

ADHD Timer

A business driven report to improve product-market fit



Figure 1: ADHD timer, own image

Individual assignment
Teun Roetman
1687484
DAB200

Business model canvas

Key partners:

App stores: Host the app of the device.

Shipping companies: Since the products sells online, it gets shipped to the customer.

Manufacturer:

The product and it's electronics are made in a small factory.

Web hosting:

The product is sold through it's own site, so needs a working site.

Social media companies:

The app is marketed through social media, to reach a relatively young audience.

Key activities:

Improving on the device and app with customer feedback.

Quality control.
Distributing the product.

Customer service.
Marketing.

Key resources:

Designers & Engineers.

Startup capital to make product producable and bring it into production.

Value proposition:

The timer is programmable with an app by customers to schedule their day and not forget any task. It has lights to signal time left, which turn off faster at the beginning to induce good stress, increasing productivity (Villines, 2024).

It has customization options to make it feel more personal to the customer, and not become bored of the device. It also offers repair parts..

Customer relationships:

Marketing on social media, as well as mouth to mouth, and care professionals. Connected with product through customisation and feedback.

Channels:

Selling via webshop and (online) retailers. In-app purchases.

Customer segments:

People with ADHD.

People who have trouble keeping schedule.

People with very busy schedules.
people with a desire for a well planned day.

Cost structure:

Value driven by creating a unique service, while keeping up with possible competition by updating app as well as product. Lower cost the more are produced. Design team is a fixed cost, always iterating.

Revenue streams:

The main revenue stream is selling the products, while side streams are customising products, and a premium version of the software with not necessary, but useful extra features. Repair parts are also sold

Figure 2: Business model canvas

Analysis

Introduction

Since currently, the product is only on its second iteration, it is important to iterate further before bringing it to market. The current value proposition thus needs to be analysed and evaluated, after which changes can be made to the design. To start the analysis and evaluation, a persona is firstly made, giving the ability to do market research and evaluation specifically for the persona. Market research and a value curve are then made to look at how the current device compared to the competition. After, more market research is done into other ways of combating the personas pain points and achieve their goals.

Persona

A persona was made of a young person with ADHD, which is the main group being marketed towards, since they are young and still looking for solutions to make their life more structured, while they are growing up and need to do more.



Gijs Vissel

Age: 22

Location: Delft,
Netherlands

Education: Industrial
Engineering

Keywords:
Fast-learning,
Chaotic, Flexible

Biography

Gijs is a full-time student at TU Delft with ADHD, he comes over as chill and is very social, although he loses track of what he's doing often. He loves his study, as well as his extracurricular activities, thus try to do as much as possible for both of them.

Goals

- Aiming to be the best in class
- Work a side job he is passionate about
- Become a better volleyball player
- Have enough time left during

Pain Points

- Gets distracted during work often
- Often comes late to meetings
- Struggles to know what to do at a given moment.
- Has no energy left after his workday
- Faces a lot of anxiety due to pressure to perform

Preferences & Needs

- He likes clean and non-distracting design
- Having a day planned out works great for him
- He works a lot faster when the deadline is close

Figure 3: Persona

Analysis

Market research

There are several different ways of improving productivity with ADHD. Some proven methods are planning out the day, working in intervals, setting an intention of what you want to do and for how long, avoiding multitasking and avoiding distractions (Lebow, 2021).

The current ADHD timer is focused on planning out the day and setting intention with that. It also aimed to reduce distraction by not being online itself.

For timed blocks, the most popular is TimeTimer (Time Timer, n.d.), which uses a large red plane to indicate how much time the user has left for a task. It lacks any other function.

For planning, a paper agenda can be used, which has limited flexibility and features. More advanced options are google calendar and any.do (google, n.d., any.do, 2011), which allow you to easily add and change schedules. They can furthermore set reminders for important appointments. Although clear intention can be set with these, since they need to be actively open to see, this can be lost.

Furthermore, since they are online, they can lead to other distracting tabs.

Any.do has an option to send reminders to the smart watch, allowing you to always be able to see the next thing, although the smart watch will also receive other distracting notifications (any.do, 2011).



Figure 4: The time timer (Time Timer, n.d.)

