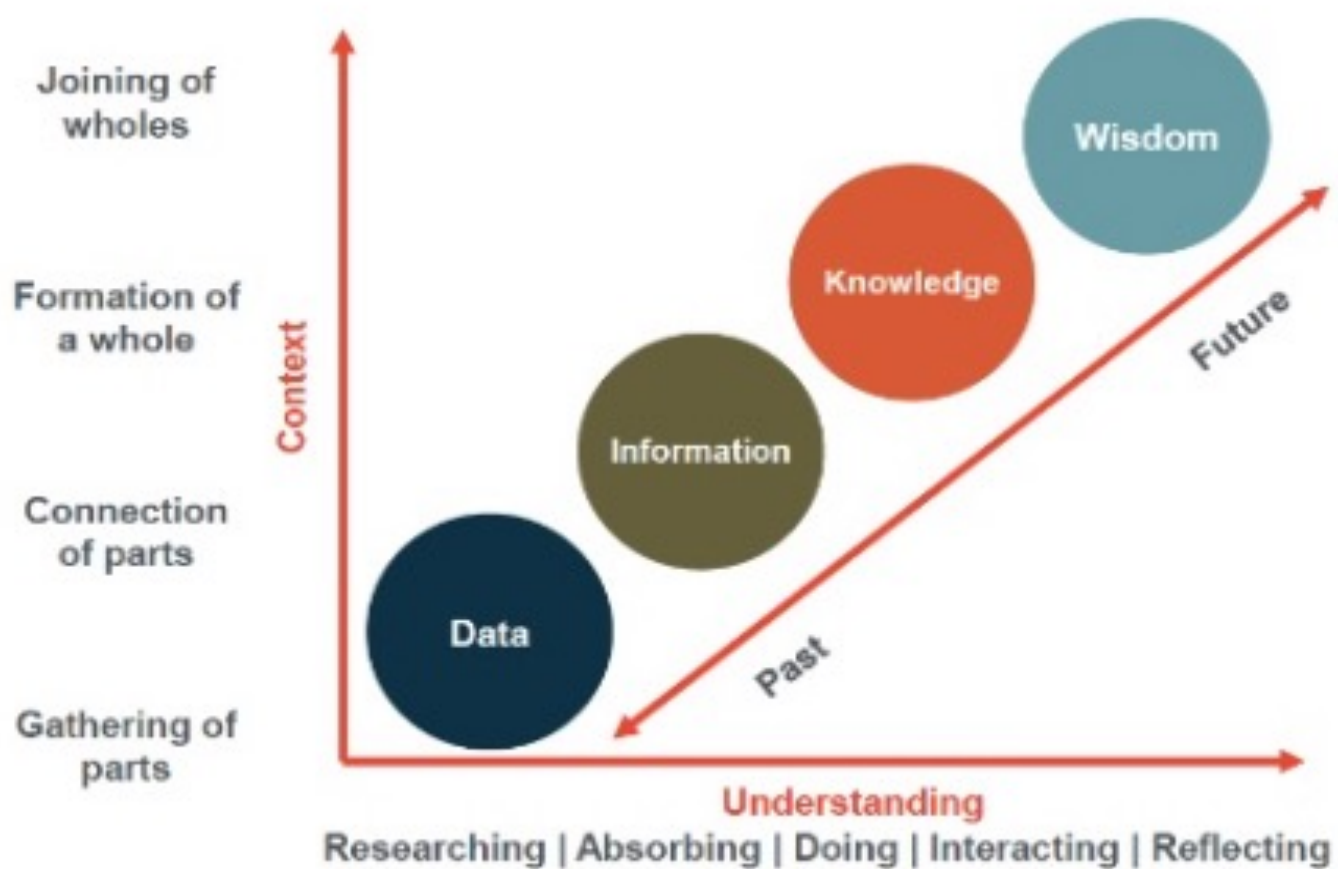


**Finding fruitful problems
through analysis (and
synthesis)**

