Co-creation in social and health sector

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Developing smart healthcare services

- 13 years of co-creation in the healthcare field
- More than 70 new technology piloted
- 100+ partners
- 30+ countries
- 200+ companies

Co-Created Health and Wellbeing

35

Agile pilots

148

Companies

830

Healthcare professionals

1490

Customers / end users

- A new co-creation operating model for the healthcare sector

- The operating model makes it possible to solve various challenges together with companies

- Common forms have been created for the "critical" stages of the operating model

- The operating model was validated over 28 months, utilizing it in 35 needs-based experiments

- The model is already in use in several cities and healthcare organizations
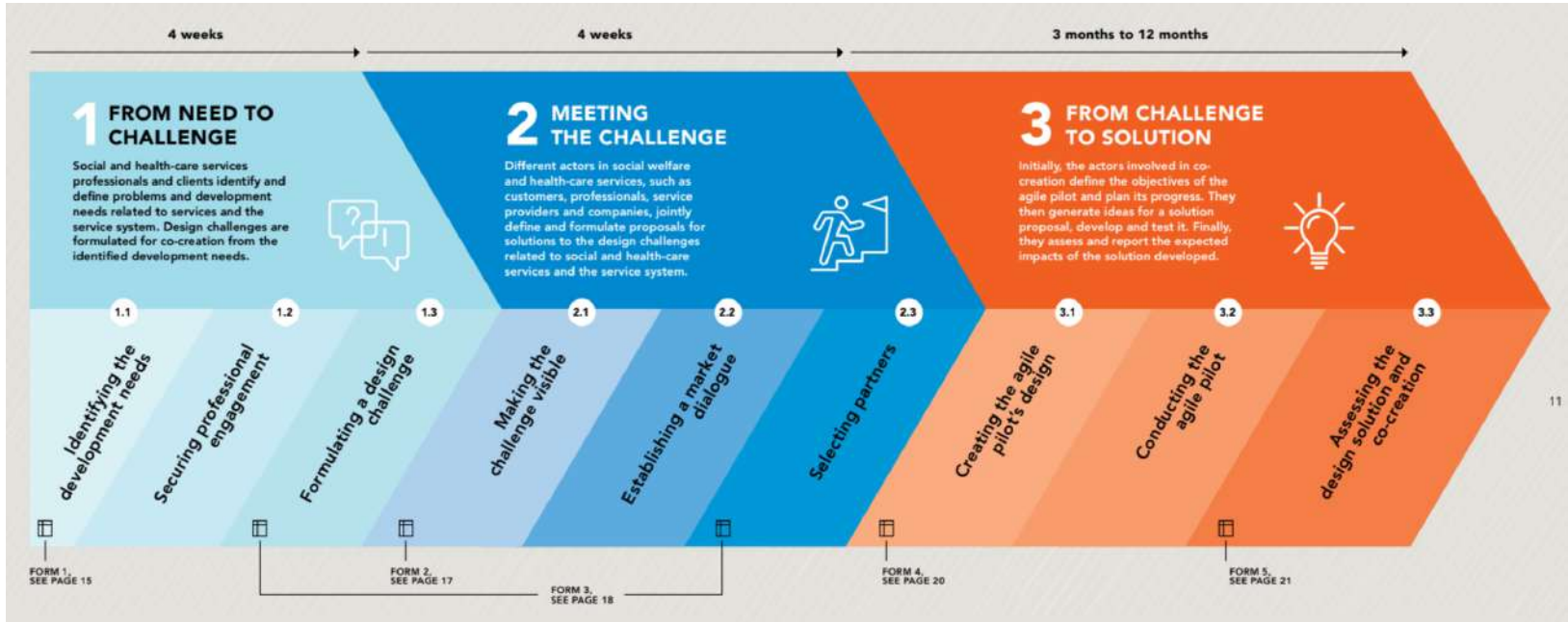
Need based co-creation
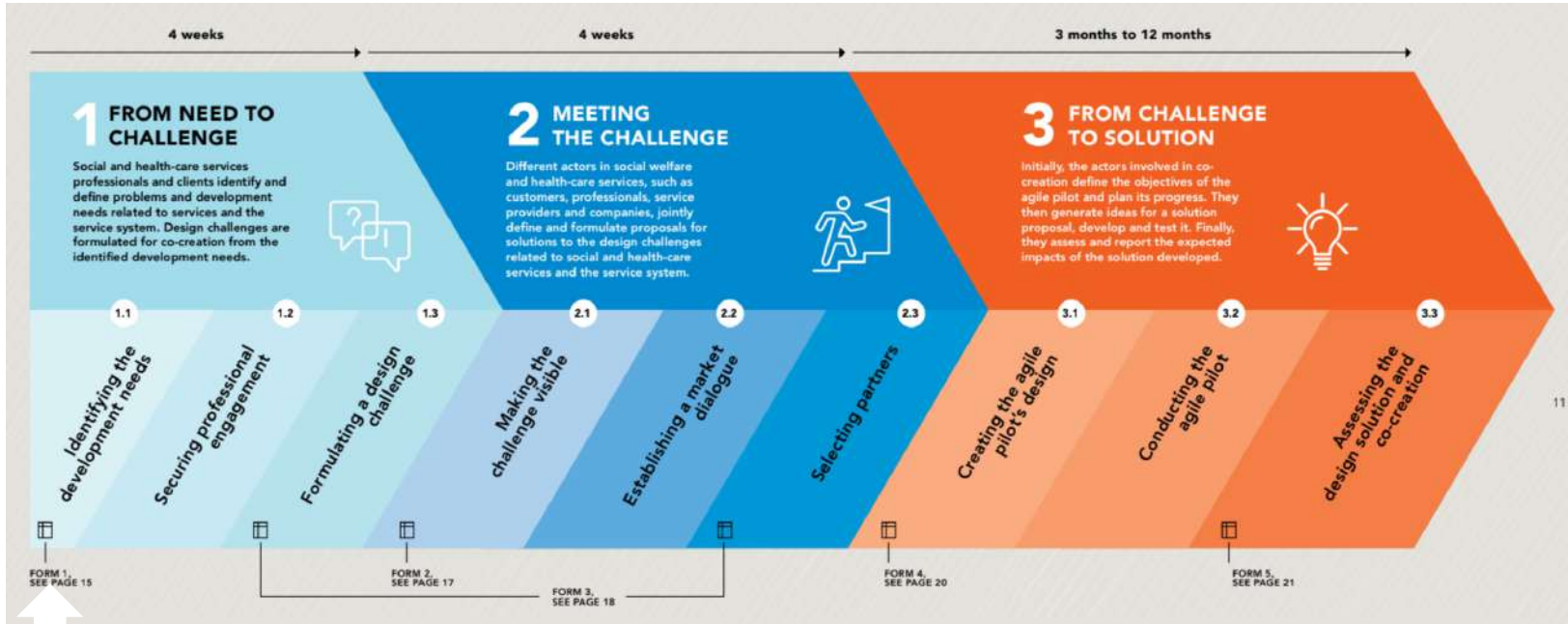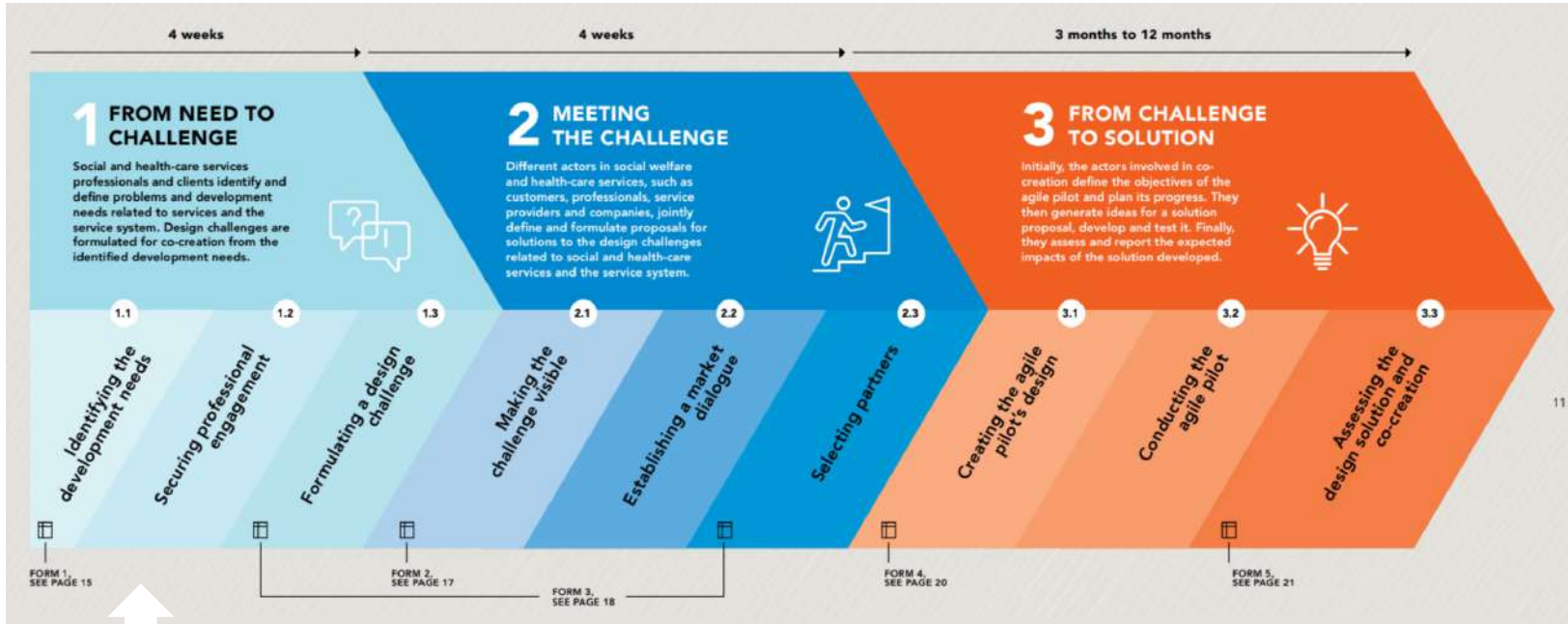
Identifying the needs

To understand the problem / challenge, you need to view it from all it's aspects.
Management's, executive staff's and customers point of view. (Form 1- Need describing)

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Securing engagement

Secure resources! A successful project requires committed and motivated people from all participating organizations.

