/marketing /UX designer	Data analyst	UX designer	manager	Marketing

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CJM User (after workshop sprint 2)

- The Customer Journey Map for the user (young doctors)

- Central question: How to motivate people for long-term use?

- Conclusion: Challenge is to keep showing the benefits of long-term use.

Customer Journey Map

	Awareness — First contact with product/service	Consideration — Communication USP's	Purchase Action — ~~Where to buy~~ Making the decision to use	Retention — ~~Delivery~~ Service after start wearing it	Loyalty — Long-term relations	Longterm use — Keep collecting data
Journey Steps — Which step of the experience are you describing?						
Actions — What does the customer do? What information do they look for? What is their context?	The user is asked to wear the lim-it on their uniform. / Management tells them they want to help prevent burnout	The user needs to know how the device works / Needs to know how to keep it clean / Understands why it is beneficial to register your mood throughout the day / should I log my mood status? / Explanation of functionalities of Lim-it / Talk with colleagues	Decides to try it for a day. Read the feedback / Install the app, make an account / start to log the mood few times a day / Clip to uniform / Discuss with colleagues how they experience it	Interact in the app / Reflect on data / Read the FAQ in the app	User delivers feedback for app / If device breaks it is replaced / Customer service is accessible via app / Application update	User has been collecting data over a longer period of time / They want to see progress with their stress management skills
Needs and Pains — What does the customer want to achieve or avoid? *Tip: Reduce ambiguity, e.g. by using the first person narrator.*	Wants to listen to management / No clear idea what Lim-it is? / Do other people also really use it?	Find information on Lim-it on the company itself. / Read reviews online. Discuss with co-workers / No clear idea what happens with the gathered data	Easy and fast onboarding in the app / Time investment in setting up the device / Easy attachement and syncing the device	Good app onboarding and maintenance / Guide reflection / Well designed UI	Room to make suggestions / Quick service if device breaks / Quick response from customer service	Mood remains stable. Why should I keep using Lim-it? / No burn-out / help others get out of burnouts
Touchpoint — What part of the service do they interact with?	Interaction is with the device Lim-it, not with the app.	Website / Device / Google?	Device / App	App	App / Customer service	App / Device
Customer Feeling — What is the customer feeling? *Tip: Use the **emoji app** to express more emotions*	🤨	🤔	🙂	😁	😌	🙂
Backstage						
Opportunities — What could we improve or introduce?	Provide a clear overview of what lim-it is and how it can help the user	Inform user about the benefits of Lim-It. Show transparency in what is done with the data	Create an easy onboarding in the app, make the set-up very simple/minimal effort.	Improve the reflection. Find strategies on how to keep people engaged	Ensure a good customer service	Come up with why registering mood should always be done and not only when you are at risk.
Process ownership — Who is in the lead on this?	Communication/marketing /UX designer	Data analyst	UX designer	UX Designer	Marketing	UX Designer

COM-B model - User

Capability		Opportunity		Motivation	
Psychological		**Physical**		**Reflective**	
Don't notice their own symptoms		No tangible help		Put others first Their issues impact the team	
Physical		**Social**		**Automatic**	
No self-care & external support		No consistency Don't show feelings in public		They continue working while being annoyed.	