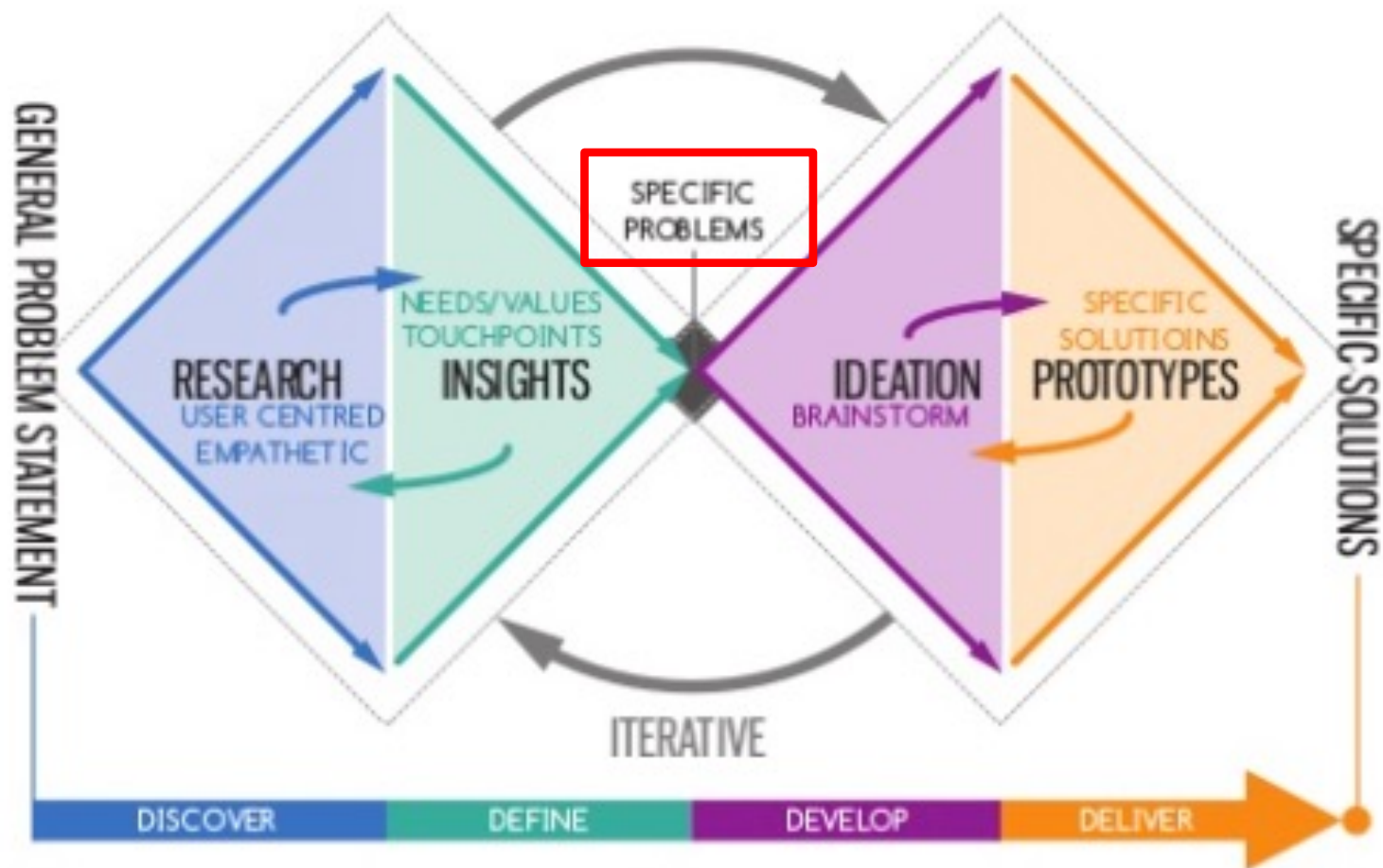


“Honey, come look! I’ve found some information all the world’s top scientists and doctors missed.”



