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Aalto University

TU Delft

AUGUST 2024



SPOT

SOCIETAL PERSPECTIVES TO
INNOVATION OPPORTUNITIES
IN TECHNOLOGY

EXPLORING
H3D-VISIONAIR
STAKEHOLDERS

 **ATTRACT**

Report:

NEEDFINDING & STAKEHOLDERS: *A student perspective*

Prepared for:

H3D-VISIO_nAiR

Projects completed within the course:

BEP - Bachelor End Project

TU Delft

April to May 2024

The *BEP - Bachelor End Project* course at TU Delft offers a combination of coaching and project work on real life cases, as the graduating bachelor students' last Design Project course (DP5).

During the first weeks of the course the students are introduced to design methodology and tools such as stakeholder mapping. Leveraging this, we offered three identical stakeholder mapping workshops at TU Delft utilizing two ATTRACTS RD&I cases.

Students were introduced to H3D-VISIO_nAiR through the ATTRACT technology card. Students were given a Needfinding toolkit, and the technology card, and as their first activity they individually listed all stakeholders they could think of related to H3D-VISIO_nAiR's case. Finally students mapped the stakeholders into groups of potential skeptics, codesigners, change agents, and informants.

This compilation of student insights represents a curated selection from group submissions of the mapped stakeholders for the two introduced projects, and individual questionnaire answers reflecting their process. The comments presented here are those of students, and they have not been edited.



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The tool:

Supporting Stakeholder Mapping

Student used the Needfinding Toolkit to map the ATTRACT stakeholders.

“Often, people assume they know the most important stakeholder. Each stakeholder has different hopes and expectations for which we can design. Even though in design processes, we tend to start small and design for a specific group of stakeholders, it is important to make conscious and mindful decisions about who you are including or excluding for a first iteration so that you can return to them later – because their interactions and experiences will also influence your target stakeholders’ experience. Considering extreme users and marginalised groups increases the likeliness your solutions will fit a wider range of users.”

From the Needfinding Toolkit

STEP 1 Identifying Stakeholders

Individually, write down stakeholders (people, groups, organizations) relevant to your chosen issue, each on a separate sticky note without sharing with your group members, using the provided Stakeholder template.

You have five minutes for each round.

1. Make each stakeholder specific. So not ‘customers’, but a specific customer segment, such as ‘busy working singles on a budget’, and not just ‘managers’, but ‘new managers in the R&D unit’.

2. There is no need to keep track of which category the stakeholders belong to, but aim to identify at least two stakeholders in each question.

STEP 2 Mapping Stakeholders in the Framework

In 15 minutes, review all the stakeholders you wrote down in the previous exercise as a group and place them on the axis diagram.

- Place the Supporting Stakeholders Map template on a flipchart paper or whiteboard and extend the axes to have enough space for all sticky notes.
- Take turns adding one of your identified stakeholders to the map. Briefly explain or discuss the position.
- There is no exact, correct place to put each stakeholder. Rather, this is a way of identifying, challenging, and aligning your assumptions across the team and indicating the stakeholders’ relative positions towards one another.
- You can remove any double stakeholders, add more stakeholders, or split some broad stakeholder groups into more specific ones.

STEP 3 Identifying Opportunities for Engagement

Each of the quadrants corresponds to how much effort or support you can expect from stakeholders in them (see the next page: Supporting Stakeholder Map). Review the quadrants and discuss who you might want to, need to, and be able to engage with.

You don’t need to yet come to an agreement and no project will be able to consider everything. Rather, this serves as a starting point for considering your options for needfinding.

Emerging Stakeholder Groups based on Placement during Needfinding

Potential change agents

could become ambassadors of your project or concept. Consider talking to change agents if you feel good about your idea but need more buy-in or if you need help advocating for your project.

- ENTHUSIASTIC ABOUT THE CHANGE EFFORT
- DISSATISFIED ABOUT THE CURRENT SITUATION

Potential codesigners

could help generate more ideas and elaborate ideas through testing. They are likely to help improve your idea but less likely to advocate on your behalf. Consider talking to codesigners if you would like to explore new solution directions or are unsure your solution fully tackles the identified issue.

