Final Presentations & Reflections

Sept 2, 10:15 – 12:00

CS-E4002: Human-Centred Research and Design in Crisis

Summer 2020

Prof. Nitin Sawhney

TA: Magda Mihalache

A"
Aalto University
School of Science

hcrdcrisis2020.wordpress.com

Agenda

- Course Outcomes & Reflections (10:15 – 10:30)
- Presentation Maimuna Syed & Nagadivya Balasubramaniam (10:30 – 11:00)
- Presentation Floris Van der Marel, Pauliina Mattila, Tiina Tuulos (11:00 – 11:30)
- Future Directions (11:30 – 12:00)

Course Outcomes

Understanding of how **human-centred research, design** and technological innovations can productively engage the complex challenges emerging in **crisis contexts**, including natural and man-made disasters, socio-political crises, and the COVID-19 pandemic.

Critical skills to recognize the limitations and **ethical implications** of conducting **research**, **participatory design**, and deployment of **technologies** including **security, privacy** and any unintended consequences of such work, while applying rigorous **human-centred design principles** and practices to have a meaningful impact in such crisis situations.

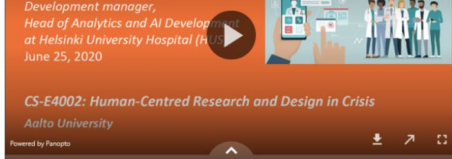
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Designing for Healthcare Experiences from a Multi-stakeholder Perspective

Speaker: Prof. Johanna Kaipio, Department of Computer Science, Aalto University On June 23, 2020, we find out more about multi-stakeholder ... More

Data-Driven Approaches to Healthcare Research during the COVID-19 Pandemic

Speaker: Miika Leminen, Head of Analytics and AI Development at Helsinki University Hospital (HUS) Miika Leminen, Head of Analytics and AI ... More

On Security, Privacy and Contact Tracing

Speakers: Prof. Janne Lindqvist, Department of Computer Science at Aalto University and Director at the Helsinki-Aalto Center for Information Security ... More

Role of ICT in Humanitarian Sector & Crisis Communication Strategies

Speakers: Ilpo Kiiskinen, Communications
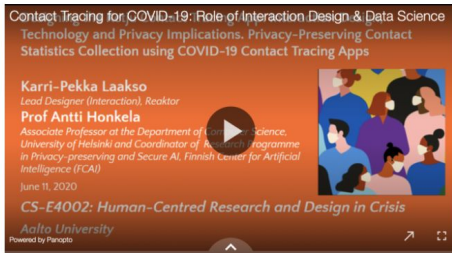
Contact Tracing for COVID-19: Role of Interaction Design & Data Science

Speakers: Karri-Pekka Laakso, Lead Designer (Interaction), Reaktor and Prof.

### Real-world Challenges of Crisis & Disaster Management

Participants Design Directions

- <u>Reforming HCD for Contact Tracing Technologies</u> by Divya and Kiko

- <u>Purposeful Innovation Fitness as a Vehicle to Unlock Opportunities in Crises</u> by Pauliina, Tiina and Floris

- Designing Human-Centric Solutions (private) by Maimuna

- <u>Voice for Urban Mobility Platform Elaboration</u> by Triin

- <u>Discovering, unlearning and relearning the thinking and doing</u> by Martina

- A multidimensional approach towards disaster and crisis management by using social media and artificial intelligence COVID-19: A Case study Proposal (private) by Ahmed

- Human-Centred Research and Design in Crisis (private) by Özge

- Ethically responsible information design for communicating of zoonoses (private) by Suvi

- <u>Without diverse representation, there is no empathy for diverse experiences</u> by Henriette