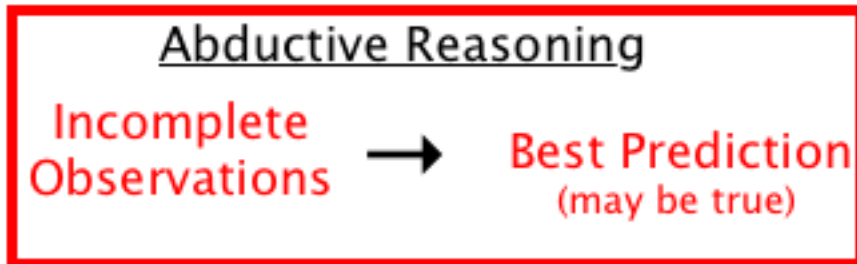
Russell Ackoff, *"From Data to Wisdom"*

DOUBLE DIAMOND PROCESS

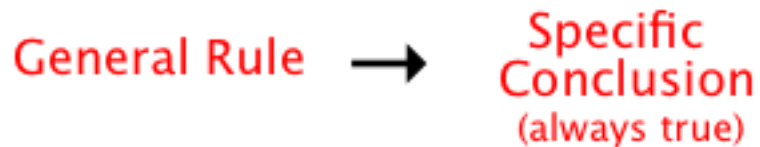


Service Design Double Diamond Process by Kaehin Chui is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License. Based on a work at <http://designground.org.uk>. Permissions beyond the scope of this license may be available at <http://creativecommons.org>.

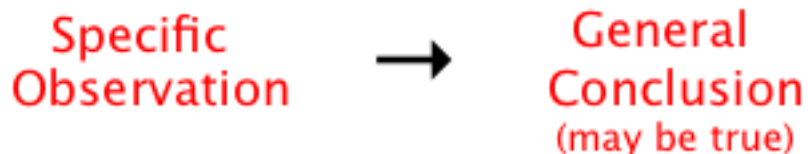
Mode of reasoning: abductive thinking (C.S. Peirce)



Deductive Reasoning



Inductive Reasoning



Four offenses we commit when we reason according to Peirce:

1. We make an absolute assertion that we're right.
2. We believe that something isn't knowable, because we don't have the techniques or technologies to figure it out.
3. We insist that some element of science is utterly inexplicable and unknowable.
4. We believe that some law or truth is in its final and perfect state.

(formulated by Madsbjerg & Rasmussen, 2014)

See also about abductive reasoning in policy-design:
<https://researchingdesignforpolicy.wordpress.com/2015/07/07/abductive-policy-making-draft-section-of-report-from-research-fellowship/>

**Crafting and re-crafting
insights and frameworks**

In order to consider something as insights we need to...

Form an understanding of how something works from someone's (group of people, role) perspective or how something is meaningful for them...

Be able to use this understanding to define and solve a problem.

And solving of the problem needs to create positive change.

Where to find potentially fruitful problems...

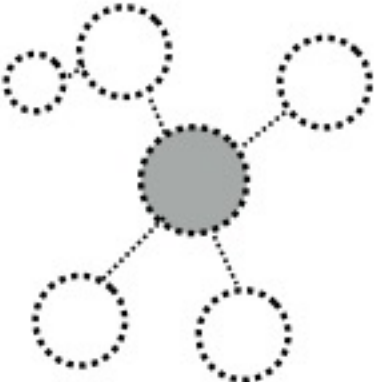
Which relations or feedback loops produce problems in the systemic level?

Where do people experience gaps between ideals and current reality?

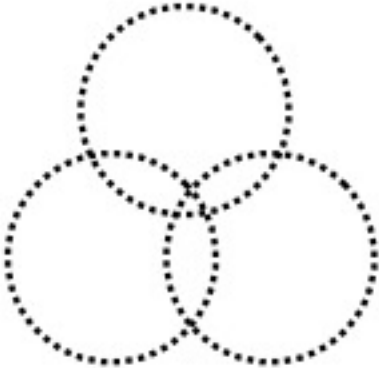
Where do we see misalignments and conflicting views and how they manifest in practice?

Who are the people (and institutions) currently struggling or at risk in our system view?

