Creating an addition to activity centres in Bromma as health promotion for elderly people

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Bergkvist Tove Bergqvist Elin Mng'ong'o Josephat Kessler Marco Guery Edvin Zlygosteva Ksenia Reponen Anni

Preface

The report that you are about to read is the result of a creative and in some ways chaotic project, where students from different disciplines and universities worked with challenges that Stockholm, as a county and a city, is facing.

The city is our lab! - is the motto for Openlab. Students worked with challenges provided by Stockholm City and Stockholm Council in a wide range of areas. Within the framework of a 15 credits mastercourse, students worked in projectgroups of 6-8 persons for one semester. То develop an understanding of the issue at hand. students engaged with the set challenges though the use of various research methods such interviews and observations. as well as literature studies. Students then developed a number of proposals for solutions, one of which has then been pursued to create a more concrete solution that is tested within real-world situations.

Whilst working together at Openlab, students from different disciplines met and interacted with each other – not always without complications. However, in these meetings something new and exciting can emerge. Students carry with them experiences of interdisciplinary discussions and solutions - a very important competence for meeting challenges of the future.

The result of all discussions. analysis, and synthesis's is here documented in the report. Of course the report can only cover some parts this dynamic and creative of process. We who have worked as teachers in this course have our main function as coaches, providing tools during different phases of the project. The students work according to a process model based on Design SCRUM. Creative Thinking and ideas and systematic thinking merge together to a final project.

For us this is learning at its best – Freedom, Creativity, Social interaction, Engagement and FUN! But it is also based on real challenges in society – the idea is that Openlab's project should contribute to a better Stockholm for its inhabitants. **The city is our lab!**

Ivar Björkman, Executive Director

Liv Gingnell KTH Royal Institute of TEchnology

Magdalena Holdar Stockholms University Martin Jonsson Södertörns University

Sofia Vikström Karolinska Institutet

The Openlab Master's Course Report Series

13:01 Hitta rätt i vården Ett värdigt åldrande

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15:01 (English) Increasing Patient Involvement in the Healthcare System Stockholm in Motion Green Power of the Ecoflower

15:02 (English) Grassroots Movements & Stockholms Stad: Bridging the Gap BikeMeSTHLM The Step-Up! Planning Tool

16:01 (English) Inside out Elderly people & warmth EduAction *16:02 (English)* Jobbtorg Helping Hearts Inspiring the Youth of Husby

17:01 (English) The process wheel Childish solutions MindTrip-Making nursing homes more like homes

17:02 (English) Cykelbanan+ Finns I Sjön Culturama Stockholm Water Tap

18:01 (English) The Dinner Dome The Magic Button

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Abstract in English

This project report discusses the activity centres for elderly in Bromma and the challenges the centres are facing as of today. Initially Bromma district administration gave the challenge of quantifying the qualitative aspects of Physical Activity, Good Food Habits, Social Community and Support, as well as Meaningfulness. Through the method of design thinking (empathize, define, ideate, prototype and test) interviews were conducted with both elderly as staff at the activity centres, and interviews with staff from the administration of Bromma. Based on the interviews, a communication problem was discovered. Hence, the challenge was redefined to focus on that. As a solution to the communication problem, the Mood Machine was created, a feedback machine where the elderly can answer questions regarding their well-being as well as the activity they have participated in. The information is then compiled and sent to the administration of Bromma. The concept was then supposed to be further developed and detailed, though it felt as the concept was at implementation stage and the creative spark therefore did not quite exist. Therefore, the group decided to change direction, by returning to the insights that had been found during the interviews and anew redefine the challenge to deal with accessibility, inclusiveness, and the elderly that currently are not participating in the activities at the activity centres, men, as well as the group "fragile". Resulting in the creation of the concept BUSS (Brommas UtflyktsSugna Seniorer), a day trip lasting for four hours, once a month. A maximum of twenty participants is then being picked up by a bus, taking them to a predetermined activity, where the activity is set to first and foremost attract the elderly that currently are not participating in the activities at the activity centres, men, as well as the group "fragile".

Sammanfattning på svenska

Den här projektrapporten behandlar aktivitetscentrum för äldre i Bromma och de utmaningar dessa står inför idag. Initialt gavs en utmaning från Bromma Stadsdelsförvaltning, där uppgiften var att kvantifiera de kvalitativa aspekterna fysisk aktivitet, bra matvanor, social gemenskap, samt meningsfullhet. Genom metoden designtänkande (empatisera, definiera, idégenerera, prototypa och testa) genomfördes intervjuer med såväl äldre som personal på aktivitetscentrumen, samt intervjuer med personal från Bromma administration. Baserat på intervjuerna identifierades ett kommunikationsproblem och utmaningen omdefinierades till att fokusera på det. Som lösning på kommunikationsproblemet skapades konceptet Mood Machine, en feedback-maskin där de äldre kan svara på frågor om deras välmående och om den aktivitet de deltagit i. Informationen sammanställs sedan och skickas till Bromma administration. När konceptet sedan skulle vidareutvecklas och detaljeras, kändes det redan färdigt att implementera och den kreativa gnistan infann sig inte. Därmed bestämde sig gruppen för att ändra inriktning, genom att gå tillbaka till de insikter som gjorts under intervjuerna och på nytt omdefiniera utmaningen till att handla om tillgänglighet, inkludering, och de äldre som i dagsläget inte deltar i aktiviteterna på aktvitetscentrumen, män samt gruppen "fragile". Resultatet blev skapandet av konceptet BUSS (Brommas UtflyktsSugna Seniorer), en dagstur som pågår under fyra timmar en gång i månaden. Upp till tjugo deltagare blir då upphämtade av en buss som tar dem till en förutbestämd aktivitet, där valet av aktivitet är inriktat på att främst locka de äldre som i dagsläget inte deltar i aktiviteterna på aktvitetscentrumen, män och gruppen "fragile".