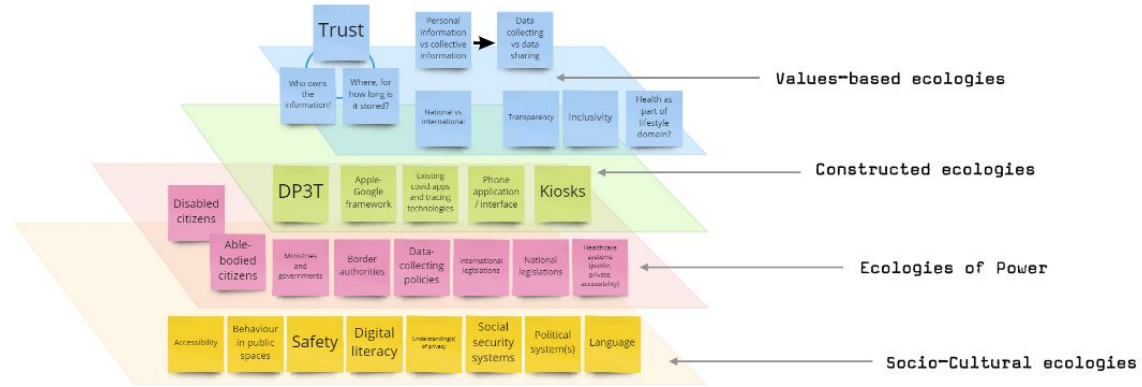- <u>Social media impact on crisis management</u> by Maryam

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Participants Design Directions

STAKEHOLDERS MAP
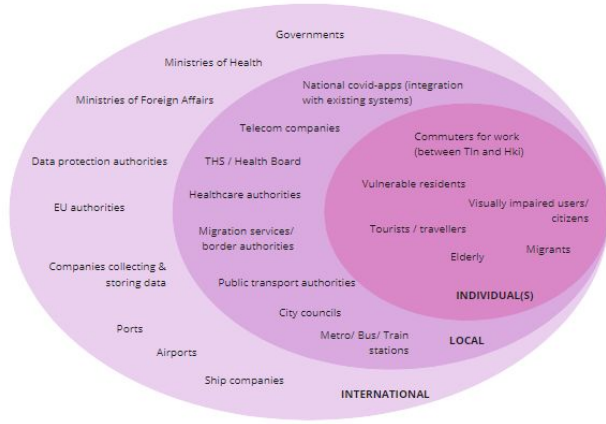
MAP OF ECOLOGIES

Summary of Project Concept Presentations

Participants in the *Human-Centred Research and Design in Crisis* course are taking a two-week break from July 15–30. This provides an opportunity to reflect on the concepts learned throughout the course, as well as prepare for Part 2 which will be more project-oriented.

In wrapping up part 1, students posted their final project concepts, unveiling the design directions and putting together the assignments they have been working on over the previous 6 weeks.

The final design directions are meant to build on the 3 previous assignments and to address the crisis

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Participatory Workshops

Project Presentations

- Maimuna Syed & Nagadivya Balasubramaniam (30min)

- Floris Van der Marel, Pauliina Mattila, Tiina Tuulos (30 min)

Application of Proposed Emerging
Outcomes (Koronavilkku app)

https://koronavilkku.fi/

Color Code for Sticky notes

Supports framework

Does not support framework

Will be implemented in future

How does the application work?

The phone receives a random ID code

The phones share the passcodes with each other

When someone reports their infection

Build trust and empower individuals (Instead of top-down and centralized)

That people receive a notification with information what they can do, and self assessment, seems a good way to empower people

not using GPS for tracking location

Not available in languages other than Finnish & Swedish - so for migrants and travelers this is not accessible

We are trying to get our students to use it, but, yep, the language is an issue

Making the apps across countries talk to each other would be key.

Highlight the explainability of the technology

Convey proactively the data protection method

Decentralised system

EU compatibility of the app

Digital divide

Be human-centered, bringing up the psychological aspect in crisis context

how does the uncertainty of not knowing where the contact/contamination has occurred affects people? How will people's increased anxiety be managed and supported?

open source project's software blueprint

Be transparent about data-collection

Battery drain

Intl. Language

The contact tracing cannot be currently turned off easily, if you leave your phone somewhere

what is the psychological effect of being notified of a possible contamination?

I wonder how this works when there are more than just a few cases. You would get notifications regularly even when not infected. At what point do people stop caring?

The stigma of getting the virus might hinder the adoption of app usage.

And the reporting of a positive case (adding in the code to the system) - is this the responsibility of the individual or will this happen by the health professionals?

Australia has indicated that they won't collect personal information and all data is only used for coronavirus tracking purposes. However, the general public has a lack of trust in government because of past privacy breaches and projecting that lack of trust to the current situation.

Ignoring minority community

Downloading the app is one thing, using it is another, what hinders people from using it?

How to keep up engagement and interest beyond immediate threat/crisis?

Creating sustaining and meaningful behaviour change rather than a band-aid solution

The app is open source, which is a Good Thing™ (though no reproducible builds)

Remembering to turn the application on, keeping your phone with you.. etc

Could this app be used to remind people of sticking to the practices needed to avoid transmission e.g. social distancing, washing hands?

