



BEYOND THE PLATE

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EXECUTIVE SUMMARY

The design challenge we addressed is to create a society in which every individual is able to follow an eating pattern that precisely meets their needs. In this challenge, we specifically focused on patients who suffer from cardiovascular issues caused by atherosclerosis. We tried to achieve this challenge to improve the short-term rehab effects to prevent hospital readmission (Lu, 2019a).

During the design process, we designed for User empathy, by creating a User Empathy Map (Osterwalder & Pigneur, 2010), for Stakeholder empathy, by creating a Trend Analysis (Lu, 2019b), Ecological Stakeholder Map (Bronfenbrenner, 1977), Motivation Matrix (Vezzoli, Delfino, & Ambole, 2014) and Service Blueprint (Shostack, 1984). Lastly, we designed for Decision Maker empathy by using the Ten Types of Innovation method (Keeley, Walters, Pikkel, & Quinn, 2013) and Business Model Canvas (Osterwalder & Pigneur, 2010).

All these steps taken during the design process led to the formulation of our vision, mission and, value proposition. The value we want to create with our product-service system is by emphasizing on three elements. We want to educate patients about healthy food, help them develop skills in cooking healthy and support them by including their social environment in their change of behavior.

When combining these elements, we inspire patients to adapt to a healthy lifestyle and thus lowering the risk of future heart attacks. We call this concept: 'Beyond the Plate' and it consists of a series of workshops. These workshops, with an educational nature, target cardiac patients to prepare healthy food in a way that will allow the patient to persevere in the adapted lifestyle. We try to create awareness among the close social circle of the cardiac patients, in order to stimulate them to support the patient in behavioral change.

After patients had surgery, they have to stay in the hospital for a few days. During the hospitalization, we want to introduce the patients and their families to the workshops by providing an information session and a mini-workshop. After this, the patients can subscribe themselves and one close relation to the workshops. The rest of the workshops will be given in the hospital during their rehabilitation process. These workshops will be hosted by a chef and a dietician. These workshops will start with an information session about healthy food, then the patients can cook the recipes with the kitchen appliances of Philips and eat the food together. After the workshop, the patients can find the recipes in the Philips NutriU app (Philips Customer Lifestyle, n.d.).

To get a better idea of what the set-up of these workshops could be, we held a co-creation session with the elderly from the Ontmoet & Groet Huys. In this session, we asked the elderly how they envisioned a cooking workshop, what the content would be and which recipes they would like. The most important feedback we got during this session is that the elderly are not interested in difficult cultural recipes. They want to learn traditional recipes they already know, but then with a twist in the form of an unexpected ingredient.

To validate the set-up we created for the workshops, we had a meeting with The Philips Chef and a scientist from Philips Research. In this meeting, we explained the concept we had for the workshop. They were very positive about our concept. To improve our concept, they gave us tips on the content of the workshops, how long they should take and how we could best promote the workshops.

So far, we only validated the set-up of the workshops, we did not execute a workshop yet. This is something which can be done in the future. If, in the future, the workshops are executed by real patients, we can see if the workshop inspires them and their close relations to cook healthier at home which can help them adapt to their new lifestyle. Other future steps are to find out how we can maintain client relationships after the workshops, finding sponsorship for the workshops and to see if there is an opportunity to make the workshops external, so outside the hospital.

DESIGN CHALLENGE & PROCESS

In our first meeting we emphasized with our users. We aimed to understand their context and problems so we can address their needs and expectations. The first step was to study the target group because we need to understand their individual problems. Before starting to look for a solution, we needed to have a clear problem to solve, we had to find the shark bite. Eating healthy is important for coping with cardiac disease (Ignarro, Balestrieri, & Napoli, 2007; Plous, Chesne, & McDowell, 1995), however, patients struggle to change their lifestyle (Knapp & Blackwell, 1985). Because of this struggle, cardiovascular patients could continue with their less healthy lifestyle and therefore get into a vicious circle that increases their chances of a new cardiac arrest.

The User Empathy Map (Osterwalder & Pigneur, 2010) [Appendix A] was a perfect tool to unveil the challenges of our target group. In 2018, 37.769 people with an average age of 81 passed away due to cardiovascular diseases (de Boer, Bots, van Dis, Vaartjes, & Visseren, 2018), this means that the target group has a high average age. As Phillips, we wanted to create a service around our kitchen appliances, so we aimed to focus on changing the eating habits of our elderly users. Keeping this in mind, we picked two of the given personas and created their User Empathy Maps. Arthur and Jolanda were selected as they have opposite profiles: Jolanda is insecure and Arthur is very confident, thus coming up with a concept that bridge between these two personas would lead to a more broad solution.

The main insights obtained were:

- They do not spend much time on cooking, thus their meals are basically microwave prepared or take away, which in general are not classified as healthy.
- They do want a change in their lives, but it may be difficult because they do not want to lose their social activities. That means that their social environment needs to change with them.

So at this point, we were more acquainted with the necessities and problems of our target group, but we still needed more insight regarding what people know about our current services. Thus we recruited people who have an Airfryer or other Philips kitchen appliances and interview them. We wanted to know how they used them, how often they use them, and if they would add something to them, among other questions.

We interviewed five people, and the main results were:

- None of them knew about the existence of the NutriU app.
- The ones that have an Airfryer use it to prepare the things that they used to deep fry. They do not prepare entire meals with it, and most of them did not know all the options that they have.

After the interview, we were convinced that most of the Airfryer owners were not aware that the Airfryer is capable of preparing more than just fries. But that it can also be used to prepare different healthy meals. Therefore, this insight has shaped our concept by creating a tool that motivates them to adopt a new eating habit.

Before executing further development on the concept, the wanted market position and market attack scenario cards were filled in. These tools helped us to create a clear landscape so that we know in which direction we wanted our proposal to keep on being developed.

Our next step was to do research on this topic. Having a healthy diet not only consists of eating the right products, it also consists of eating the right proportions (Benton, 2015; Voedingscentrum, n.d.). Having the Airfryer as a leading concept at this point, we looked into possibilities of helping cardiac patients determining the right proportions. Doing research on the accessories that are already existing for the Airfryer was a starting point in creating a new concept. Inspired by cooking an entire meal in an Airfryer, we came up with our first concept: BalanceU, Figure 1. In combination with the NutriU app, developed by Philips, it helps cardiac patients to determine the right proportions and support them when cooking.

Recipes that include the BalanceU accessoire in the NutriU app reduce the threshold for users to maintain the correct proportions in their daily meals.

The idea was to make it easier for users to know which are the correct proportions, by letting them introduce their preferences in an updated version of the NutriU app. The Airfryer is the centre of this service, with a new dynamic divider that enables people to cook an entire meal at the same time in the correct proportions. The updated NutriU app would provide personalized recipes to the user, indicating where to set the divider to obtain the desired meals.

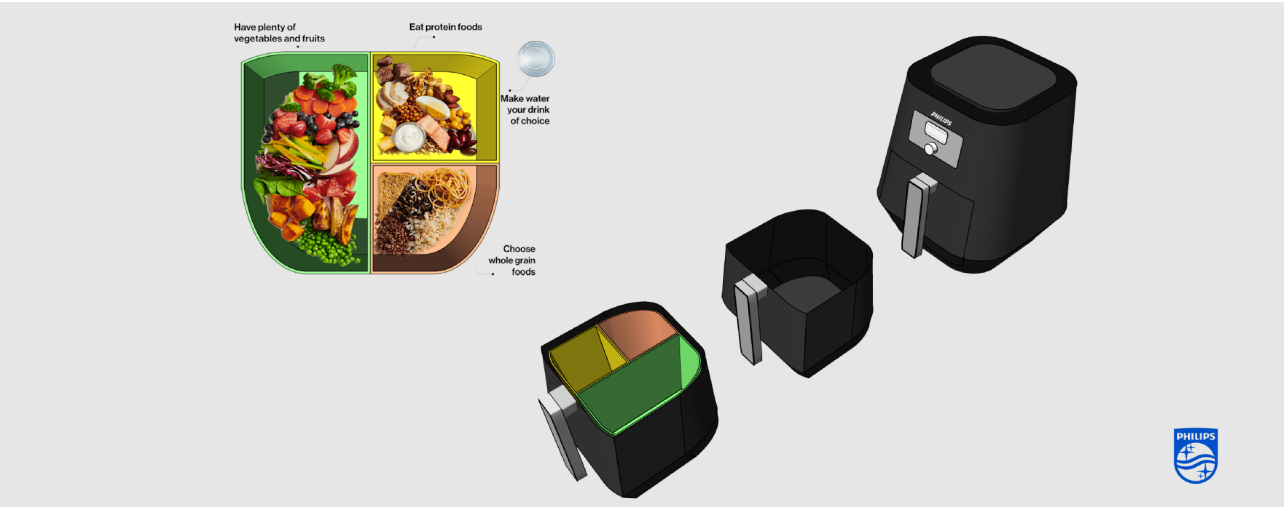


Figure 1: Airfryer compartment concept

Three main problems were found. First of all, our target group is mainly composed of elderly people, who would not be so open to using (more) apps. Secondly, our main goal is to generate a behavioural change, and in this way the app and Airfryer were doing everything for the user, not driving them into a real conscious change. Lastly, a scientist from Philips Research pointed out that placing compartments in the Airfryer could intervene with the airflow in the basket. This can result in uneven cooking of the ingredients. Considering those three mentioned aspects, we decided that it was necessary to iterate and create a new concept that can involve multiple kitchen appliances of Philips. We kept on doing more research, as we believed that there was space for creating a more immersive experience.

To further develop our concept we looked into how we can create a holistic experience that would help cardiac patients to improve their eating behaviour. In order to establish this further development, we looked at different models to help us. Firstly, we did a Trend Analysis (Lu, 2019b) with a focus on food production, cooking habits and eating behaviours. An overview of the findings can be seen in Figure 2, also in Appendix B.

From this analysis, we learned that the social environment of the patients is an important aspect of the solution space (Helgeson, 2003). Additionally, cooking should be easy and convenient as everything in life is becoming quicker (Sloan, n.d.). Finally, people need to be educated in order to achieve successful behaviour change (Pelletier, Kundra, & Hasler, 2003; Plous et al., 1995). With this in mind, we did multiple brainstorm on how to combine these three elements into a concept that can create actual value for cardiac patients and their rehabilitation process.

MEGA TRENDS	GENERAL TRENDS	INSIGHTS
<ul style="list-style-type: none">- The increased volume of fast food supply and availability.- Busy lifestyle leads to little to no time to spend in homemade dishes.	<ul style="list-style-type: none">- Meals are more often bought in supermarkets (66%) and consumers spend less time on food preparation.- When behaviour is habitual, people do not think about what to prepare, they just do it almost unconsciously.- People do not distinguish between different aspects of food (safety or healthiness) they classify as good or bad.- Social support has a huge influence on nutrition behaviour.	<ul style="list-style-type: none">- Family and close social circle should be included as an aspect of the solution.- Cooking should be easy and convenient, as people have a short time to invest.- Habit should be transformed. Thus people need to be educated to reach a behavioural change.

Figure 2: Trend analysis

The brainstorms resulted in moving towards a workshop, in which including the social environment plays a leading role. Within these workshops, multiple experts are present to provide patients with their knowledge and skills. Including family and friends motivate patients to change their lifestyle (Helgeson, 2003) as their environment is also changing with them. We expect that this will also have a long-term effect as their family and friends would also be more capable to support the patients, giving them the necessary confidence to embrace change.

