

MANAGEMENT SUMMARY

To

Sogeti Project B Jury Members

From

Eykenburg Group 2 De Haagse Hogeschool

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Value Proposition

Product we are offering

Active plus is an innovative ecosystem which consists of photo activity sets that are created by the caretakers and family members in order to motivate the inhabitants to become more active and an interaction touchpoint for the client called Digital Mailbox which motivates the inhabitants to be active through the photo sets. We offer a new communication platform which will encourage people with dementia to challenge their own will and be more proactive.

Our target customer

The current stakeholders are: – the institution, employees – the caretakers and doctors of such facilities, elders – people in their older years with different stages of dementia, and family members – of those elders.

The problem our product solves for our customers

Our product solves the issue of lack of motivation that we see prominently in people with Dementia. From our Research we saw that the inhabitants lack the feeling of contribution,

which can lead them to feeling like they miss being valuable to society. This can naturally alienate them from society and at the end they don't feel motivated. Along with this, we need to keep in mind that they don't have a long train of thought like we do. So our two main design drivers are motivation and short memory span.

How our product benefits our customer

Our system has many benefits for different stakeholders:

- **Family members:** The family gets motivated to visit the inhabitants more, and has peace of mind knowing that they are safe at all times.
- Caretakers: On the other hand, the caretakers will become more motivated to help the inhabitants. This is because they can display their work on active+ which benefits their future career.
- **Inhabitants:** As a result of this ecosystem, the inhabitant can become more active, purpose driven and feel reintegrated into society again.
- **Institution:** Finally, we have the organization as a whole who can share and learn from organizations all around The Netherlands.

How our product is unique

The active plus eco system is unique because of its simplicity and combination of different important aspects for these peculiar stakeholders:

- The Active+ app is designed to be familiar to popular social networks so that it is easy to learn and understand. Our Privacy Policy is stringent on not monetising data to keep it safe. While using Active+, the caretaker is with the inhabitant at all times to insure their safety. The app Connects different stakeholders and creates a community.
- The Digital Mailbox gives the inhabitants a Familiar experience of reading letters, a technology that was very common when the inhabitants were younger. It is designed to easily be interacted with through Gaze and touch recognition. It uses Captivating sensory cues like narratives, photos and sounds as motivators. And finally it is also Height Adjustable so that it can be easily accessible, even for people in wheelchairs.
- The Active+ experience is not restricted to only one institution, but can be implemented into all of them in the netherlands. The design goes beyond the constraints of the organization and creates one big community.
- It is a viable venture because of its simplicity. For the app we are planning on implementing the freemium and Multi sided pattern. Along with that, we have ensured that the cost of hardware such as the Digital Mailbox as well as software remains feasible for the institutions.

Description of Product/Service



The final version of our idea is the ultimate community system. It is designed as a digital form of society that symbiotically empowers the clients (**people with dementia**), their family members and the caretakers.

Let's have a look how the idea works:

Firstly, one part of the system is a social network - the Active+ app. The platform is used by



the caretakers and the family members through their mobile phones. The active+ app is a social platform where caretakers and family members can upload pictures of the inhabitants doing activities. Within the app the caretaker categorises the photos into activities like gardening, painting, playing piano, and more. Basically, employees and family members could be moderators of the inhabitant's personal profile.

The caretakers who interact with the client supervise them and take a picture of the activity. As the caretaker takes a photo of the client doing the activity, it is automatically uploaded into our system. It then gets added to their personal memory wall, which could be accessed by them later.

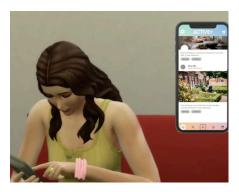
As for the client, they have access to our system through the Digital mailbox which is an interactive wall or a touch screen tv which has facial recognition. Such a screen has a novel sleeping mode which could grab the engaging curiosity from our client. During the busiest times of the day for the caretaker. The DM will only be activated during the calmer times of the day. The way the caretakers can support and monitor all activities is by restricting the total amount of activities done



everyday (the amount of letters received everyday). For instance clients would do 2 activities a day. Het Zamen has 16 clients, so it's roughly 1 activity per week.