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Purposeful Innovation Skills to Unlock Opportunities in Crises

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ACKNOWLEDGEMENT OF COUNTRY

On behalf of those present I acknowledge the Wurundjeri people of the Kulin Nation who are the traditional custodians of the land on which we now meet. I pay my respect to their Elders: past, present and emerging.

I also pay my respect to all Aboriginal and Torres Strait Islander people of Australia and hope that the path towards reconciliation continues to be shared and embraced.

HELLO!

Tiina Tuulos

PhD in Capabilities for the Future of Work

Pauliina Mattila

PhD in Innovation Ecosystems

Floris van der Marel

PhD in Unheard Voices in Participatory Design

AGENDA

✱ Scope: purposeful innovation fitness

✱ Two experiments + insights

✱ Next steps

CRISIS AND DISRUPTION ARE OPPORTUNITIES FOR TRANSFORMATION

OUR PROJECT: PURPOSEFUL INNOVATION FITNESS

Aalto University Design Factory

DESIGN FACTORY MELBOURNE

* Support professionals in being **resilient** and push for **meaningful**, sustainable **transformations** during crises

* Define a transferable set of **tools** and **skills**, which could be learned and experienced in various forms.

Challenges

Opportu-nities

Innovation & preparedness

Innovation & preparedness

Innovation & preparedness
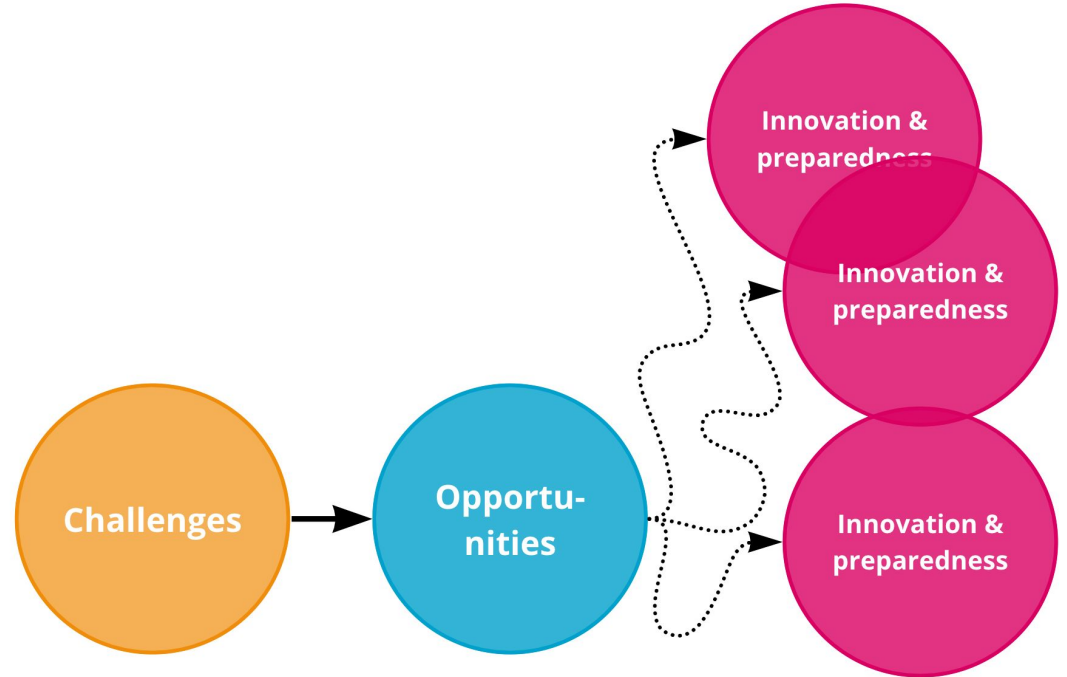
Summary blogpost of our project vision

CRISIS AS A BIRTHPLACE FOR NEW OPPORTUNITIES

Crises can be defined as **perceptions of a situation** that cause emotional imbalance or turmoil, where **typical toolkits and coping mechanisms no longer are sufficient** to cope and deal with the situation.

