## Finding fruitful problems through research

## Aiming for the words of wisdom



Russell Ackoff, "From Data to Wisdom"

## DOUBLE DIAMOND PROCESS



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Server Design Double Demend Pracess by Kath Chuis ikensed under a

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Service Design Vancouver

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.

## Insights are crystallized forms of understanding that support the creative work or decision-making

Words typically used to describe customer / consumer / human insights

## Deep understanding

Truth
Discovery
Unconscious needs
Inspiration
Consumer aspirations
Perspective

Typical explanations of the insights

Insights are NOT just data
Insights are NOT just findings of market research

Insights give perspective that inspires good decisions

They don't just answer WHAT, but also WHY and HOW

Truth is not final

INSIGHT BEHIND A PRODUCT


## Play can be a way to achieve and differentiate <br> o




INSIGHT BEHIND A SERVICE


## What kinds of insights you can see behind the Airbnb service?

## airbnb

 s of insights you can

Taneli

Cozy and clean apartment in Töölö Helsinki, Suomi

Saapuminen
pp.kk.vvvv

Lähteminen
Vieraita pp.kk.vvvv 1


Koko talo/asunto

1 vuode


## How to document your research



- 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


## EXAMPLECREATED TOSHOWTHERAW DATA

## "I was born here in the neighbourhood and everyday I feel happy to be able to say that I live here" <br> 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.

Specific pictures according the field guide
Pictures from the home - challenging and important helping devides DATA


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.


Handle that helps her keeping balance when showering.


Heightened toilet seat.

## Dreams and expectations for the future / Opinions on independer



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

## 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.

## 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 have 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

Microsoft Flux
Co-working Space Observations


Sgnage and upselling


Examples from Laurea Service Innoation 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?



## Analysis

## 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?

## Analysis

## Affinity diagram as a method for pattern recognition and analysis



Figure 9: KJ Ho's basic steps
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## Analysis

## Principles for data synthesis by Jan Chipchase

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.

Pattern recognition workshop - asking questions from the data and making sense with the help of data wall

1. Spend time with data and make your own comments and notes (alone)
2. Take 10 mins for one person to present one part of data (interview they made or report they read)
3. Others write relevant findings and thoughts on post-its - connecting to quotes or observations on other parts of research they are familiar with (you may also ask questions)
4. Present your post-its and start grouping them - remember that you can change your groups (keep empirical data on the wall in a traceable form)
5. Look for patterns and charts of related groups of findings
6. Try crafting initial insights and potential opportunities

## Examples of different types of lenses

Different viewpoints to the everyday life of people

## Analysis <br> Analysis


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## Analysis

## Viewing a phenomenon as cultural and looking for cultural change

Food is not just food - not even junk food


## Analysis

## Empathy map as a tool for mapping different types of users



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## Analysis

## Role - The Presentation of the Self in Everyday Life

Role is not something unreal - we are what we present, and the roles and stages change over the course of our days.

Roles are combinations of normative expectations towards the behavior of a person in the role. Roles are always connected to other roles. (teacher - pupil)


Props

Framed situations

## Backstage

Audiences

## Analysis

What Can We Try to Understand


- Look for experiences of conflicting role expectations - How can we mitigate these?
- Look for situations and rituals where people change roles - What happens? How can we smoothen these transformations?
- Look for props and tools that are failing the role - How do we support people in maintaining their face?
- See how people enter different roles - What is ascribed, achieved, wanted, unwanted? How do we support the dynamics?


## Analysis

## Fields and capitals - different social realms and how we compete in them



## Analysis

## What can we try to understand

- Look for the fields and positions in the fields related to the research problem What are the rules of the field and how do we help people to follow or break them in a fruitful way?
- Look for the uphill battles in the fields - Where can we leverage the meaningful change from?
- Look for the types of capital people gather and apply - How can we support them in their endeavours?


## Analysis

## Example of a new concept: Spatial Capital



Access to aspects of urban space that provide good experiences, help save time and translate into other types of capital.