As soon as the client (inhabitant) approaches close enough to the screen, it recognizes their face and provides them with the interactive activity system. The last message which has been sended them personally from a relative or generated automatically by Active+ will be shown on the screen. But in order to see it, the inhabitant should interact with the touchscreen. As the inhabitant interacts with the digital mailbox, a caretaker is notified about it and is asked to help the inhabitant in interaction and the activity. Then after getting familiar with all the message content, the inhabitant has to select a special activity that she/he is willing to do. It is **important to mention** here that those letters which are addressed personally for the inhabitants are designed in a way which will directly trigger and motivate inhabitants to do a certain activity.

From primary and secondary research we learnt that pictures of the past can activate clients in a very emotional way. As the contents of those letters are based on the inhabitants past, letters and pictures on the mailbox are designed to directly activate the client at that moment. So he/she gets motivated to start gardening, singing, playing music, etc.



While the client completes their activity, the caretaker takes a photo of the client in order to upload it to the community. This is to keep the family members up to date and remind them that the clients are safe.

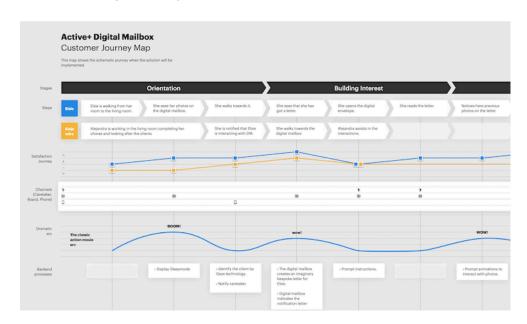
Family members are notified as soon as a client's picture has been posted. They can view it on their feed and can decide to send a note of encouragement where they can attach more pictures of the client.

StoryBoard



We used a combination of a story board with personas before making the concept in order to visualise the customer journey. This was a useful tool to see some mistakes or misconceptions we might have had throughout our design process.

Customer journey map



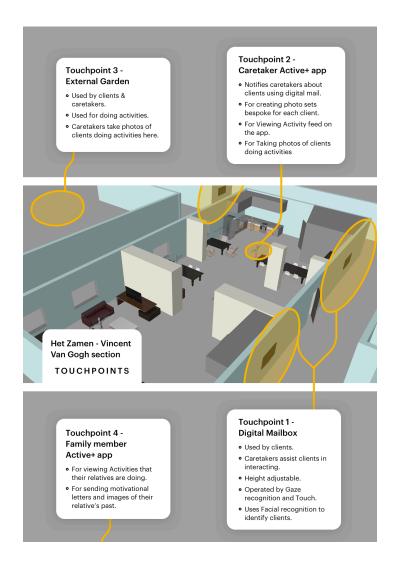
The Customer Journey map, being the base of the service blueprint also shows the journey of our experience. Particularly here, we have illustrated 2 stakeholders - the caretaker and the client. There are steps in the journey where we had to think about What-ifs if the experience didn't go as wwe have planned, and therefore to mitigate that, we have designed answers for it.

Overall, the emotional(satisfaction) journey of the stakeholders becomes more positive at the culmination. We realised that this experience had a dramatic curve that is common and is used in action movies (From the book This is service design doing).

View complete high-resolution Customer Journey map:

https://drive.google.com/file/d/1cwEMJROxpx1sut2XK-9ARD-P6ySLT6XD/view?usp=sharing

Technology



Simple and proven Technology

We have incorporated applications and touchscreens (UI) as well as familiar social platforms. Nevertheless, we also included some limited high-tech as in face and gaze recognition. The reason behind our technological choice is simplicity. We found from research that due to the elderly's lack of focus, it could be uncomfortable to use unfamiliar technology. Therefore, we decided to include a supportive system which asks for the minimum input from the inhabitant and more highly valuable work from the other stakeholders.

Flagship technology features of Active+ App.

- Used by caretakers and family members.
- Family members add photos of the client's past, caretakers add photos of client's present.
- Caretakers create bespoke photo-activity sets that are suitable for each client.
- Multiple institutions can be on the app. So family members can find the most suitable institution for relatives with beginning stages of dementia.
- Designed to be familiar to popular social networks so that it is easy to learn and understand.
- Our Privacy Policy is stringent on not monetising data to keep it safe.
- Simple app ensures it can be interacted even on low cost smartphones.

Flagship technology features of digital mailbox.