Our concept changed dramatically, so the cards were filled in again [Appendix C]. We moved from focusing on proportions to educating end-users on how to cook their food in an easy, healthy way so they can sustain their new lifestyle while being supported by their social environment. We realized that our target market has changed, as we were no longer focused on the home environment but in the rehabilitation centre. We also discovered that it was necessary to step in earlier in the rehabilitation process to make the change slowly and more easily achievable. At the same time, we were opening a new market that was not yet explored.

Secondly, we mapped out different stakeholders (Bronfenbrenner, 1977). We did this from two different perspectives, the patient perspective and the Phillips perspective. These can be found in Appendix D. We did this to see which connections are interesting to collaborate with for the success of our concept and which connections the patient has that could be valuable players within our concept. Therefore we reached out to different teams within the course (Flow and Máxima Medisch Centrum) to discuss possible partnerships. Additionally, we reached out to stakeholders outside of the course such as the chairman from Ontmoet & Groet. The most important takeaway from this meeting was that there was a mutual interest in executing the workshop together. Their vision is to come together, be together, stay together. It aligns with our vision to bring cardiac patients and their relatives together in order to join forces to a greater goal: eating healthy. The Ontmoet & Groet Huys is a possible location for hosting workshops.

Next to a meeting with the Ontmoet & Groet chairman, we had an expert session with cardiologists from Máxima Medisch Centrum to help us validate the concept. They were positive on the concept since this workshop concept will involve not only information sessions, but also creating social gathering activities in order to motivate them to gain hands-on experience. Máxima Medisch Centrum already hosts information sessions, but these tend to be less interactive. Therefore, we were convinced that hosting workshops in the hospital would increase the level of engagement to the information sessions, as well as connecting experts with the social environment of the patients.

To further develop the details of the workshop and its service, we did a number of activities. Firstly, we used the Motivation Matrix (Vezzoli, Delfino, & Ambole, 2014) to map out all the roles of the stakeholders related to cardiac patients [Appendix E]. This was done to see what the added value of a workshop could be for each of the involved stakeholders.

Secondly, we filled in a Service Blueprint (Shostack, 1984) to help us shape our workshop by distinguishing the different phases, see Figure 3 and Appendix F.

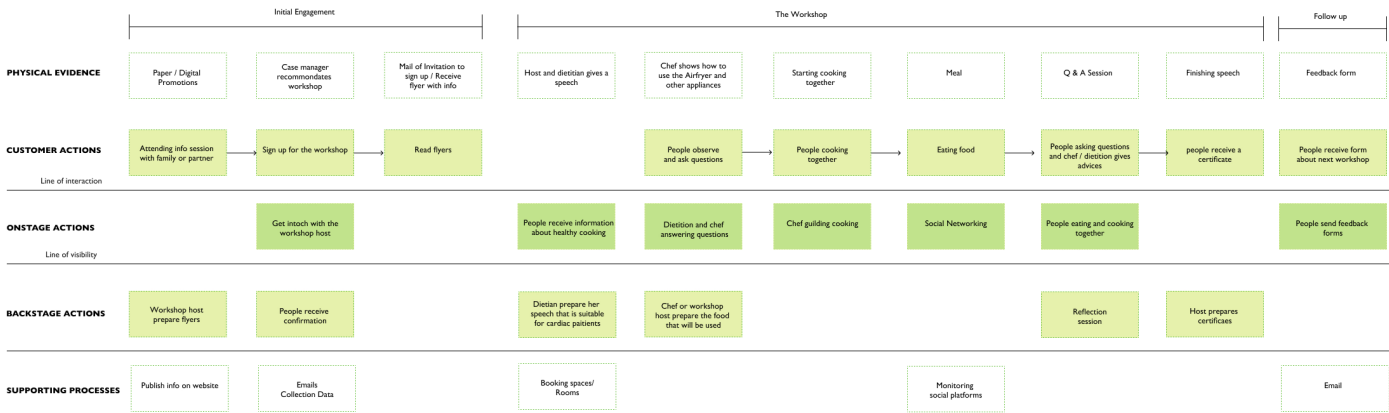


Figure 3: Service Blueprint

As the figure n the previous page shows, an information session will take place in the first two weeks of hospitalization. Our aim is to generate engagement by allowing the patients to shape their future right from the beginning of their recovery period. Getting patients out of bed early is known to have positive effects on their health (Liu et al., 2017), so the the already mentioned information session will introduce them to the workshop and make them put hands on (hence motivating them to get out of bed) on an early stage.

THE CONCEPT

Beyond the plate is a product-service system that aims to engage cardiac patients into adopting a healthy lifestyle by providing a holistic experience which gives them the required knowledge, skills, and support on how to prepare healthy meals in a convenient way. Beyond the plate brings a new dynamic to the traditional cooking workshops, as it includes the social environment of the participants so that they do not face change by themselves, but their environment changes and evolves with them.

The service consists of a series of workshops facilitated by a Chef and a Dietician, in which the users discover new cooking dynamics, get acquainted with new cooking products and services and learn by doing surrounded by their friends, family and other people that share their same goal: overcome disease and become healthier.

Overall, each workshop has an educational nature and is targeted to cardiac patients, empowering them in preparing healthy food in a way that will allow the patient to persevere in the adapted lifestyle, while at the same time awareness is created among the close social circle of the cardiac patients to stimulate them to support the patient in their behavioral change.



Figure 4: Workshop hosted by the Philips Chef

To check the viability of the Beyond the Plate we did an extensive analysis by applying the Ten Types of Innovation principles (Keeley et al., 2013), which can be found in the Innovation Strategies chapter. Next to that, we created a business model by using the Business Model Canvas (Osterwalder & Pigneur, 2010) [Appendix G]. In the aforementioned previous steps of the process we explain more about the target group and who our stakeholders/partners are. Therefore, the most important result that we extracted from our business model is clarity about the revenue stream and cost structure. Practical matters like location, kitchen tools, appliances and promotion will be paid from our side, most likely with marketing money. There are also options for sponsorships, for example that the food gets sponsored by Jumbo, Albert Heijn or any other supermarket/food chain. The idea is that patients only pay for the ingredients they use during the workshop since we validated that this is what our target group feels most comfortable with (they have low income due to AOW). The overall goal is that Philips acquires a new customer segment, namely cardiac patients and hospitals in general, which is the long term source of income that is generated through the workshop.

VALUE PROPOSITION

The taken steps mentioned in the previous section all lead up to serve the greater mission and vision of our products and services. That was captured within our value proposition. The value we want to create with our product-service system is by emphasizing on three elements that are all equally important for the success of this project. The first element is to educate cardiac patients about food. We want to teach them what food is healthy for them. This element is closely related to the second element, namely skill development. We want to help cardiac patients develop their cooking skills by showing them how to cook food in a healthy convenient way. We will do this by introducing them to different kitchen appliances from Phillips (e.g. Airfryer and Soupmaker). These appliances stimulate preparing home-cooked meals from scratch in a convenient and healthy way. By doing this we will empower cardiac patients by letting them experience that they are able to make the change and it is not scary or impossible. The third element is the social environment of the cardiac patient. By including them in the learning process of the cardiac patients they will not only receive social support, but they will also serve as reinsurance that they newly learned skills will be more easily adopted within the home-environment of the patients. This is emphasized during guest lectures that the social environment is a key factor in behaviour change. This was also pointed out in research by Helgeson (2003).

When combining these elements we inspire patients to adapt to a healthy lifestyle and thus lowering the risk of future heart attacks. We call this concept: 'Beyond the Plate' and it consists of a series of workshops. These workshops, with an educational nature, target cardiac patients to prepare healthy food in a way that will allow the patient to persevere in the adapted lifestyle. We try to create awareness among the close social circle of the cardiac patients, in order to stimulate them to support the patient in behavioural change.

INNOVATION STRATEGIES

Beyond the Plate was analysed by using the Ten Types of Innovation principles (Keeley et al., 2013). Identifying opportunities and evaluating how it performs against competitors gave insight into the viability of the concept. Beyond the Plate stands out on several types of innovations compared to competitors, see Figure 5.



Figure 5: Ten Types of Innovation specified to Behind the Plate

NETWORK

Philips is already closely connected to hospitals and its experts for developing medical equipment. However, for Beyond the Plate Philips will team up with a different group of experts for the development of the workshops, namely dieticians, cardiovascular specialists and nurses.

Philips has an official partnership with the Hartstichting to improve the lives of cardiovascular patients and high-risk entities within the Netherlands (De Nederlandse Hartstichting, n.d.-b). Making use of the Hartstichting's expertise and the network is a valuable asset for the development of the Beyond the Plate workshops.

Two-third of the 240.000 people in the Netherlands with heart failure are above 75 years old (De Nederlandse Hartstichting, n.d.-a). In 2018 37.769 people with an average age of 81 passed away due to cardiovascular diseases (de Boer, Bots, van Dis, Vaartjes, & Visseren, 2018). The target audience has a high average age, for which we reached out to the Ontmoet & Groet Huys. This community offers workshops for elderly who seek company. Partnering with the Ontmoet & Groet Huys opens up possibilities to bring the workshop to the right target group.

PRODUCT SYSTEM

Beyond the Plate creates valuable connections between several types of offerings: the advice from a dietician, the expertise of specialists, the knowledge and skills of a chef and the kitchen appliances of Philips. These otherwise separated 'products' now provide a holistic offering that helps to build a valuable ecosystem for cardiac patients. The dietician's advice can be put to action directly with the help of a chef. Patients are encouraged to develop their own skills and are able to customize their experience by cooking personalized recipes.

SERVICE

Making use of Philips kitchen appliances allows the patients to try them before they buy the appliances. Actually cooking with the appliances along with instructions provides a proper introduction to the possibilities of the appliances. Participants of the workshop then can decide for themselves if they think the appliances are the right fit for them.

Teaming up with the Máxima Medisch Centrum gives access to their platform which provides information of patients. On the platform, patients are able to specify what kind of information they want to share and don't want to share. In that way, the patients are always in control. By having the right dietary information, Philips can make personalized recipes. Additionally, patients are able to subscribe for the workshop both on this platform (online) as by using a form distributed by the case manager of the patient in the hospital (offline).

The Philips NutriU app (Philips, n.d.), Figure 6, already acts as a platform for Philips Airfryer users where they are able to share and get recipes. Today the app already has 200.000+ downloads. The NutriU app is currently under development and will have extra features, in order to make a customized service for cardiac patients. By adding extra filters, users of the app are able to select recipes and tips that are specifically created for, in this case, cardiovascular patients. This app is a form of aftercare for the participants of the workshop. NutriU is regularly updated with new recipes and tips from the Philips Chef. The community can also post recipes and share ideas.

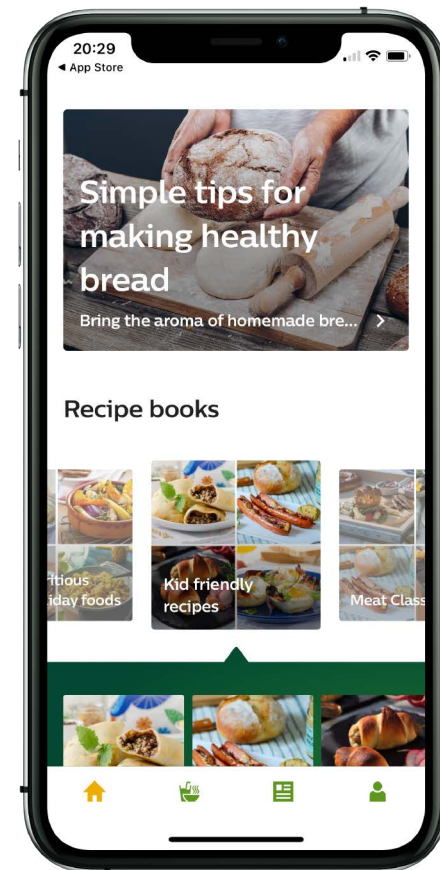


Figure 6: NutriU app

CHANNEL

By combining the immersive experience of Beyond the Plate with the targeting of a specific user group, a new way of selling Philips kitchen appliances will emerge. The distribution will not only go via the usual channels (stores, internet) but also during such a workshop and the hospital. Philips has experience hosting pop-up kitchens to sell products, however the hospital or community homes have not been one of the locations before.