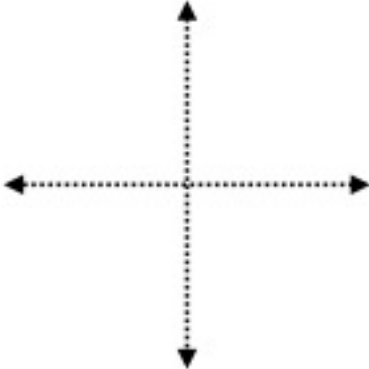
Visualizing and relating your findings through frameworks



relational map



venn diagram



two-by-two
matrix

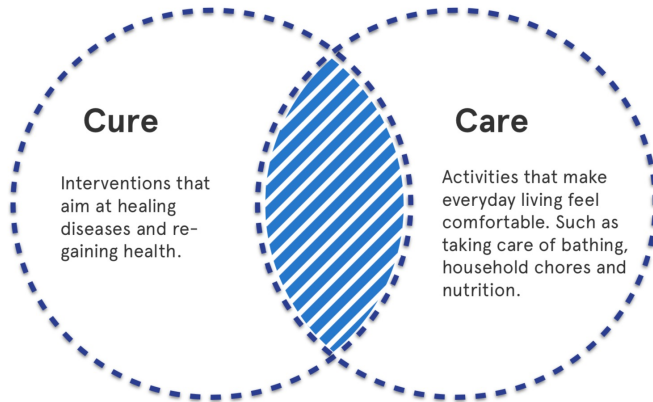


process

Examples: Frameworks that capture an argument build on our findings

How things overlap and differ:

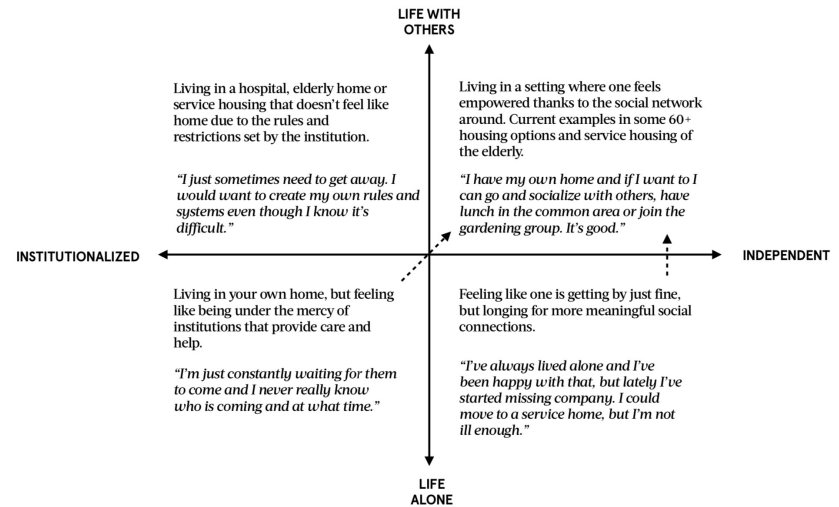
Care consists of a variety of different practices by different actors - it's not just about healthcare



Based on Mol 2009

How things are related on a four field:

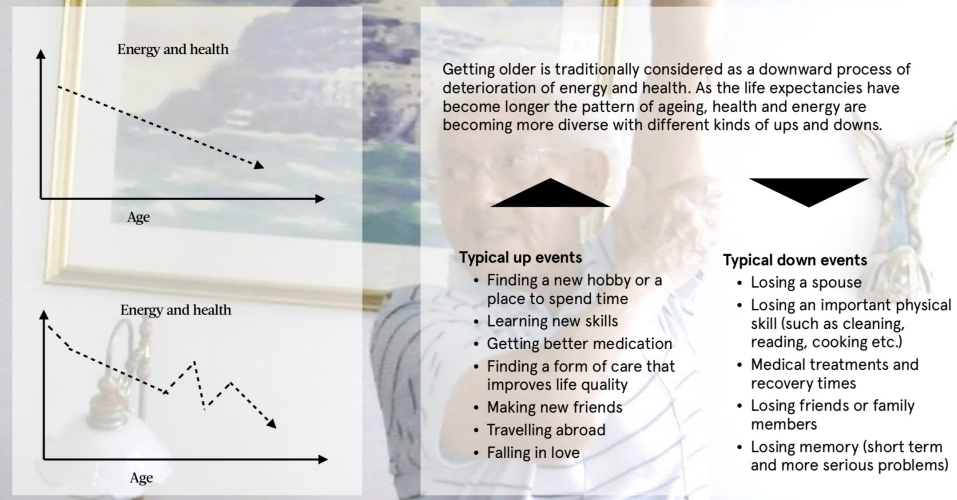
How to support the experience of independency by meaningful social connections?