Formulating a design challenge
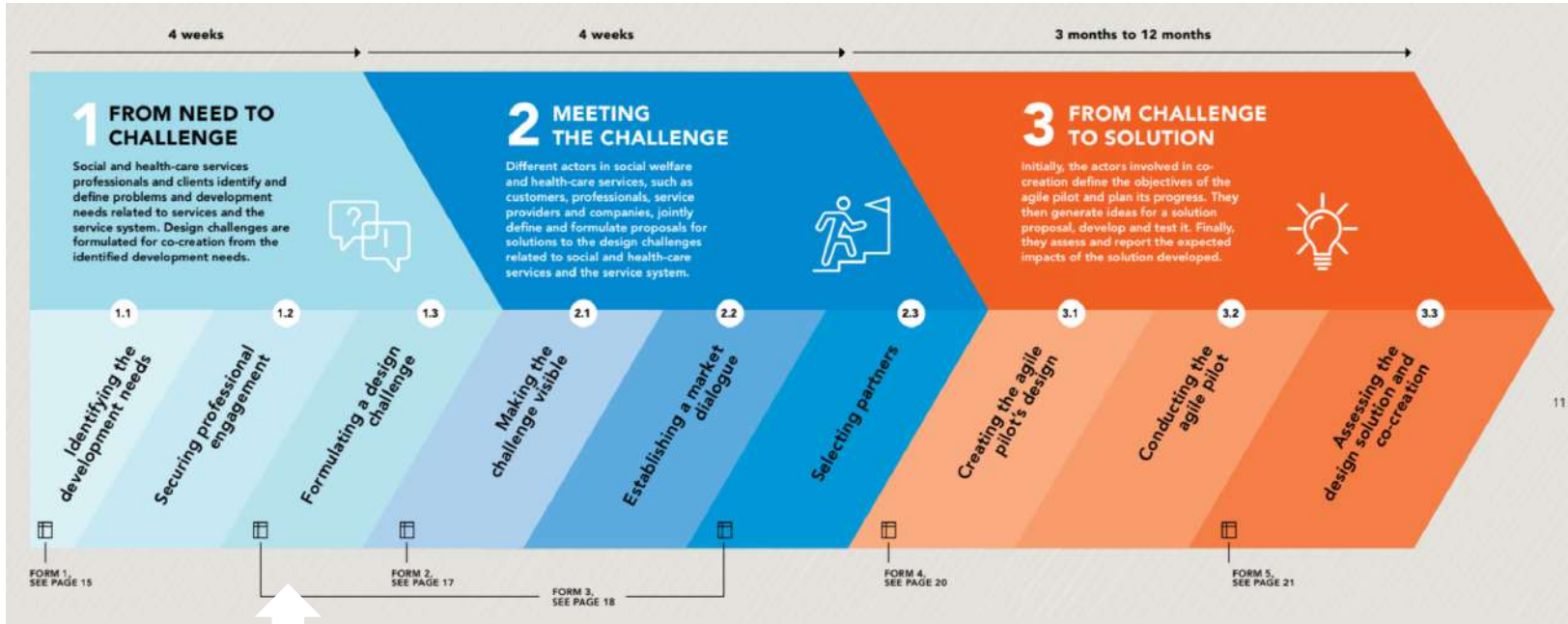
Instead of looking for technology from familiar companies in the industry, describes the problem and the operating environment. This way, you enable the utilization of innovations developed in other industries for the benefit of your own industry. Form 2 & 3 - Description of the company solution proposal & assessment criteria