Starting with a mini-workshop as an addition to the already existing information sessions in the hospital is the first touchpoint we have with the new customer segment. In the workshops, participants are able to really experience what it is like to use Philips kitchen appliances and are able to ask questions. This immersive experience is similar to the environment in which the appliances will be used later: cooking in the kitchen.

CUSTOMER ENGAGEMENT

By inspiring patients and their close social circle into adapting to a healthy lifestyle, we cover more ground than just being another competitor that sells kitchen appliances. Providing a hands-on experience we support participants to reach a certain level of mastery with our appliances. This boosts the confidence of cardiovascular patients in particular.

Patients are given a lot of different tools to improve their lives after the diagnosis. With this concept, we combine all the given tools and enable patients to adapt to and maintain a healthy lifestyle.

To conclude, Beyond the Plate innovates on a configuration, offering and experience level with a focus on the experience level. The key to Beyond the Plate is the gathering of all the right stakeholders and connecting them to patients via an immersive experience that enables them to adapt to a healthy lifestyle. Not pushing information on patients, but giving them the opportunity to see how this new lifestyle can be put through practice by changing eating habits. Setting up these workshops opens up a new customer segment for Philips and can add to the purpose of the appliances.

VALIDATION

In our first concept of the workshops, we made many assumptions about the content and the arrangement of the workshops. To validate these assumptions, we decided to have a small co-creation session with four elderly of the Ontmoet & Groet Huys, to see what their vision is on a cooking workshop.

In this co-creation session, we gave the elderly two assignments. In the first assignment they had to think about what they ate for dinner the past three days. We gave them this assignment so that they would start to think about food and what they normally eat. In the second assignment, we asked them to discuss several questions related to cooking workshops together. These questions were printed on a poster. To answer the questions, we gave them cards with possible answers and cards on which they could write their answer. They could lay the cards on the poster. The poster, the cards and the filled posters can be found in appendix H.

CO-CREATION SESSION

The elderly were not interested in very cultural recipes or recipes with too many ingredients. They would like to learn easy recipes which are similar to the recipes they already know, but then with a twist. They were very interested in an information session about what is healthy during the workshops. And they also appreciated that a dietician would be present during a workshop. This would lower the threshold of asking the dietician questions.

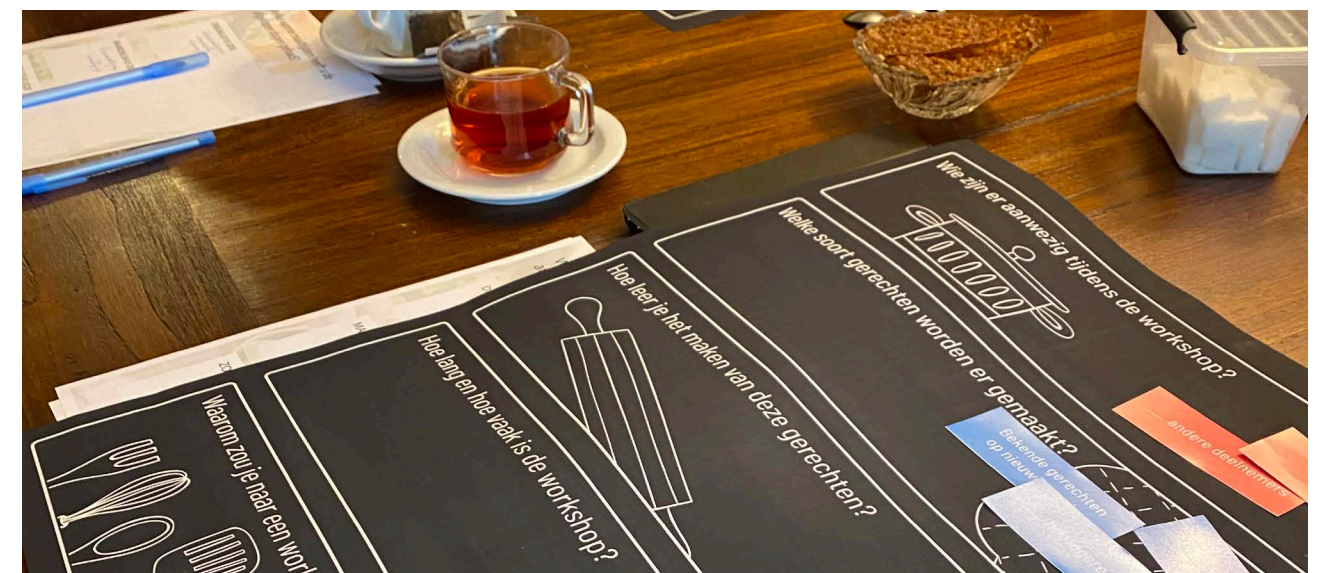


Figure 7: Co-creation Session

The social nature of the workshop was appealing, since they like to meet new people. It would not be the deciding factor to go to the workshop, however it would be an encouragement.

All four elderly agreed that the workshop should be once in three weeks and that the workshop should not take longer than two hours. Also, they thought the price for the workshop should not exceed €7,50 per session. This is based on having a low income due to AOW.

THE PHILIPS CHEF

After the co-creation session with the elderly, we had a better vision of how we should set up the workshops. To validate whether we made the right choices regarding the set up of the workshop, we had a meeting with The Philips Chef and a scientist from Philips Research.

In this meeting we discussed the current concept we had of the workshop. The Philips chef gave us tips about the duration and the content of the workshop and how to communicate information about the workshop to the patients.

He suggested that the cooking part of the workshop should not take longer than one hour, excluding cleaning up and eating the food the patients made during the workshop. He also mentioned that he always takes 15–20 minutes before the workshop to explain some information to the participants. He said that we could do the same, but then together with a dietician.

The Philips chef also mentioned that, when we communicate to patients that there is a workshop, that we should not mention that it is about how they can cook healthier. Both the chef and the scientist were clear about this. They said that when you mention something is 'Healthy' people will not be interested. So, when we communicate that there is a cooking workshop, we can mention that a dietician is present, so they can ask questions. But most importantly, we should communicate that it is a nice social event where you can learn new recipes together with your friends or family.

Lastly, the chef mentioned that the workshops he is currently giving with the Philips appliances motivate participants to buy the appliances. Out of the 50 participants he had during the workshops he already gave, 42 participants bought one of the Philips kitchen appliances he used during the workshop. This is a first step in validating that the workshops stimulate sales.



Figure 8: The Philips Chef

FURTHER VALIDATION

Now, we did a stakeholder evaluation, by a co-creation session and the meeting with the Philips Chef, and a business validation by using the ten types of innovation method. In these evaluations, we assumed that the current set up of the workshops will help patients to adjust to a new healthier lifestyle. However, to confirm if the set-up of the workshop really helps patients to adapt, we need to do a user evaluation.

In our current concept, we assume that doing a mini-workshop during the hospitalization helps to attract patients and their close social circle to a larger set of workshops. However, we still need to validate whether a mini-workshop is persuasive enough.

FUTURE DEVELOPMENT PLAN

As mentioned in the previous section, Further validation, we still need to do a user evaluation to test whether the set-up of the workshop works for cardiac patients. Our stakeholders Ontmoet & Groet Huys and Máxima Medisch Centrum showed interest in doing a trial workshop at their location. Therefore, the first next step is to test whether the workshop has a positive effect on a cardiac patient.

Starting capital to set-up the workshop will come from Philips' marketing money, but there is also a possibility to team up with supermarket chains like Jumbo or Albert Heijn. We can use their ingredients during the workshops. For this we can mention their name, put their logo in the workshop room and on the recipe cards. Exploring such a sponsorship would be a next step after validating the workshop with cardiovascular patients.

After these first steps, it is interesting to look into how we can maintain relationships with patients after their rehabilitation process, to make sure that they stay on track after the workshops end.

INDIVIDUAL CONTRIBUTIONS

During the project, we tried to make sure that everyone was doing tasks according to their roles. But sometimes, due to time management, it was not feasible to live up to the tasks entirely. Our Program Manager (Marieke) and Consumer Marketing Manager (Pascal) took care of presenting the concept during the three market battle rounds.

All the empathy maps, stakeholder maps and Business model canvas were filled in by all the group members together. We did this so that everyone has contributed to the creation of the concept.

The Ten Types of Innovation method was used by our UX Designer (Milou). Also, all the visual communication like the report and the market battles were created by our UX Designer. Overall, the collaboration in our group was good. We all contributed to the project, trying to live up to the tasks of our roles. All the group members were involved in using the given methods during the lectures, so that everybody understood why we used these methods. There were also good discussions about the content of the workshops, how we should use the stakeholder maps and how we could improve the presentations in the market battles.

We had multiple meetings with several stakeholders like the chairman from Ontmoet & Groet, a cardiologist from MMC, the Philips Chef and the MMC group. In order to get the most out of these meetings and to make sure we were following the tasks of our roles, we tried to make sure that the right group members were there. For example, when having the co-creation with elderly the UX Designer was present and when meeting with MMC to discuss their platform our Software Architect was present. In the meeting with The Philips Chef to discuss our workshop, our Product Designer was present. In all meetings, the Program Manager and the Consumer Marketing Manager were there.

Yet, all roles did not live up to their full potential because this concept did not ask for software development or tangible product. However, with an integration of different team roles with their expertise, we went through each step by applying different business tools and created a service design that aims to offer an immersive and holistic experience for our target users. An overview of the contribution of each individual member can be found in appendix I.