- Used by the clients at Het Zamen.
- Primary motivators include narrative, photo activity sets, sounds.
- Can be interacted with Touch and Gaze(facial) recognition scanner.
- Height Adjustable so that it can be accessible even for people in wheelchairs.
- During busier times of the day it is restricted to sleep mode.
- a small screen (around 55 inches)
- Adequate colour contrast (AAA Pass WCAG Guidelines).
- Familiar experience of reading letters, a technology that was very common when our clients were younger.

The Active+ system is not presenting a new technology but it is revolutionary in the user centric purpose as it has that well driven design of persuasion, re-creation and communication. With our system concept we had to think of every aspect on how every stakeholder could potentially communicate with one and the other. Along with that, we had to keep in mind that nobody should feel left out. The clients' every effort of doing something will be highly rewarded in a way of getting unforgettable experience and memory to their Active+portfolio.

Innovation



Our idea could seem to be not that innovative at the first place, as the technology which we present is already in use in some way or another. But we would like to prove it to you otherwise; the Active+ is a social system based platform. It is revolutionary as well as innovative in a way to build those close relationship ties between presented stakeholders.

- family members, who do not have that much time as they want to have in order to spend and be updated on their elderly relatives.
- the employee, who has some problems to make the inhabitants (clients) to be more proactive and happy in general.
- the inhabitants, who have lack of motivation to do any physical activity throughout the day, if it is not a must.

The uniqueness of our new social platform is that it is designed for elderly house foundations. Our priorities were to customize and secure the necessary aspects in order to meet the foundation's expectations. Let us elaborate on that; as we have identified the present issues we presented the solution. If our system will be implemented into the field in the nearest future it will:

- Active+ will keep updated those family members, who have family members (inhabitants) in those facilities on the current activity progress.
- Active+ will indefinitely make changes in the daily workflow of the employees of such elderly foundation facilities.
- Active+ will spice up the inhabitants daily routine.

Such a system requires a certain input from all the shareholders, therefore it is a tool, which must be learned and practiced. Now it is for you to decide, whether such a solution is innovative enough in order to make everyone be much closer together despite the distance factor, essence of time or any unexpected restriction which accrue in our strange time.

Feedback Target group

As for the testing part of our project, unfortunately, due the current circumstances of COVID-19, we could not practically test our prototype with our clients. Therefore, we decided to take another approach by creating a heuristic evaluation as well as seeking extra feedback with crowdsourcing on our final prototype from professionals of a certain field.

Our iterations stages had multiple phases of a review stages and we would like to share some of them with you:

Expert from Sogeti: driver of innovation

- "I like the "serious gaming" element. It feels a bit uncomfortable; as if you turn their lives into a game. People can win; does that imply they can also lose; and do we want that? I think caretakers do not need points to be motivated.

Overall I am not sure about this concept because of the uncomfortable feeling."

André Helderman

Specialised Doctor and Experienced Caretaker

- "I think the second and third ideas are particularly good and I really see that it works, especially the experience space! very nice! Because of the recognition I can imagine that it can reassure people and that it could also be an effective therapy for problem behavior in addition to that it is just fun for those residents to experience the familiar things / memories of them. Magic carpet is also very nice! and sound can really motivate! For each resident, we will of course measure whether he / she is not very frightened by the sound.

Back to the first idea. Maybe a little less suitable for the nursing home because it seems to take a lot of time from the care and a large part of the residents will no longer "understand" or see that a reward will follow if he / she does something. I therefore wonder if they motivate because they don't understand cause-effect. However, I think it could work for people with (early) dementia who still live at home and / or who may go to day care / care. These people are often even less demented and can be motivated by this idea. Or if you apply it in the nursing home it might be something for the family to pick up."

Eva van Tol

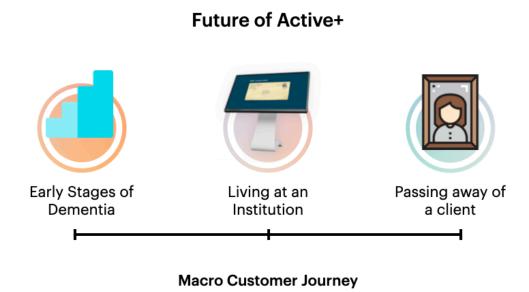
It was tough to choose between different solutions and decide on the perfect combination of them for the presented challenge. Therefore, based on all the crowd-sourced reviews we decided to integrate all the highlights from the outstanding ideas into one. We took the base of the idea number one and implemented additional features from the ideas number two and

three. That is how the Active+ platform came into life, using something simple as a base and adding based on professional feedback.

