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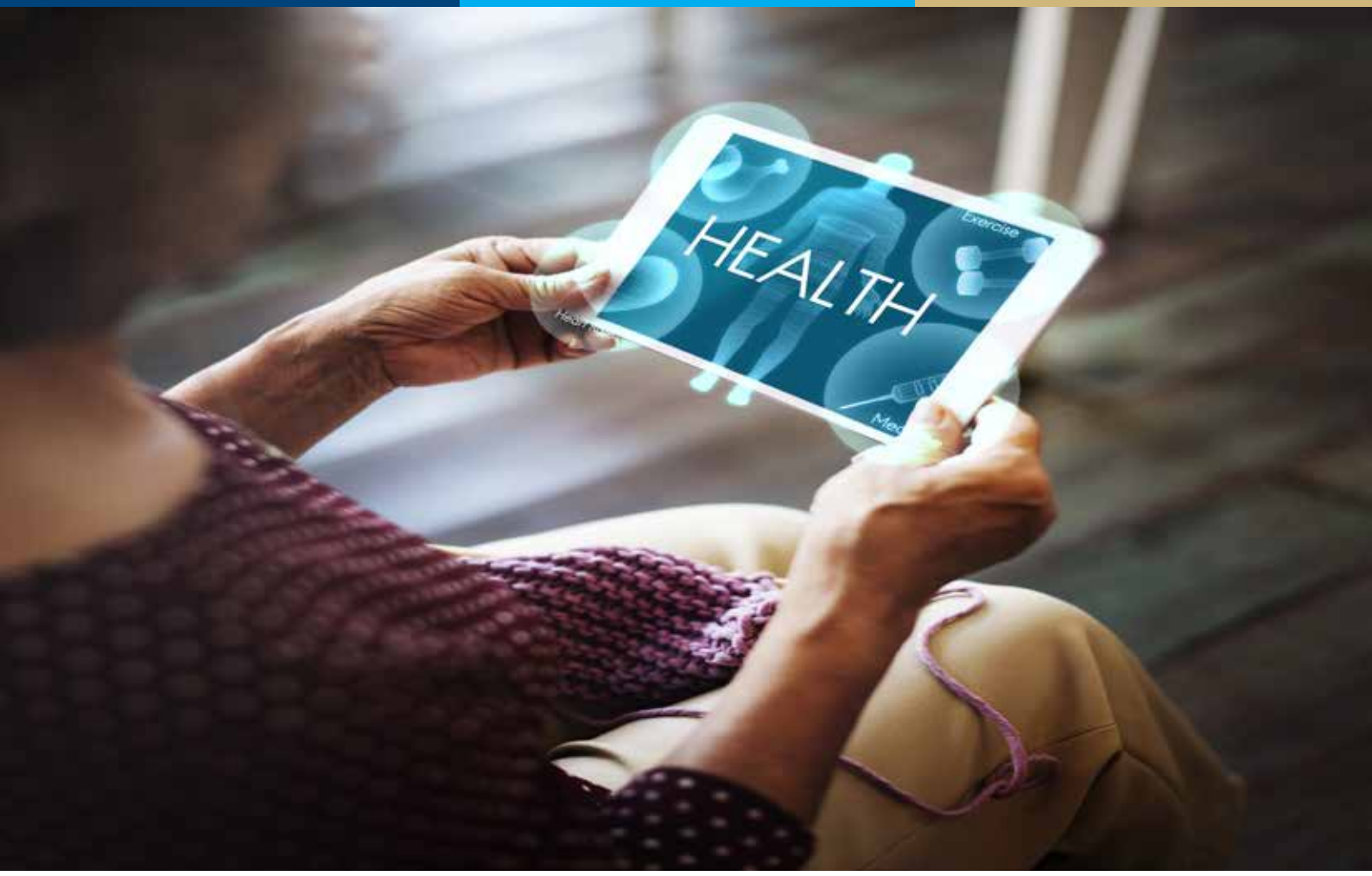

Tuija Hirvikoski, Paula Lehto & Anne Äyväri

DEVELOPMENT AND EXPERIMENTATION PLATFORM FOR SOCIAL, HEALTH AND WELLBEING SERVICES IN THE CONTEXT OF KALASATAMA HEALTH AND WELLBEING CENTRE

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Content

1 OBJECTIVES OF THE DEVELOPMENT AND EXPERIMENTATION PLATFORM

The objectives of the development and experimentation platform can be divided into three categories:.