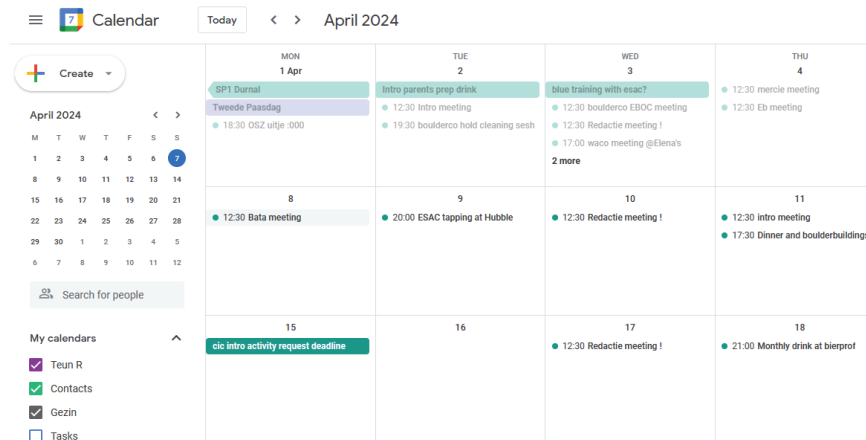


Figure 5: Google calendar (Google, n.d.)



Figure 6: Smartwatch reminder (any.do, 2011)

Analysis

Market research

Amazing Marvin offers the most features. It's main selling point is using gamification to create dopamine for done tasks with a mascot cheering you on, and getting points for each task, which is proven to be effective in activating the dopamine circuitry of people with ADHD (Blum et al, 2008) (Alabdulkareem & Jamjoom, 2020)(Amazing Marvin, n.d.).

It furthermore has a lot of features, automatically picking a task from a to-do list, interval timers.

A last program useful for our target group is Cold Turkey (Cold Turkey Software, n.d.). It is a website blocker which is made to be incredibly hard to remove from your computer and can thus eliminate distractions. It has no ability as a planning or timing tool and has little in common with the other tools or the first iteration of the prototype in this sense and is thus not mentioned in the value curve, although still important to keep in mind for the next phase.

A hybrid between a digital app to plan with a non distracting device to show the planning does not exist on the market currently.

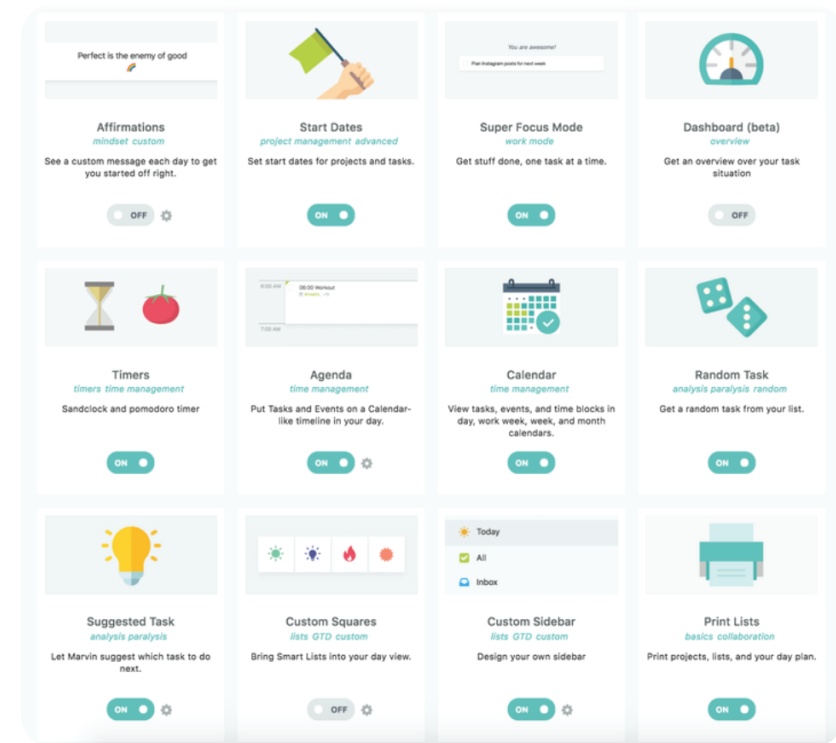


Figure 7: Amazing Marvin features (Amazing Marvin. n.d.)