- ENTHUSIASTIC ABOUT THE CHANGE EFFORT
- SATISFIED ABOUT THE CURRENT SITUATION

Potential informants

could help you better understand present issues. They are likely to be willing to share their concerns but less likely to participate in supporting your change effort. Consider talking to informants if you are unsure, you are targeting the right issue or would like to increase your understanding of different needs.

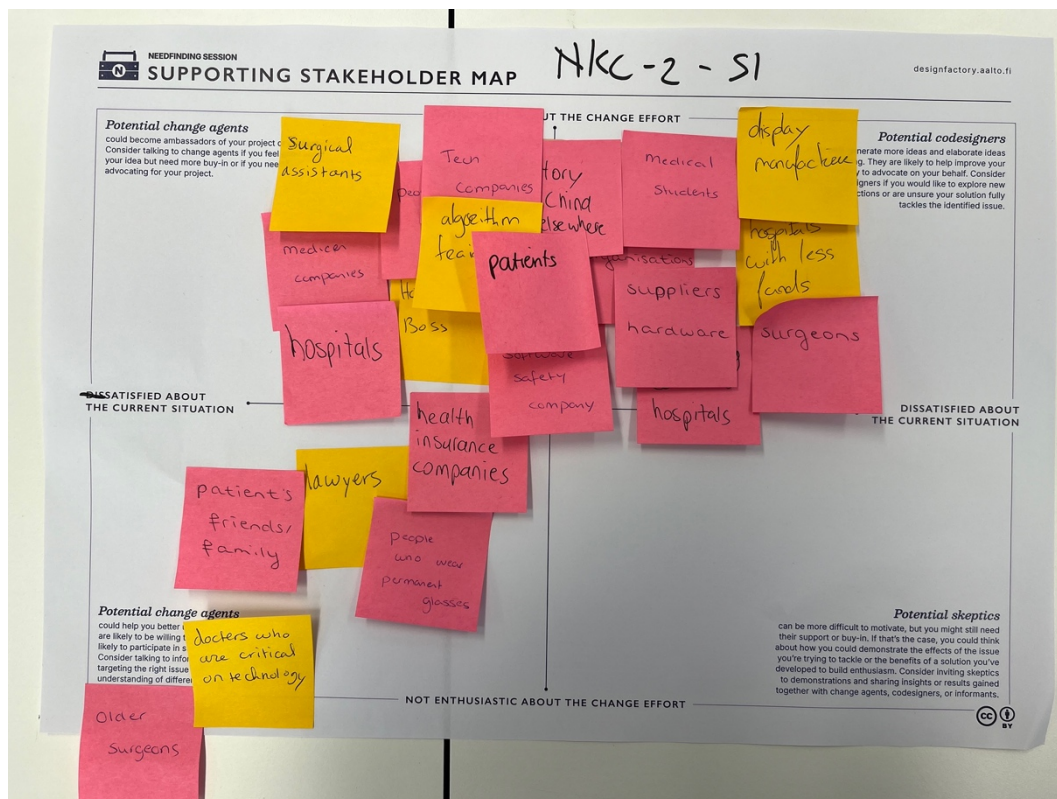
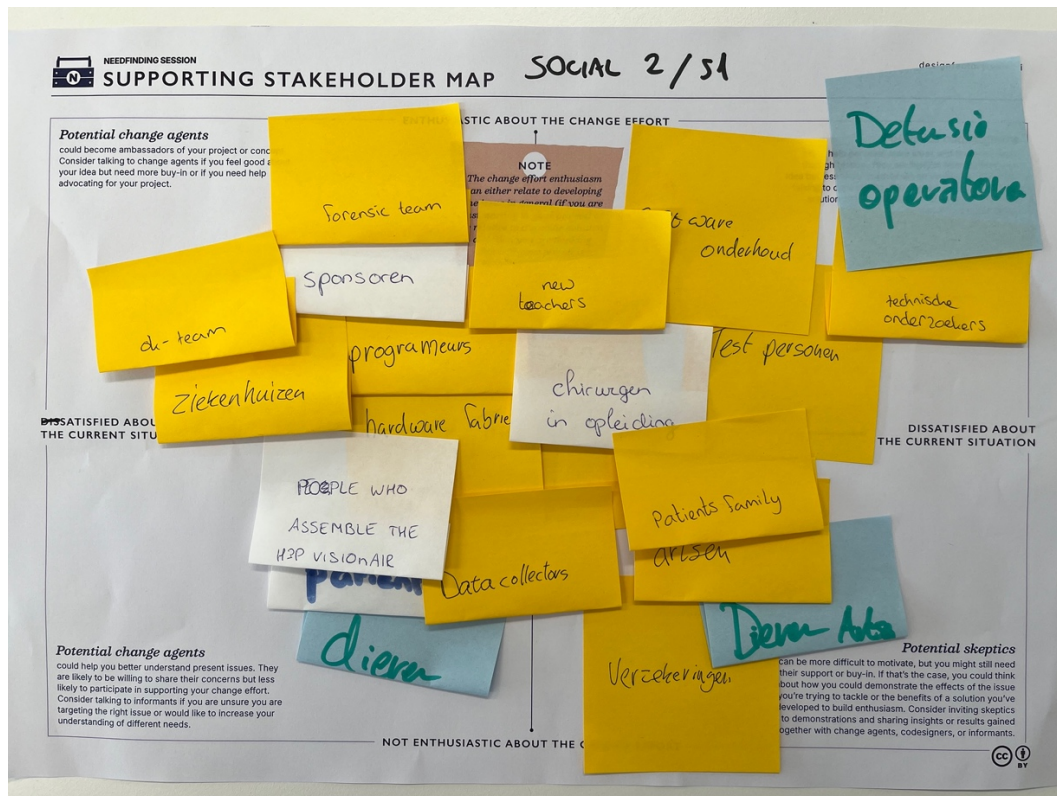
- NOT ENTHUSIASTIC ABOUT THE CHANGE EFFORT
- DISSATISFIED ABOUT THE CURRENT SITUATION