- what type of new services and service processes are aimed for?
- objectives that guide the practical operation of the development and experimentation platform
- objectives related to the scalability and replicability of the development and experimentation platform planned within the context of Kalasatama health and wellbeing centre.

What type of new services and service processes are aimed for?

The new services and service processes start from customer needs. The value experienced by the customer is an important criterion when evaluating the usefulness of an innovation after piloting.

Another guideline pointing the way for the development and experimentation platform naturally is the Triple aim principle, which informs the development of social and health services in the City of Helsinki. The platform is used to find new services and processes that improve the

- productivity,
- influence, and
- quality (both the customer experience and availability) of social and health services.

In addition to these objectives, the target of reducing the health and wellbeing gaps of the population and integrating social and health services will be taken into consideration in the development and experimentation platform activities.

Objectives that direct the practical operation of the development and experimentation platform

The practical operation of the development and experimentation platform, or the planning, implementation and evaluation of co-creation processes and pilot projects, will be guided by the following objectives:

- The service development and testing process will follow the principles of user-centric design.
- New services will be developed and tested in cooperation with customers, social and health service professionals of Helsinki, companies and third sector organisations, actors in other sectors of the City, higher education institutions and research institutes.
- The development challenges/needs for new services and service processes will be defined so that the definitions also allow proposals aiming for radical innovations, not only incremental ones.
- The development challenges/needs for new services and services processes will be made public to the aforementioned actors as extensively and openly as possible.

The planning of the contents of pilots to be implemented in 2016—2018, on the other hand, will be guided by the following objective: the pilots should be generic enough to allow for the wider utilisation of the experiences gained in them in the introduction of the health and wellbeing centre concept as a whole.

The aforementioned objectives — what type of new services will be developed, and how their co-creation will take place — will also be applied as evaluation criteria of development challenges, proposals received from different actors and the concepts and tested solutions produced as the result of co-creation.

Objective concerning the scalability and replicability of the development and experimentation platform

The description of the development and experimentation platform activities should allow for the extension of this operating method to the activities of both the Department of Social Services and Health Care as a whole and the other agencies of the City. In particular, this applies to the cooperation model: how will development and experimentation activities be carried out in cooperation with companies and third sector organisations.

The description of the operating method will also take into consideration the possibility that the development challenge or the need for new services and service processes is defined by a company that serves the needs of the residents or a third sector organisation rather than by the Department of Social Services and Health Care or other agencies of the City of Helsinki. Scalability and replicability are also associated with the questions of how the development and experimentation platform can optimally enable both the employees and the residents of the City to make their voices heard when development needs are identified and solutions considered, regardless of the sector to which the need or the solution is relevant.

2 MULTI-ACTOR COOPERATION ON THE DEVELOPMENT AND EXPERIMENTATION PLATFORM

2.1 Actors

Figure 1 describes the actors of the development and experimentation platform. In the specific context of Kalasatama health and wellbeing centre, the customers and Helsinki Department of Social Services and Health Care staff have the main roles in the "development and experimentation platform productions".

Companies and third sector actors naturally play highly significant roles when launching the development of new services together and in close cooperation with both the customers and the social and health service professionals of the City. The companies may either be companies already operating in Finland or those interested in establishing themselves in this country.

Helsinki Economic Development Division, Forum Virium Helsinki Oy and Helsinki Business Hub Ltd Oy work together with both Finnish and foreign companies and have diverse expertise in funding possibilities, user-centered design and innovative procurements alike.

The participation of other agencies and sectors of the City in the development and experimentation platform activities is likely to depend on the contents of each development challenge. Especially sports, cultural and free time services have impacts on well-being, and these sectors at the very least could be important partners in the co-creation processes of new services.