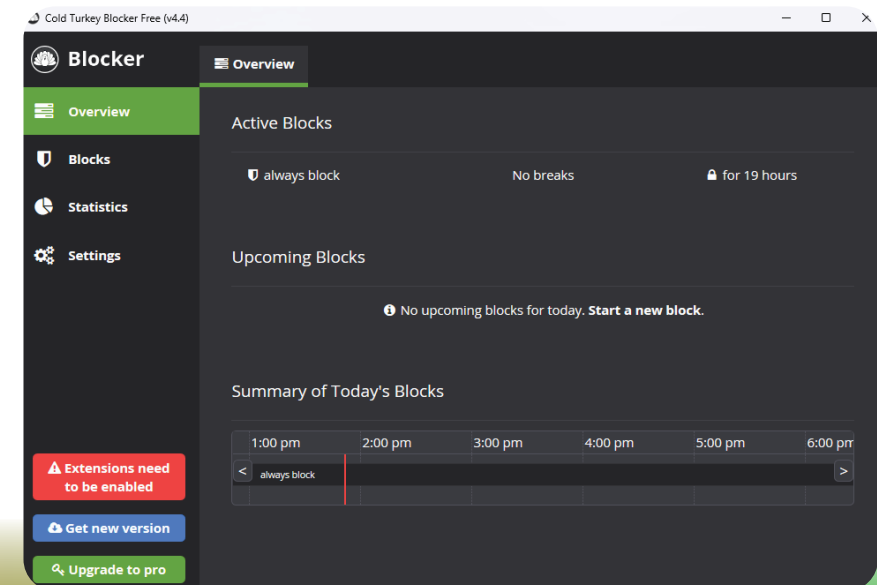


Figure 8: Cold Turkey blocker UI with a blocker activated (Cold Turkey Software, n.d.)

Analysis

Value curve

A value curve was made to see how the current value proposition compares to other companies. It scored the lowest in convenience, since as a combination between physical and digital, it is the most complicated. It furthermore scores high in cost. It lastly did not score good in creating agency to start with tasks.