# Making the challenge visible
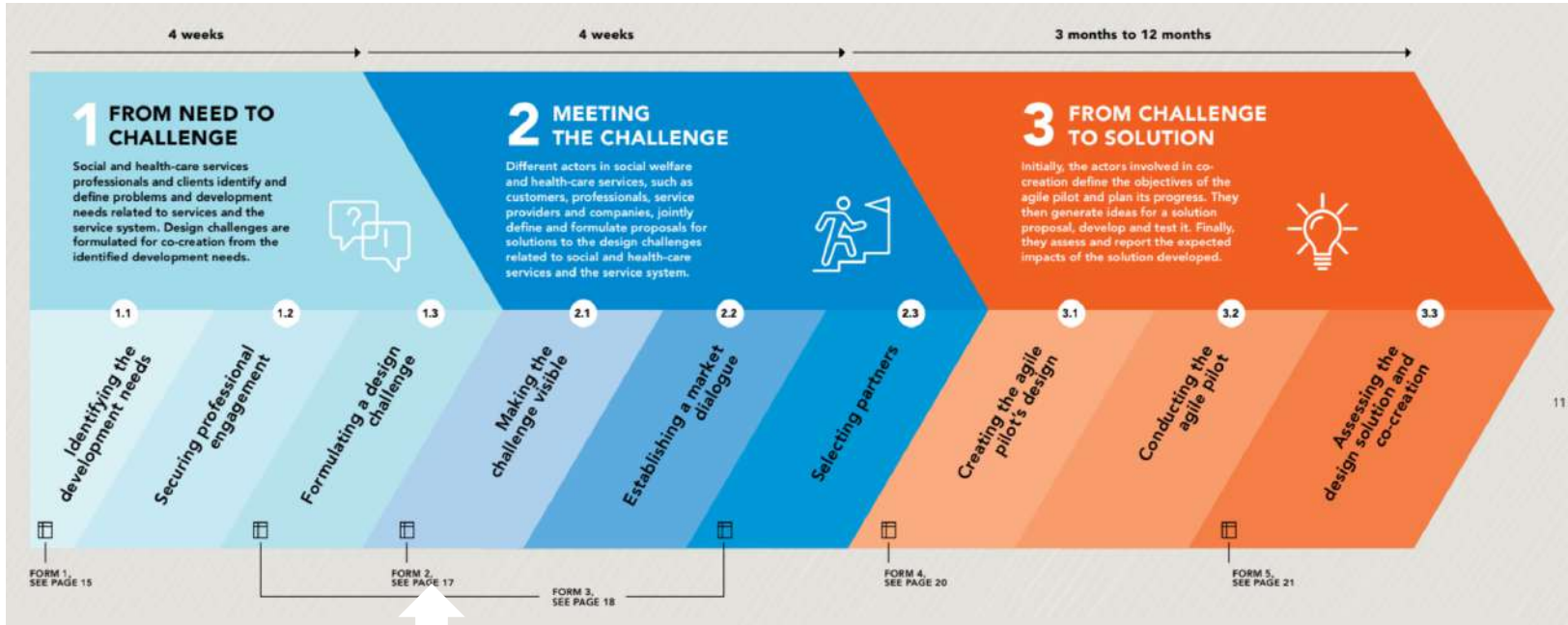
More messenger, more visibility. For example, accelerators and incubators own the target group and want to share information.

Establishing a market dialogue
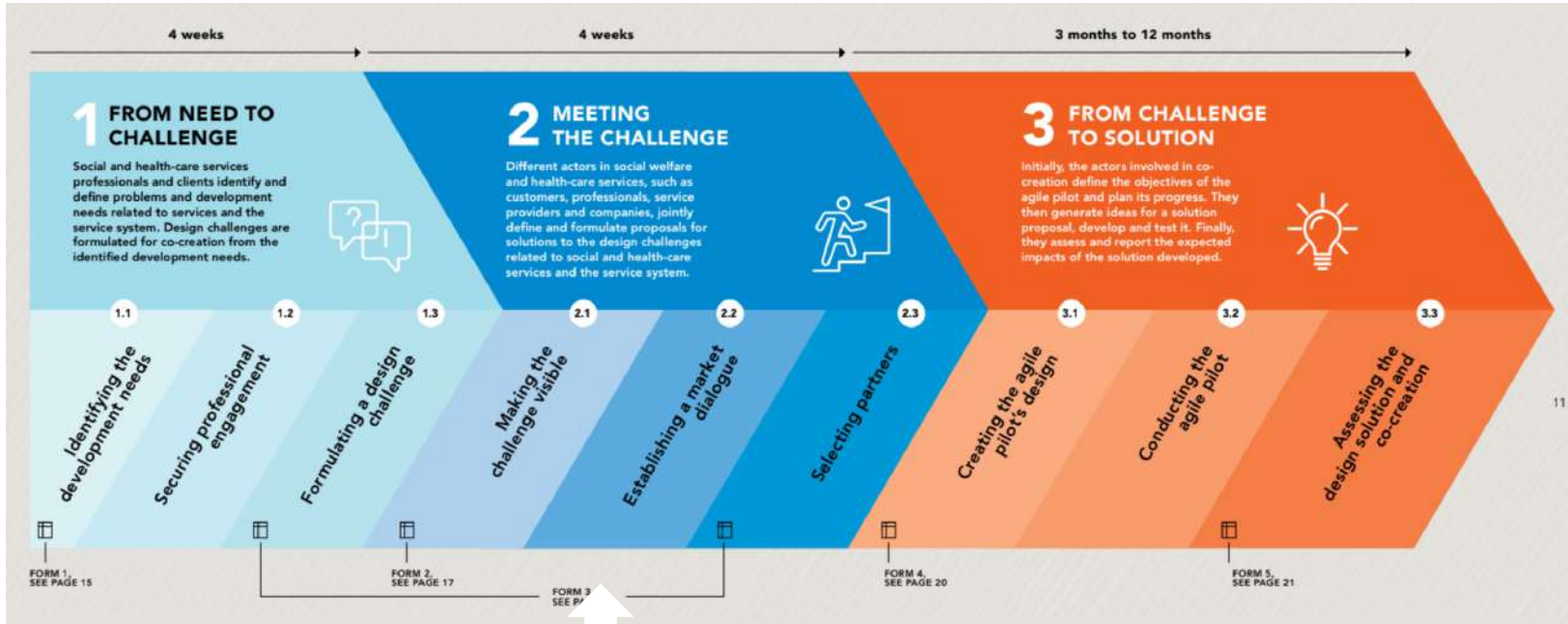

Growing knowhow. Market dialogue enables an information exchange and dialogue between healthcare professionals and companies for the benefit of both. > final call for tenders.