Crises can provide an **opportunity for transformation** and "usher in change that will be of value". (Tedeschi 2020:128)

"Crises lead many people to find deep value in their jobs, develop professionally, and grow personally." (Martela & Kent 2020)

BETTER PREPAREDNESS FOR THE UNKNOWN

Need to be better prepared for an unknown future, not just crises.

What are the skills and capabilities that are universally beneficial in change and disruption but also in times of balance?

Figure I: The Global Risks Landscape 2019

(World Economic Forum)
(Martela & Kent, 2020)
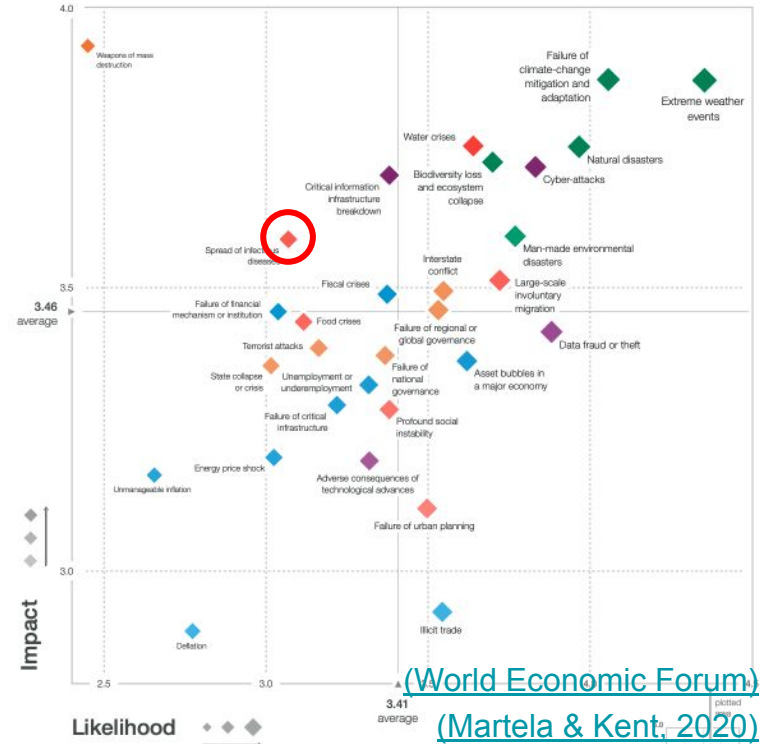
DESIGN AS AN APPROACH TO NAVIGATE UNCERTAINTY
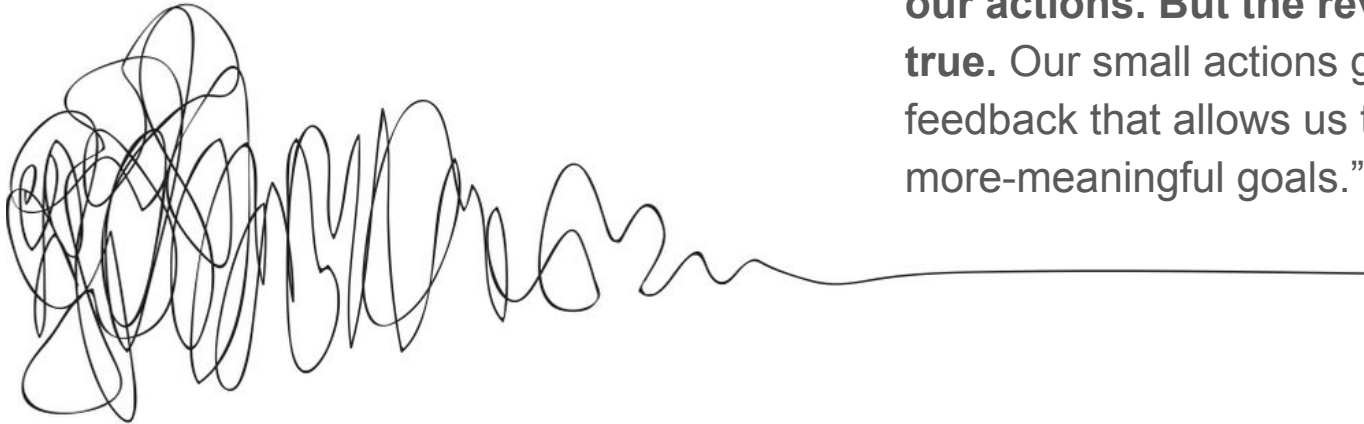
"We assume that **our goals determine our actions. But the reverse is also true.** Our small actions generate feedback that allows us to discover more-meaningful goals." (Martela & Kent, 2020)