Value Curve

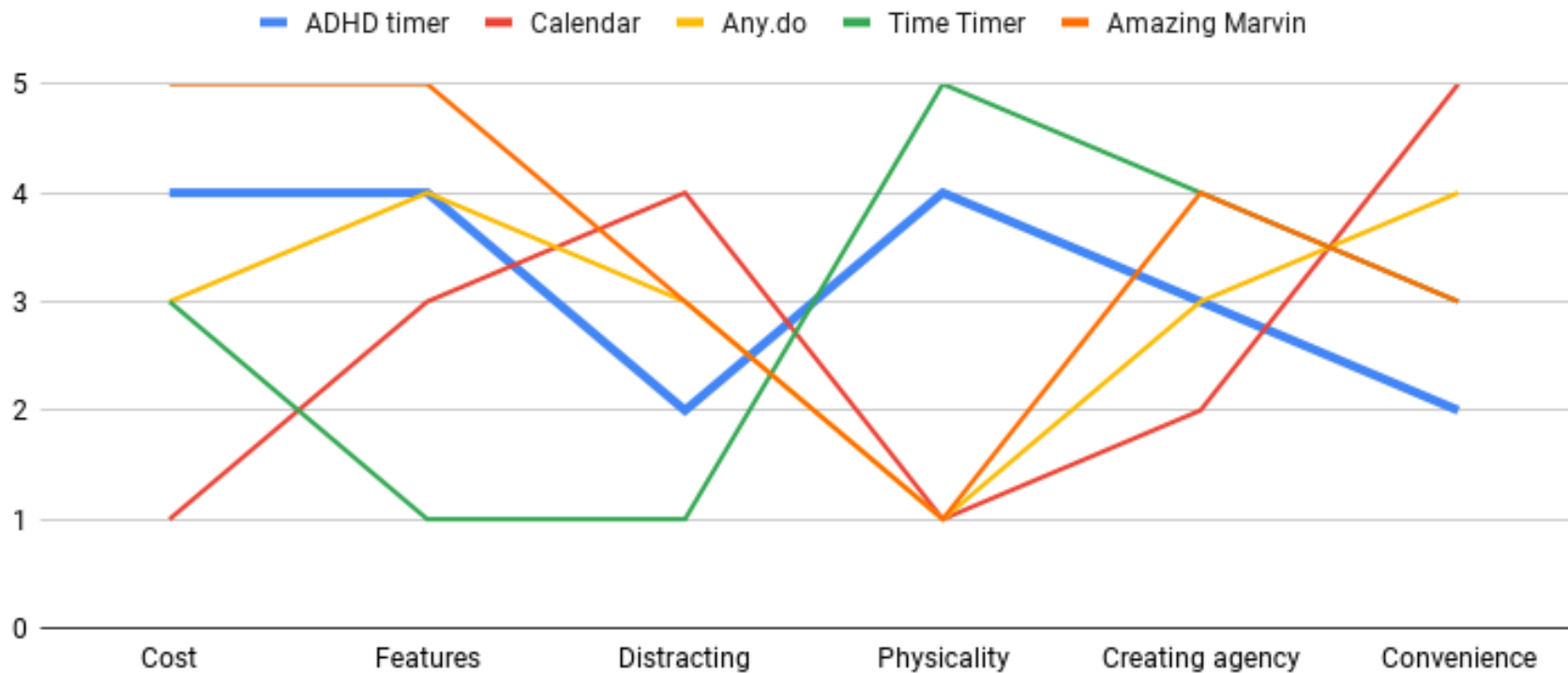


Figure 9: Value curve

Evaluate

Value proposition canvas

A value proposition canvas was utilised to evaluate if customer needs align with the value proposition. In bold are parts where the needs of the customer do not seem to align with the proposition. This creates clear improvement points for the product.