Link for more of the External feedbacks:

https://docs.google.com/spreadsheets/d/1IO0T5Cd1pP1sLwy85K-plCJILehcDxD2ezwWG4X IHRM/edit?usp=sharing

Future perspective



The stakeholders can achieve a lot of benefits through our ecosystem. But we don't want to stop here. For our next version, we want to broaden the customer journey and incorporate it into Active+.

1. For earlier stages of Dementia

For people who have just got diagnosed with Dementia, Active+ can be a great companion to remain active and at the same time remain in connection with society. Therefore, the Active+ app will be tailored for the people in the beginning stages so that they can use it themselves. Through this way, we reduce the patronising tone of the Digital Mailbox and give them more autonomy in choosing and doing activities. When their stage of dementia progresses and they enter an institution, the caretakers can then easily add them and their information to the database.

2. When a client passes away

We think that the passing away of a client is a very important subject. So, we felt it was necessary to design an experience about it that can be incorporated into Active+. This will be done through a physical memory book. A book with all the

photos of the client including the past as well as the time they spent at Het Zamen will be created and printed. The institution (Eykenburg) can then give this book to the family members as a token of gratitude and memory towards the client. This is our gift from active+ to our users.

We are glad to share that our client, Het Zamen, has shown an interest and intent to test and implement this solution in their Institution for people with Dementia in the Hague.

Learning points

How we worked in a team

- The whole team was willing (openness) to try and do better.
- Reliance, on time, if not good reason for it.
- Discussed short comes in the team. We resolved issues quickly.
- Iterative approach.
- Different skills in the team complimented each other.
- We evolved to a quasi-leadership approach in the team in which there were leaders who were equal to all the peers.

What we learnt in the Design Process:

Define & Research (Empathise):

- We were very excited to understand and help our new clients, therefore we conducted secondary research before going to the institution.
- find the design vision in order to help the clients at Het Zamen. We commenced the research one week ahead of the schedule which helped us the most as the following weeks became a strict home quarantine.

Ideation:

- This stage was the biggest struggle for us. We found all the ideas interesting and having different benefits which caused us doubting and considering different concepts. We were looping back and forth between being unable to decide which idea to pick as the core one.
- The transition to Work From Home made us slack a little bit in our work and we
 weren't aware of the lack of research. Therefore, we lost time going back to research
 and ideating more constructively later.
- Every week we had a new idea, we created deliverables according to it, and by the end of the week we realised that the idea won't work.

Prototyping:

- Since our ideation resulted in a concrete solution, by the prototyping stage we knew exactly what we wanted. The skills in our team complemented each other and it helped the distribution of work in a very structured manner.

Testing:

- As for the testing part of our project, it was a shame due the current circumstances of COVID-19 we could not practically test our prototype with our clients. In that case, we decided to take another approach by creating a heuristic evaluation as well as seeking extra feedback on our final prototype from professionals of a certain field.

Presenting & Pitching:

Pitch Training:

- For our practice pitch, we had a very technical presentation involving a video with Voiceover being played through Microsoft Teams. We forgot to test the system and therefore during the pitch it was a catastrophe. The video lagged and the sound was not shared.
- Retrospectively, we decided to test everything beforehand to make sure everything works smoothly for the final presentation.

Final Pitch:

- Testing and rehearsing the pitch really helped us to deliver a consistent and quality presentation.
- However, at the last moment, the computer from which we were supposed to deliver the presentation malfunctioned and we had to think on our feet to change the structure of the presentation. Rehearsing along with keeping a backup is what we learnt through this experience.

Conclusion

Overall, the project was an interesting and challenging experience for our whole team. First of all we have never worked on such a serious project. Secondly, we did not expect to have to work on such a project in a pandemic. But we were not only able to complete our initial challenge, but were able to accomplish so much more for all stakeholders. The inhabitants struck so much inspiration and motivation within us, especially when we volunteered. It felt like it was our mission to help them. Not only with a concept, but something simple enough that it can actually become real. Their stories and struggles resonated with us and that's why we were able to accomplish so much. This could not have been accomplished without the help of our Sogeti team and the many people who helped us.