The competence of research institutes and the staff and students of higher education institutions and other educational institutions in the Metropolitan area can be utilised in the co-creation process and pilot projects in different ways. For example, researchers in different fields can give indications of what has already been tried in some part of the world, or how the results of the most recent research could be taken into account in the experiment.

At the bottom of the Figure 1, the Circle of Facilitators is cited as one of the development and experimentation platform actors. A mediator is needed in the development and experimentation platform activities to facilitate multi-actor cooperation. As it is quite literally a facilitator, it is shown in the figure as a kind of foundation. The mediator builds bridges between the representatives of the actor groups described above; it serves as a communicator and, where necessary, an interpreter who understands the language of both social and health service professionals and commercial actors; it organisers and reflects, and it has competence in evaluation.

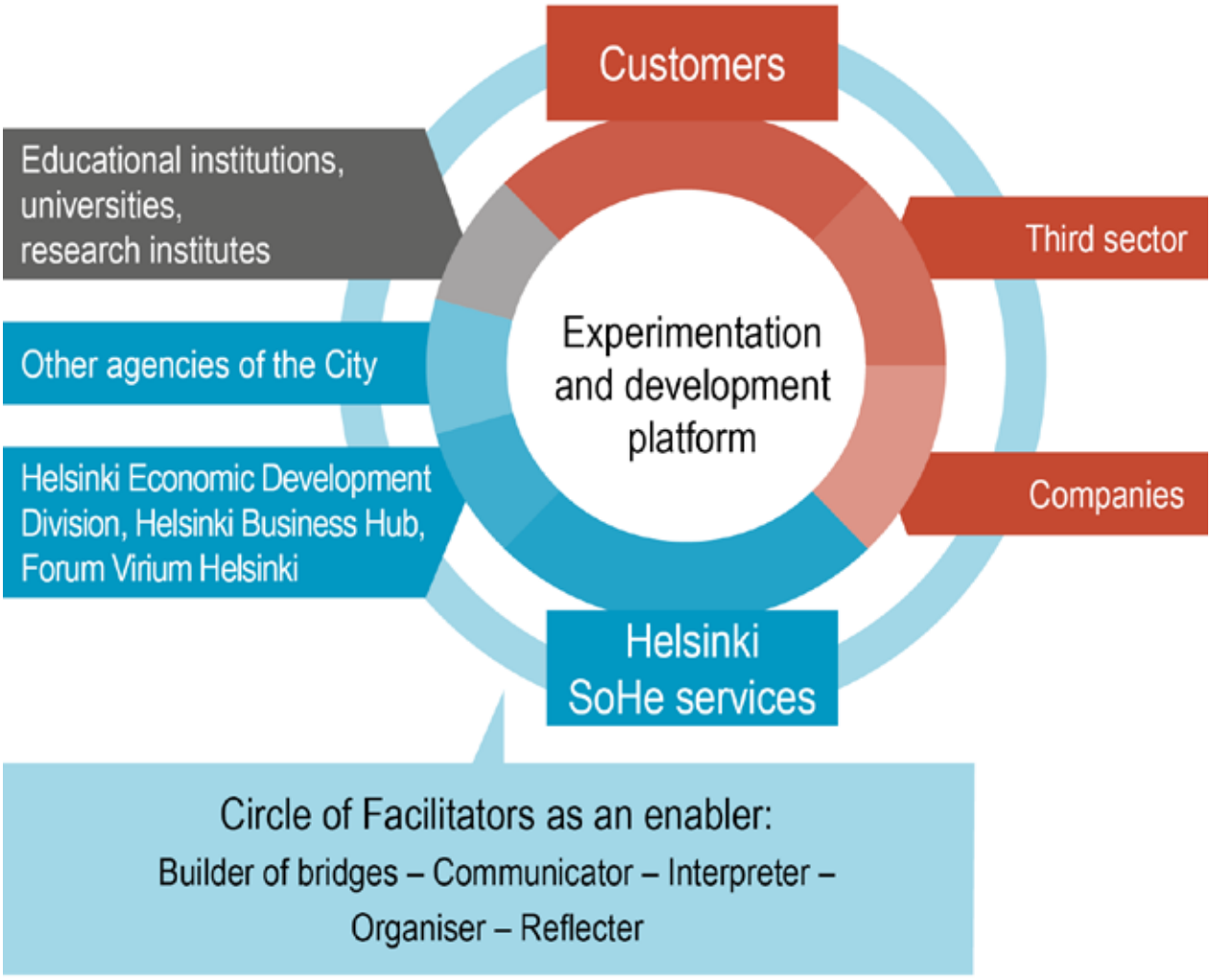

Figure 1. Actors of the development and experimentation platform of Helsinki Department of Social Services and Health Care

2.2 Actors in the *Circle of Facilitators*

In this report, the working title Circle of Facilitators is used of the mediator. This title strives to communicate the following meanings:

- Mediator tasks are performed by a team, a group of experts, not all of whom necessarily represent a single organisation or organisation unit.
- The circle may consist of a core team and a slightly larger group of experts that varies depending on the pilot.
- The combined competences of the Circle of Facilitators covers all those competence areas that are needed in productive operation of the development and experimentation platform.
- The circle thus is dynamic in nature, and as the platform activities expand, it will change and evolve.

As the development and experimentation platform activities and the first pilots are launched, the members of the Circe of Facilitators are likely to include, in addition to social and health services professionals, a representative of both Forum Virium Helsinki and Helsinki Business Hub. A new employee focusing on social and health sector business cooperation in Helsinki Economic Development Division will naturally be one of the key persons in the Circle of Facilitators. As the plan is that the services and service concepts to be developed and tested in the pilots will be deployed in Kalasatama health and wellbeing centre scheduled for opening in 2018, the main actors of the Kalasatama project will, especially in the first two years, participate actively in the Circle of Facilitators of the development and experimentation platform.