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1. INTRODUCTION AND PROJECT DESCRIPTION

With the improvements of society, our population is growing. As a consequence, more people reach an age above 65 years old, increasing the proportion of older people within society. Hence, it becomes more and more expensive to provide sufficient and meaningful care for all people in need, while the part of the population responsible for those expenses is decreasing due to lower birth rates. This raises pressure for the public administration to distribute the money to where it is most effective. Since the number of people in need of care is expected to substantially increase in the years to come, Swedish society is set to face higher health costs and social challenges. Hence, a major goal is now to undertake preventive measures, so as to relieve the healthcare system and Swedish tax payers from non-efficient costs towards meaningful ageing.

The challenge was given to us by Bromma Stadsdelsförvaltning, also called Bromma's District Administration (BDA). They are responsible for administering and managing the issues, concerns and interests of the district. The amount of elderly among Bromma's general population is on the rise, as well as projections of associated health care costs of this region. This brings new challenges in health and social care in the community, not only in Bromma, but in the Stockholm area as a whole.

Therefore, a major objective is to decrease the costs of such care, while securing a healthy lifestyle among elderly that promotes well-being and good quality of life simultaneously. As many investigations show, well-being and good life in general prevents physical and mental illnesses.

In order to attain these goals of preventive care, BDA has launched three activity centres, aiming to offer elderly a platform of togetherness, care and collective activities. The problem BDA has, is that they do not know how to measure whether the implementations they are doing have any positive effect and lasting impact. As they have a tight budget, which is dependent on the government fundings, they need data of the most cost efficient way of helping society so they can provide the population with the best care possible. With the focus on the elderly, the challenge that was given to us was the following:

"How to measure and follow up the outcomes?"

BDA gave us four areas to focus on: Good Food Habits, Physical Activity, Meaningfulness, as well as Social Community and Support. Thus, our challenge was to solve what types of outcomes that should be measured and how to quantify these qualitative values?

This is the foundation of the project. However, this might be the problem from their perspective, but it may not be the actual issue when looking at it from another angle. As the challenge only sets a base for the project, the actual problem may change with time as more information is to be gathered.

2. DESIGN THINKING PROCESS

The design thinking process is a method to develop a solution to a challenge or a problem. The process consists of five phases divided into a double diamond. The first diamond includes the phases empathize and define, whilst the second diamond includes the phases ideation, prototype and test.



Empathize

When working with problem solving in the design thinking method, the most important part is to get an understanding of the situation by taking a step back, to see what the issue actually consists of. The empathize phase is all about seeing the whole picture and discover what the underlying problem is. This is done through observing different stakeholders and engaging with the users by interactions and interviews, immersing yourself in the user experience to get different perspectives, and to step into the shoes of the user.

Define

Once a step back has been taken and a broad view has been acquired, one can enter the define phase. This second phase focuses on compiling the data collected in the emphasize phase, narrowing it down to reveal the main problem behind the initial challenge. To be able to reframe the original problem, one has to make choices regarding what is considered the most important information, and then try to find a specific point of view. The point of view will, most certainly, differ from the initial challenge.

Ideation

After redefining the challenge, it is time for the third phase of design thinking, which is called ideation. Since the underlying problem has been identified and targeted, it is time to find as many solutions to the point of view as possible. It is important to have a mind-set of stepping outside of your comfort zone and thinking outside of the box. Here, no idea is considered a bad one. All ideas will be evaluated later on in the process, which is why they shouldn't be questioned at this stage. Even though some ideas, at the first sight, may seem impossible to implement there might be a possibility to build on them.

Prototype

The ideas are brought to life in the phase of prototyping. Since there is no time to develop all of the ideas, a selection has to be made. The idea of prototyping is to bring the ideas from a theoretical stage to a physical and practical form. Prototyping is a good way of visualizing the ideas, and to get response and feedback before entering the next phase.

Test

The fifth and final phase is the test phase. The prototyped ideas now need to be tested, so a decision can be made as to which one of them can be further developed. Testing is important since it proves whether or not the idea works in reality, and a lot of new insights regarding the solutions can be found through testing prototypes.

3. EMPATHIZE

As previously mentioned, the goal with empathizing is to take a step back from the challenge given. By taking a step back we investigated what the underlying problems could be, instead of focusing on the initial problem our challenge givers had assigned for us. To accomplish discovering the underlying problems, we used different methods such as interviews, observations, and active participation to get a wider understanding of the underlying issues.

3.1. Stakeholder map

One of the first things we did was creating a mind map over the different stakeholders in our challenge. The stakeholder map helped us get an overview of the most important parts in the puzzle, facilitating our choice of which end users we were to focus on.



Image 2. Stakeholders' map

3.2. Our own understanding of the four focus areas

The four focus areas our challenge included were Good Food Habits, Physical Activity, Meaningfulness, as well as Social Community and Support. By using the method of brainstorming, we aimed to clarify what we interpreted within each of the four focus areas and what they implied to us.



Image 3. Focus areas' definitions brainstorming

It was important defining what the focus areas entail since it gave us inspiration for the interviews. From the brainstorming session, we could then come up with questions to ask when interviewing the elderly when we eventually started to visit various activity centres in Bromma.



Image 4. Interview's questions brainstorming

3.3. Interviews, observations, and active participation

To interview elderly, we visited different locations in Bromma: Tranebergs activity centre, Tunets activity centre, and the wellness centre, which is connected to Tunet activity centre. The total number of elderly interviewed was around 25, including five women from the elderly organisations Seniorerna About Us (SPF) and Pensionärernas Riksorganisation (PRO). Aside from the interviews, we also observed the elderly while visiting the activity centres. There was, for example, a music performance at Traneberg, so instead of engaging with the visitors, we watched whether or not the elderly seemed to appreciate the event. Lastly, three of our group members participated in the line-dancing activity at the Wellness Centre. This was mainly to get an idea of how the activities were structured and what it is about them that attracts the elderly.