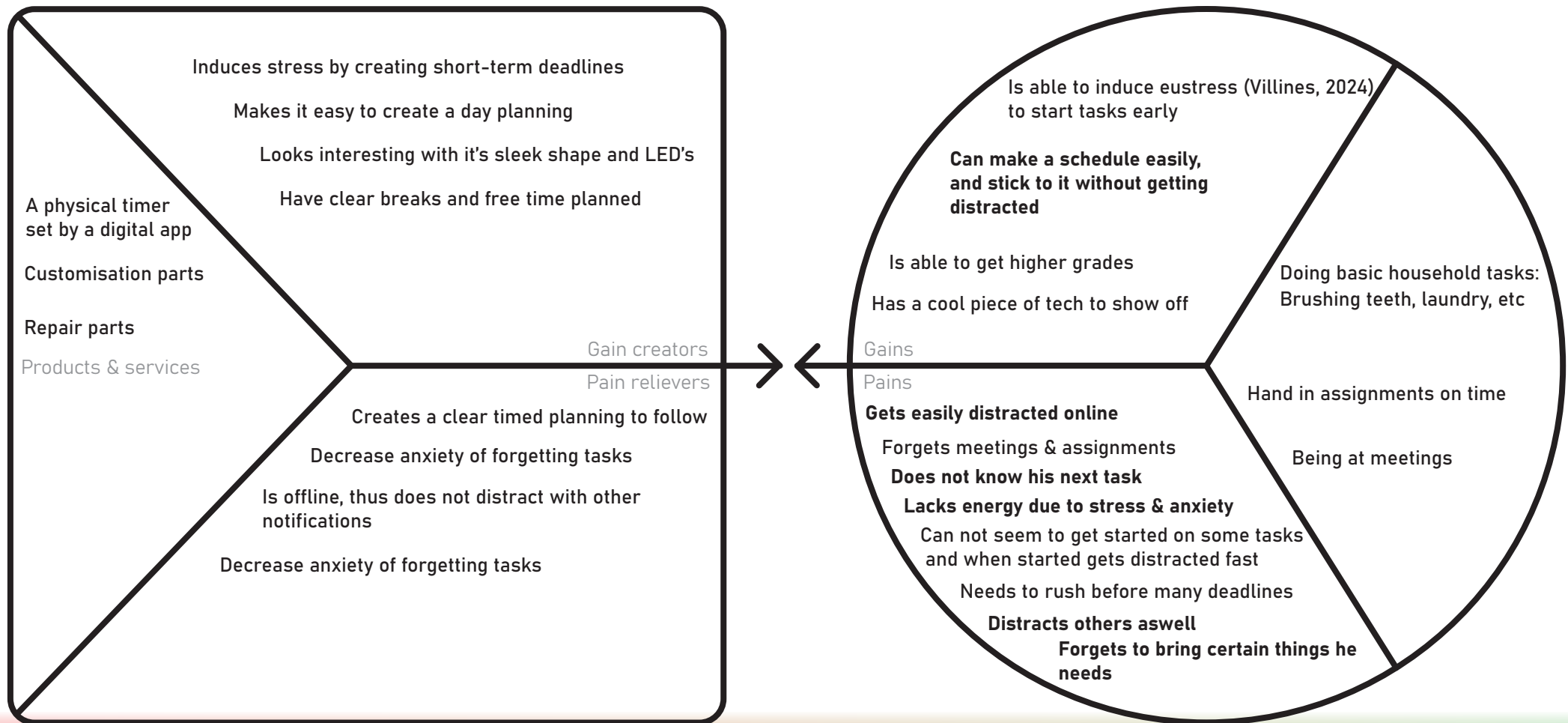


Figure 10: Value proposition canvas (Varga, 2020)

Evaluate

Problem-solution fit

A problem-solution fit canvas was utilised to look for new solutions to the customers main problem.

Customer segments Young students with a lack of planning experience People with busy schedules People with ADHD People looking for a clear scheduled day		Customer limitations Small budget for many students Lack of time Stress to do even more	Available solutions Online calendar with reminders Online to do list with virtual rewards A clock to give a specific time for a task
Problems/pains The user gets distracted when online The customer does not know what he should do The customer forgets things, meetings and tasks.		Problem root The customer has a lack of focus, possibly due to ADHD, or stress. Online environments try to pull you into them. The customer has a lot of things to do every day.	Behavior Spending a lot of time on the internet browsing Rushing from meeting to meeting Walking back and forward to retrieve forgotten items,
Triggers to act Done with feeling overwhelmed Forgetting another meeting		Solution Take away the access to online environments. Have a maximum amount of tasks to do daily. Give dopamine to the user to create an incentive for the task bigger than the alternative. Have a day planned out exactly, so there is no room for distraction	Channels of behavior - online Social media advertisement Collaboration with influencers
Emotions before Overwhelmed stressed Ashamed	Emotions after Organized chill Flow (headspace, n.d.)		Channels of behavior - offline Talking about the product to other showing the product in public

Figure 11: Problem-solution fit canvas (The Canvas Revolution, 2020)

Evaluate

Conclusion

There are several points the main product can improve upon, as shown by the value proposition canvas (figure 10). The device tries to make users feel stressed to come into action, while most already feel overwhelmed. Furthermore, the light of the device is probably too distracting, since they turn off and change colours quite abruptly, this can distract others as well, while the distracting online world is still accessible. The device also does not show what the next task is. Lastly, it is a device that can be forgotten easily at any point, especially by the target group.

The problem-solution fit (figure 11) canvas dove deeper into the main problem and with it possible solutions were found. An exact planned out day will however create stress for a lot of people again, and can thus be ruled out. A maximum amount of tasks per day is also not practical, since some days there are many smaller tasks that may need to be done.

Taking away access to online environments is a good solution to some of the issues the user is facing, as well as small dopaminergic incentives.

For create, the analysis should not be forgotten, and thus minimising complexity of the device for the user should be kept in mind with the redesign as well, next to the improvement points mentioned above. The good points about the product should also not be forgotten in the redesign. Costs are not a priority for the redesign, since for the success of the product at this early design stage, it is more important to get the core value proposition right. After this it can be iterated upon to minimise costs or redesign the business model.

Create

Original design

The original design (figure 12-14) had lights which signalled time and induced stress by going out faster in the beginning. An app was used to program a schedule into it, and it would then start timers for each task, as well as notify the user of any meetings. Some old design requirements are still relevant, since they add value to the user.

New design requirements

- Device should not receive notifications from apps
- It should be programmable with a clear schedule and appointments
- Device should show how much time is approximately left for task or until next task

New design requirements

- It should give dopamine instead of stress
- It should be able to block online distractions
- It should not use any LED lighting
- It should show the task at hand
- It should be hard to forget
- It should minimize complexity