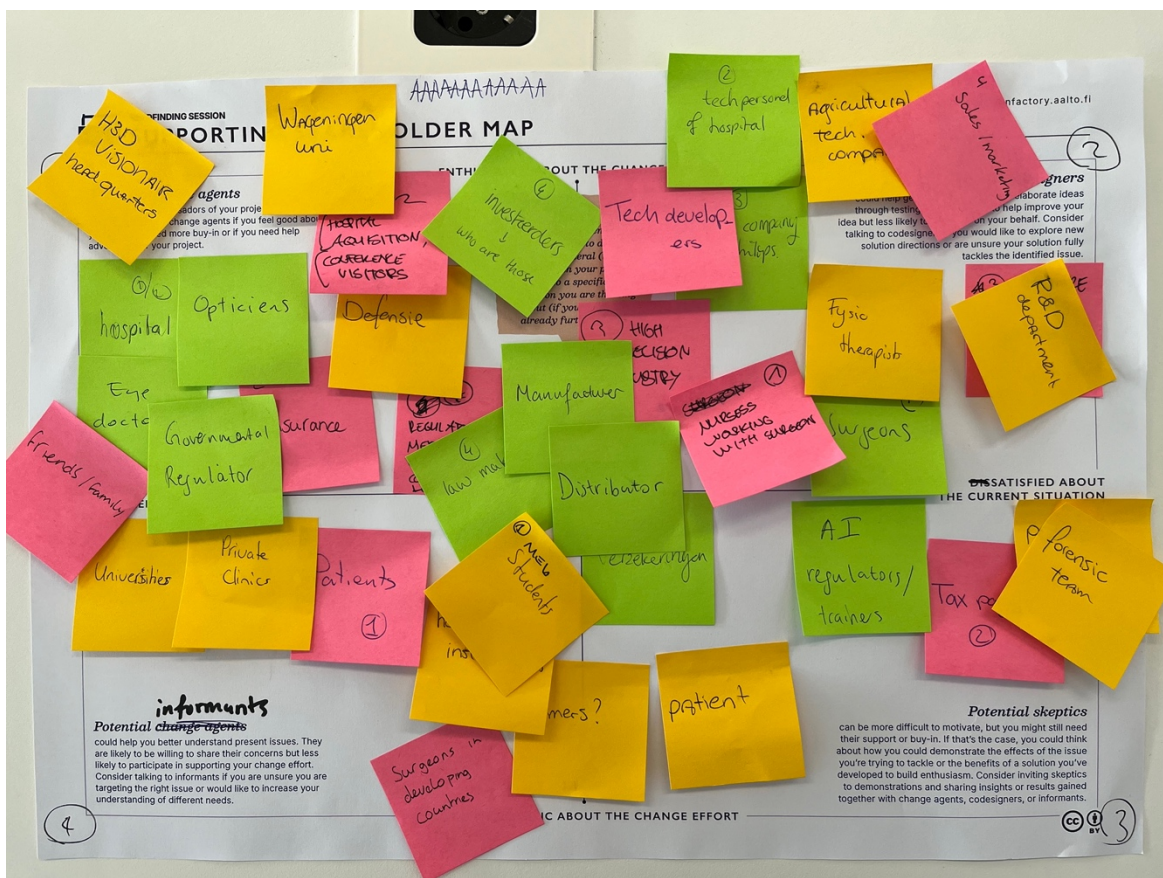