Selecting partners
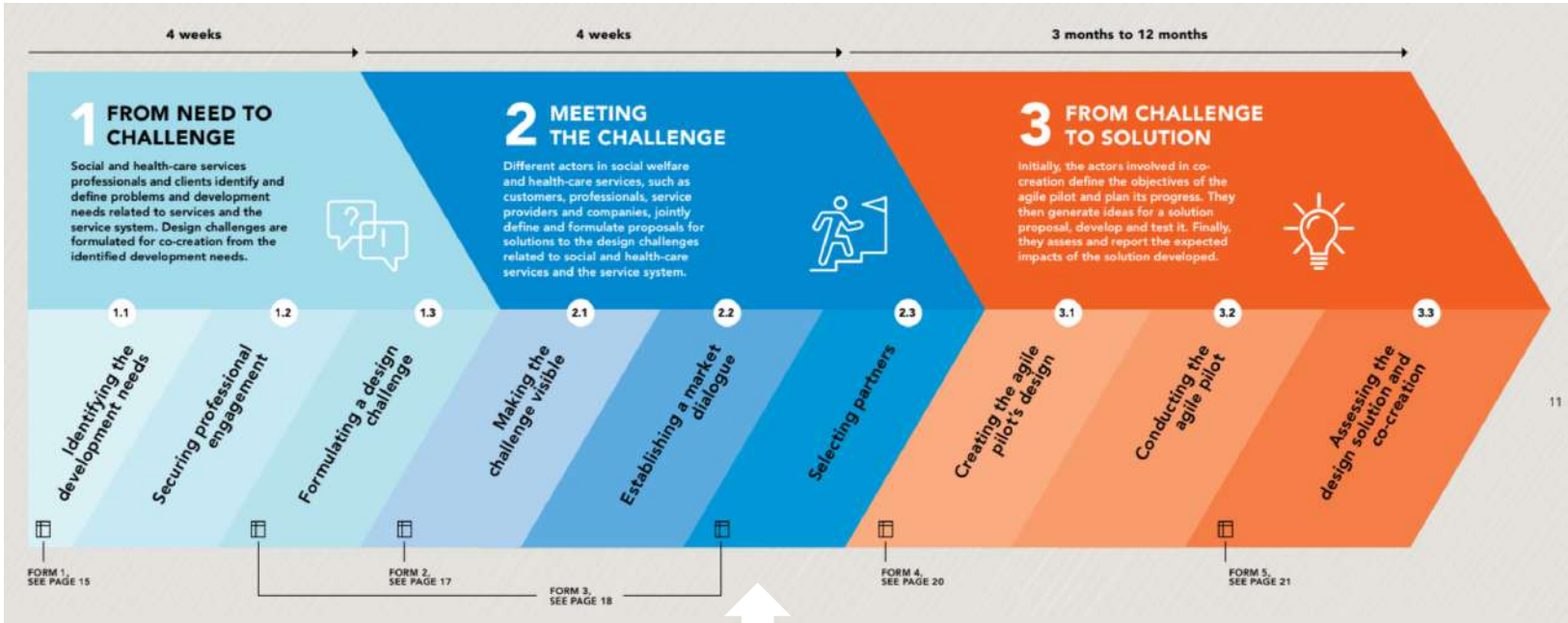
The proposed solutions will be assessed using pre-agreed assessment criteria. So proposals are easy to compare. Form 2 & 3 - Description of the company solution proposal & assessment criteria

Creating the agile pilot's design
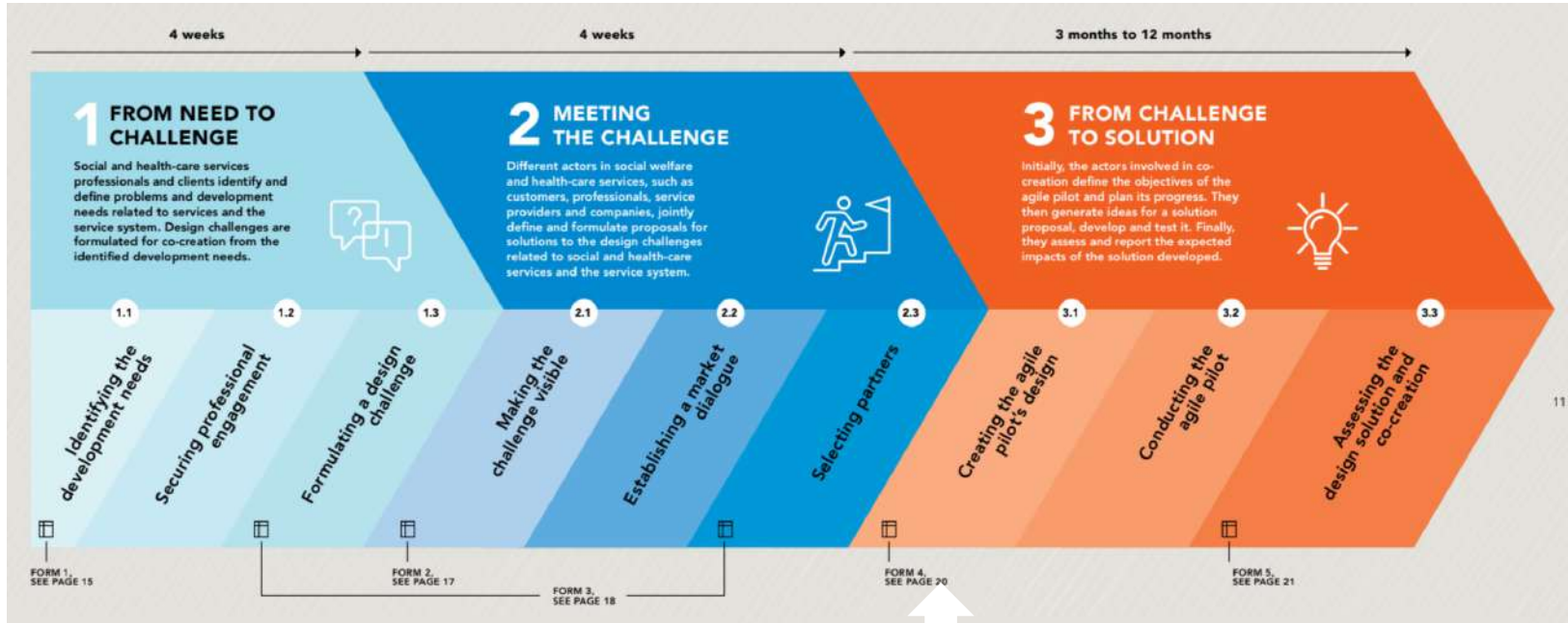
Each organisation has it's own criteria for a successful co-creation project and they all need to be addressed. (form 4)