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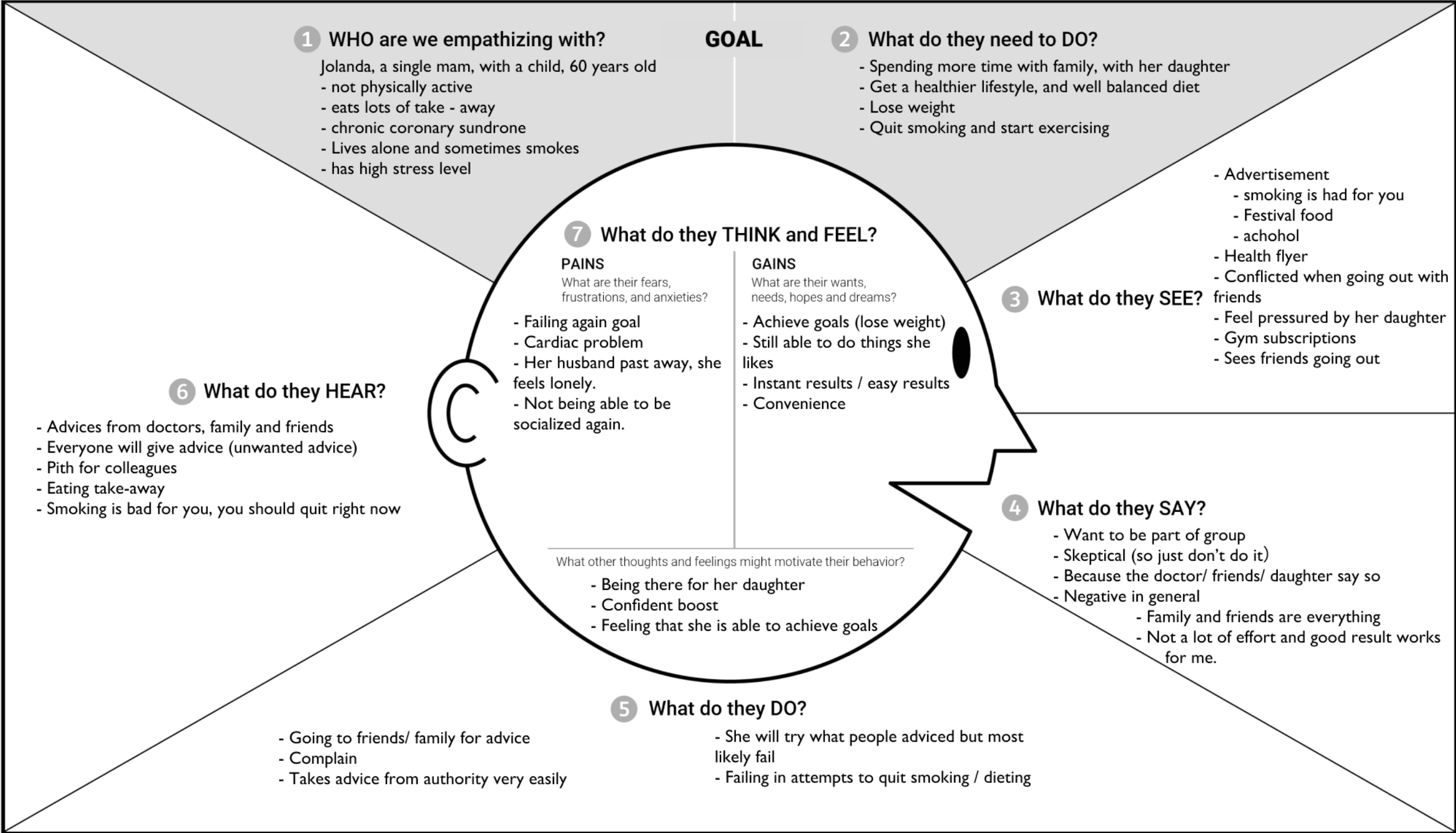
Empathy Map Canvas

Designed for: Jolanda

Designed by: The Philips Team

Date: 25/11/2019

Version:



Last updated on 16 July 2017. Download a copy of this canvas at <http://gamestorming.com/empathy-map/>

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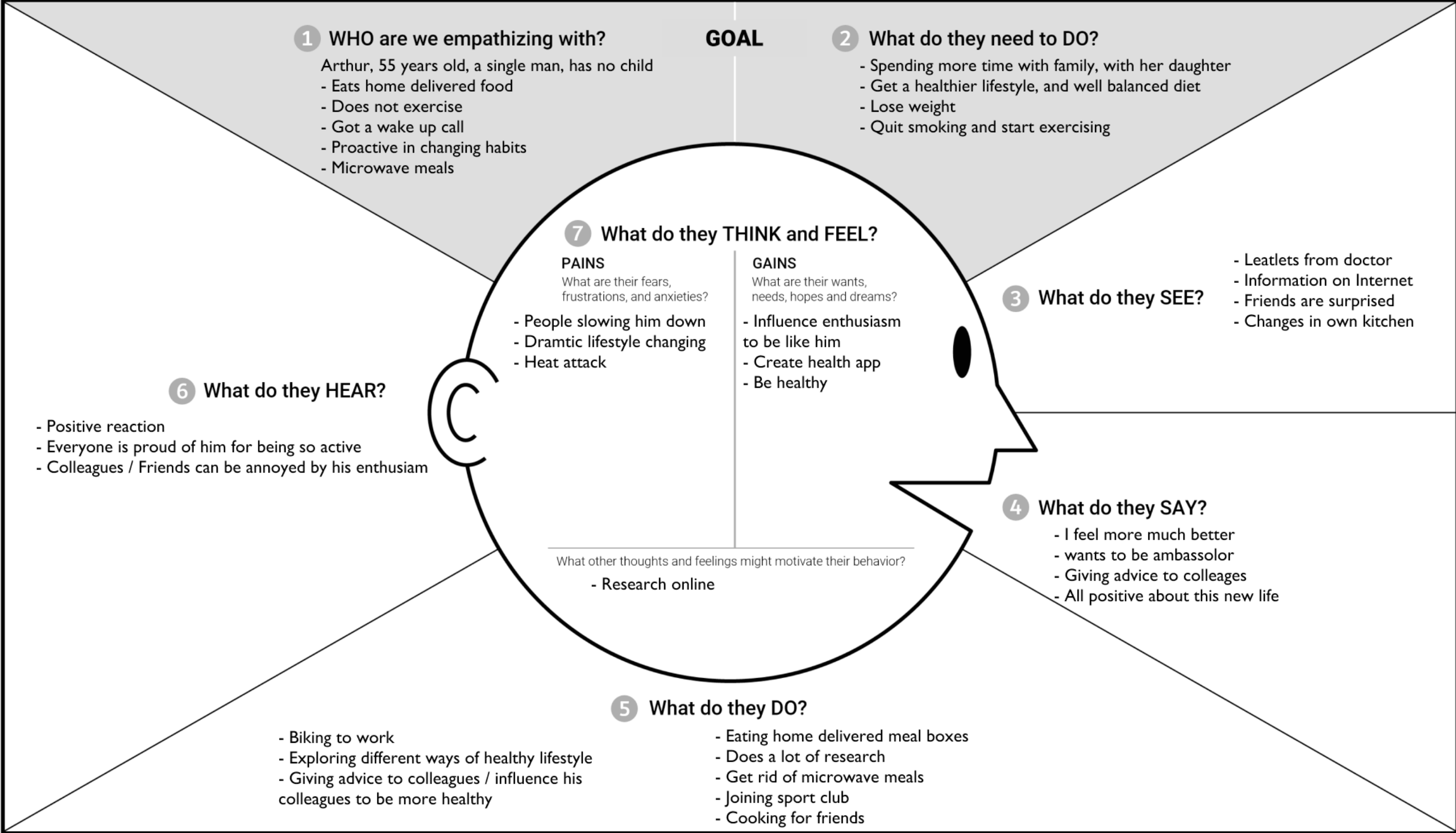
Empathy Map Canvas

Designed for: Arthur

Designed by: The Philips Team

Date: 25/11/2019

Version:



APPENDIX B – TREND ANALYSIS

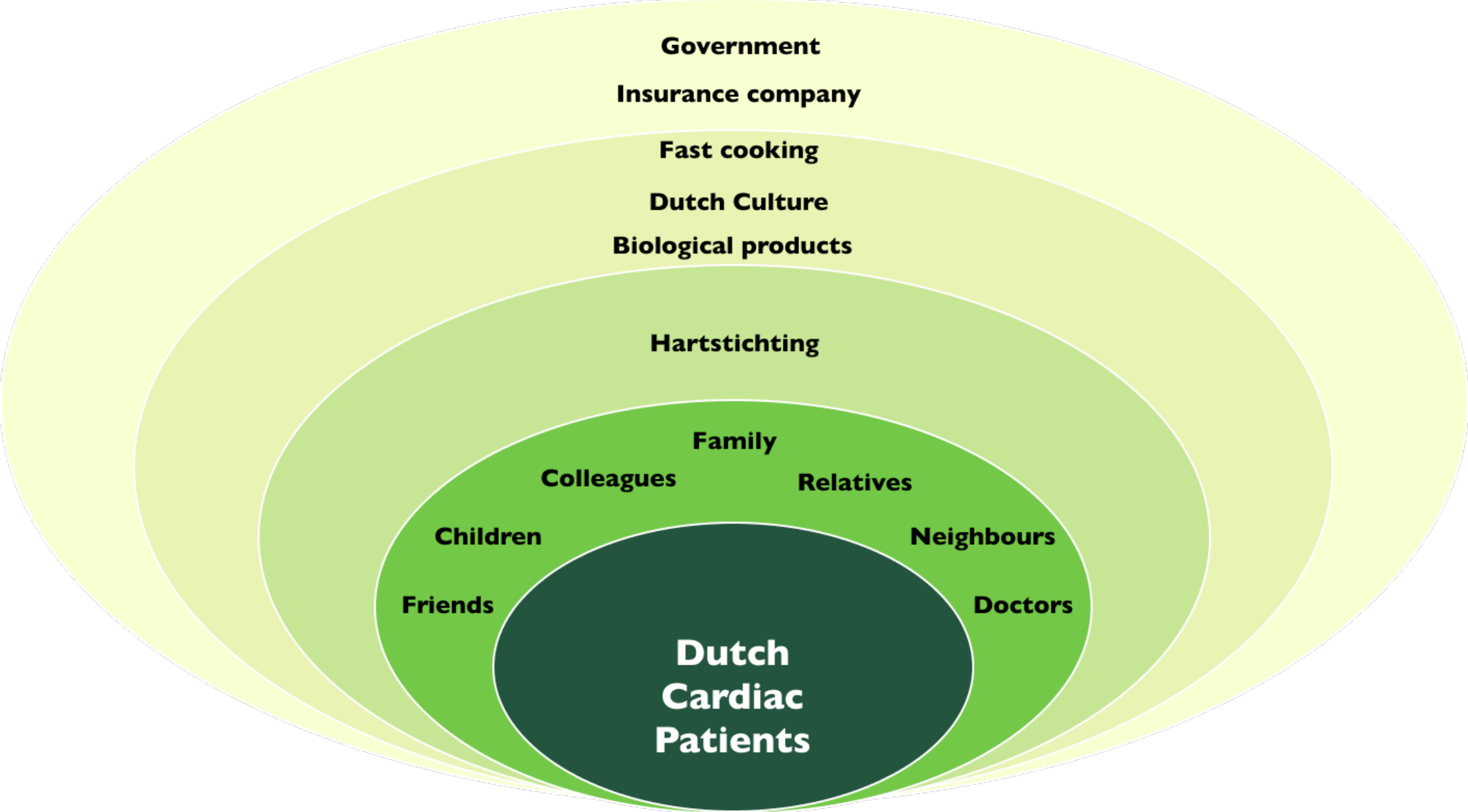
MEGA TRENDS	GENERAL TRENDS	INSIGHTS
<ul style="list-style-type: none">- The increased volume of fast food supply and availability.- Busy lifestyle leads to little to no time to spend in homemade dishes.	<ul style="list-style-type: none">- Meals are more often bought in supermarkets (66%) and consumers spend less time on food preparation.- When behaviour is habitual, people do not think about what to prepare, they just do it almost unconsciously.- People do not distinguish between different aspects of food (safety or healthiness) they classify as good or bad.- Social support has a huge influence on nutrition behaviour.	<ul style="list-style-type: none">-Family and close social circle should be included as an aspect of the solution.- Cooking should be easy and convenient, as people have a short time to invest.- Habit should be transformed. Thus people need to be educated to reach a behavioural change.