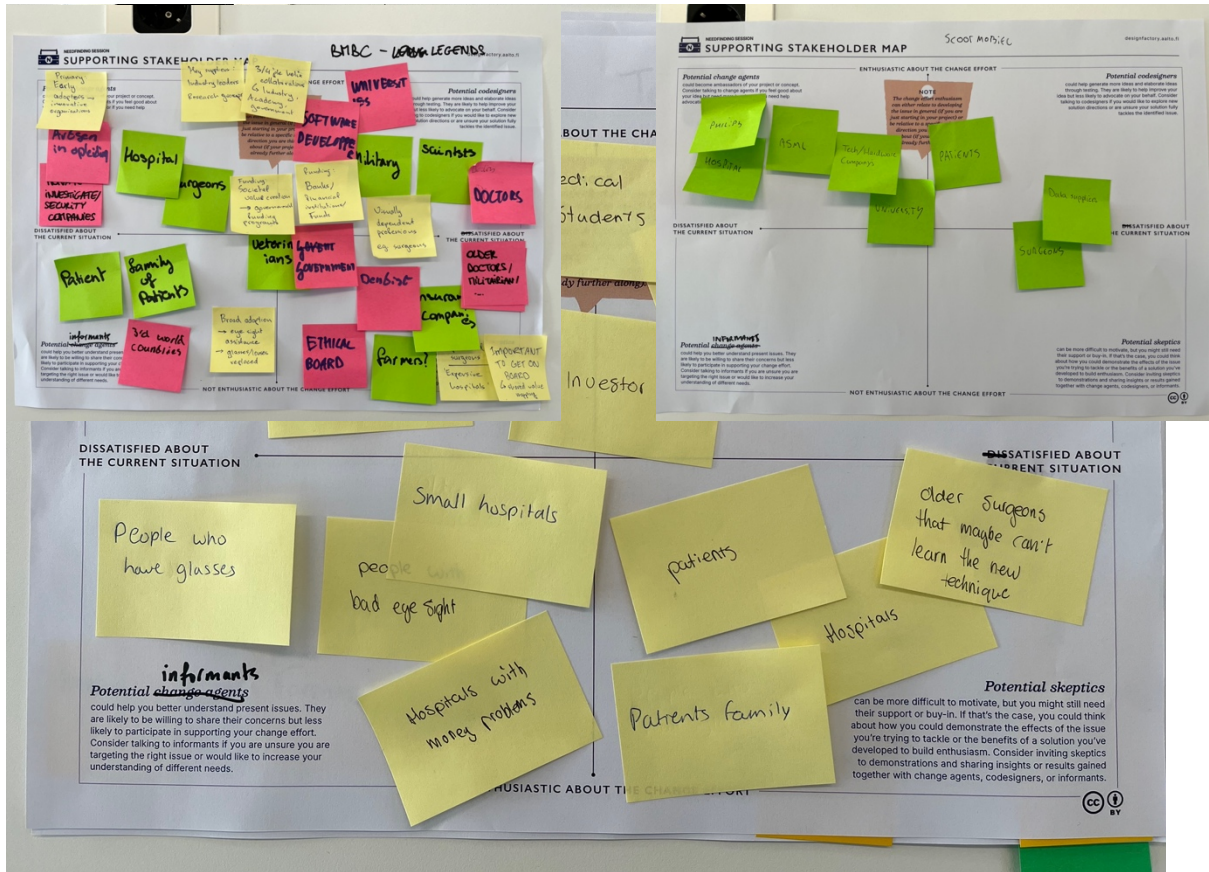
Potential skeptics