In addition, we also interviewed three members of the staff. One was from Mary's cafe (another activity centre in the area), one from the Wellness Centre, and the last one was an economic consult from BDA. Our reasoning for interviewing staff members was to get yet another perspective on the same situation. Since they are in the midst of it, but aren't the end users, they could be able to see issues from another angle.

3.4. Customer journey map

To get a deeper understanding of the elderly, i.e. the end users, we tried stepping into their shoes. Therefore, we created a customer journey map of an elderly wanting to go line dancing. A customer



journey map takes stand in what the user does, feels and wants, guiding the observer through the different stages from the user having an idea of doing something, until he or she has turned that idea into reality. All the way through the journey his emotions have varied according to how his needs correspond to his actions and external events.

Image 5. Customer journey map

4. DEFINE

4.1. Personas

In order to operationalize the data we collected during the empathize phase, we created three personas of different characters.

The first persona was named Greta. Greta is an elderly woman of 71 years, living in Bromma. She is married to Gösta, who has dementia, putting her in a "fragile" state where she needs to take care of her husband. Together they have two sons and one daughter. She is visiting the café at the activity centre because of the other people coming to the café. Hence, her need is Social Contact.

Secondly, we created John. John is an elderly male of 82 years, living by himself since his wife passed away a few years ago. He once had an accident on the public commute, resulting in him needing a walker to be able to get around. Ever since the accident, he finds it hard to trust the public commute, and is therefore limited in his options when travelling, making him in need of Accessibility.

Lastly, we created a member of the staff as our third persona, naming her Anna. Anna is a 38 year old woman working at the activity centre. She loves her work and engages with the elderly, but does not want to get too attached. Whilst she really enjoys working at the activity centre, it sometimes gets too stressful. Consequently, Anna needs a Lower Workload to be able to fully appreciate her work.



Image 6. Personas

4.2. Insights

During weeks of interviewing and observing, which we aimed to make both deep and extensive, we gained significant insights about elderly' perceptions and needs. A large share of the interview guide that we designed and used was structured around the four focus areas Good Food Habits, Physical Activity, Meaningfulness, as well as Social Community and Support. While the notions of Good Food Habits and Physical Activity seemed quite obvious and easy-to measure, Meaningfulness and Social Community and Support could be interpreted differently by each person. Hereafter, our discoveries about the meaning of these notions for the elderly will be explained.

Most of the people interviewed realized the importance of Good Food Habits and strived to provide themselves with diverse and healthy meals. The levels of Physical Activity of the interviewees varied and depended on many factors. Some of them have already faced serious health issues of different kinds, which for many were defining the limitations of Physical Activity. On the contrary, some elderly aimed to exercise regularly. We were amazed to realize that while the three activity centres in Bromma showed low levels of attendance (average of 6 thousands visits in 2018), the Wellness Centre was so popular that it's administration could not afford to place more advertisement and reach out wider audience because it would not be possible to accept more visitors (about 20 thousand visits per year).

Differences in elderly' physical limitations and personal relationship to Physical Activity affected their preferences about the activities they expected to have at the activity centres. For example, Sara (72 y.o., name changed) was experiencing serious troubles with nerves in her legs (being happy that she just could move after a serious injury) and therefore could not take as many walks as she wanted. Hence, she showed more interest and need in intellectual activities such as literature and movie discussions. On the other hand, Sofia enjoyed and felt that she was doing a good thing for her body when she takes walks and was generally physically active. Sofia preferred to spend time leading a walking group around Djurgården instead of attending activities at the activity centre. Finally, Greta, our persona, would really like to be Physically Active, but her husband with dementia becomes a limitation, since she always tries to be close to him. The variety in activity levels and preferences is evidence that the image of the senior population cannot be generalized.

We asked almost every interviewee what Meaningfulness means to them. We also searched for the elements of Meaningfulness in all of their answers. Each person found Meaningfulness of their own. For example, for one person, living in a house built by her parents was meaningful, and giving money to charity. For a person who went through a year of paralysis and fatal diagnosis, life itself was meaningful and everything else could just make it more or less pleasant. However, the most common element of Meaningfulness seemed to be social contact with their families and friends. An insight was therefore that seniors, probably, come to the activity centres to meet and talk to other people first, and to engage in activities at second hand.

The elements of Meaningfulness for some of the interviewees was to be part of something, and to contribute to society (for example, through volunteer work), and according to Anna, our persona, "they want someone who wants to be around them". Social contact was the main reason for many interviewees to come to the activity centres. Social connections are important and often overlap with Meaningfulness. Some people who do not meet their families often suffer from loneliness. From this we could draw the conclusion that elderly are all different with different needs (for activities), but still have some needs in common.

We met Greta	
We were amazed to realize that	We wonder if this means
She sees her family often.	It has a positive impact in her confidence to meet new people.
She tries to visit the activity centre regularly.	That the activity centre is important for an active social life and healthy lifestyle. That the activity centre is a getaway for her.
Spends a lot of time taking care of her husband.	She neglects her own interests and needs. That she feels her life is more meaningful.

Table 1. The insights

We met John	
We were amazed to realize that	We wonder if it means
He does not trust public transportation.	That he chooses not to go to the activity centres because he is afraid.
He dislikes the activities offered at the activity centres.	That activity centres aren't geared towards men. The activities are not engaging enough. There's not enough activities. A more inviting environment and more engaging activities would decrease his loneliness.
He does not feel prioritized.	An increased participation in decision-making would make him feel more important. He doesn't get enough attention and is neglected.

We met Anna	
We were amazed to realize that	We wonder if it means
She feels stressed because of the workload.	That the workload affects the quality of her work.
There were more women than men in the activity centres.	Women have a bigger social need than men. Exercises are less attractive to men. Gender ratio of the visitors represents gender ratio in this age in general. Men are less interested in the activity centres.
She keeps a professional distance to the visitors.	This keeps her impartial for her work. That she doesn't want to be emotionally attached to the visitors.