Examples: Frameworks that capture an argument build on our findings

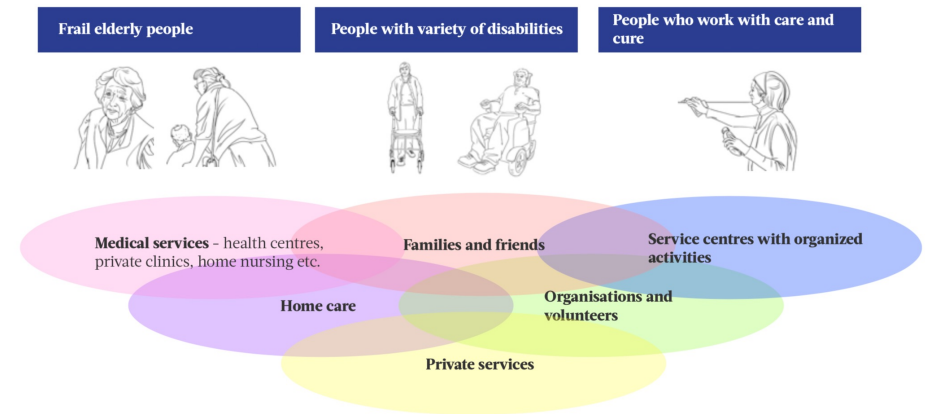
Ups and downs in time:

How to soften the "down" life events and enhance the "up" events?



Connectedness of different actors and activities:

Independent living takes place in a well functioning network



Language matters – seeing something from a new perspective through new definitions and metaphors

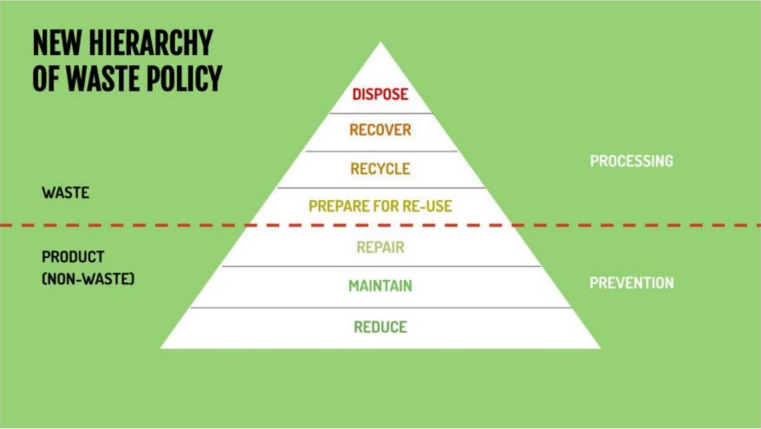
NATIONAL UPKEEP PLAN & THE NATIONAL PROCUREMENT AGENCY

Suvi Kinnarinen, Merja Lang, Riikka Ylitalo

Ilari Laitinen, Anna Pyyluoma, Noomi Schulman

New Hierarchy of Waste Policy as a guideline for Valtsu

New hierarchy of waste policy is created based on the current waste hierarchy within EU Directive 2008/98/EC.⁴ In the new model, the triangle is turned upside down and waste prevention has been given a significantly larger role. The new model on waste hierarchy should be used when doing planning of future waste policies, the National Waste Plan as well as concrete actions on how the goals are reached.



[9] New Hierarchy of waste policy

Examples: Stories that capture an argument built on our findings

What something means and how it manifests:

When independency works you become a *subject* instead of being an object of care

It means that you have control over your own life

In order to feel that the way you spend your time is meaningful, it is necessary that you have some form of control over it. *In ideal cases the care, services and aid tools people receive actually support them in keeping up and gaining control over their own lives, homes and activities.* Having control is also a way to take care of your own everyday life as much as possible.