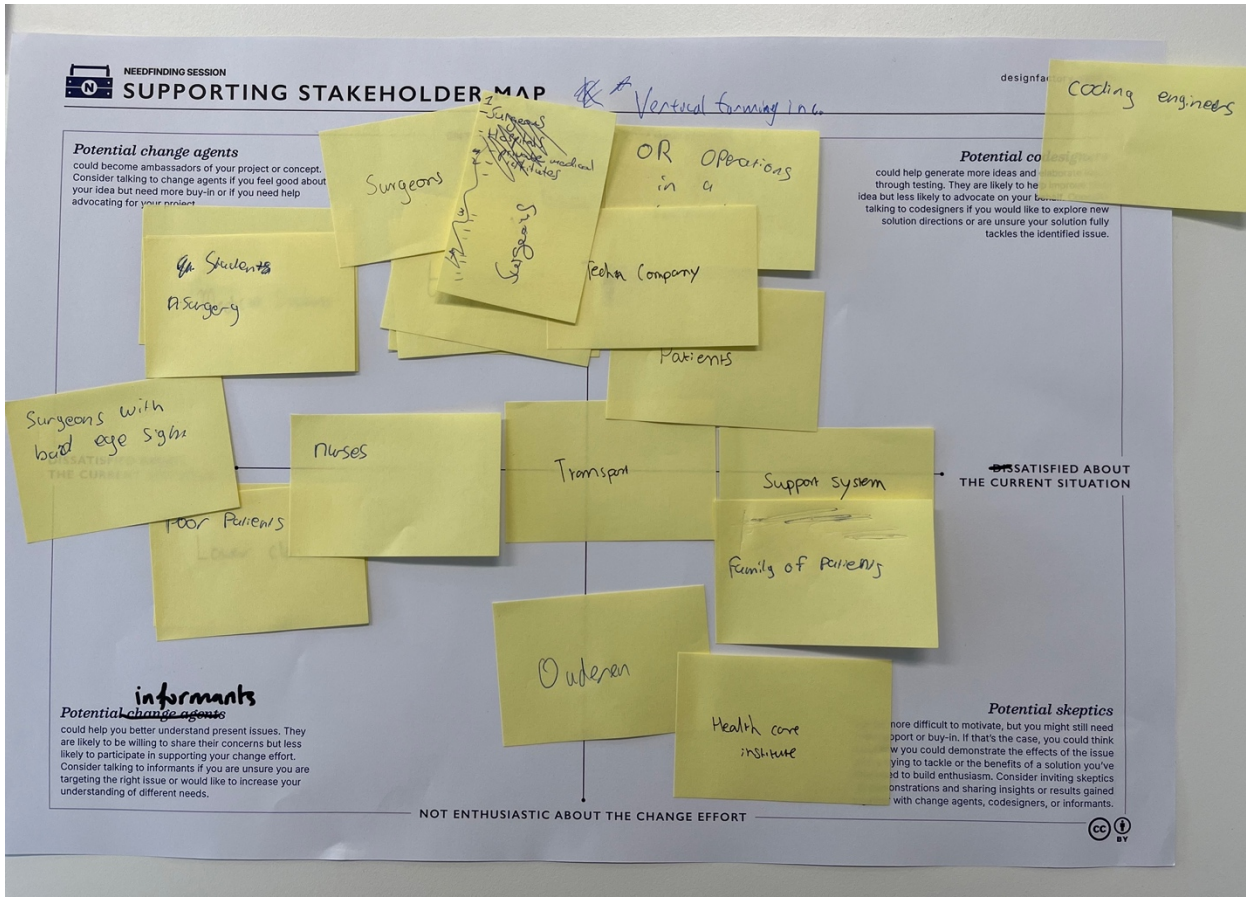
can be more difficult to motivate, but you might still need their support or buy-in. If that's the case, you could think about how you could demonstrate the effects of the issue you're trying to tackle or the benefits of a solution you've developed to build enthusiasm. Consider inviting skeptics to demonstrations and sharing insights or results gained together with change agents, codesigners, or informants.