Research & Synthesis   Concept / Prototype   Design

Damien Newman – The Design Squiggle

TWO EXPERIMENTS

LEARNING IS A JOURNEY,
NOT A DESTINATION

❀ "Everyone says that **learning is essential** for companies' success—and for your own. And yet, on a daily basis, who cares for your learning? No one. **People care about what you have learned**. They care about your results…"

❀ "**Transformational learning** rarely builds up so smoothly. It does not just make us more knowledgeable. It reveals what mastery prevents us from knowing. It does not just refine our skills. **It changes our perspective**. And it is not just a matter of time."

(Petriglieri, 2014)

AGENTCY TO CREATE CHANGE

"Agency thus involves not only the deliberative ability to make choices and action plans, but the ability to give shape to appropriate courses of action and to motivate and regulate their execution."
(Bandura, 2001: 8)

DOMINO EFFECT OF VALUE-BASED ACTIONS

"**The path to great achievement is often lined with steps that are aligned with one another.** No matter how small the first step is, the power generated from that first activity compounds into something much greater. There is literally no limit to the potential you can achieve when your priorities, goals and daily actions are lined up for you to knock over one by one."
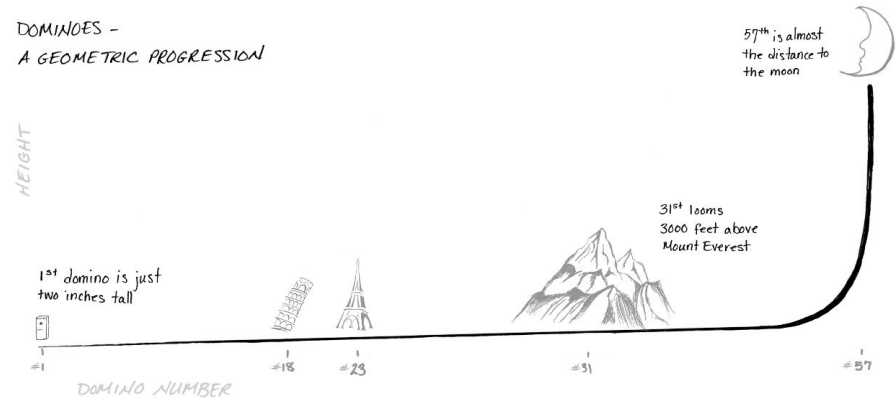
DOMINOES –
A GEOMETRIC PROGRESSION

HEIGHT

1st domino is just
two inches tall

31st looms
3000 feet above
Mount Everest

57th is almost
the distance to
the moon

DOMINO NUMBER

#1   #18   #23   #31   #57

(The One Thing)

ELEMENT 1. CHALLENGES TO OPPORTUNITIES

ELEMENT 1. CHALLENGES TO OPPORTUNITIES

Your challenges

1. Map challenges (5min)

Prioritised challenges through mapping

2. Temperature check (5min)

fatigued, unspired

studiolab.ide.tudelft.nl

Premo | Pieter Desmet

3. Underlying issues (10min)

chosen challenge

why is this happening?

why is this happening?

why is this happening?

why is this happening?

why is this happening?

Unpacked challenges through questioning

4. Invite questions (15min)

what doesn't work?

what works?

why is?

underlying issue

what if?

5. Envision impact (5min)

underlying issue

question

question

question

reframed issue

envisioned impact

Actionable opportunities through reframing

6. Flip into opportunity (10min)

Possible solutions

First steps

Reframe

opportunity as question

7. Temperature check (5min)

hopeful, inspired

Premo | Pieter Desmet

KEY INSIGHTS

"We have much more room for action than we think, we just need to learn how to switch to a different narrative than the one we're used to!"
- **Identifying and unpacking challenges increases agency**

"My challenge is more about how I feel about it rather than the actual practical issues."
- **Reflecting on emotions to identify hindrances**

Read more in our blogpost

KEY INSIGHTS

"I learned to break things down into key issues, values of others, and where I can have agency."
- **Breaking things down enables planning for action**

"I need to seek out others to gain other perspectives on issues."
- **Questioning supports unlocking new perspectives**

Read more in our blogpost

KEY INSIGHTS

"If this was done in-person would it have been as effective or more awkward? I wonder if this online approach is actually better or a hybrid approach would also work?"