We propose that the Circle of Facilitators should be complemented as necessary depending on the pilot and the needs to reinforce the Circle's competence with representatives of other groups of actors. For example, the competence of a company offering integration services may be needed in the planning, implementation and evaluation of pilots of certain types (in this context, integration refers e.g. to the integration of electronic services offered by several companies into a single platform, in other words a single user interface; this makes service utilisation easier, especially for professionals). Similarly, some pilots may focus on developing service concepts in whose implementation third sector organisations have a larger role than Helsinki Department of Social Services and Health Care. In this case, the Circe of Facilitators should be complemented with a third sector organisation representative who has solid experience and competence related to the pilot's theme.

The customers and their needs are at the core of user-centered service design. Consequently, the earlier the customer is involved in designing the services, the better. We propose that the core actors of the Circle of Facilitators should consider when it is possible to invite resident representatives to participate in pilots already in the planning stage to ensure that their views would be taken into account when defining the development need and the change that the pilot aims for.

If necessary, the Circle of Facilitators could also be complemented with experts from research institutes, higher education institutions and other educational institutions. For example, they could contribute evaluation competence, which will be needed to evaluate both individual pilots and the development and experimentation activities as a whole.

2.3 Capabilities required of the Circle of Facilitators

In order to perform their bridge-building role, the members of the Circle of Facilitators must be familiar with the social welfare, health care and wellbeing service actors (organisations), and also be able to utilise their networks to identify those people in the relevant organisations whose inputs are needed to implement the development and experimentation platform and pilots. Solid networking competence is a fundamental capability of the Circle of Facilitators.

The roles of the communicator and the interpreter, on the other hand, require both competence in multi-channel communication and an ability to interpret the message of one group of actors, for example companies, into the language used by another, such as the social and health service professionals at health and wellbeing centres. Interpretation skills will be needed in all phases of the pilots from planning to evaluation, not only when talking to the organisations implementing potential pilots.