4.3. How-to-questions

Thereafter, we started listing How-to-questions. These are questions focused on the collected insights, and helps when building the point of view (POV) of the end user. Below are the three personas with a listing of the How-to-questions. Subsequently, we chose two How-to-questions for each persona, by voting on the most important ones.

- How to decrease Anna's stress-level so she can do her work properly and still feel good in her everyday life outside of work?
- How to make the activity centres more welcoming in terms of atmosphere, environment, entertainment, interior design, etc?
- How to make an elderly feel confident to meet new people when they have an absent family?
- How to create activities that make elderly feel they're contributing to something?
- How to attract more visitors to the activity centres that normally wouldn't go there?

• How to give easier access to activity centres so there can be an increase in elderly visits?

4.4 First POV

When putting the How-to-questions together, we made one point of view (POV) for each persona, aiming to summarize the two chosen How-tos. The three outcomes can be seen below.

Greta

How might we design activities that will nudge the elderly to meet new people, while generating a feeling that they're contributing to something, to avoid them feeling lonely?

John

How might we ease the accessibility of the activity centre and make the visits a more joyful experience, to attract more elderly?

Anna

How might we facilitate a more welcoming atmosphere at the activity centre, so as to decrease staff stress level, while improving the overall attractiveness to the elderly?

Thereafter, we tried to merge the three POVs into one POV. Since we didn't want to leave anything out, the POV became extensively long and fussy. It is shown below.

How might we ease accessibility, create a welcoming atmosphere, reduce stress and design activities that generate a sense of contribution and combat the feeling of loneliness amongst elderly, which leads to a more joyful experience that improves the overall attractiveness of the activity centres?

We were not fully happy with this outcome as it was too complex and didn't really narrow our challenge down, as supposed to. It touched on too many aspects, so we decided to reform it. With the help from another group, that outside view really helped us moving forward.

4.5. Mind mapping problems

After reforming the first POV, we did our first internal presentation, aiming to present the process so far and as an outcome, the first POV. However, the feedback we received after the presentation in the Master's course (at Opelab) was that our POV was too wide and didn't narrow anything down. Therefore, we had to reformulate the POV once again. We decided to try a different way, so we created a mind map of all the problems we'd discovered during all the interviews.



Image 7. Problem mind map

By creating the mind map, we understood, that one of the main problems seemed to be communication between different entities, as well as the needs of the elderly to be heard. This made us conclude that one of the biggest issues we wanted to tackle was the lack of communication. Below is a picture summarizing the communication process between the different entities.



Image 8. Stakeholder's communications process

4.6. New POV

By discovering the problem of lacking communication, it was easier to reformulate the POV into something more specific and tangible. We began by brainstorming different versions of a POV that aimed to tackle the problem with lack of communication. Below is our output of the new POV. "How to communicate the elderly peoples' needs in order to provide the administration with valuable information to make decisions to fulfill those needs?"

5. IDEATION

With a reformulated POV in hand, we moved on to the ideation phase. The aim of the ideation phase was to generate various solutions to our POV, by using different ideation methods as described below.

5.1. How might we-questions

To generate a lot of actionable aspects of our POV, we brainstormed questions on the topic How Might We (HMW). We then voted for the five best questions.

	HOW MIGHT !	NE	
	-/detect the ne		
1. encour	age the elderly to	share their	needs?
	r the information		
	t a part of the e		
	the core-takers in		
ensure	a two-way commun	ication?	
	a two-way commun the evidently feel hea		
· make +	a two-way commun the elderly feel hea the communication de for the elderly?	rd?]
make for make	the eiderly feel hea the communication de for the elderly?	rd? inclusive and]
* make + make accessii X 6 make	the eiderly feel hea the communication	rd? inclusive and and fast?]
* make + make accessii X 6 make	the elderly feel hea the communication de for the elderly? communication easy the communication	rd? inclusive and and fast?]

Image 9. "How mighty we" questions

5.2. Silent brainstorming and foot-storming

With these five HMWs, we began brainstorming in silent individually, writing down each idea on separate post-its. Each group member could then explain his or her ideas before we discussed them as a whole group to try and develop each other's solutions. Furthermore, we used a foot-storming method, in which we took a ten minute silent walk outside. While observing the outdoor surroundings to get more

inspiration and boost creativity, we silently thought of possible ideas and solutions. Various ideas were developed and written down before we came back and discussed them in detail.

5.3. What would [character name] do?



Moreover, we thought about what a certain person, such as a superhero or well-known character, would do to solve the problem at hand. We chose the mindset of Robin Hood and Jack Sparrow to ideate more ideas to our selection.

Image 10. What would a certain character do? Brainstorming

5.4. Visual brainstorming

Thereafter, we used visual brainstorming, drawing various ideas on papers, and then passing them around so everyone got a chance to develop the next person's idea.



Image 11. Group doing visual brainstorming

5.5. The storyboard

Lastly, we used a method called the storyboard, which is a kind of comic book, to develop ideas. Each member thought about one idea, drawing the sequences of realizing that idea on a paper divided into six panels.



Image 12. The storyboard

5.6. Selection of ideas

After gathering a lot of ideas, we categorized the ideas using the How-Now-Wow-matrix. The tool is used to cluster ideas into four sections. How represents great ideas that are difficult to implement. Now represents ideas that somehow are already being implemented. Wow represents great, original ideas that are easy to implement. The last section represents the ideas which are impossible to implement.



Image 13. Idea selection

The ideation phase was concluded by selecting five ideas, mostly from the Wow-quadrant. We used the voting method in which every member had three votes to distribute. The five ideas selected to be further developed as concepts were: i) Sharing is Caring, ii) Mr Mood, iii) FunOmeter, iv) Mood Machine, and v) Innovation Day.