APPENDIX C – CARDS

Product introduction scenario card	
Unique selling points	Customer insights
<ul style="list-style-type: none">- Low key cooking for people who want to cook healthier- Adaptable to diet- Community creation oriented	<ul style="list-style-type: none">- Easy recipes, nothing really complex- Want no big change in everyday life- Cost lower than 7.5 euro- Length lower or equal to an hour
Pricing	Major functions solution
<ul style="list-style-type: none">- We aim to price around 7.5 euro per workshop	<ul style="list-style-type: none">- Users learn by doing what recipes are better for them- Users feel supported as they are surrounded by their social environment during the whole process- They learn how to use appliances that makes it easier to cook meals in a healthier way

Market attack scenario card	
Opportunity	Strength
<ul style="list-style-type: none">- Having a healthy diet is important for people with heart diseases since it can improve their health and thus lower the risk of heart attacks.- Opportunity of jumping into a new market	<ul style="list-style-type: none">- Keep track of what you're eating- Philips as a brand- Involving the social aspect, leaving behind the traditional way of teaching- Creating an immersive experience that covers cardiac patients and their social circle.
Target market	Discriminator
<ul style="list-style-type: none">- CV patients who have trouble eating healthy, but actually anyone who wants to eat healthily- Rehabilitation process, start the process earlier	<ul style="list-style-type: none">- Philips connected products and services supporting the health and well-being of people with innovative technology

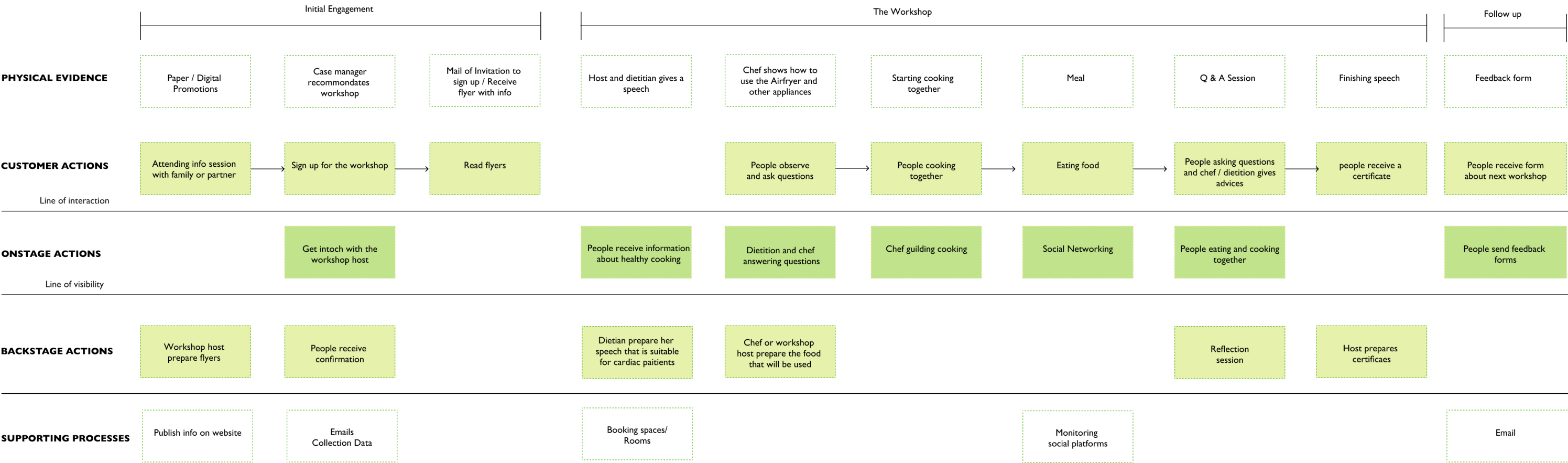
Wanted market position	
Competing factors	End-user value drivers
<ul style="list-style-type: none">- Providing opportunities for people to prepare healthy food, motivate them to cook healthier.- Offering a holistic and immersive experience for cardiac patients and their social circle.	<ul style="list-style-type: none">- Maintain a healthier lifestyle and decrease the threshold when preparing their daily meals.- Make the social environment of the end users change with them, to share the load of adapting into a new lifestyle
Business target (market share/sales target)	Weak points of the other teams
<ul style="list-style-type: none">- Hospital or places like Ontmoet & Goret Huys. Places or communities that are related to cardiac patients.	<ul style="list-style-type: none">- HelloFresh: only delivers food and recipes, not the utensils to prepare it.- Flow: only gives advice on how to do it- MMC medical staff: they are only in the hospital environment.- Foodforcare: hard to personalize, want to cover too much ground.



APPENDIX E – MOTIVATION MATRIX

	Cardiac Patients	Family	Dietitian	Friends	Workshop Host	Partner MMC
Cardiac Patients	<u>MOTIVATION</u> <ul style="list-style-type: none"> - Learn how to cook healthy - Meet new people - Networking 	<ul style="list-style-type: none"> - Assure family that your are trying to be healthy/ better 	<ul style="list-style-type: none"> - Money - Achievement/ grateful - Fulfillments 	<ul style="list-style-type: none"> - Assurements 	<ul style="list-style-type: none"> - Money - Fulfillments - Achievement - Self efficacy 	<ul style="list-style-type: none"> - Work
Family	<ul style="list-style-type: none"> - Support - Comfort 	<u>MOTIVATION</u> <ul style="list-style-type: none"> - Support - Learn how to cook healthy 	<ul style="list-style-type: none"> - Money - Sharing the load 	<ul style="list-style-type: none"> - Gratefulness - Support 	<ul style="list-style-type: none"> - Money - Support in workshop / guiding patients 	<ul style="list-style-type: none"> - Money - Support in workshop / guiding patients
Dietitian	<ul style="list-style-type: none"> - Guildlines - Support - Information - Confidence 	<ul style="list-style-type: none"> - Information - Reassurance - Confidence 	<u>MOTIVATION</u> <ul style="list-style-type: none"> - Information - Stimulate healthy behaviour - Support / Advice 	<ul style="list-style-type: none"> - Information - Reassurance - Confidence 	<ul style="list-style-type: none"> - knowledge - Validation - Support - New Ideas 	<ul style="list-style-type: none"> - knowledge - Expertise
Friends	<ul style="list-style-type: none"> - Support - Comfort 	<ul style="list-style-type: none"> - Support - Sharing the load 	<ul style="list-style-type: none"> - Money - Sharing the load 	<u>MOTIVATION</u> <ul style="list-style-type: none"> - Support 	<ul style="list-style-type: none"> - Money - Support in workshop / guiding patients 	<ul style="list-style-type: none"> - Money - Support in workshop / guiding patients
Workshop Host	<ul style="list-style-type: none"> - Workshop - Information - Skills and knowledge 	<ul style="list-style-type: none"> - Workshop - Information - Skills and knowledge - Tools 	<ul style="list-style-type: none"> - Workshop - Information - New Techniques - Dynamic validation 	<ul style="list-style-type: none"> - Workshop - Information - New Techniques - Tools 	<u>MOTIVATION</u> <ul style="list-style-type: none"> - Money - Fulfillments / fun - Helping people 	<ul style="list-style-type: none"> - Platform - Extra services - Way to get patients more healthy/ recovering better
Partner MMC	<ul style="list-style-type: none"> - Opporitynity of workshop - Awareness - Hospital services 	<ul style="list-style-type: none"> - Opporitynity of workshop - Awareness 	<ul style="list-style-type: none"> - Employee - Platform for dieticians 	<ul style="list-style-type: none"> - Opportunity - Awareness 	<ul style="list-style-type: none"> - Participants - Possible locations 	<u>MOTIVATION</u> <ul style="list-style-type: none"> - Data - Patients

APPENDIX F – SERVICE BLUEPRINT



BUSINESS MODEL CANVAS

Designed for Behind the Plate

Designed by Philips

<div>KEY PARTNERS</div> <div>Key partnters:<ul style="list-style-type: none">- Ontmoet & Groet- MMC hospital- Hartstichting- Dietians</div> <div>Key resources:<ul style="list-style-type: none">- Expertise- Knowledge- Location- Customers- Money- Promotion- Platform</div>	<div>KEY ACTIVITIES</div> <div><ul style="list-style-type: none">- Workshop- knowledge sharing- development , creating holistic and immersive experience to promote the kitchen appliances.</div>	<div>VALUE PROPOSITION</div> <div>Providing a holistic offerings that inspire cardiac patients into adapting a healthy lifestyle.</div>	<div>CUSTOMER RELATIONSHIPS</div> <div><ul style="list-style-type: none">- Paper promotion- Mailing,- MMC platform.- Recommendation (word of mouse by an expert)</div>	<div>CUSTOMER SEGMENTS</div> <div><ul style="list-style-type: none">- Cardiac patients,- Social circle of the patients. (Family or friends)</div>
	<div>KEY RESOURCES</div> <div><ul style="list-style-type: none">- Dietitian,- Knowledge from dietitian and chef.- MMC platform- nutriU App</div>		<div>CHANNELS</div> <div><ul style="list-style-type: none">- Paper promotion- Mailing- MMC platform.- Recommendation (word of mouse by an expert)- Case Manager</div>	
<div>COST STRUCTURE</div> <div><ul style="list-style-type: none">- Location (Hospital)- the chef- Appliance- Cooking equipment- Cleaning cost- Printing and promotion cost.- Further development of NtriU.</div>			<div>REVENUE STREAMS</div> <div><ul style="list-style-type: none">- Subscription- Sponsorship- End of workshop sale- Increase of sales- Supermaret- Insurance- Sponsorships</div>	

Wie zijn er aanwezig tijdens de workshop?

Diëtist

... andere deelnemers

Welke soort gerechten worden er gemaakt?

Bekende gerechten op nieuwe manier

... hoofdgerecht(en)

... nagerecht(en)

Hoe leer je het maken van deze gerechten?

Competitie

Informatiesessies

Opdrachten

Hoe lang en hoe vaak is de workshop?

Altijd dezelfde tijden

1 1/2 uur

1x 3 weken

Waarom zou je naar een workshop gaan?

Nieuwe mensen leren kennen

Makkelijker koken

Wie zijn er aanwezig tijdens de workshop?

Diëtist

Vrienden

Welke soort gerechten worden er gemaakt?

Gezonde gerechten

... nagerecht(en)

... hoofdgerecht(en)

Makkelijke gerechten

Hoe leer je het maken van deze gerechten?

Informatiesessies

Huiswerk

Hoe lang en hoe vaak is de workshop?

1 1/2 - 2 uur

... 3 per week

1x per maand

Waarom zou je naar een workshop gaan?

Nieuwe gerechten leren maken

APPENDIX I – OVERVIEW

Activity	Programmer Manager (Marieke)	Consumer Marketing Manager (Pascalie)	UX Designer (Milou)	Product Designer (Yiwen)	Software Architect (Emanuel)
Presenting at Market battles	X	X			
Using all the empathy maps, stakeholder maps and business model	X	X	X	X	X
Visual communication: report + presentations			X		
Ten types of innovation method			X		
Meeting with Flow group	X	X	X	X	X
Meeting with MMC group	X		X	X	X
Meeting with Chairman Ontmoet & Groet Huys	X	X	X	X	
Co-creation session Ontmoet & Groet Huys	X	X	X		
Meeting with Philips Chef and scientist of Philips Research	X	X		X	
Making 3D model for first concept BalanceU				X	
Interview with people who use the Airfryer	X	X	X	X	X
Making the flyer used in the last battle round				X	
Write report	X	X	X	X	X

APPENDIX J – DATA MANAGEMENT PLAN

Week 9, 22-01-2020

Data Management Plan

Philips Team

Index:

- 1. Interview with Airfryer Owners
 - a. Interview Guide
 - b. Consent form (English version) & (Dutch Version)
 - c. Interview 1
 - d. Interview 2
 - e. Interview 3
 - f. Interview 4
 - g. Interview 5
- 2. 1st Meeting notes with Cardiologist
- 3. Meeting with Hubert
- 4. 2nd Meeting notes with Cardiologists
- 5. CO-design session at Ontmoet & Groet (consent form and pictures)
- 6. Meeting with Philips Chef

How to read the data?