In the context of development and experimentation activities, the organiser must have an understanding of the user-centered design approach. In practice, this means mastering such areas as co-creation or service design methods, enabling the Circle members themselves to facilitate workshops that may be organised in different phases of the process. The Circe of Facilitators carries the main responsibility for the planning of co-creation and piloting processes (see Chapters 3 and 4), and it should thus have adequate expertise to assess the nature of each pilot it is dealing with.

For example:

- If the needs and daily lives of the target customer group are not know well enough, an explorative approach is needed at the beginning and more information should be obtained, for example by means of ethnographic methods. It may be necessary to organise co-creation sessions with both customers and professionals in order to get pointers for service concept development.

- If the service concept isadvanced when the pilot begins, on the other hand, the pilot will focus on testing, collecting feedback from both customers and professionals and, in more extensive and long-term pilots, also on versatile impact assessment.

In addition, the organiser's role requires strong project competence.

Reflection and evaluation are at the core of development and experimentation activities. In co-creation and piloting processes, evaluation is continuous rather than just focusing on the final phase. The process phases have several junctures where it is necessary to assess whether the process should be continued or dropped. Evaluation competence is also part of the most essential capability requirements placed on the *Circle of Facilitators*.

The importance of evaluation competence is highlighted by the fact that in 2016 - 2018, not only individual pilots but also the development and experimentation activities as a whole will have to be evaluated.

3 THE DEVELOPMENT AND EXPERIMENTATION PROCESS

3.1 Action research approach

In this section, we will start by describing the development and experimentation process in general terms, utilising the action research approach. See Figure 2 for the stages of action research.

In the initial situation assessment, the question/problem/need that is the starting point of the experiment is clearly identified among existing prior research or development projects together with different actors. The actors include social and health care sector experts, stakeholders, any company partners and, in particular, customers. The initial situation is described accurately from the perspective of different actors. Many types of data collection methods may be used in the mapping and identification of the initial situation, including document analyses, individual and/or group interviews (experts, customers), knowledge produced in workshops and/or knowledge gained through participatory activities.

On the basis of the initial situation and situational information, a plan is formulated for the experiment in order to find a solution for a selected problem and/or question. The plan contains tasks, goals, methods, an implementation plan and an evaluation plan. Documentation of the timeline, resources, ethical questions and the evaluation plan is also part of the plan. The plan is drawn up in as concrete terms as possible, allowing for its fluent implementation by the selected health centre(s) or other units. The plan also describes cooperation with selected companies and other actors. The guidance and orientation of different actors is also an elemental part of the plan.

The experiment is implemented in agreed and authentic situations at health centres or other similar operating environments. In the implementation phase, the actors work closely together during the experimentation process. The perspective of systematic evaluation is a vital part of the experimentation process; for example, this means that the monitoring and evaluation of the experiment are documented according to the plan. Any improvements or development measures are flexibly implemented and thoroughly documented.

The monitoring and evaluation of the experiment takes place according to the plan, ensuring that reflective evaluation, corrections, improvements and reforms can be carried out iteratively and nimbly in terms of the schedule. A report is written on the experiment according to the plan and based on the evaluation criteria. Various documentation methods are used to complement the report, including videos, stories, qualitative material, statistics etc.