5.7. Concepts

CONCEPT #1 Sharing is Caring

This concept is not a new one, and is already in the works, but after looking into it, it is prevalent that it can be brought further quite easily with a high reward. What it means is the collaboration between the elderly organisations (such as PRO or SPF) and BDA. The activity centres have spaces that are empty and could be used, and the organisations have the engaged people and a close connection to the target group. There are a lot of mutual benefits that can be gained through the use of each other's channels of work. The activity centres can be used as the physical space for this collaboration. As previously said, this collaboration is already being done in some way, but could be used in a more active engagement between the two parties, so both of them can make sure that the elderly get the best care possible, and a chance to voice their opinions regarding their own care.

CONCEPT #2 Mr Mood

This concept aims to tackle the elderly' need to be heard and the lack of personal contact. It also aims to unburden staff members who feel stressed because of the shortage of time they have dedicated for each elderly visitor. As many of the elderly said, they visit activity centres because they want to engage with other people. Mr Mood's aim is to build on such personal contacts with elderly and to get the elderly to feel comfortable and heard in activity centres. The idea of Mr Mood is that it is a person who directly engages with the elderly at the activity centres, and listens to their needs and concerns. Mr Mood will then take all the collected information back to the administration. This way, an effective communication channel is established between the elderly and the decision-makers.

One of the most important parts of the concept is that he or she should visit various activity centres regularly, e.g. once a week, enabling the establishing of trust and empathy between the two parties. The elderly need to feel comfortable with this person so that they feel comfortable sharing their opinions, needs and interests. Some of the tasks included in Mr Mood's job could for example be holding seminars (which should be structured as an open discussion where elderly and Mr Mood together can think of new ways to improve the activity centres), as well as conversing with elderly when they are having

CONCEPT #3 FunOmeter

The basic idea behind this concept is to account for the elderly' needs to have their voices heard, while simultaneously catering to the administration's demand for measuring the outcomes of their activities. The idea is inspired by questionnaires, combining these wishes to improve communication between the elderly and the administration. However, it is more than a mere communication channel. Rather it can be imagined as an elderly companion that facilitates joy and assists them throughout their daily routines. Elderly could be guided through the questions using exciting game scripts in which they e.g. support a fictional character solving riddles or mastering challenges with the help of their answers. Questions encompass for example "How many times have you been attending activities in the centre the last month?", "Which activities did you attend and how did you like these?", as well as "How are you feeling and what do you want to do today?"

The tool could take shape in distinct ways, ranging from a digital device, to paper-based options, to interviews. It all depends on the preferences of the respective user and the capacity of the activity centre. Answers could also consist of different options out of which elderly can choose their favourite, with a possibility to type in answers manually too. We believe it is important to design the tool to be very interactive, touchable and responsive.

For the administration, the tool allows tracking of changes in elderly' well-being over time and unveiling of improvement potentials. Elderly will be given a tool to communicate their needs and receive personalized assistance and recommendations. Participation could be incentivised through free fika, but ideally elderly would use it voluntarily as part of the realization of the tool's benefits. The measuring part is oriented towards long-term evaluation, thus a monthly completion would be sufficient.

CONCEPT #4 Mood Machine

Whilst the FunOmeter is long-term oriented, the aim of this concept is at short-term level. Taking inspiration from the machines existing at airport security and in stores, we created the Mood Machine. The intention is to encourage the elderly to answer a maximum of three questions, such as "How are you feeling today?" or "How did you like the activity?". It is important to keep a limited amount of questions, since it should be quick and easy to use the machine, ensuring as many respondents as possible.

The Mood Machine will be located in connection to the activities, to measure if participating in an activity improves the well-being of the respondent, as well as whether he or she /dis/liked the activity. All the data collected in the machine can then be directly transferred to the administration.

The idea is that the elderly will each have their own card, which they should blip on the machine, in order for the staff and administration to keep track of the amount of unique visitors, the gender distribution, the feedback on the activities and so forth. Each question will appear on a screen and the respondent will then have to take a stand on the specific question, pushing the button which corresponds to their standpoint. The answering alternatives range from red corresponding to being upset or disapproving, to orange corresponding to being slightly unhappy, to yellow corresponding being content, to green corresponding to being very satisfied. Lastly, it should be said that all the information sent to decision-makers will still be anonymous, even with the use of a blip card. This is to ensure that the elderly feel safe enough to answer the questions truthfully.

CONCEPT #5 Innovation Day

We imagine this concept, Innovation Day, as an event, which is aimed to bring together all of the entities, elderly, caretakers and administration. It is supposed to be a fun and attractive event, with music, food, beverages and a relaxed atmosphere so that elderly who have never visited the activity centres also want to go there. It is a very flexible concept, and can include almost anything. A crucial thing is that there will be offered free transportation, to ensure that everyone can participate, despite disabilities. This will help elderly with the need of accessibility, like our persona John. Also, to guarantee a wider visitor ratio, invitations can be sent home to every elderly older than 65. Innovation Day should also happen regularly, and can change topics and themes depending on the needs. This also helps making every event feel special.

The event could offer seminars where all entities, elderly, administration and care-takers can discuss possible ideas to improve the activity centres. They could also offer face-to-face conversation between elderly and administration, since it would provide the elderly a chance to be heard, as well as for the administration to get to know the elderly in person, taking part in their view of the situation. Moreover, these conversations can help the administration to collect worthy data about elderly and the outcomes of the activity centres. Another way of collecting data could be a comment box, where elderly can leave anonymous notes with their needs or wishes of any sort.

6. PROTOTYPE

During this phase we built small models of the five different concepts by using a variety of materials like lego, styrofoam, and paper. The idea was that these prototypes were supposed to be 'quick and dirty', so not finished concepts, but more an idea of what the final products could look like.