COM-B model - Buyer

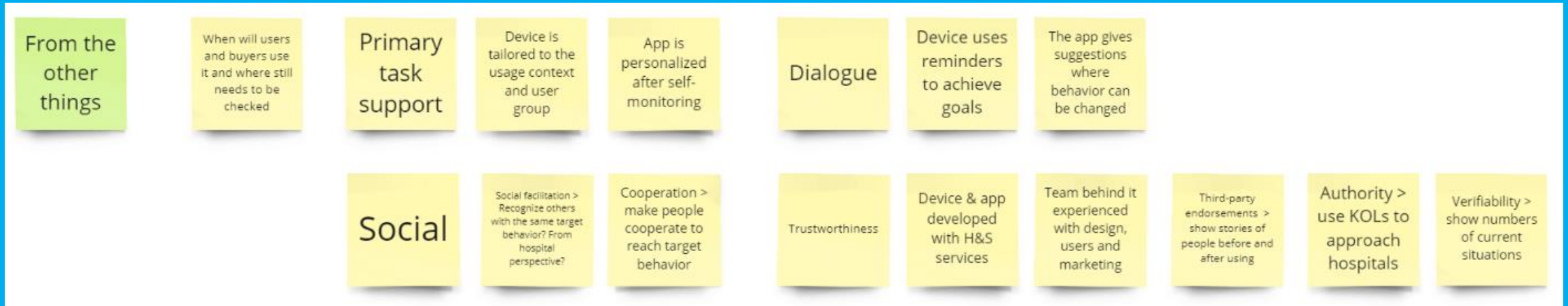| Capability		Opportunity		Motivation	
Psychological		**Physical**		**Reflective**	
Don't know that preventing burn-out can lower costs educate through sales representative and promotion		Don't have the resources to help Enablement		Reduce burn-out costs Modelling	
Physical		**Social**		**Automatic**	
No tools Enablement		Mental health is important Environmental restructuring		money - turn over rate. Incentivization	

Workshop learnings (sprint 2)

From CJM user

- The hospital needs support from us with explaining why and how to use Lim-It

- Device is used during working hours, but the app afterwards

- Users will probably discuss it with colleagues

- Can we support them in the community feeling?

- Do they even want community feeling?

From CJM buyer

- Managers need to be involved in the process of implementing Lim-It with support from us

- Hospital needs to take moment to reflect on if it is helping after a few months

- How will they support the reflection part of the app?

Workshop learnings

From the other things	When will users and buyers use it and where still needs to be checked	Primary task support	Device is tailored to the usage context and user group	App is personalized after self-monitoring		Dialogue	Device uses reminders to achieve goals	The app gives suggestions where behavior can be changed

		Social	Social facilitation > Recognize others with the same target behavior? From hospital perspective?	Cooperation > make people cooperate to reach target behavior		Trustworthiness	Device & app developed with H&S services	Team behind it experienced with design, users and marketing	Third-party endorsements > show stories of people before and after using	Authority > use KOLs to approach hospitals	Verifiability > show numbers of current situations

Workshop learnings

Behavior weel

Education > when they get Lim-It, they get an information folder on the why, what, how

Education > hospital get information folder how to support employees in using app and reflecting

Training > workshop for employees to reflect and practice with app and device

Training > managers how to support employees with Lim-It

Environmental restructuring > Posters in hospitals

Changing culture by letting everyone wear Lim-It and open the conversation about mental health

Service provision > deliver community & app

Communication/ marketing > Via media campaigns targeted to hospitals

Communication/ marketing > Use posters in hospitals with Lim-It explanation

Guidelines how to use Lim-It as employee and as hospital

Modelling > For future, when already having a trial hospital, show how great that is going

Enablement > reduce barrier to track mood

Problem-Solution Fit canvas

Purpose / Vision

Version:

1. CUSTOMER SEGMENT(S) — CS

Who is your customer?
eg. working parents of 0-5 y.o. kids

- Dutch hospitals
- Hospital boards
- 69 hospital organizations *(Ziekenhuiszorg | Aanbod | Instellingen, 2023)*

(Menco et al., 2021)

Define CS, fit into CL

6. CUSTOMER LIMITATIONS — CL
EG. BUDGET, DEVICES

What limits your customers to act when problem occurs?
Spending power, budget, no cash in the pocket? Network connection?
Available devi

- accessibility for mood management (employer cannot wear watches etc) *(Maharjan et al, 2014)*
- Careworkers first focus on others before thinking of themselves *(Veel burn-outs onder jonge zorgmedewerkers, 2019)*
- Do not spot early symptoms of a burnout *(Van der Toorn, 2023)*

5. AVAILABLE SOLUTIONS — AS
PLUSES & MINUSES

Which solutions are available to the customer when he/she is facing

- Workshop/ coaching sessions/..... *(Menco et al., 2021)*
- Imec: bandaids to detect heart rate and check for stress *(Van Doren, 2021)*
- Offer personal support (from peer, mentor, coach, psychologist) *(Korsten et al., 2022)*
- Headspace (app + online lecture) *(Headspace, 2023)*
- Online platforms to share moods and support each other

Explore AS, differentiate

2. PROBLEMS / PAINS — PR
+ ITS FREQUENCY

Which problem do you solve for your customer?
There could be more than one, explore different sides.
eg. existing solar solutions **Young doctors (user)** *considered*
a good investment (1).