In all the parts in this document, we first put the questions we asked the participants. Then, the answered questions are written under the questions.

Date: 26-27 / 11/ 2019

Week: Week 3

Activities: Interview with Airfryer Owners

=====

1a. Interview guide

- 1. Mention pros and cons of the airfryer
- 2. Why did you buy it?
- 3. What do you cook on it? What do you use it for?
- 4. Did it add value to your situation?
- 5. Do you think that something is still missing? Would you add other functionality? Would you quit something?
- 6. Did you notice something different since you bought the airfryer? (healthier eating?)
- 7. What is the best thing/quality of the airfryer? And the worse?
- 8. How do you interact with it? Do you plan your dinner based on what you can prepare with it?
- 9. Do you think you are acquainted with all the dishes that can be prepared with it?
- 10. Do you think you are taking the most out of the experience of using it?

1b. Consent form (English and Dutch)

Informed consent form

This document gives you information about the interview about workshops for cardiac patients, which is a part of group assignment carried out during the *Creating Corporate Entrepreneurship* course taught at Department of Industrial Design of the Eindhoven University of Technology. The student team conducting this interview is formed of the following members: Marieke van Otterdijk, Milou Weerts, Emanuel Beron Rey, Yiwen Shen and Pascale Ickenroth. Before we begin, it is important that you learn about the procedure followed throughout the Interview and that you give your informed consent for voluntary participation. Please read this document carefully.

The aim of this interview is to gather information about possible collaborations with stakeholders for creating a workshop and to identify any missing information which could help us design the concept for eating behavior change. During the interview, we will ask you several questions about your background and seek opportunities to collaborate.

Your participation is completely voluntary. You can refuse to participate without giving any reasons and you can stop your participation at any time during the interview. Such decisions will have no negative consequences whatsoever.

The interview does not involve any risks or detrimental side effects.
The study will last approximately one hour.

Confidentiality

We will not be sharing personal information about you to anyone outside of the research team. The information that we will disseminate from this interview will be used for confirming our assumption regarding the use of Philips kitchen appliances in a workshop for cardiac patients. It will be completely anonymous, and it cannot be traced back to you. Only the researchers will know your identity. No video or audio recordings are made that could identify you.

More information

If you liked more information about the course that this study is conducted for, you can contact our supervisor Lu Yuan (Y.Lu@tue.nl)

Certificate of Consent

- ☐ I **do** give permission, to publicly publish photos and videos of me on the internet and social media. Next to this, my data may also be used for the purpose of this research. I understand that this data will be processed anonymously.
- ☐ I **do not** give permission, to publicly publish photos and videos and photos on the internet or any other media. My data may only be processed anonymously for the purpose of this research. I will not be seen or heard in any photos and videos.
- ☐ I **do not** give permission, to publicly publish photos and videos and photos on the internet or any other media. However, I **do** give permission for my data to be used for the purpose of this research. I understand that this data will be processed anonymously.

I, (NAME)..... have read and understood this consent form and have been given the opportunity to ask questions. I agree to voluntarily participate in this research study carried out by the student team participating in *Creating Corporate Entrepreneurship* course taught at Department of Industrial Design of the Eindhoven University of Technology.

Participant's Signature

Date

Toestemmingsformulier

Dit document geeft u informatie over een focusgroep met betrekking tot een kookworkshop over gezond en makkelijk koken, dat deel uitmaakt van een groepsopdracht die wordt uitgevoerd tijdens het vak Creating Corporate Entrepreneurship aan de afdeling Industrial Design van de Technische Universiteit Eindhoven. Het studententeam die deze focusgroep begeleidt, bestaat uit de volgende leden: Marieke van Otterdijk, Milou Weerts, Emanuel Beron Rey, Yiwen Shen en Pascal Ickenroth. Voordat we beginnen, is het belangrijk dat u meer te weten komt over de procedure die tijdens deze focusgroep wordt gevolgd en dat u toestemming geeft voor vrijwillige deelname. Lees dit document aandachtig door.

Het doel van deze focusgroep is om informatie te verzamelen over mogelijke manieren om een kookworkshop samen te stellen voor mensen die gezonder en makkelijker willen leren koken en om ontbrekende informatie te identificeren die ons kan helpen bij het ontwerpen van deze kookworkshop. Tijdens de focusgroep geven we u eerst een introductie over waarom we deze focusgroep graag willen doen. Daarna vragen we u om mee te doen aan een tweetal creatieve opdrachten. De eerste opdracht is gericht op het inzicht op eetgewoontes. Bij de tweede opdracht wordt u gevraagd om verschillende kaartjes op tafel te leggen om zo uw eigen workshop kunt creëren. Naar aanleiding van deze opdrachten zullen we u nog enkele vragen hierover stellen.

Uw deelname is volledig vrijwillig. U kunt zonder opgave van redenen weigeren deel te nemen en u kunt uw deelname op elk moment de focusgroep verlaten. Dergelijke beslissingen hebben geen enkele negatieve consequentie.

De focusgroep houdt geen risico's of schadelijke bijwerkingen in.
Het onderzoek duurt ongeveer een uur.

Vertrouwelijkheid

We zullen geen persoonlijke informatie over u delen met iemand buiten het onderzoeksteam. De informatie die we uit de focusgroep verkrijgen, zal uitsluitend worden gebruikt bij het opzetten van een kookworkshop. Het is volledig anoniem en kan niet tot u worden herleid. Alleen de onderzoekers zullen uw identiteit kennen. Er worden geen video- of audio-opnamen gemaakt die u kunnen identificeren.

Meer informatie

Als u meer informatie wilt over het vak waarvoor dit onderzoek wordt uitgevoerd, kunt u contact opnemen met onze supervisor Lu Yuan (Y.Lu@tue.nl)

Toestemming

- ☐ Ik geef **wel** toestemming om foto's en video's van mij openbaar te publiceren op internet en sociale media. Daarnaast kunnen mijn gegevens ook worden gebruikt voor dit onderzoek. Ik begrijp dat deze gegevens anoniem worden verwerkt.
- ☐ Ik geef **geen** toestemming om foto's en video's en foto's publiekelijk te publiceren op internet of andere media. Mijn gegevens mogen alleen anoniem worden verwerkt ten behoeve van dit onderzoek. Ik zal in geen enkele foto of video worden gezien of gehoord.
- ☐ Ik geef **geen** toestemming om foto's en video's en foto's publiekelijk te publiceren op internet of andere media. Ik geef echter wel toestemming om mijn gegevens te gebruiken voor dit onderzoek. Ik begrijp dat deze gegevens anoniem worden verwerkt.

Ik, (NAAM) heb dit toestemmingsformulier gelezen en begrepen en heb de gelegenheid gekregen om vragen te stellen. Ik ga ermee akkoord om vrijwillig deel te nemen aan dit onderzoek uitgevoerd door het studententeam dat deelneemt aan het vak Creating Corporate Entrepreneurship die wordt gegeven aan de afdeling Industrial Design van de Technische Universiteit Eindhoven.

Handtekening

Datum

1c. Interview 1

Mention pros and cons of the airfryer

Pros:

- Can cook without paying too much attention to the food.
- Consistency of cooking: it always comes out the same.
- Taste: Loves French fries from this thing.

Cons:

- Slower than actual frying.
- Capacity is low (so cooking for too many people is hard and makes it even slower).
- Noisy.

Why did you buy it?

They have never eaten too much fried food in their house. They bought this in order to get as close to the fried taste and feel but without its health problems. So, basically, to replace the oven and get crispy-er food.

What do you cook on it? What do you use it for?

He mainly cook fried and milanesas but also use it to heat up pizza, bread, fish and empanadas.

Did it add value to your situation?

Yes.

They use it almost daily in their house and it allowed him to cook food by himself what he would otherwise don't be able to cook (because he is a really bad cook) (fries and milanesas).

Do you think that something is still missing? Would you add other functionality? Would you quit something?

A bigger compartment or a way to cook food for a lot of people.

Maybe an easily accessible (not another app) guide on temps and cook time.

Did you notice something different since you bought the airfryer? (healthier eating?)

No. They just shifted their cooking from the oven to the airfryer where possible. It was mostly an ease of use and taste thing for they.

What is the best thing/quality of the airfryer? And the worse?

Best: consistent results without too much effort.

Worse: Noise and small compartment.

How do you interact with it? Do you plan your dinner based on what you can prepare with it?

He puts the food inside and set the timer to its highest position. Then open it every once in a while to check the progress. The temp dial is almost always set to max.

They don't plan dinner around the fryer, but they do usually have side-dishes that can be cooked in the fryer, so they end up using it.

Do you think you are acquainted with all the dishes that can be prepared with it?

He is sure he is not. They've not explored the possibilities it opens. Just basically cook the same things but with the fryer.

Do you think you are taking the most out of the experience of using it?

He doesn't think so. It's basically an easy to use oven for him. His recipes are quite simple and not airfryerspecific.

Do you know that there's an app?

He does. But his fryer is analogue so he can't use it.

He probably wouldn't use it anyways.

He doesn't want more apps.

How many accessories do you have for the airfryer?

Standard equipment (airfryer + removable grill thingy that comes with it) and a grill that would give the possibility to subdivide the grill in "2 floors", anyway they never use it.

For how many people you use it?

Usually 3, occasionally 4 and not frequently more than 6.

1d. Interview 2

Interview questions

1. Why did you get an air fryer?

Motivation for buying an airfryer was to exchange it with the regular old fryer they owned. But they still wanted to be able to make fries and snacks at home in a more healthy way. wanted to be able to make fries and snacks at home.

2. What kind of food do you prepare in the air fryer? Is it different than before (when you didn't have an air fryer)

At first, the kind of food the interviewee prepares in the air fryer is similar to the food that they used to prepare with the regular fryer. Yet now they use the air fryer for different kinds of food as well. The interviewee likes to make fries and other kinds of baked potatoes, snacks, sausage rolls, etc. He/she explains that they keep on using it to prepare more and more different kinds of food. Yet it is mostly used for preparing potatoes or meat products.

3. How many times a week do you use the air fryer?

The air fryer is almost used every day by the interviewee, that would mean around 4 to 5 times a week..

4. What do you think are limitations in the use of an air fryer? / comparing (pro and con)

Pros of using the airfryer:

- Warms up faster than a regular fryer
- It is a more healthy way of preparing my meals as it contains less fat.

Cons of using the airfryer:

- It takes longer for food to be ready
- For snacks you have to buy special oven snacks or airfryer snacks, and they are often more expensive than regular snacks.

5. Is there something you would add to the air fryer? / What do you miss?

The interviewee explains that he/she would like it for the airfryer to have a different basket. A basket that would allow him/her to make more things at the same time, like with a regular fryer. For those you have a double basket and the airfryer only has one. This would be convenient for parties or if you want to prepare multiple different food at the same time. Yet the interviewee explains that he/she does not know whether it exists or not.

6. What changed/how did the air fryer change your habits?

What changed is that the interviewee does not prepare potatoes in a pan or fryer anymore. They solemnly use the airfryer to do so. Additionally, the way/ ritual of food preparation also changed. Now there is more planning involved when using the airfryer to get all the food for dinner ready at exactly the same time. Since the food has a different cooking time in the airfryer than when using a regular fryer or stove.