"It's a mindset, a strong experience. You can actually become institutionalised in your own home if you don't have any control and some people you don't know just come to your home in hours you can't decide and just do things to you."

-Runar, Reykjavik

Doing gardening work or keeping your home clean and tidy is a form of control over one's own life.

How people weigh between thoughts or options:

Good tools and services empower people to do things by themselves, but help is also needed

Empowerment is considered a good goal

"If possible we don't do things for the people, but try to give them an active role by providing tools for empowerment."

-Worker at elderly service center in Reykjavik

As long as it doesn't mean a lack of help when needed

"Independency doesn't have to mean that you do everything yourself. It's about being able to take decisions in your life. Everyone should be entitled to that."

-Freyja, activist for the human rights of disabled



Examples: Observations connected to stories that capture an argument build on our findings

Capturing how practices materialize in physical form:

Meaningful independent life has routines and rhythm

Framework of routines gives structure in life

People who are satisfied with their lives visit places and meet people within some recurring timetable. These can be hobbies, volunteer work or any other planned routines.

Structured routines allow you to have uplifting experiences

Having a set of daily and weekly routines also allows you to plan and experience uplifting moments in life. These can be simple such as a festive lunch once a month in the local service centre or a trip to the theatre.



Witnessing the overlooked in practice:

The variety of different life situations with different kinds of needs is easily overlooked

Different kinds of disabilities cause concrete challenges in different ways

"Disabled people have very different needs. Accessibility means different things for someone who is blind and for someone who uses an electric wheelchair."

-Tuomas Tuure, Kynnys Ry.



We often forget the wide scope of different life situations within the life stage of elderly

"The idea of the independency of the frail elderly is very important. The discussion is often only about the active 3rd agers or the ones who are very sick and old, living in institutions."

-Antti Karisto, professor of Social Gerontology



How to document and share documents of the research

Documentation

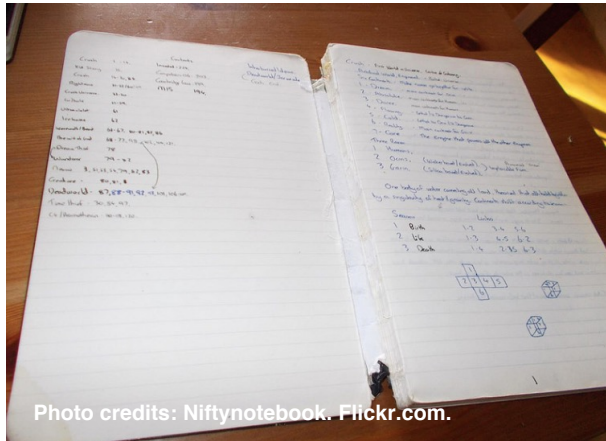


Photo credits: Niftynotebook. Flickr.com.



Photo credits:: See-Ming Lee. Flickr.com.



Photo credits:: Susanne Nilsson. Flickr.com.

- Think about the quality of your notes from the perspective of teamwork – they need to be accessible and understandable
- Be clear about your expectations for notes and documentation. (full transcripts vs. key bullet points)
- Consider your resources
- Acknowledge that you can't escape making decisions when you document – you can't catch everything and the way you document affects the research situation and the analysis
- Notes for the interview vs. Notes of the interview

Respondent

Rigmor, 83, Oslo

Rigmor, 83, Oslo

EXAMPLE CREATED
TO SHOW THE RAW
DATA

Pictures



Description of
daily life

*“I was born here in the neighbourhood
and everyday I feel happy to be able to
say that I live here”*

Key quote

Rigmor is a widow – she lost her husband 4 years ago (they were married for 57 years).

Rigmor has bad memory which sometimes makes it difficult for her to think and talk at the same time (caused by three strokes). She has bad legs and bad balance so she uses a walker when she goes for long walks. Furthermore she has limited power in her left arm and a bad shoulder. Due to her impaired hearing she wears a hearing aid. Rigmor has lost her appetite so she does not enjoy eating; she has to remind herself to eat regularly. She makes simple dinners and often buys ready-made meals and warms them up in the microwave.