Young doctors (user)

- Doctors in training: 44% experiences a high work pressure. 35% is unsatisfied with work-life balance. 54% can almost never take a break without spending their break on work related tasks. *(Korsten et al., 2022)*
- 24% has burn-out symptoms. in 2 years from 14% to 24% while work circumstances do not change. *(Korsten et al., 2022)*
- Hospitals do not know how to solve burn-out problems among health care givers. *(Moss, 2021)*
- Burn-out symptoms over the years *(Korsten et al., 2022)*
- Work-life balance is mentioned (41%) as cause for burn-out symptoms *(Korsten et al., 2022)*

How often does this problem occur?

- 95% of the costs made for burn-out in hospitals are made by the occupational health and safety services *(Overspannenheid En Burn-out | Zorgutgaven, 2022)*
- Sick leave is increased by burn-out. Sick leave has a large price tag for employers. *(Moss, 2021)*

Hospital

Focus on PR, tap into BE, understand RC

9. PROBLEM ROOT / CAUSE — RC

What is the root of every problem from the list?
*eg. People think that solar panels are bad investment right now, because they are too expensive (1.1), and possible changes to the law might influence the return of investme**Young doctors (user)** h the benefits (1.2).*

Young doctors (user)

- Employee shortage *(Ministerie van Volksgezondheid, Welzijn en Sport, 2022)*
- No time or guidance for reflection to prevent burn-out *(Van der Toorn, 2023)*
- Bad work-life balance *(Korsten et al., 2022)*

Hospital

- Hospitals do not know how to help employees *(Moss, 2021)*

7. BEHAVIOR — BE
+ ITS INTENSITY

What does your customer do about / around / directly or indirectly related to the problem?
eg. directly related: tries different "green energy" calculators in search for the best deal (1.1), usually chooses for 100% green provider (1.2).
indirectly related: volunteering work ("Greenpeace etc)

Hospital

- Personal guidance *(Korsten et al., 2022)*

Young doctors (user)

- visit a presentation about stress symptoms
- Go to trainings
- talk to a company doctor *(Menco et al., 2021)*

How often does this related behavior happen?

Focus on PR, tap into BE, understand RC

3. TRIGGERS TO ACT — TR

What trigge— *to act?*

- With burnout symptoms, more medical errors *(Van Dievoort, 2015)*
- Relationship between burnout and quality of healthcare
- Domino effect of burnouts among employees *(Korsten et al., 2022)*
- Risk that patiënt care will become worse. *(Korsten et al., 2022)*
- Needing to pay for the burnouts
- collective bargaining agreement - when unable to work due to health issues, the hospitals need to pay for 104 weeks 70% of the salary. *(Nederlandse Vereniging van Ziekenhuizen, 2021)*

€277,9 million *(Overspannenheid En Burn-out | Zorgutgaven, 2022)*

4. EMOTIONS — EM
BEFORE / AFTER

Which emotions do p—*l before/after this problem is solved?*
Use it in your commu— *gy.*
eg. frustration, block— *it) -*— *mart, be an example for others (made a sm*—

- Before: *Lost* because there are no good solutions
- After: *Secure* because they have a way to solve the problem

Identify strong TR & EM

10. YOUR SOLUTION — SL

If you are working on existing business - write down existing solution first, fill in the canvas and check how much does it fit reality.

If you are working on a new business proposition then keep it blank until you fill in the canvas and come up with a solution that fits within customer limitations, solves a problem and matches customer behaviour

- Show why trackign your behaviour is important in preventing burnout
- Guide personal reflection
- focus on preventing burn-out to reduce turnover rate and health care costs.