- **The digital environment created a safe space for authentic collaboration**

"We got to talk through how uncertain times are now – it helped even on a personal level to just accept that this new normal will change how we behave and think."

- **From fight, flight or fright to "figuring it out"**
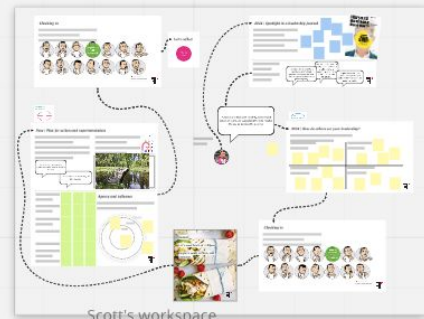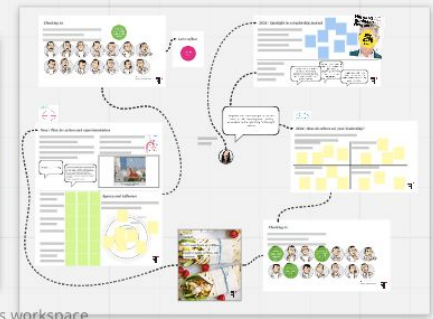
Read more in our blogpost

ELEMENT 2. VISION TO ACTION

ELEMENT 2. VISION TO ACTION

Select an avatar

Memoir Cover

My purpose is to...

qualities

qualities

qualities

Perceptions

Values | Skills

Environment | Actions

Temperature Check

fatigued, unspired

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Plan for Action

My focus is to...

Agency and Influence

CONCERN

INFLUENCE

CONTROL

Temperature Check

fatigued, unspired

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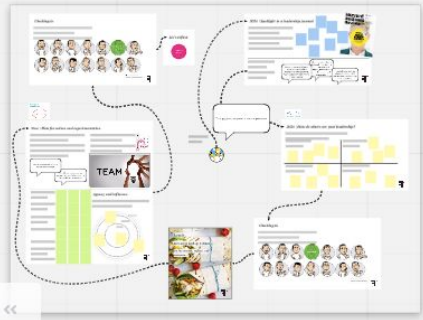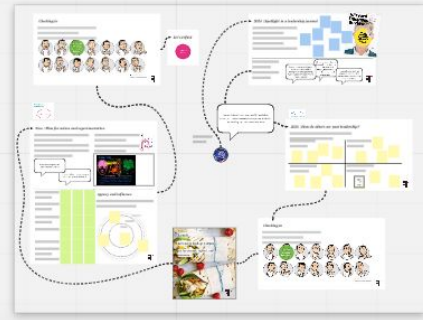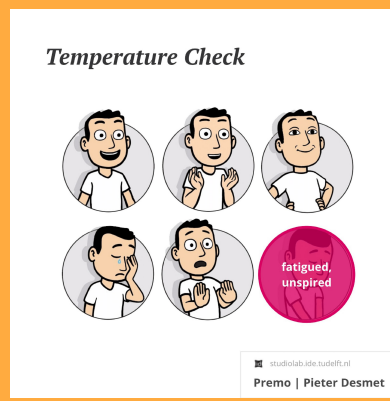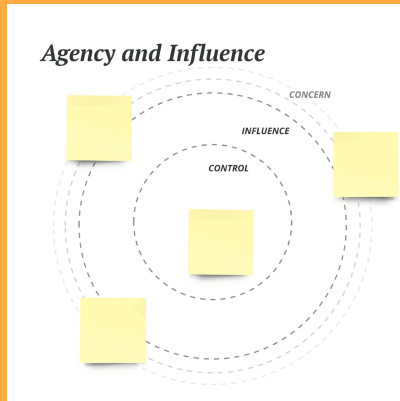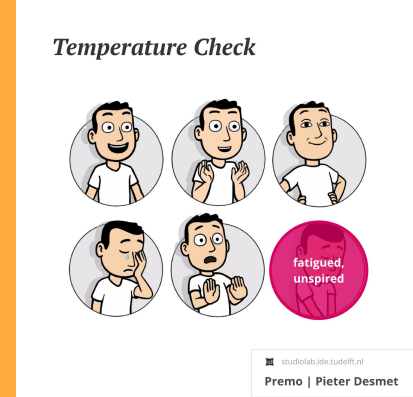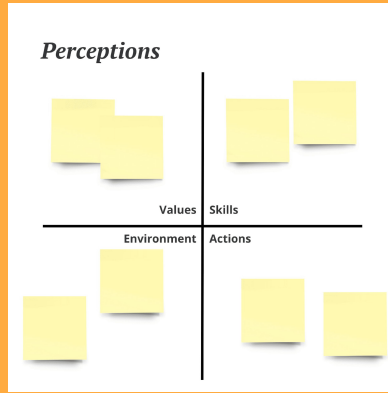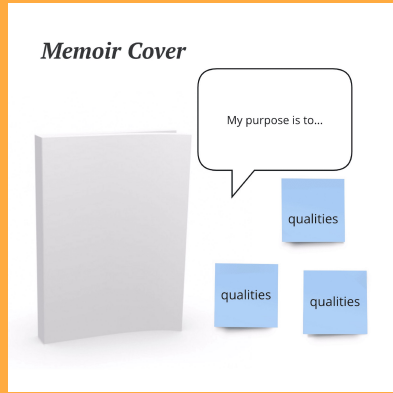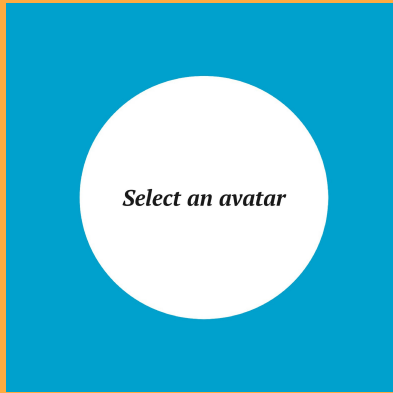
KEY INSIGHTS