Rigmor goes to the elderly centre three times a week – Monday, Wednesday and Friday. When she has been there she often takes a little nap afterwards. She goes to sleep at around eleven in the evening with the help of a sleeping pill.

A home nurse visits her once a month to discuss her health.

Pictures from the home – challenging and important helping devices



Walking device / trolley. Rigmor use it for walking long distances and to sit down when she gets dizzy.



The security button is crucial to her and makes her feel secure.



Medicine roll to keep control of when to take which medicine – every bag is marked by a date and time.



"Stove guard" that turns off the stove after a certain time and if there is nothing on it.



Crutches.



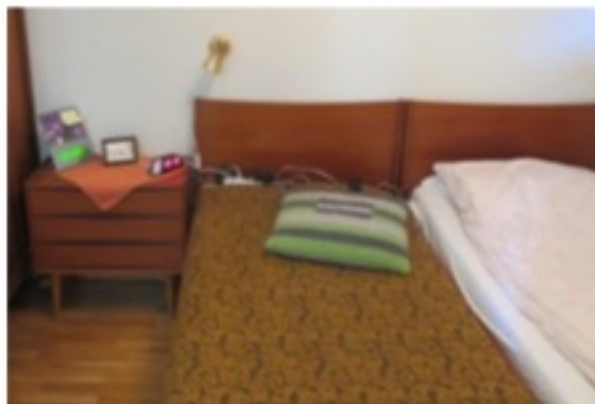
Handle that helps her keeping balance when showering.



Showering chair.



Heightened toilet seat.



Rigmor's bed – it means a lot for her to be able to wake up in the mornings and get out of bed by herself.

LIFE IN THE FUTURE

Rigmor takes one day at a time and hopes that she will be able to keep up on her two feet and go to bed as she has always done.

OPINIONS ON INDEPENDENT LIVING

Independent living for Rigmor is when she manages to get out of bed by herself in the mornings. The possibility of going to the elderly center for socializing and to have contact to her son are also big parts in making her feel that she can live an independent life (her son calls every day to check status on her – if she has eaten etc.). To have your closest relatives around you / people that you can count on is according to Rigmor living an independent life. If her son and family are not at home (traveling abroad for example) she feels insecure. In that sense it also means a lot to Rigmor to know the neighborhood / area well since she grew up there.

Living independently also means for her that she can decide when she does things – for example when she goes to the grocery store.

"I can't go back and forth to the doctor and complain - if I can manage as I do now and I am happy where I am and can take the dust off the floors I feel that I have an independent life."

Notes according to themes of the field guide and links to where key quotes can be found in the data

Video-highlights

1) Dreams and hopes for life in the future

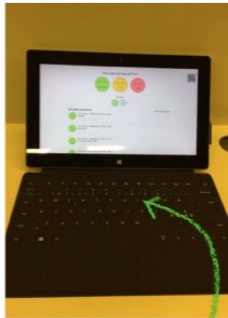
[1:02:30 - 1:03:00 in interview 4.2]

She tells that she takes one day at a time – hoping to be able to keep up on her two feet and get to her bed as she has always done.

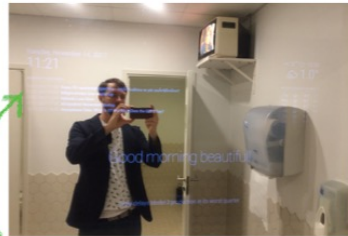
Documentation

Microsoft Flux

Co-working Space Observations



A simple feedback laptop is provided by the exit - it seems to be used regularly. Does change actually occur from the feedback provided?