7. Do you know that there's an app?

The interviewee expressed that he/she was not aware that there was an app that was connected to the airfryer.

When asked what the functionalities for an app should be, the interviewee express that he/she would like it to have 1) tips for recipes that you can prepare with the airfryer. Additionally, 2) tips for food preparation would be appreciated, for instance how to cook the best crispy chicken. 3) information about where you can buy certain airfryer accessories that you can use for specific recipes.

8. Do you look up specific air fryer dishes? / do you look into healthy components?

Normally, only a portion of the entire meal is prepared in the airfryer not a full meal. So the interviewee mentions that he/she does not really do that.

9. How many accessories do you have for the air fryer?

The accessories owned by the interviewee are:

- A frying basket
- A baking tray type accessory.

The interviewee is aware that there are more accessories available for the airfryer but he/she explains that he/she thinks that those are not really required when you want to make a portion of your meal inside the airfryer. So there was no need for further investment in different airfryer accessories.

10. For how many people you use it?

The airfryer is mostly used for the preparation of a part of the dinner for around 3 adults.

1e. Interview 3

1. Mention pros and cons of the airfryer

Pro: Healthier than deep fried food, quicker than an oven

Con: The smoke it produces when using it (only applicable for some types of food)

2. Why did you buy it?

My mother always used an airfryer to cook with, so I was already used to eating non deep fried food. My girlfriend already had an airfryer, so I didn't have to buy one myself. Definitely would buy one if she did not have it. Food is just easier to prepare in the airfryer, and its healthier so those are the main reasons I would buy one.

3. What do you cook on it? What do you use it for?

All potato related dishes, meat and rolls for breakfast/lunch when I'm home. I never prepare vegetables in it, my girlfriend however does. To me, the airfryer is purely a substitution for deep fried food and an oven.

4. Did it add value to your situation?

Yes, healthier food.

5. Do you think that something is still missing? Would you add other functionality? Would you quit something?

Airfryer is good as it is, especially when having the XXL one. Wouldn't add anything, but also wouldn't lose anything.

6. Did you notice something different since you bought the airfryer? (healthier eating(?))

Well, all the food that we used to deep fry is now prepared in the airfryer, so that does mean healthier food. Also, preparing of food is faster, for example the rolls I make in the morning.

7. What is the best thing/quality of the airfryer? And the worse?

Best thing is its speed, way faster than an oven. No bad thing about it.

8. How do you interact with it? Do you plan your dinner based on what you can prepare with it?

No I just buy what I want to eat and then make a plan of how to do it. We still have an oven, so it has happened before that we use the airfryer and the oven simultaneously in order to prepare certain dishes. Like for example putting fries in the airfryer and chicken in the oven. It can even be the case that we put vegetables on the stove, so handling three different cooking methods at once. You don't have to pay attention to the airfryer and the oven, so it isn't that difficult.

9. Do you think you are acquainted with all the dishes that can be prepared with it?

No I don't think so. *interested?* No not really, you will come across new dishes when you really want to. I'm not interested in looking them up now.

10. Do you think you are taking the most out of the experience of using it?

Yes I do. It does exactly what I want it to do

1f. Interview 4

1. Why did you get an air fryer?

Because we thought it would be very easy to use an airfryer for frying fries for example. And you don't need to warm up an entire oven.

2. What kind of food do you prepare in the air fryer? Is it different than before (when you didn't have an air fryer)

Sauzijken broodjes, toast, afbakbroodjes, potato chips, schnitzel, drumsticks, fishsticks.

3. How many times a week do you use the airfryer?

Almost daily

4. What do you think are limitations in the use of an air fryer? / comparing (pro and con)

No limitations.

Pros: it is very fast, it is a small (heteluchtoven). it is way faster to use an airfryer than a normal oven. No extra fat used.

Cons: the stuff you put in (like a kroket) needs to be suited for an airfryer.

5. Is there something you would add to the air fryer? / What do you miss?

No nothing

6. What changed/how did the air fryer change your habits?

we eat toast and afbakbroodjes more often. but also sauzijnbroodjes and worstenbroodjes, which is less healthy.

7. Do you know that there's an app?

No, we got a book with recipes, but I did not know there was an app.

8. Do you look up specific air fryer dishes? / do you look into healthy components?

No, I don't. Mostly when I am going to make something, I think about if it can be made in the airfryer, but I don't look up recipes specifically for the airfryer. Mostly only a part of a dish is made in the airfryer, like potatoes.

9. How many accessories do you have for the airfryer?

We have a divider for in the basket, but we never use it.

10. For how many people you use it?

Four adults.

1g. Interview 5

Interview guide

Introduction, informed consent, presentation.

1. Mention pros and cons of the airfryer

Pros: easy to use and fast to prepare food, most importantly, the air-fried food are healthier than normal fried food.

Cons: the range of products is smaller than normal oil fried food, in some supermarket like Aldi or Lidl, I cannot find so many air-fried products, and they are relatively more expensive.

2. Why did you buy it?

Because I would like to have a healthier lifestyle, besides that, using an air fryer is so easy and fast, sometimes when I host a party, it is very convenient to buy a party bag of air-fried food and I am able to give a decent party for my friends or families.

3. What do you cook on it? What do you use it for?

I usually preheat the airfryer for 5 minutes, as for the food I cooked or the airfryer cooked, 50% percent was fries, because it is the main course for a meal if I want to prepare a meal for myself. The rest of them are snacks like frikandel en kroket. I never tried vegetables because I never knew that you can put vegetable inside.

4. Did it add value to your situation?

Ease of use:

Yes, indeed, it makes my life easier and I can save time on cooking, sometimes I don't like the smell of kitchen after cooking, particularly the smell of herbs like kerry or garlic. I sometimes need to work on project after dinner, the smell herbs gives me somewhat negative feeling.

Flexibility

Air fryer is also very flexible to be relocated because it is lightweight and small size, I can put in the garden instead of kitchen to prepare for a meal.

Healthy lifestyle:

As I mentioned before, I think using airfryer has created a healthier lifestyle that I am aiming for, I feel less guilty after eating air fried food. I also recommended this airfryer to my mom because I also want to improve her lifestyle.

Recently I heard that have a "less oil, less salt" diet can reduce the risk of heart disease, I really would like to introduce this product to them

5. Do you think that something is still missing? Would you add other functionality? Would you quit something?

The range of the product of airfrayer is so limited, you don't have so many options, and sometimes the taste of air fried food is a bit dry. You cannot compare this with meals like hutspot or other easy to prepare microwave food.

Speaking of adding a new functionality, I would like to have more sections in the airfryer, If I need to prepare a meal for myself, I will put everything in one section because that will save me some time. But the taste of the different food will mixed, like the oil from a kroket will drop on fries. And different food requires different cooking duration in setting, as well as the temperature.

6. Did you notice something different since you bought the airfryer? (healthier eating?)

I saved a lot of time because sometimes I don't want to cook. In some situations, for instance, when my friends visit me and I can quickly make some nice and warm snack for me, without polluting my kitchen.

7. What is the best thing/quality of the airfryer? And the worse?

The best thing of airfryer is time saving. However, as a frequent user of airfryer, I realized I cooked less, for me it is hard to balance this lifestyle and cooking activities, on one side, I would like to be healthier, so I used the airfryer, but one the other side, I think I eat more air fried food instead of real meals.

8. How do you interact with it? Do you plan your dinner based on what you can prepare with it?

Preheat for 5 minutes, but I don't follow the recommendation on the package when I preparing food, because I prefer more crispy taste of fries.

Date: 26 / 11/ 2019

Week: Week 3

Activities: Meeting note with Cardiologist

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Q: What do you think of this concept?

The cardiologist thinks that it is a good idea to have the divider sets as a separation toolkit for Philips AirFryer. And he agrees that the proportion of different types of food is important for the patients.

Q: How do you work with your patients?

In his work/experience, he always first asks patients about their eating habits, for instance, the amount of vegetables or meat they eat everyday, most patients think they have good eating habits. But they are not aware of how much meat vegetables they should eat for a meal. Sometimes they eat too much vegetables or too much meat. They know that keeping a balanced diet it is good for their recovery, but they don't value or know the importance of the proportion of different types of food.

Q: Is the balanced diet important? Especially for their rehab process?

It is important to have a balanced diet for patients, but only 1/3 of patients will visit a dietitian for advice, these people will get personalised diet recipe book. (I showed him the Philips airfryer app) and explained that there are many recipes created by airfryer users and maybe we could have a new category that dietitians can upload the recipes for their patients.

Q: How do you think of the airfryer?

Air Fryer can create a healthier lifestyle, it is fast and the taste of food is also good. And it is an easy tool for people to operate, because it is important to maintain your diet for a longer term.

Q: Any other questions?

He also advised that in the design of this divider, not only put the measurement on it, but it is also important to measure the weight of food. Because vegetables are lighter than meat. Sometimes patients eat too much meat for a meal.

Date: 16 / 12/ 2019

Week: Week 6

Activities: Meeting note with Hurbert

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Questions:

Ontmoet & Groet

- Can you elaborate a bit more on what Ontmoet & Groet does?
- Are there a lot of cardiac patients here at Ontmoet & Groet?
- Do you provide special workshops for these cardiac patients? (or any particular group within the community home)
- Do you already use Philips appliances at Ontmoet & Groet?
- How do you see a collaboration between Philips and Ontmoet & Groet?
- How do you reach elderly? (some people here multiple times a week, but others who also might need it won't come)

Their Vision: **Come together, be together and stay together**

Meeting notes from Ontmoet & Groet

Come together:

- **75%** of the elderly feel lonely, ontmoet & Groet tries to address this problem and reduce the loneliness by creating a community based place to gather people that are mostly 50+ years old. " if you feel lonely, you can just come to this place. "
- Elderly have mobility problem, O & G hires students from university to help them as a means of transportation, they are required to collect kilometers to drive elderly from places to places, so they could use the car for free.
- O & G is not an activity center for the elderly, they are more than that, they host lots of club - community based activities to attract old people. Old people are free to do what they like to do, they can share their values and contribute their specialties to this community. However, they often miss the trigger to do this, O&G is a place where they could help their to realize their values. For instance, if you are good at making cookies, you can come here, make cookies for other people, sell them with a bit of profits. By doing this, O & G aims to transcend their skills to experience which makes them feel valuable and useful.

Be together:

- The relationship is togetherness, not patients and volunteer, it is about equality. They have organised lots of workshops and activities, often these activities will be organised in one place, which could create a cosy environment that makes people feel more connected.
- More than 12 people in a group, several groups in one team. Hubert envisions that we could also organise workshops about 'Healthy eating behavior', food and cooking', 'man can cook'.
- Make cooking fun for everybody. Combine activities with healthy eating

Stay together:

- O & G encourages them stay together, they let their guests to set up their own 'house' together, creating valuable memories for the elderly.
- For the elderly, they can tell that they are involved with students projects.
- They are acting with the elderly, not only a side viewer, but engaging themselves to their life, feeling them, connecting them and staying with them.

Other insights

- As for the cardiac patients, we don't have so many people with cardiac problems. Philips is fostering healthy eating behavior,
- Social eating is really important, we want to organize the workshop by using the philips products, (our cooking club, volunteering with using the Philips product, but also encouraging them to eat more healthy, eating healthy by using a simple cooking way, coaching them and stimulating them use new products.
- The research from Philips (Netje?) will like our concept if we can organise a workshop in ontmoet & groet.