Sharing is Caring

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FunOmeter

Image 14. Prototypes

7. TEST

As the second stage of the course began we started testing some of our concepts with the elderly people at the activity centres. When visiting Tunets and Mary's cafe, we showed three of our prototypes (Mr Mood, Mood Machine, and Innovation Day) to the elderly and asked them about their opinions. The reason we didn't bring the other two concepts, FunOmeter and Sharing is Caring, was that they felt too difficult to test, as well as not equally developed or innovative as the other three. Sharing is Caring didn't really feel like a concept of its own, but more as a part of one. The FunOmeter on the other hand, appeared too similar to the Mood Machine, hence not as creative. Neither was it as user friendly as the Mood Machine. Therefore, we made the conscious decision to neglect them. In hindsight, it could have been a valuable input to test these two concepts as well with the elderly, since it could have resulted in new insights that would have helped us going forward with the other concepts.

Many of the interviewees seemed to agree that there was a lack of communication between elderly and administration, and expressed scepticism of whether or not admin would show up for an event such as Innovation Day, though the idea of free transport was appreciated, since this meant that more people would be able to attend. The Mood Machine was a big hit, but there were concerns that the technology aspect of the concept would become problematic for some elderly. Mr Mood got mixed response, as some elderly seemed to like the idea, but others were a bit confused as to what this person's job would actually entail.

8. SELECTING CONCEPT

8.1 Decision matrices

In order to decide which concept to go further with and continue developing we used both the Decision matrix and the Pugh matrix. For both matrices we chose the same five criteria in terms of five different aspects we considered important that the concept include.

The first criteria chosen was Easy to Use, since it is an important aspect for the elderly to be able to use the concept themselves, without the help from a member of staff, making them feel independent. It is

also important for the concept to be easy to use in terms of being easy to grasp, encouraging the elderly to take part and use the concept.

Furthermore, the second criteria chosen was Giving a Voice to the Elderly. When designing a solution to an existing problem, an important aspect to consider is giving a voice to the fragile or somehow vulnerable, those normally are struggling to get their opinions raised. This especially accounts for elderly, since many of the elderly struggle with difficulties hearing, speaking, walking or such, making it super important to create a concept that is designed to help them raise their voice, as well as ease their difficulties.

Thirdly, Accessibility was chosen as a criteria. Accessibility aims to cover both the aspect of actually getting from point A to point B, as entering or accessing the actual concept when arrived at the desired location. The criteria also considers how, or how easy it is, to access information about the concept, since it is pointless to create a concept if nobody can access information about its existence.

Since our POV was focused on enhancing the communication between the admin and the elderly at the activity centres, the fourth criteria was chosen to Improved Communication. Our initial angle to the challenge was to somehow solve the lack of communication between the elderly and the administration of Bromma, hence we needed a criteria covering that aspect.

Lastly, the fifth criteria chosen was Adaptability. Our challenge involves human beings with different needs, needs which are changeable over time, both slowly and rapidly. Taken together it is important to calculate for changing conditions and the possibilities for the concept to adapt to such changed conditions and needs.



Image 15. Summary of the chosen criteria

After setting the criteria, we scored the five different concepts according to the five criteria. Summarizing the individual score for each concepts, the Mood Machine and the Innovation Day were the concepts with the distinct highest scores.

		Easy to use	Giving elderly a voice	Accessibility	Enhanced	Adaptability		
	WEIGHT	9	6	7	8	5	TOTAL	
	Mr Nood	7	8	4	8	9	248	6
ves	Sharing	5	3	4	5	5	156	6
Salualitatives	caring FunOmeter	5	6	5	8	7	215	6
	Innovation Day	9	9	8	0	8	311	6
ł	Mood	9	8	Ð	8	(8)	282	

Image 16. Decision matrix

Having a hard time deciding between the two of them we therefore chose to do a pros and cons grid between the two of them. Both the Mood Machine and Innovation Day had fewer cons than pros. The pros of Mood Machine included regularity, being easy to use, independent use, simplicity, long lasting and easy to implement. On the other hand, the Innovation Day included pros such as fun, engaging, getting something out of it, reaching more people than just the activity centres, increasing Social Contact, flexibility and creativity. Considering the different pros of the two concepts, we chose to go through with the Mood Machine, since it corresponded the better with our POV regarding the lack of communication between the administration and the elderly. Though, what fretted our minds was that the Mood Machine as a concept seemed to aim more towards the admin, whilst the Innovation Day clearly aimed towards the elderly.



Image 17. Pros and Cons of the mood machine

8.2. SWOT-analysis

In the next stage we were to develop the concept of the Mood Machine even further. We started this process by doing a SWOT-analysis, standing for Strengths, Weaknesses, Opportunities, and Threats. By using post-its, we all tried to come up with as many of these as possible, to see what advantages and disadvantages there was with our chosen concept.



Image 18. SWOT-analysis of the Mood machine

Afterwards, it was time to start sketching, a method used to develop different variations of one concept. The idea was to use the SWOT-analysis, and focus either on a Strength/Opportunity to develop further, or focus on a Weakness/Threat and try sketching a version that would minimize the disadvantages. By sketching as many different variations of the Mood Machine as possible and focusing on these four different aspects from the SWOT-analysis, we were able to come up with some versions, but there was still that nagging feeling in the back of our heads that they weren't unique enough, and that these versions didn't differ from each other that much. Even when we used the method of passing the sketches around to try and develop each other's ideas, we seemed to be a bit stuck with how to develop the Mood Machine.

During one of our coaching, we received feedback on the report that we'd previously handed in, where our coaches told us that we had an opportunity of doing something completely new and innovative. By that time there was one specific concern that stood out for us, which got us questioning whether or not we should continue with the Mood Machine or switch concepts. Are activity centres really the best way to tackle the problems that elderly experience, in terms of loneliness or lack of Meaningfulness and Physical Activity?

To answer this question we started to compare the different concepts using the method SWOT-analysis. After conducting such an analysis for the Mood Machine, we continued applying it to our other concept Innovation Day and on activity centres in general. Through this we were able to detect and map out the key strengths, weaknesses, opportunities and threats we found to be crucial for making a decision. This helped us to find answers to, firstly, our question of which concept to continue with, and secondly how to develop that concept in a way that comprehensively accounts for the pitfalls of the activity centres. Moreover, it stimulated our ideas and initiated a sparking discussion.