8. CHANNELS of BEHAVIOR — CH

ONLINE
Extract channels from Behavior block

- In the news

OFFLINE
Extract channels from Behavior block and use for customer development

- On the work floor
- At home

Extract online & offline CH of BE

IdeaHackers .NL

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Data requirements

Cloud storage is possible but there are a few rules.

two- or multiple factor authentification

data communication between device and cloud needs to be encrypted.

Cloud server needs to be on european crowd.

Data needs to be compliant to GDRP.

(ICTRECHT, 2019)

Business Value Proposition

Planning

| | Week 4 | | Week 5 | | Week 6 | | Week 7 | |
	By Tuesday	By Thursday	Tuesday	Thursday	Tuesday	Thursday	Tuesday	Thursday
Design & Prototype		Revised Design; Finish Week 4 Study Modules	Updated Prototype; Presentation Slides & Pitch Preparation			Design Revision (if Needed); Finish Week 6 Study Modules	Final Product Prototype; Final Presentation Slides & Pitch Preparation	
User Research		Customer Journey Mapping; Business Ethics Research on Environmental Sustainability & social responsibility	Service Blue Print; Coaching Meeting 13:00 to 13.30				Coaching Meeting 13:00 to 13.30	
Market Research		Target group	Stakeholder Benefits; Voice of Health & Safety Service					
Finance & Costing			Finalise Subsidies			Product Costing		Product Launch

PRESENTATION & FEEDBACK (PRODUCT PITCHING)

FINAL PRESENTATION & FEEDBACK (PRODUCT PITCHING)

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Reflection Design Entrepreneurship

Design Entrepreneurship - Vere Vreeswijk - 1314246

This course has helped me to develop on an intellectual, personal, and professional level. I worked on the Lim-It challenge as a UX/UI designer in the course.

From hypothesis to market-fit

A project's business or entrepreneurial side never had my priority in projects. However, throughout this course, I developed my business and entrepreneurship perspective and how this perspective can enrich the design process. Due to this development, I am more motivated and skilled to implement business-related strategies in my project. For example, my focus on climate change always feels like my north star is to 'save' the world, which is a highly unrealistic north star for one individual designer. In this case, the business growth map already helped me define a realistic north star. Besides the business growth map, other tools also provided me with new approaches for the design process, which I will use during my preparation for FMP and FMP.
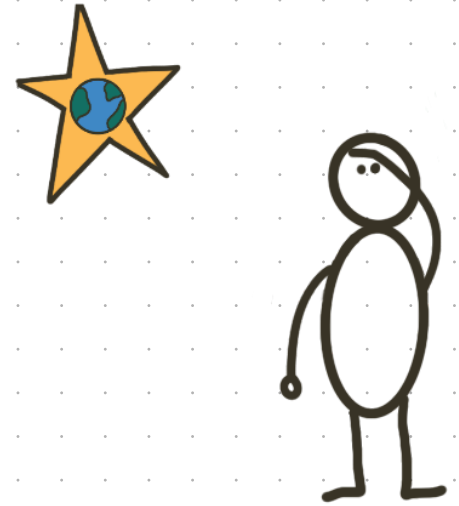
Business-related skills

In addition, I have strengthened my entrepreneurial skills in funding as I took the lead in those topics. I went from a foundation to an intermediate level, which is a good starting point for future development. Reflecting on this development, I realized that I am passionate about something other than funding and instead focus my energy on creating a good user experience or keeping the overview of the process. So, even though I have developed myself in this skill, I will not prioritize further development. I now have expertise in multiple strategies for getting funding. Still, in future projects, I would like to collaborate with funding experts to keep my focus on other aspects of the project.