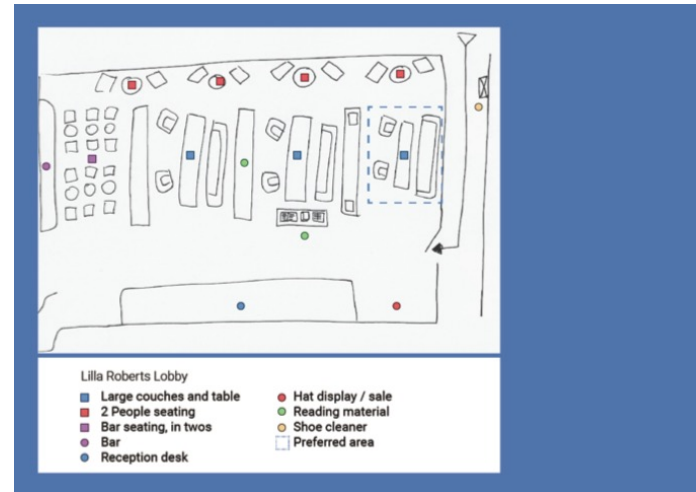
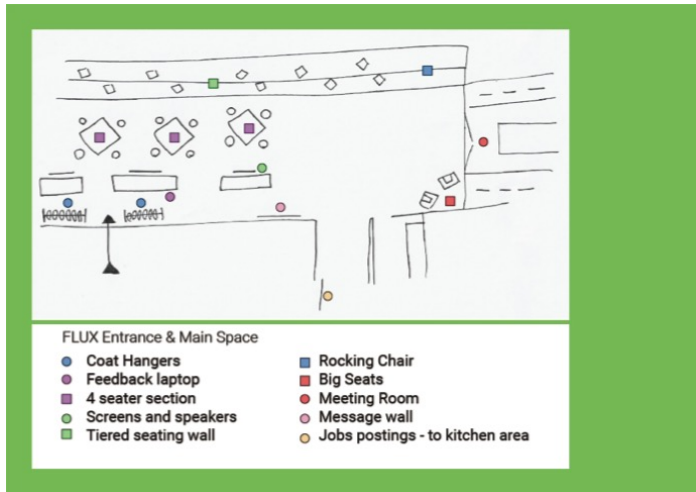
Bathroom's have digital screen displaying useful information - a nice touch



Power sockets are not hidden away, but displayed boldly

Signage and upselling

- There is a lot of signage to help people navigate to exits and to different kinds of snacks offerings
- Generally people seem to know what they want and act intentionally
- Upselling and advertising was a major component of the lobby area/ ground floor peppered with stands of *movie-going-related food*
- Some of the food (like popcorn) is classic offerings associated with movie-going that *you don't usually find elsewhere*
- In general many of the elements used were temporary in nature making the interior/welcoming experience *easy to change* from time to time
- As Saturday night there were a *third-party* company offering freebies near the lobby-area
- Even though not everyone buys a ticket or snacks at the premises, every movie-goer gets a personal greeting when their *ticket gets scanned* by an employee when entering a hall



Examples from Laurea Service Innovation and Design students, 2017

How to analyze and discuss data

What analysis is and how can we do it?



What analysis is and how can we do it?



Thinking

Learning

Interpreting

Critical scrutiny

Breaking things into parts and seeing their relations

Looking for patterns – reoccurring things

Constructing arguments

Relating findings to existing knowledge

Applying heuristics, models and theories as lenses

Understanding

Perspective

Insight

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Research question # 1

Research question # 2

Research question # 3

Visibility matters for the ones seeking shopping solutions: "I can see clearly now!" - Kaisa, Helsinki

Premium liquors as a way to claim masculine space of freedom: "I really miss drinking and smoking in my man cave." - Janne, Lohja

Four essential stages of analysis

1. Document and arrange your research findings (give names/codes to different sets of research)
2. Immerse yourself in the data and search answers to your research questions
3. Arrange, map, re-arrange the data according to patterns you see emerging
4. Give names and labels to these patterns. Try out different frameworks – what are your findings and interpretations of those findings?

Principles for data synthesis by Jan Chipchase, 2017

1. Data should be consumed fresh.
2. Data is atomistic.
3. Data is traceable.
4. Data needs to breathe.
5. Move together. Remove together.
6. Optimize the absorption of data.
7. Supporting evidence builds validity.
8. Micro, macro and the middle distance.
9. Appreciate the value of informal sessions, and informal data.

Communicating for potential impact based on your insights

1. Know your audience and keep them in mind.
2. Address the challenge that your research is aiming to help solve.
3. People remember stories.
4. Explain your ideas and insights by sharing data points.
5. Make sure you have structure and balance.
6. Talk to the people NOT at them.