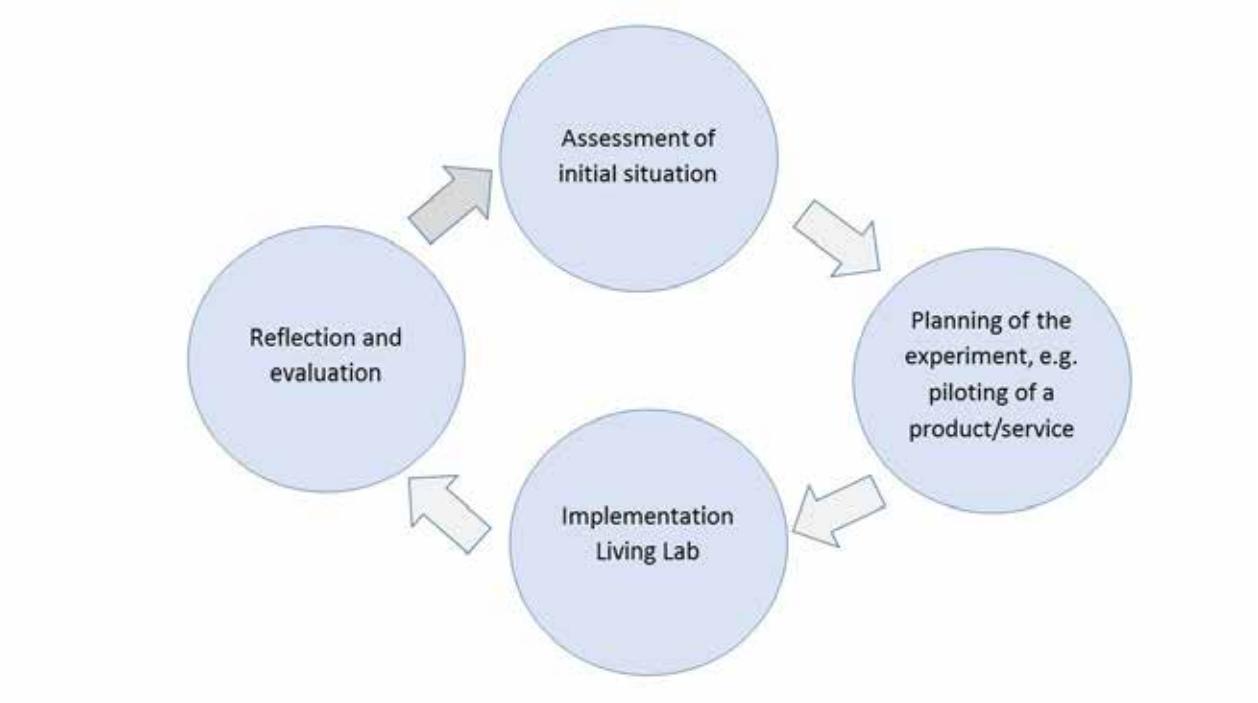

Figure 2. Action research approach in pilot implementation

3.2 Main phases of the development and experimentation process and the actors' roles in different phases

Figure 3 below describes the main phases of the development and experimentation process. In practice, each main phase contains several smaller steps. The structure of the development, an experimentation process presented in Figure 3 is generic, and an experiment carried out in any sector of the City of Helsinki would progress through the same phases. Chapter 4 contains a "recipe book" of development and experimentation activities, or a concrete and detailed proposal on how the planning, implementation and evaluation of a pilot could progress in the specific context of Kalasatama health and wellbeing centre.

1.	Definition of the need/challenge/development task
2.	Publication of the development task
3.	Actors register their interest in participating in the co-creation process and propose different approaches to developing and piloting new solutions
4.	Evaluation of proposals for developing a solution
5.	Planning of the co-creation process and/or pilot
6.	Implementation and interim evaluation of the co-creation process and/or pilot
7.	Final evaluation of the products of the co-creation process and/or pilot outcomes and decision on future activities
	Procurement process and competitive bidding

Figure 3. Main phases of the development and experimentation process

Figure 4 (page 13), on the other hand, shows the actors' roles in the different phases of a development and experimentation process. The Figure does not comment on which organisations should be represented in the Circle of Facilitators.

The Circle of Facilitators, either on its own or together with Helsinki social and health service professionals, has the main role in all other phases except 3, in which the actors submit their proposals for the co-creation and piloting processes. On the other hand, Helsinki Department of Social Services and Health Care together with the Circle of Facilitators have the main role in the following phases:

- definition of the need, challenge and/or development task (phase 1)
- evaluation of proposals for developing solutions (phase 4)
- implementation of co-creation processes and pilots, interim evaluations (phase 6)
- final evaluation and decision on future activities (phase 7).

In addition, Helsinki Department of Social Services and Health Care participates in the publication of the development task (phase 2). Social and health service professionals may also themselves send in proposals for the types of concepts that should be developed or practices that should be piloted in order to resolve the need (phase 3). The professionals naturally also participate in preparing the piloting plan. The collection of customers' views may already start in the first phase as the development task is defined. Customers are also invited to propose solutions (phase 3). The co-creation process or pilot cannot be carried out without customer participation (one of the main roles in phase 6). Customer experiences and further development ideas are the basis of both the interim and the final evaluation (phase 7).