8.2.1. Innovation Day



Strengths: Flexibility and adaptability of themes and design of the event, possibility to reach out to non-comers and fragile that are currently not addressed by the activity centres.

Weaknesses: Limited to activity centres, no constant flow of data and measuring.

Opportunities: Personal contact between elderly and admin, improving the reputation of activity centres.

Threats: Funding of the concept, limited staff, no one attending the events.

Image 19. SWOT-analysis of the Innovation day

8.2.2. Activity centres



Image 20. SWOT-analysis of the activity centres

Strengths: Likeable and cheap activities, social community.

Weaknesses: Bad reputation, not attractive to outsiders or men, limited activities and opening hours, sometimes difficult to access.

Opportunities: Easy expansion, elderly could decide on their own, collaboration with organisations.

Threats: Stressed staff, lack of information, gets abandoned if not popular.

The first substantial discussion we had dealt with the general feasibility of changing our concept. We were aware that we might not have enough time and human resources to possibly deliver a finished concept. However, based on the fact that our initial concept, the Mood Machine, already felt quite developed and almost ready to use, we realized that there was not much room for further development. It also didn't reach people who don't attend the activity centres, and since they are such a large part of the elderly population, these users seemed very important to focus on. Therefore, we decided, based on our new insights, to change perspective and focus more on the final end users, the elderly, to substantially contribute in improving their lives. Our concept accounts for the lack of diverse and gender neutral activities, concentrates on attracting more men, as well as reaching out to fragiles and non-comers (people who don't go to activity centres), that is people who do not see their needs satisfied by the current design of the activity centres. Hence, we made the decision to go ahead with the new concept Innovation Day.

8.3. Video prototyping

As one way of prototyping, we made a video. Since we just had decided to change our concept from the Mood Machine to Innovation Day, we hadn't got the time to fully develop Innovation Day in detail. We therefore chose to do the video prototype with Mood Machine, by writing a script of a daily scenario on how the Mood Machine could be used.



The script starts with an old woman, who lives in her home not at the activity centre, waking up and thinking of attending an activity at the activity centre. Even after being reluctant to go, due to her fear and distrust on public transport, she still decides to attend.

Image 21(a). Video prototyping – at home

The next script shows her in a public bus transport heading to the activity centre. She reaches the activity centre and joins the on-going activities such as line dancing.





Image 21(c). Video prototyping – at the activity centre

Image 21(b). Video prototyping – on the bus

When the staff at the activity centre asks the woman about how she feels about the activities, she replies that the activities are good, but she had trouble getting there. She feels the bus isn't safe for her and wishes the mode of transportation to be modified. The staff then introduces the Mood Machine to her, explaining how it can collect all the queries from her and report them back to the administration. The old woman ends up thanking the staff and uses the Mood Machine to report all her troubles.

9. DEVELOPING CONCEPT

9.1. New POV

As we previously had changed concept from Mood Machine to Innovation Day, altering the POV was



Image 22. Concept developing

crucial to match our new line of thinking. Previously, our focus had been elderly who attend the activity centres, but since we made a decision to focus on people who don't go there, our POV needed to reflect this.

To reformulate our POV, we rigorously took a step back and compiled all our collected insights, both old and new, with fresh eyes, and then voted with dots on the most important ones. We could then pick out the most important keywords and insights that we wanted our new POV to focus on.

• Attractive reputation

- Activity centres have a bad reputation of only being for the 'old and ill', and this might deter elderly from going there

• Inclusive and welcoming atmosphere

- Very few men visit activity centres, and this might be because the variety of activities offered there aren't geared towards

men

- Accessibility in terms of transport
 - The lack of accessibility deters people from going to activity centres, since they might not trust public transport due to previous accidents
- Activity centres is not an effective concept
 - The low number of visitors from outside of the elderly homes and lack of gender neutral activities indicates that activity centres don't live up to their full potential
- Marketing and reaching out to non-comers



- This is crucial for improving the lives of fragile elderly, as many of them don't get information about what's going on in their neighbourhood

Then, by making How to-questions, we tried to merge them into one POV that would aim towards people who don't go to the activity centres, so called non-comers, since they are the larger part of the elderly population in Bromma.

Thus, the reformulated POV turned out as below.

"How to create an addition to activity centres that brings inclusive activities to elderly, attracts non-comers, and empowers them?"

Image 23. How-to questions

9.2. BUSS - Brommas UtflyktsSugna Seniorer

To develop Innovation Day, detailing the concept and making it more tangible, we sketched three variations each of the concept. The variations originated from either a strength/opportunity or a weakness/threat from the SWOT-analysis. We then sketched a variation of the variation by giving our initial variations to another group member, who developed the variation even further. Hence, there were twenty four variations to Innovation Day, which we clustered to get an overview on the different aspects of the concept, in order to be able to choose in which direction we wanted to develop the concept. The clusters were: variety themes/activities, accessibility, motivation and lecture/course (with the outliers hearing disabilities, fun activities and Mood Machine + Innovation Day).

By voting with three dots each, variety in themes/activities and lecture/course both scored four dots each, closely followed by accessibility scoring three dots. As lectures and courses could be considered as an activity, we chose to focus on both of the clusters, whilst keeping the accessibility in mind (also supported by the fact that accessibility was one of our criteria in the decision matrices, making it a continuously important aspect).



Image 24. Concept variations clusters

Further detailing the concept, we brainstormed regarding how such a day could be structured, in terms of the duration time, the regularity of the concept, the optimal group size, as well as which activities the elderly could appreciate in this context. We agreed to prototype for a duration time of approximately four hours, an initial regularity of once a month (with a possibility to expand it to twice a month, once the concept has been established) and a group size of twenty to thirty people (depending on the activity). Also, we made a list of all possible activities we could come up with, that elderly, or more specifically non-comers, men and fragile, would prefer attending on such a day. The list contained activities as town walking tours, fishing, museums, study visits, theatre, throwing clay on potter's wheel, garden centres, photography courses, and so forth. Information about the event and the marketing would ideally be done on billboards at supermarkets and community centres, in the local newspaper and on the website of the activity centres. Lastly, the most important aspect of the concept was that it should contain a bus picking up the elderly at four different pick up places in Bromma, located at the northern, the southern, the western and the eastern parts of Bromma, to cover as big an area as possible. Of course, the bus is environmentally friendly, i.e. runs on biofuel or equivalent.