- SATISFIED ABOUT THE CURRENT SITUATION
- NOT ENTHUSIASTIC ABOUT THE CHANGE EFFORT

TU Delft Student Maps









NEEDFINDING SESSION

SUPPORTING STAKEHOLDER MAP

THOM R.

designfactory.aalto.fi

Potential change agents

could become ambassadors of your project or concept. Consider talking to change agents if you feel good about your idea but need more buy-in or if you need help advocating for your project.

Hospital
surgeon
doctors & nurses

ENTHUSIASTIC ABOUT THE CHANGE EFFORT

NOTE
The change effort enthusiasm can either relate to developing the issue in general (if you are just starting in your project) or be relative to a specific solution direction you are thinking about (if your project is already further along).

Technicians
culture talks
AI comp

Potential codesigners

could help generate more ideas and elaborate ideas through testing. They are likely to help improve your idea but less likely to advocate on your behalf. Consider talking to codesigners if you would like to explore new solution directions or are unsure your solution fully tackles the identified issue.

DISSATISFIED ABOUT THE CURRENT SITUATION

Family
Patient
less fortunate people (Broken)
surgeons in other specialisation

non medical

DISSATISFIED ABOUT THE CURRENT SITUATION

Insurance
Digitally impaired
Blind
Producers of current system
system

NOT ENTHUSIASTIC ABOUT THE CHANGE EFFORT

informants
could help you better understand present issues. They are likely to be willing to share their concerns but less likely to participate in supporting your change effort. Consider talking to informants if you are unsure you are targeting the right issue or would like to increase your understanding of different needs.



NEEDFINDING SESSION

SUPPORTING STAKEHOLDER MAP

GIANNI

designfactory.aalto.fi

Potential change agents

could become ambassadors of your project or concept. Consider talking to change agents if you feel good about your idea but need more buy-in or if you need help advocating for your project.

(3) AR HEADGEAR MANUFACTURERS
(4) AI DEVELOPERS
(12) CSE (INFORMATICS) EXPERTS

ENTHUSIASTIC ABOUT THE CHANGE EFFORT

NOTE
The change effort enthusiasm can either relate to developing the issue in general (if you are just starting in your project) or be relative to a specific solution direction you are thinking about (if your project is already further along).

(1) SURGEONS

Potential codesigners

could help generate more ideas and elaborate ideas through testing. They are likely to help improve your idea but less likely to advocate on your behalf. Consider talking to codesigners if you would like to explore new solution directions or are unsure your solution fully tackles the identified issue.

DISSATISFIED ABOUT THE CURRENT SITUATION

(10) INSURANCE COMPANIES

(2) HOSPITALS
(9) PATIENTS!

DISSATISFIED ABOUT THE CURRENT SITUATION

(4) - NURSES

(9) OPERATION PERSONNEL

(5) ELDERLY SURGEONS

NOT ENTHUSIASTIC ABOUT THE CHANGE EFFORT

informants

could help you better understand present issues. They are likely to be willing to share their concerns but less likely to participate in supporting your change effort. Consider talking to informants if you are unsure you are targeting the right issue or would like to increase your understanding of different needs.

could be more difficult to get their support or buy-in about how you are trying to tackle the issue. Consider talking to informants if you've developed a solution but need to demonstrate it together with change agents, codesigners, or informants.