Third sector organisations and companies have the main role in phase 3, Submitting proposals for developing and piloting solutions. Information from these actors may also be requested in phase 1 to establish what solutions are already on offer. Third sector organisations and companies selected as co-creation and piloting partners take part in the planning, implementation and final evaluation of the pilot (phases 5, 6, and 7).

The role of other agencies in the City of Helsinki is similar to the roles of third sector organisations and companies. It is likely that in pilots implemented in 2016—2018, other agencies of the City may propose solutions in phase 3 that will be included in the piloting of more extensive solution packages. The other agencies would in that case participate in the planning, implementation and final evaluation of the pilot together with other organisations implementing it (phases 5, 6 and 7).

Helsinki Economic Development Division, Helsinki Business Hub and Forum Virium Helsinki will participate in the development and experimentation process as experts when needed. Figure 3 suggests that, in particular, the expertise of these units should be utilised in phases 1, 2, 4 and 7.

Higher education institutions and other educational institutions, universities and research institutes will take part in the process as required and usually based on a separate agreement (phases 1, 4, 5, 6, and 7). They can submit proposals for developing solutions similarly to other actors when the development task is made fully public to all stakeholders (phase 3).

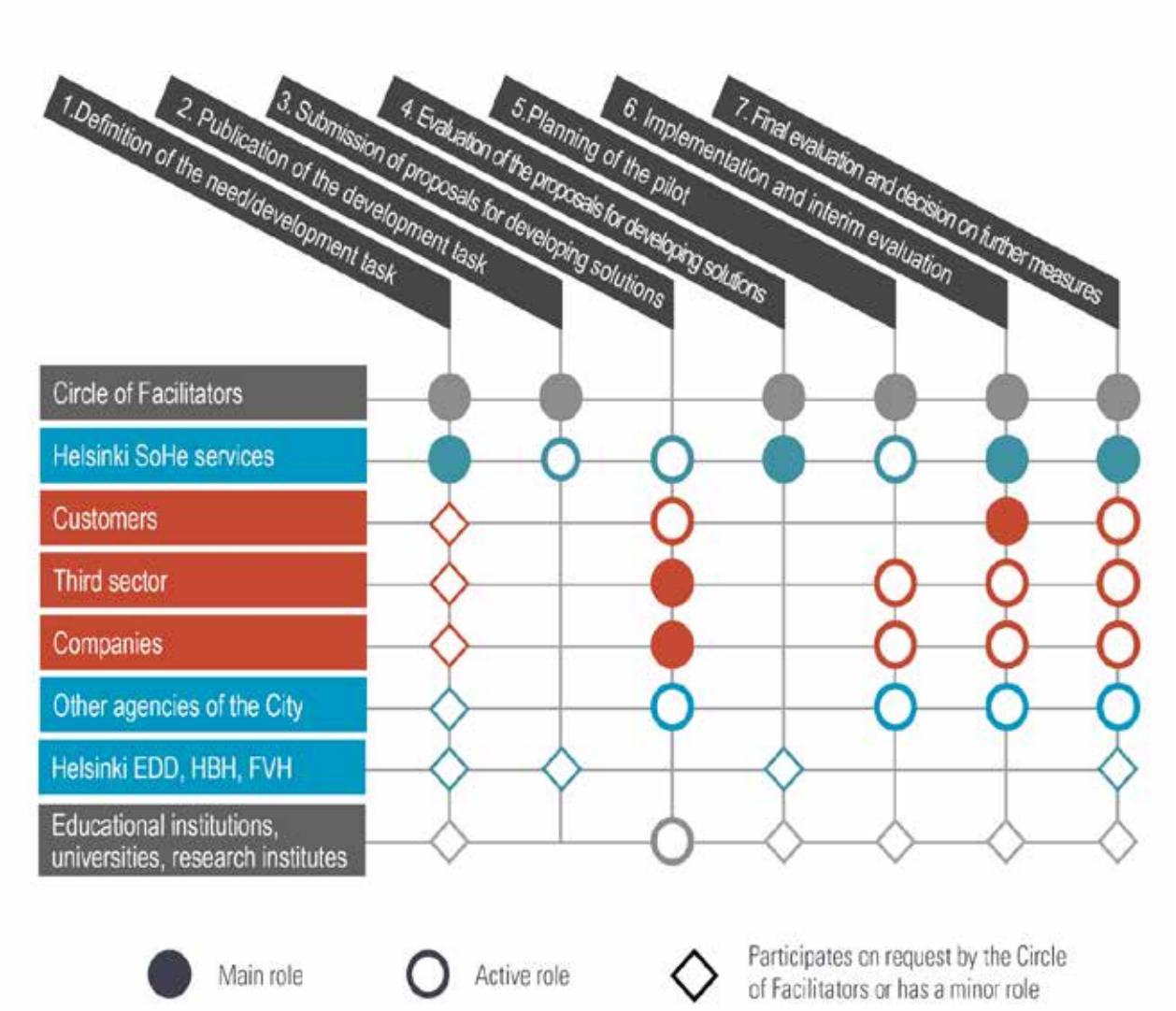

Figure 4. The actors' roles in different phases of a development and experimentation process

4 DETAILED DESCRIPTION OF THE CO-CREATION AND PILOTING PROCESS

This Chapter strives to describe the co-creation and piloting process in the style of a "recipe book". In practice, the co-creation and piloting processes or projects will differ from each other. The recipe should thus be "customised" for each project to produce a successful end result.

The following will also be needed to add spice to the recipe:

- enthusiasm and innovativeness,
- a development-oriented approach,
- tolerance of risks and uncertainty, and
- joy of learning, including the joy of learning from failures.

The "recipe book" contains seven sections: each main phase of the development and experimentation process is described in its own table. The following abbreviations are used for the actors:

- CF: Circle of Facilitators