Conducting the agile pilot
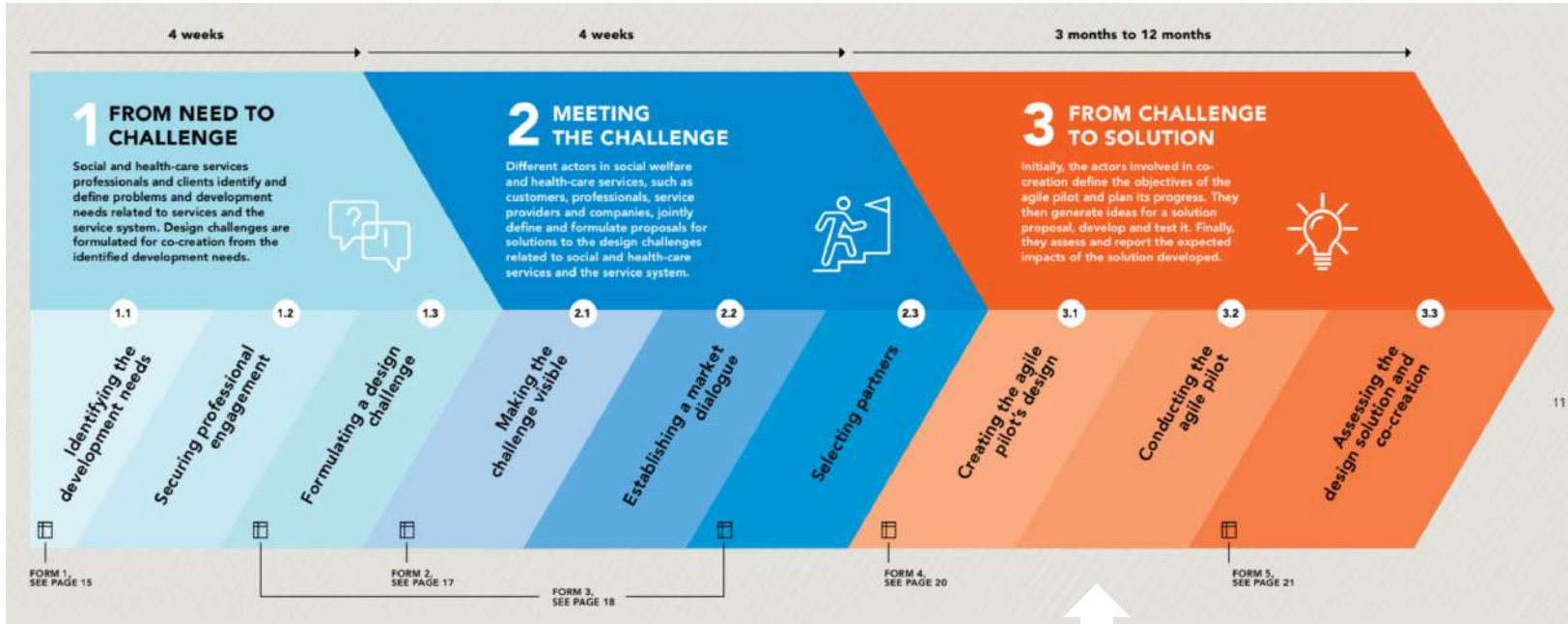
Ongoing iteration. Test, observe, learn, modify, test… Based on the user feedback collected during the pilot, the design solution will be further developed to more effectively meet the needs of target groups.