- Proximity to interesting "third places" such as cafes and restaurants
- Proximity to local services such as grocery stores, health services, schools, recreational activities etc.
- Beautiful architecture and visibility of the history of the place
- Access to nature


## Analysis

## Double cultural analysis - search for opportunities to impact



- Studying and understanding the world of potential users is crucial, but you should also consider the client
organization and other stakeholders that can affect the phenomenon.
- What kind of values these organizations have? What roles are relevant? What kind of language is used? What kind of habits are common?



## Insights

## 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.

## Differences between market research and ethnographic approach properties vs. experiences



- Large samples with many answers
- Measuring pre-know factors
- Studying people as isolated individuals
- Studying detached views and opinion
- Explaining facts
- Coming to a conclusion

Ethnographic Research


- Deep and rich descriptions
- Describing phenomenon and discovering new aspects
- Studying people in their social relations
- Studying the embedded experience in real environments
- Understanding truths
- Opening a new way of seeing
"The greatest weakness of the quantitative approach is that it decontextualizes human behavior, removing an event from it's real world setting and ignoring the effects of variables not included in the model."

Roger Martin, the dean of Rothman School of Management

## Analysis

P.O.I.N.T Analysis as a simple starting point method for affinity diagramming

WISDOM
KNOWLEDGE

Here the aim is to externalise the data and create an initial understanding of what has been studied. The end-result should be a general understanding of the context that can be later shared with others.

P.O.I.N.T. Analysis<br>P = Problems you observed<br>O = Opportunities you can see<br>I = Insights you gathered<br>$\mathrm{N}=$ Needs people have<br>$\mathrm{T}=$ Themes that stand out

## Analysis

## Personas / profiles as archetypes of potential users

## What are profiles?

Profiles (or personas) are characters created to represent different user types or themes emerging from the research. They are used in design or marketing to illustrate and to bring to life various characteristics of the target group. They are useful when considering their aims, needs and challenges. Profiles are always created based on research conducted within the context. Instead of distancing and abstracting knowledge, profiles are created to create an empathic link between the developer and their user base. They do this by utilizing illustrations, photographs, video and storytelling.

## Benefits of profiles for an innovation challenge

Profiles help in creating new ideas or focusing an existing product or service to fit and help people in their daily lives. They should be used to focus the innovation challenge and to communicate central research findings to the users. The current profiles can be used as they are or they can be modified to fit the needs of the innovation challenge. However, they should always retain the characteristics of a person and not separated from the themes they represent.


## Analysis

## Personas / profiles as archetypes of potential users

## THEME 3: 24/7 CARING

"Hello, I am Aune and this is Henri.

Im seventy-nine years old and live in Helsinki with my husband Henri who is eighty-four. He is paralysed and I take care of him around the clock. The situation has been the same for the past six
years, ever since Henri got a stroke. Im in relatively good condiyears, ever since Henri got a stroke. I'm in relatively good condi-
tion myself, otherwise I wouldnt be able to take care of him and w tion myself, otherwise I wouldn't be able to take care of him and we
wouldn't live in our own place. wouldn't live in our own place.

Most of my life revolves around taking care of Henri nowadays, ever Most of my life revolves around taking care of Henrinowadays, ever
since I retired. He spends most of his time in his bed in the living since I retired. He spends most of his time in his bed in the IVing wheelchair. For now I get along with him quite well, being able to lift
him up and move outside with him, but some places can be difficult him up and move ou

Sometimes life feels quite hard, but then I get strength from praying. Pm fine with the current situation as long as my health holds up.come the gym with me because I think they could definitely benefit and also enioy it.

## PERSONAL NEEDS

## TIED TO HER HUSBAND'S CONDITION AND MOOD

Aun's everyday life is strongly connected with her husband, as
shés responsible for him all the time. She feeds him bathes him shes responsibl for him all the time. She feeds him, bathes him
and takes him to the bathroom Henri's mood can change quite rapidly and he can be very pushy. Their daily programme runs
according to his desires. Aune used to exercise, but since she according to his sesires. Anue sued to exercise, but since sh.
doesn't have any time for herself she has had to sop it.
"Sometimes Henri goes to the hospital and we think it's a holiday for both of us."

## DIFFICULTY TO FIND RIGHT PEOPLE TO HELP OUT

Aune has tried to find people through a volunter organization to take
Henri outside and do other chores, but she feels that suitable helpers are not eass to find. Henri only accepts men, which automatically makes
things more diffcult. He doesnt want to let just anyone in their home.