"To put emphasis on my leadership mindset. Think about who I am and embracing that in my leadership style and making sure i stay authentic and true to myself"

- **Thinking about future vision enables more meaningful actions in the present**
- **Bringing personal purpose and values to the forefront and making them explicit.**
- **How to be adaptive, but not changing. Be authentic.**

KEY INSIGHTS

"Reminded me of what I already know, but don't necessarily action or set time aside to reflect, plan and make changes"

- **Design approach gives tools for participants to action on issues or create change.**

"Definitely made me think what kind of leader I want to be in the future"

- **Opportunity to create a stronger connection between vision and actions.**
- **Recognising what impact you have on other people. We don't operate in a vacuum.**

SHIFTING PERSPECTIVES ENABLES TO SEE OPPORTUNITIES AND TAKE ACTION
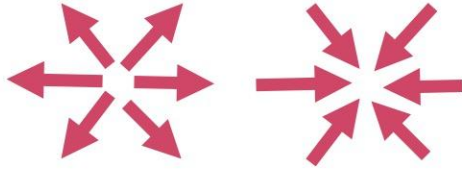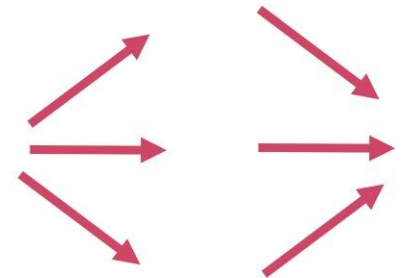
WHERE TO FROM HERE?

NEXT STEPS

❀ More experimentation in different contexts (e.g. Rural Hospital in Australia)

❀ Include more reflective practice and purpose-driven action

❀ Populate different skills that we consider important in our toolkit
   ○ Identify skill, justification of its importance and related tools and methods

❀ Identify ways to make learning stick
   ○ Identify hindrances and enablers people experience when actioning on their learnings
   ○ Create follow-up interventions

QUESTIONS WE CONTINUE ASKING

❋ What is the world we want to be a part of creating?

❋ What might enable or hinder us to make this happen?

❋ How do our values and purpose manifest through behaviours and action?

❋ What impact does this have for the future of work?

THANK YOU

We welcome all types of questions, reflections, ideas, concerns, critiques, and other thoughts.

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FUTURE DIRECTIONS: RESEARCHING HCRD IN CRISIS

What will you do with what you have learned in the course?

COURSE WEBSITE AS PUBLIC RESOURCE

What can we do to improve the website content, design and experience?

Jump on the Miro board

Next: Submitting Final Write-up & Reflections on Blog

CS-E4002: Human-Centred Research and Design in Crisis

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Thank you for joining & contributing to this exploratory initiative.

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