My role as UX/UI designer

I built upon my skills as a UX/UI designer because I used to work on an existing product already in the market, and this course focused on developing a product for the market. Thinking of product-market fit in the development phase showed me that it is vital to alter your product to two perspectives: the needs of the user and the market. It was interesting to view one product from two perspectives, especially in our case, where we asked hospitals to pay for a product their employees will use. From this, I have learned the importance of evaluating multiple business perspectives of a product to ensure that the product is not only a problem-fit for the user but also a market-fit to have buyers for your product.
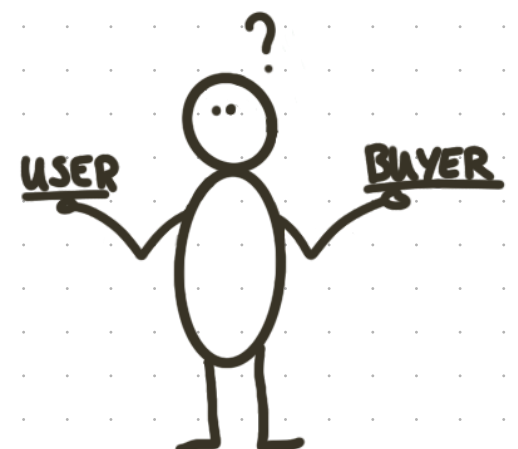
One of my goals for the UX/UI designer role was to gain insight into what type of UX/UI designer I would like to become. Reflecting on this, I do not want to be one specific UX/UI designer because I enjoy working on an

early-stage product as much as an advanced one. Besides, I value combining literature and reports with data from questionnaires and interviews. Both user research methods strengthen each other and give other insights into the problem. The role felt like a natural fit, challenged me and showed me new perspectives, which led me to think that UX/UI design is a potential career opportunity.

Task management

My last goal was to only help my team members with their tasks instead of taking over to allow them to develop themselves and for me to not overwork myself. This goal proved to be my most significant challenge throughout the course. Our group had people with different backgrounds, resulting in different expertise and entry levels in this course. The collaboration was often difficult for me as I felt like I was educating my team rather than learning something myself. This disbalance resulted in a lower motivation for the course as I did not feel as intellectually challenged as I wanted to be. For my future collaborations, I want to continue developing myself in how I can facilitate and support the learning curve of others (if needed) while still ensuring that I will be challenged. One crucial step in this could be to take time at the start of a collaboration to establish everyone's level of knowledge, discuss what we want to get out of the course, and how to support each other. Especially as a potential UX/UI designer who is responsible for guiding the team through a design process, it is necessary to create a healthy balance for myself.

On a positive note, looking at previous courses, I have developed myself in not taking over someone's tasks when I thought I could do them better. I noticed this as I could provide feedback on a professional level to my team members throughout the course rather than jumping in the gaps and getting frustrated while doing so. Besides, I can reflect that we were not the star team of this course but that the members of our group have learned a lot from the course. Ultimately, we are here to learn, so developing ourselves as individuals and as a team is more valuable than giving the best pitch. In future educational projects, I will keep this mindset present so I can worry less about the outcome and focus more on the learning curve.