MOVING OUTSIDE WITH THE WHEELCHAIR
The only way for Henri to move outside their apartment is in a wheelThe places he most offen visits are. close by, like the barbershop he visits weekly. This is because the neifhbourhood dhey live in has stee h hills,
which makes moving with a wheelchair difficult. Aune fects that even which makes moving with a wheecchair difificult. Aune fels shat ever
small bumps on the road make Henri comment on her pushing.


## CHRISTIANITY GUIDING WHOLE LIFE

Aune and Henri are deeply religious, which shows in their everyday life They prap dails, Adoest't watch TV often because " "its full of obscenity"' Their reigion contributes to their traditionalg gender roles with the ma
being the head of the family: Aune obeys his husband loyally

BELONGINGS FILLING UP ENTIRE HOME
Aunes and Henri's home is flling up with all kinds of objects that have become obsolete. They have several mobility aids, ikie the hoist that helps Herri get up from the bed. Some of them they use, but many are
lying around unused Aune feels that many of them are too complex and yifficult to learn so so she has made up her own ways of doing the tasks. Their bedroom is full of Hennis old things seven thought he has so sue
for them anymore. Many of the itms are connected to certain memofor them anymore. Many of the items are connected
ries so he doesn't allow them to be thrown away.
"In my retirement I've mostly only taken care of Henri."
health And self-medication
Aune actively follows various health news and applies them to her owr
living habits. Many of her sources come from her chucch. She often ilving habist. . .any o o her sources come from her church. She often
shares her findings with friends and relatives. Sometimes she gives natu ral remedies ase gitsts. This is her way of helping others and contributing
to their welleing.

EVERYDAY CHALLENGES

makncit onthelr own



All of Aune's time revolves around taking care of Henri. Part of the problem is Henris strict requirements for per find people to whare her duties hed have time for herself as well.
2. Help deal with old belongings

Aune's and Henri's apartment is fille with their belongings and mobility aids, most of which are not used. space and become a mentol burden.


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## supporit rrom chinstian values



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 and


I know I could ask for help but since I've lifted him up even with a broken arm I know I can make it."

## Analysis

## Visualizing and relating your findings in the analysis


relational map

venn diagram

two-by-two matrix

process

## Case Example from Helsinki: Middle aged men who don't use the public health services

## Starting point:

A huge health gap between the different socio-economical groups of men.

Especially middle aged men passive in using health services and the main group suffering of national diseases, diabetes 2 and hypertension.

Where do we want to be:
Have a better understanding of the gap in order to find means of making it smaller -engaging people with the public healthcare services and healthier lifestyles.


## Case Example from Helsinki: Middle aged men who don't use the public health services

Starting point: A huge health gap

1. Ethnographic research

Understanding and mapping the relations of the "passive" middle aged men to health and health care.

Fieldwork - the day shift - in the pubs of Eastern Helsinki.
2. Co-creation

Discussion the possibilities for bringing health to the everyday agenda through the pubs.

Discussions with the bartenders and customers.
3. Service prototyping

Pilot experiment of a light health service taking place in two pubs every second week for two hours.

Blood sugar and pressure measurements and possibility for discussions with health care students.

## Case Example from Helsinki: Middle aged men who don't use the public health services

Finding the people:
Men outside of occupational health care.
Day shift - groups of men spending time in the neighborhood pubs of the suburbs.

## Forms of capital

Social capital - network around the place for advice, support and discussion. Group supports freedom and masculinity.

Cultural capital - knowledge and skills - no health-related discussions or knowledge.


## Case Example from Helsinki: Middle aged men who don't use the public health services

## Roles:

Traditional independent masculinity - fixer working-man ethics.

Body as a machine - or something you work with. (not on)
Collision of roles and settings:
Negative attitudes towards health care - feminine, patronizing, "guessing-centres" that try to tell you how to live

Clean white walls, waiting rooms, white jackets - tools used on you (not by yourself) - making a fuss of "small problems"




[^0]:    SEE: https://medium.com/the-xplane-collection/updated-empathy-map-canvas-46df22df3c8a