Assessing the solution
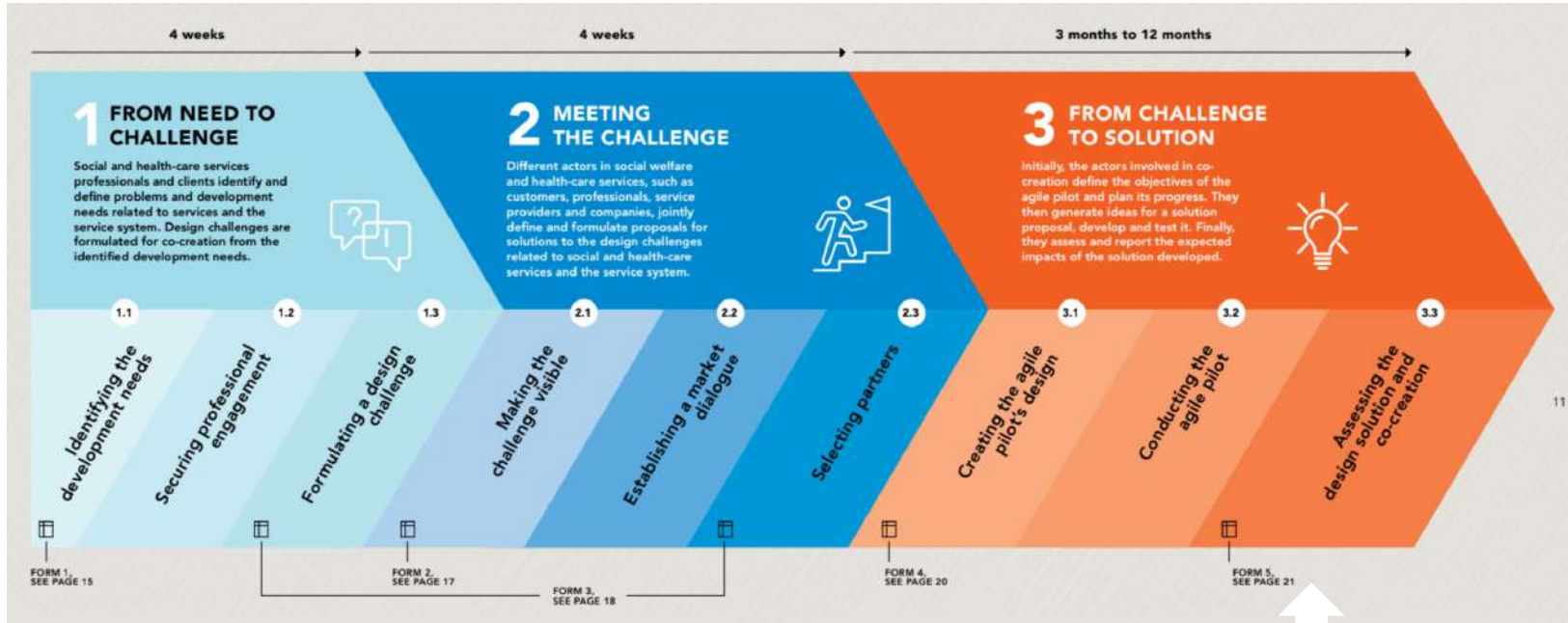
Solutions are evaluated against the evaluation criteria defined in the design phase. The effectiveness evaluation model helps decision making > whether to invest (form 5)

Experiences

+ **Commitment:** Equality of participants led to a strong commitment

+ **Efficiency:** The new co-creation model allows healthcare units to respond quickly to sudden needs (covid 19)

+ **Co-create alongside your core work:** Based on the feedback, professionals have found co-creation meaningful and part of their core work

+ **Permanent solutions:** A larger number of experiments have remained as permanent solutions.

+ **Copy success:** Experiments and learnings can be easily scaled between cities.

+ **Increasing competence:** The co-creation method increases knowledge and competence

+ **Information to support decision-making:** The effectiveness evaluation model helps decision making > whether to invest

+ **All innovations available.** Enables effective use of innovations developed in other industries.

Co-creation case examples

Access to freedom
(for eldery with memory disorder)

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Problem in elderyhome

- Outdoor activities are limited due to limited resources

- Concern for well-being

- Self-determination rights are on risk

- Wearable technology is not useful

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Solution

- we used Machine Vision, which was developed for tracking cows

- Elevator and door lock integrations

- Mobile application: See where customers are, alerts when a customer falls down, moves too far or is outside for too long,

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Covid 19 rapid breath test

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Problem with pandemia

- SARS-CoV-2 caused a global pandemic in the spring of 2020

- SARS-CoV-2 disease is life threatening, especially for the elderly and those with chronic, pre-existing conditions

- The pandemic has had an enormous impact on society

- Testing is slow, expensive and inaccurate

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Solution

- we used a smart toilet seat with nanosensors and turned it into a Covid 19 breath test

- Technology is based on the analysis of Volatile Organic Compounds (VOC). These are biomarkers created by human metabolism while under sickness.