Professional identity and vision

Lastly, the course contributed to my professional identity and vision development by enriching my entrepreneurial attitude in my design process and providing the necessary tools. As a designer, I highly value knowing many techniques and tools to select appropriate methods for my design challenges. Besides, this course made me curious to explore entrepreneurship in the context of climate change and behaviour change and how projects for societal impact can become market-fit. My development in this course will help me to put my vision from hypotheses to practice, which is what I wanted to get out of this course.
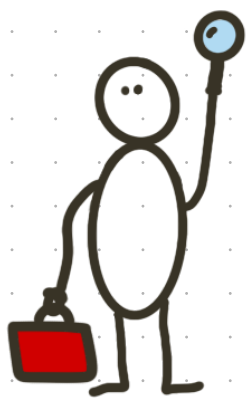
In conclusion, this course was beneficial for my development as a professional, a person, a UX/UI designer, a team member and as a designer in general.
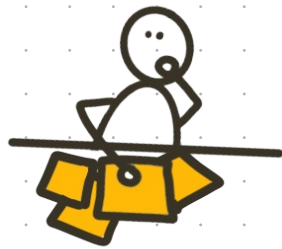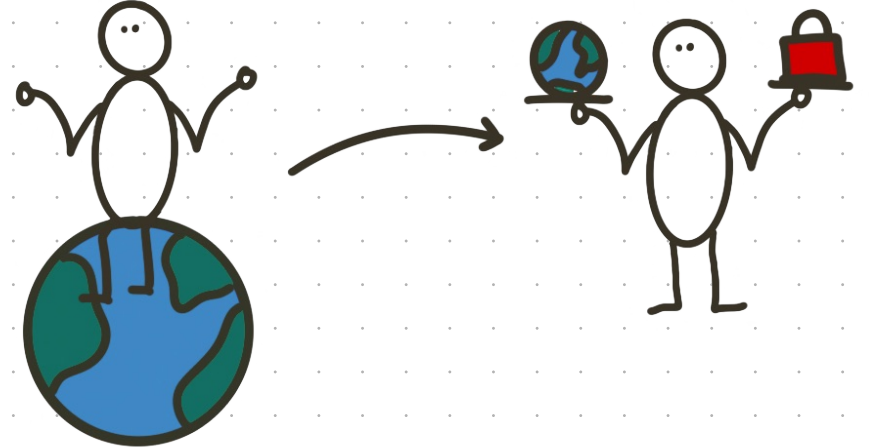
Personal Development Plan

Design Entrepreneurship – Vere Vreeswijk

1

From hypotheses to market-fit

As a designer, I have been focussing on how I can impact climate change with my designs. The impact I was aiming to make was on a societal level rather than considering the economic side of my project. In most of my projects, business plans often come last and are only focused on if time allows. However, for my second year in the master's, I have chosen to do the' preparation FMP' project to add more depth to my FMP. I have decided to follow this course to add an entrepreneurial perspective to my FMP. My first goal for this course is to learn methods and tools to help me generate a value proposition and business model for designs that aim to alleviate the negative consequences of climate change. This would allow me to take my designs from a hypothetical stage to a market-fit product.

2

Business-related skills

The EntreComp self-assessment showed me that I mainly score high on soft skills, such as planning and leading a team. However, I still need a better understanding of risk analysis, budgeting, and funding. This will make me a more well-rounded designer and is a valuable asset in understanding how businesses function. I will actively engage with these topics throughout the course challenge to better understand these business-related skills. At the end of the course, I want to have a strong foundation of these skills to evaluate if these are skills I should develop further.
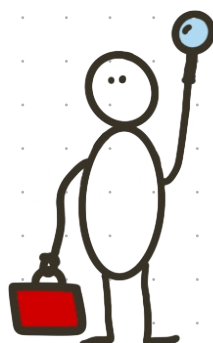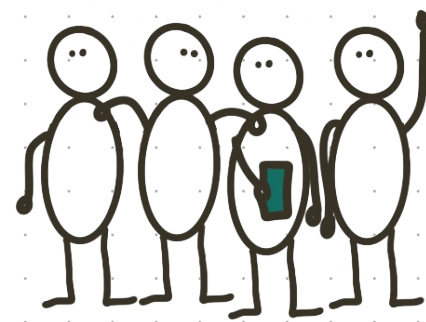
3

Task management

In teamwork, I tend to take over someone's task if they struggle to manage it, specifically if I think I can do it faster. This was also reflected in the Belbin test. I am aware that this is not good for me as I take on unnecessary extra tasks, but it also takes the learning opportunity away from others. Therefore, I challenge myself in this course to only help my team members with their tasks rather than taking them on myself. Developing in this will prepare me for my future career where it is also impossible to do the work of others and hopefully will also teach me to trust my team members in their capabilities.

4

Senior UX/UI designer

The role is closely related to my past developments but also challenges me to develop myself further. In a previous course, I learned several methodologies related to UX design. Besides, I have worked as a junior UI/UX designer. In the course, I want to focus on the product's business side as a UX/UI designer and learn to combine market elements with UX/UI design. This course and role allow me to exercise and use what I have learned in an actual project. Adding an entrepreneurial perspective to UX/UI design can help me reflect on what kind of UX/UI designer I want to become.