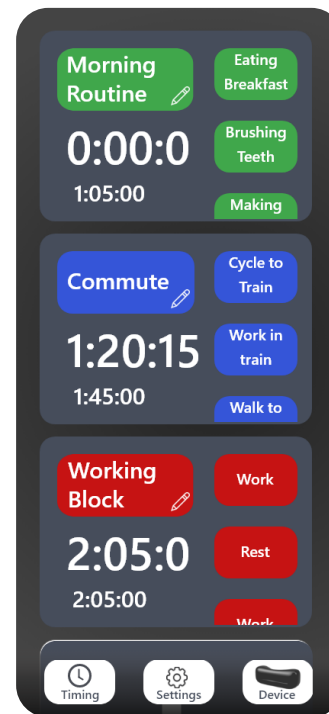


Figure 12: Current app design



Figure 13: Current product design



Figure 14: Current product design with lights on in the dark

Create

Possible redesign 1

Redesign 1 (figure 15) makes the device wearable, giving only the beginning of the day to forget it. It uses a ball in a tube to show how much time is left. The ball in the tube jumps up and down when a task is completed for a sense of accomplishment. It has a small screen to show the current task. The app for programming remains unchanged.

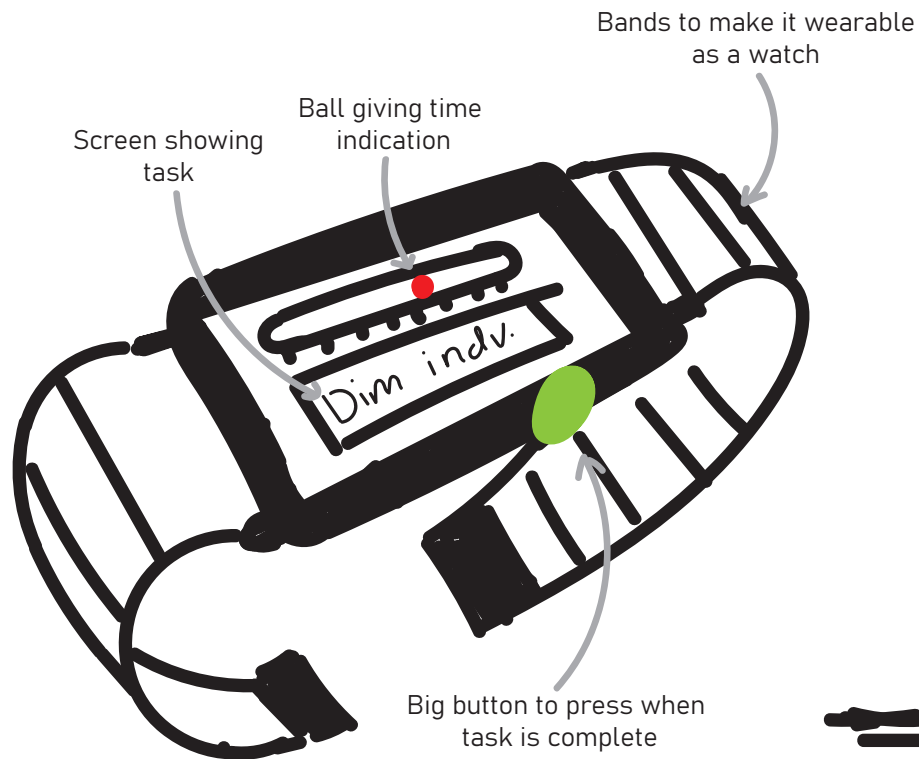


Figure 15: New product sketch 1

Possible redesign 2

Redesign 2 (figure 16) is attached to a laptop, with a switch to block a standard or custom list of distracting sites. It has a thermometer-like way of telling how much time is left and plays an animation on the laptop when a task is finished. It can be argued that by attaching it to a laptop, it becomes less of a physical device, although with its blocker, the distracting element of that gets taken away.