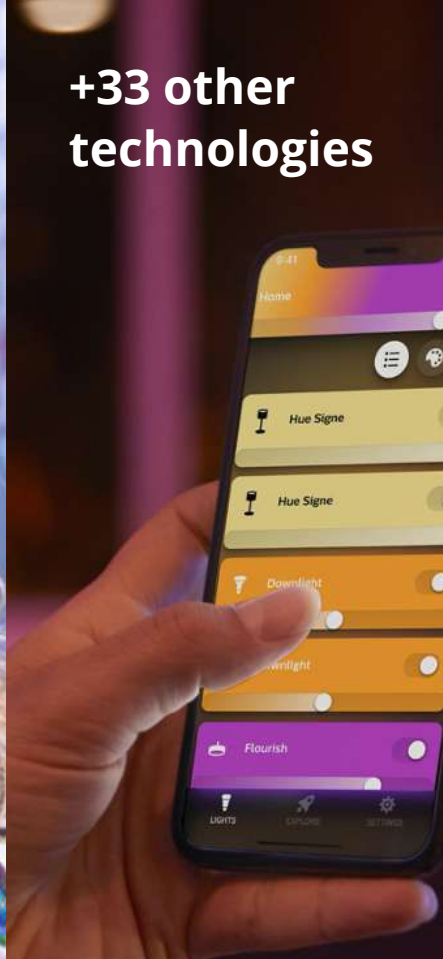- It took 10 months from idea to prototype using the co-creation model.

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logistics robot **guide robot** **Virtual Reality** **Smart lights**

+33 other technologies

NEW TECH

2021-2023

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Avatar robot

Touchlab Ltd is an XPrize finalist developed by an avatar robot suitable for use in hazardous environments, space or nuclear power plants. 2022 the robot is being planned co-developed for the hospital environment in Helsinki.

The avatar robot is controlled remotely. The pilot has VR goggles where he sees the same as the robot and both the gloves whose movements the robot repeats. The robot thus operates at real speed, repeating the pilot's movements. The robot's hands and fingers are able to do 80% of the same thing as a human with their hands, for example, handing out a glass of water or medicine, opening a window or correcting the position of a pillow. In addition, the robot can measure the customer's pulse, blood pressure, etc. when touched by hand.

Radio waves
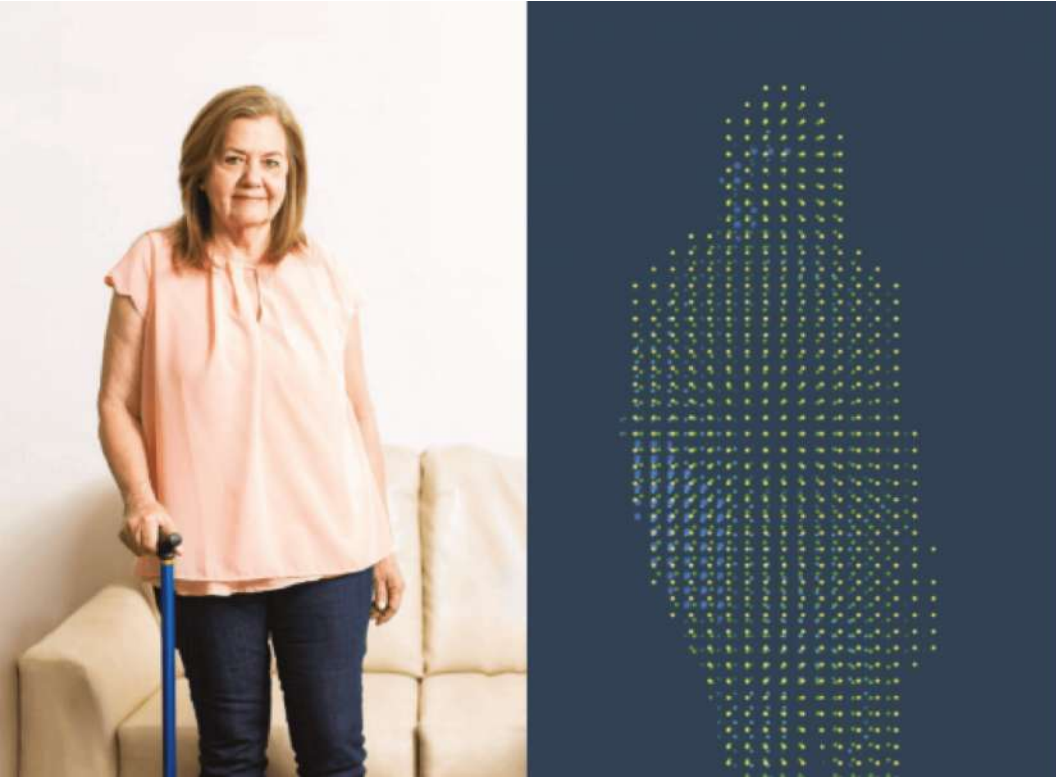
A technology that transmits signals scanning the environment thousands of times on radio waves weaker than a cell phone.

It detects when a person falls and collects information that can be used to track activity patterns and identify signs of deteriorating health.

radio waves work in the dark or in steam, do not need cameras and always maintain privacy.

Drones

The pain points of the current transport system are concretised especially in the rescue operation, where congestion and other weaknesses of the traditional infrastructure complicate the operation of emergency care units.

One of the main goals of the three-year AiRMOUR project is to develop drones for the transport of emergency care personnel and medical supplies.

Practical testing will be conducted in the spring of 2023

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