Since we had changed, developed and detailed Innovation Day in another direction than we initially had thought of it to be, we felt a need to change the name into something that better corresponded with the concept. Since one of the main goals with our concept was to bring activities to the elderly, by offering free transportation, we wanted it to be visible in the name. Therefore, we chose the name BUSS as an abbreviation of Brommas UtflyktsSugna Seniorer.

10. PROTOTYPING AND TESTING CONCEPT



Image 25. BUSS Storyboard – story developing

When prototyping and testing BUSS, we decided to sketch a storyboard, almost like a comic-book, of what such a day could look like. We set the activity to fishing, since we thought it could appeal to many men, and sketched an example day.

After the sketching, we went outside with our prototype and talked with the elderly people we could find, to get feedback and opinions. The first man we talked to said he wasn't into the idea of fishing, but would like activities such as going to museums. Overall, he was positive to the idea of a bus like this, because it would mean "partly doing something, and partly doing it together". The second man we talked to was more positive to fishing, but really jumped on the idea of photography as an example of an activity.

Next, we interviewed two

women, whom both disliked fishing, but repeated what the others had said about museums

being a good activity. Overall, all four people we talked to agree on the four hour timeframe of the activity, but disagreed on the size of the groups. One man said 25-30 people was a good size of a group, while the other man said 10 people, explaining that a too big group would make it difficult for a guide to have time for all participants.



Image 26. Concept testing feedback

11. EVENT DESIGN

To prepare the upcoming exhibition, in which we are to demonstrate our concept to an audience of various guests, we did an event design. The aim is to design our exhibition to attract as many visitors as possible, by creating a nice experience for the visitors. There are three elements to take into consideration when designing an event, a concept, the space, and the activity.

When designing the concept part of an event, it is crucial to show the visitors, rather than tell. It is important to make the visitors experience the journey of the concept. Designing the space is all about the limitations and possibilities arising from the surroundings where the event will take place. In our case, the space has an entrance area, a wall, a curtain and a window. Therefore, we decided to put a picture of a big bus on the curtain and a picture of a big tree on the other wall. We created two entrances, one will be used to enter the space and the visitors will have to pass through the different

parts of our exhibition, before leaving through the other entrance. Lastly, in one corner the visitors may enjoy some fika during the exhibition.



Image 27. Event's space design

Ultimately, we designed the activities being arranged in our exhibition space. The activities aim to generate a link to our concept and create an experience for the audience. We came up with various activities as femkamp, painting, throwing a ball, etc. It was important to come up with gender neutral activities that aim to create a welcoming environment to all of the visitors.

We wrapped up the event design by creating a feedback mechanism, to collect feedback from the visitors of both the concept as well as the exhibition. Since we had created the Mood Machine as a mean of collecting feedback, we wanted to implement it on our exhibition, putting it at the exit door to collect feedback from the visitors.

12. CONCLUSION

The challenge given to us was "How to measure and follow up the outcomes", along with the four focus areas Good Food Habits, Physical Activity, Meaningfulness, as well as Social Community and Support.

The empathize phase gave us insights which made us reformulate the challenge and hence focus on a different POV, namely accessibility, inclusiveness and reaching out to non-comers and men. It was a good experience to work with different kinds of users such as elderly, staff, and the BDA. By interviewing them, we learnt a lot of what their everyday lives look like.

At the completion of the design thinking process the concept of BUSS was presented. The BUSS concept will provide a flexible and adaptable way of bringing the elderly together, hence contributing more into their meaningful and social life. The flexibility of the themes and activities that can be done during the events is aiming to attract more men to attend the activities and reach more of the current non-comers.

We as a group are very happy and proud of this project and it is our hope that it will improve elderly wellbeing in Bromma and other areas once implemented.

References

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BUSS - Brommas UtflyktsSugna Seniorer



This project report discusses the activity centres for elderly in Bromma and the challenges the centres are facing as of today. Initially Bromma district administration gave the challenge of quantifying the qualitative aspects of Physical Activity, Good Food Habits, Social Community and Support, as well as Meaningfulness. Through the method of design thinking (empathize, define, ideate, prototype and test) interviews were conducted with both elderly as staff at the activity centres, and interviews with staff from the administration of Bromma. Based on the interviews, a communication problem was discovered. Hence, the challenge was redefined to focus on that. As a solution to the communication problem, the Mood

Machine was created, a feedback machine where the elderly can answer questions regarding their well-being as well as the activity they have participated in. The information is then compiled and sent to the administration of Bromma. The concept was then supposed to be further developed and detailed, though it felt as the concept was at implementation stage and the creative spark therefore did not quite exist. Therefore, the group decided to change direction, by returning to the insights that had been found during the interviews and anew redefine the challenge to deal with accessibility, inclusiveness, and the elderly that currently are not participating in the activities at the activity centres, men, as well as the group "fragile". Resulting in the creation of the concept BUSS (Brommas UtflyktsSugna Seniorer), a day trip lasting for four hours, once a month. A maximum of twenty participants is then being picked up by a bus, taking them to a predetermined activity, where the activity is set to first and foremost attract the elderly that currently are not participating in the activity as the group "fragile".

Openlab is a creative centre that provides opportunities for finding solutions to challenges in society. In cooperation with our partners and other actors, we create proposals for innovative solutions for the Stockholm region. We do this across the lines between different disciplines and professions. The reports from Openlab are results from students interdisciplinary cooperation within the framework of a 15 ECTS master course.