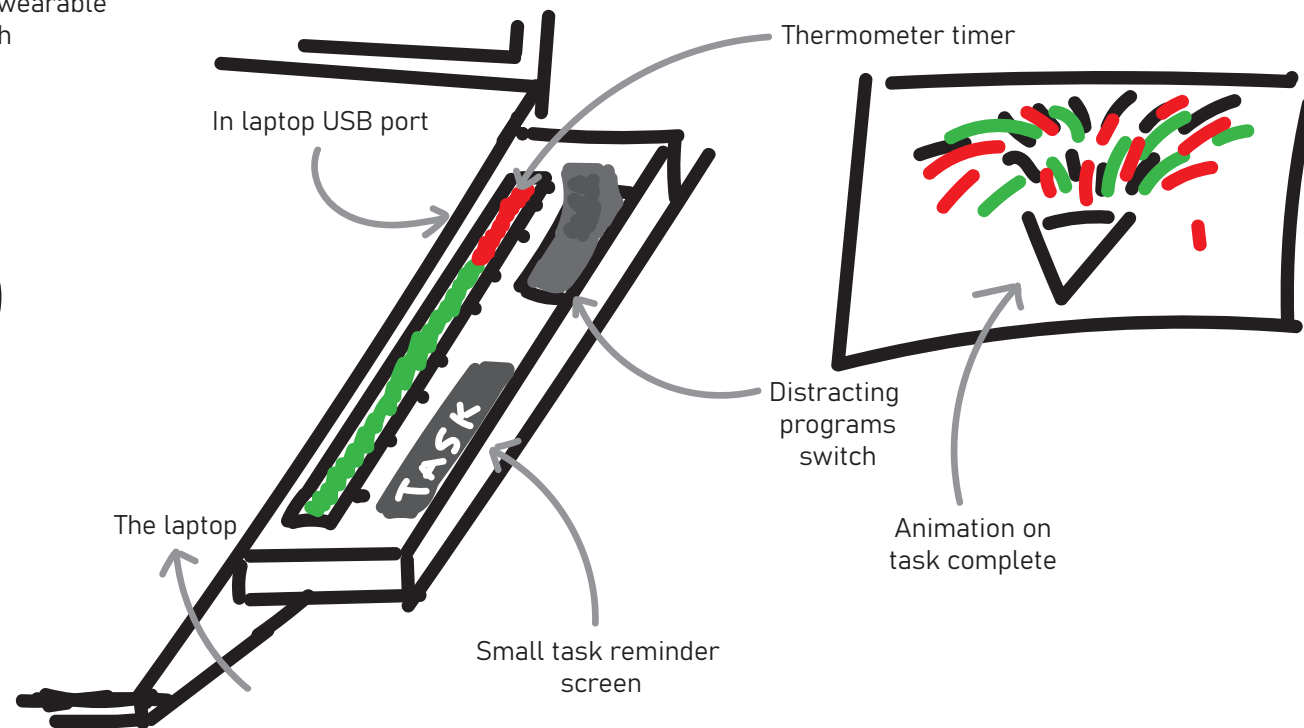


Figure 16: New product sketch 2

Sources

Amazing Marvin (n.d.), Amazing Marvin - Customizable Task Manager and Daily Planner. <https://amazingmarvin.com/>

Alabdulkareem, E., & Jamjoom, M. (2020).

Computer-assisted learning for improving ADHD individuals' executive functions through gamified interventions: A review. Entertainment Computing, 33, 100341. <https://doi.org/10.1016/j.entcom.2020.100341>

Any.do (2011, 11 januari) A simple to do list for you and your team. Any.do. <https://any.do/>

Blum, k et all (2008, 4 October). Attention-deficit-hyperactivity disorder and reward deficiency syndrome. Pubmed central. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2626918/>

Cold Turkey Software. (z.d.). Cold Turkey blocker. Cold Turkey Blocker. <https://getcoldturkey.com/>

Google (n.d.). Shareable Online Calendar and Scheduling - Google Calendar. Google Workspace. <https://calendar.google.com/calendar/u/0/r?pli=1>

Haynes, T. (2021, 4 februari). Dopamine, Smartphones & You: A battle for your time - Science in the News. Science in The News. <https://sitn.hms.harvard.edu/flash/2018/dopamine-smartphones-battle-time/>

Headspace, (n.d.) What Is a Flow State and What Are Its Benefits?. Headspace. <https://www.headspace.com/articles/flow-state>

Lebow, H. I. (2021, 24 juni). How to Stay Productive with ADHD. Psych Central. <https://psychcentral.com/adhd/adhd-productivity-strategies-for-getting-things-done>

Sources

The Canvas Revolution. (2020, 23 juli). Problem-Solution Fit Canvas - The Canvas Revolution.
<https://thecanvasrevolution.com/product/problem-solution-fit-canvas>

Time Timer. (n.d.). Time Timer® | Visual Timers for Time Management | Countdown Timer. <https://www.timetimer.com/>

Varga, D. (2020, 10 augustus). How to Use Value Proposition Canvas: The Definitive Guide. Digital Natives.
<https://www.digitalnatives.hu/blog/value-proposition-canvas/>

Villines, Z. (2024, 15 januari). Eustress vs. distress: What is the difference?
<https://www.medicalnewstoday.com/articles/eustress-vs-distress>