Remaining questions about the setups of the workshop?

- What approach will be using for this workshop? If it is a personal approach, you need to trigger and address their needs, for instance, how can you trigger a higher level of motivation.
- Or a nice and attractive cooking workshop, but the settings needs to be inviting and attractive.
- Or an information gathering workshop, how many participants (volunteers or staff or elderly) will be gathered. Will you ask for feedback for one and a half hours?.
- Will you also host this workshop to invite also cardiac patients, as well as other stakeholders to join in?
- Hurbert likes to create a holistic experience, they believe in good concept ideas that are applicable and scalable in anywhere.

Date: 17/ 12/ 2019

Week: Week 6

Activities: Meeting notes with Cardiologists

How to approach cardiac patients when they're in the hospital?

- Through a nurse and their case manager, every patients have a case manager that involves all time during their journey (hospital -- rehab -- go back home) but in the beginning, most of the cardiac patients only care about their condition and medicine, so in this phase, they don't need information about the eating habits, not for later, after their operation, their case manager could give advice about changing their eating habits.

Are there already information sessions regarding health eating habits?

- Yes, they organised information sessions about health eating before, it was not very interactive and attractive, nutrition and dietitian will give them ppt about half an hour each, there is only " what to do" no "how to do".
- They are very enthusiastic about having this educational workshop, because they were convinced that social interactions are really important for them, most of these patients need to family accompanies, as well as a psychologist to help them to keep their mental health in a good way.
- They envision that they can ask for a dietitian and a nutritionist to be presented in the beginning of the workshop, or standing by the chef who is using the airfryer, chef can show them how easy and fast it is to cook a healthy meal
- They have thought about to have a workshop, they also discussed this with Lu, they did not do it yet.
- There are many ways to give educational sessions, for example, e-learning, webinars, they it is hard to trigger them to follow, the workshop could be a platform for them to show cooking and share recipes.

How do you think about this concept?

Pilot test at Ontmoet & Groet is a good idea, because you need to know how to make the workshop fun and engaging.

Would you organise this workshop at hospital?

They have place to organise workshop at hospital, maybe around dinner time. what you need to provide are the cookers and equipment, maybe you can ask patients to bring some contribution, bring it to workshop and cooking together.

Date: 08/ 01/ 2020

Week: Week 7

Activities: Co- Design session at Ontmoet & Groet

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Pictures:



Figure: the setup & co-design session

First assignment (thinking about what they ate the past few days)

- 2 couples
- Trouble thinking about what they ate the past few days
- They make their food themselves. Now, they don't make 'hutspot' for example. That is too much work.
- They are not making Nasi or Bami anymore. Now they eat this as an instant meal
- One couple really paid attention to how much salt they are eating (but they still use a lot of instant sauces).
- One guy is really busy with how much salt and calcium he is eating.
- They are busy with being physically active. They are aware that this is good. They can't do as much as they used to do, but they still try to be active.
- The circumstances in which you eat also influences your food → Pain (the guy starts talking about his son)
- Social aspect is much more important than eating itself

Second assignment (filling in the poster)

- When you are older, walking becomes more difficult. Then you choose for instant meals faster.
- **They are not interested in making new things (think they are too old)**

- Both women decide what the men eat
- One guy does the groceries, because he really likes it. He pays attention to that it is fresh and low fat
- Both women are always cooking. Men don't
- Breakfast is very important
- They are interested in (gevarieerde) recipes with a surprise
 - some other ingredients in the 'hutspot'
 - something challenging
 - something different in their traditional recipe
- One woman always takes a glass of Port after her swimming lesson. The man then gets some small pieces of cheese
- The other woman always drinks 1 or 2 glasses of wine
- **They are not interested in too much herbs**
- **Not a fan of multicultural recipes. Just normal recipes is ok**
- 'Wij zijn van de oude stempel'
- Homework → when the woman sees something she likes, she will try it.
- One of the men does not know if he wants to join his wife to a workshop. Woman thinks it is a good idea
- Other couple would like to join the workshop together
- **Instruction of the workshop should not be too hard**
- What does a workshop cost?
 - not too much
 - 7,50 pp.
 - One woman thinks 7.50 is too much
- **One every three weeks workshop**
- **Time of workshop → 1,5-2 hours**
- They want a fixed time for the workshop (every tuesday of the third week of the month for example)
- They will not join the workshop when a famous chef comes to the workshop, then they think the workshop will be too difficult
- One man likes to meet new people, he thinks 'it is interesting'

Date: 13/ 01/ 2019

Week: Week 8

Activities: Meeting with Philips chef

Questions:

- Healthy eating in combination with Philips appliances
- Do you already have experience in arranging workshops for people with specific diets?
- How do you think a workshop should look like?
 - Kind of food prepared
 - How much time
 - How many people
 - Challenges/homework
- How many workshops do you think are necessary to teach people how to cook?
- Involving family and friends, done that before?
- How do you currently use NutriU?
- Have you already hosted a workshop with other professionals? (dietitian etc)
- How much do you think it should cost? (based on previous answers)
- Any idea (based on your experience) about what we should include or do in our ten minutes presentation this thursday?
- Ask him to attend to thursday presentation

During the interview, we used the questions as a guideline. We did not ask the exact questions in our list.

Notes of the meeting

1 hour of cooking. Cleaning and eating not included. Maximum of 2 appliances per workshop.
Not too many different things.

15 minutes of theory explanation beforehand.

The patients have to eat together → then they will discuss what they are eating

Once a month a workshop

There is a physical training every two weeks in MMC, maybe we can attach the workshop to this training?

Give the workshop a theme! This makes it more fun for the patients.

Don't mention that the patients are going to cook healthy or vegetarian.

- research has been done → people are then not motivated
- think of creative titles for workshops and recipes, like 'Kermit the Frog salad'.

Let the patients know beforehand what is going to happen in the workshop. Then they can prepare themselves.

Now things need to change in the kitchen of the MMC, they do not meet all the requirements of doing a workshop there

- no suction
- ability to wash hands.

After surgery, patients need to get out of bed as soon as possible

Nutri-U app is being used now

- in the future patients should have the ability to say in the app: I'm a cardiac patient. Then the app will filter the recipes.

After the workshop, let the patients fill in an evaluation form. Then you can improve the workshops or the recipes.

Don't cook everything at the same time

- First soup, then eat and chat
- Then the main course, then eat and chat etc.

More products are sold after workshops.

- He had a workshop, 2 sessions of 25 people, so 50 people in total. 42 of the participants bought the appliances after the workshop.

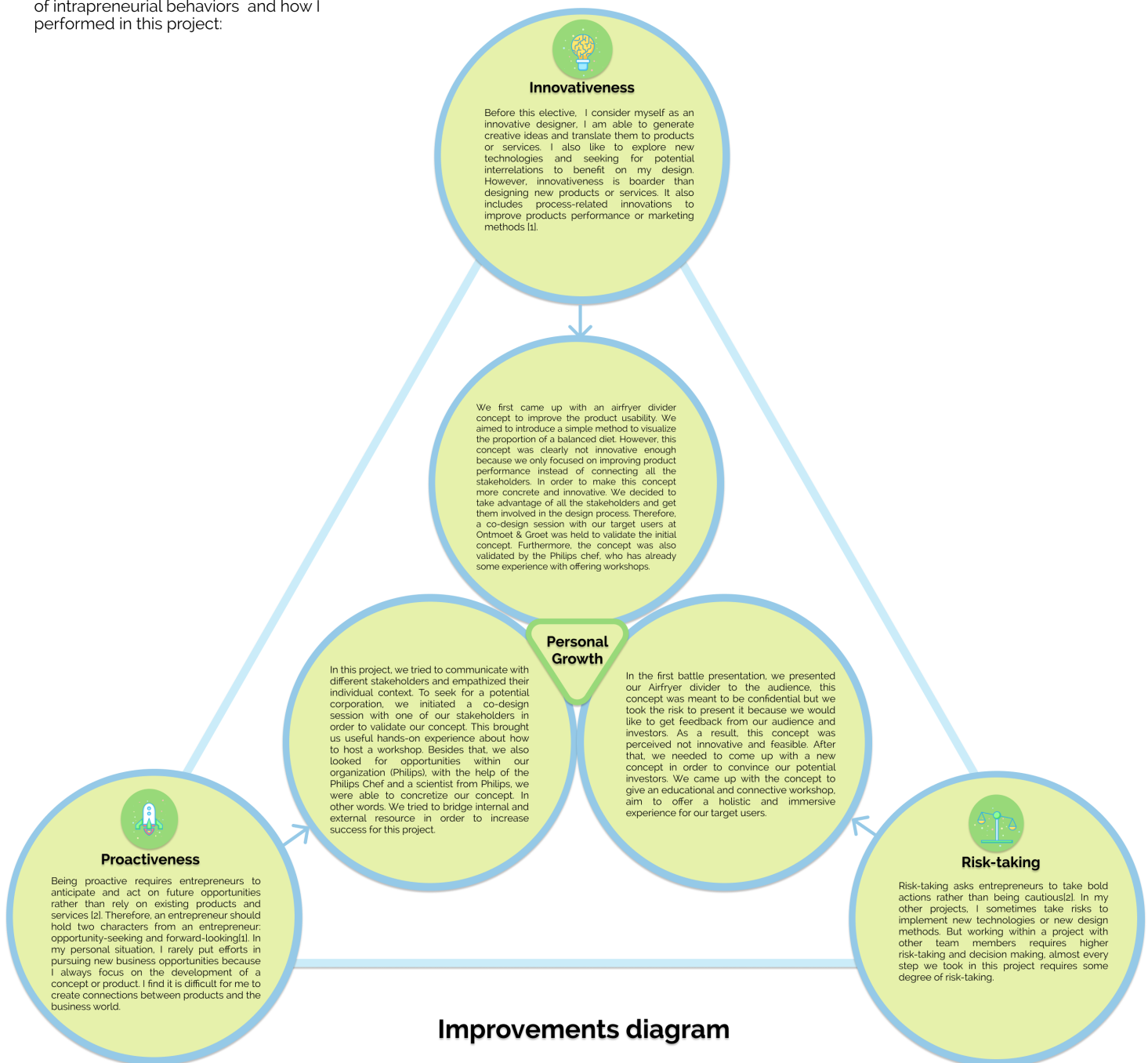
Insights

What are the important qualities of being a corporate entrepreneur in the field of the creative industry? And how to act as a good corporate entrepreneur in projects? This elective brought me useful insights and knowledge to answer these questions. I learned different sides of what goes in a corporative business project, the general process of how a business concept is initially planned, developed and completed, as well as applying different business modules and tools into different stages. Another valuable experience I learned during these 9 weeks, was how to perform actively in a business project as a product designer.

I would like to reflect on my performance as a product designer in this project. The first battle was challenging but enjoyable for me as it did make me use all the techniques I learned, namely: 3D modelling and texturing, creating user empathy map and stakeholder map. In the 2nd battle, I was introduced different methods and tools to acquire insights from stakeholders. I learned how to do a trend analysis and ecological stakeholder map. Before the last battle took place, we finalized our concept and applied new methods to validate it, for instance, motivation matrix, services blueprint. I personally find that service blueprint is very useful to clarify each stage of actions and process.

All these methods are very applicable to my personal development as an industrial designer. I felt more confident and supported when utilized these methods in my graduation project.

Here I would like to reflect on three dimensions of intrapreneurial behaviors and how I performed in this project:



Improvements diagram

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