- SoHe: social and health service professionals
- Cst: customers participating in development and experimentation activities
- 3sec: third sector organisations
- Comp: companies
- HOther: Other agencies and units of the City of Helsinki
- HEDD: Helsinki Economic Development Division
- FVH: Forum Virium Helsinki
- HBH: Helsinki Business Hub
- RDI: educational institutions, higher education institutions, universities, research institutes.

In the following tables, the rows shown in blue are important junctures where a decision is made on whether the process will continue on the development and experimentation platform or not. However, a development process may also continue as an internal project of the City.

The rows shown in red are junctures where the process is interrupted.

Participates	Main responsibility	What needs to be done?
	SoHe	Identification and initial description of the need/challenge/development task
SoHe	CF	Adding detail to the description, especially to ensure that the change aimed for is recorded clearly both from the viewpoint of customers and professionals.
CF	SoHe	Initial evaluation of the challenge/development task using the indicators in Appendix 1.
		RESULTS OF THE INITIAL EVALUATION: average score less than three => Not worth continuing the process at this stage
RDI	CF	Average score of three or more, the process continues: Mapping of the current status: what research information already exists on the issue? Possibly, inquiries addressed to research institutes, universities and higher education institutions
SoHe Cst	CF	Mapping of the current status: Is enough information available about the customers' needs and daily lives? If not, a decision is made on whether or not more information should be gathered before the development task is made public.
HBH,FVH, HOther	CF	Mapping of the current status: what kinds of experiments may already have been carried out elsewhere in Finland or abroad?
Comp HEDD FVH,HBH	CF	Mapping of the current status: what kinds of solutions are already in the market or being developed by start-ups? An initial mapping of companies; if necessary, initial inquiries with companies.
	SoHe	DECISION after the current status mapping: will a co-creation or piloting process be launched or not?
		IF not, the process ends. It may be possible to skip directly to the procurement phase if validated solutions are already available in the market. Or a decision is made to resolve the development task by the professionals and customers of the City.
Sohe	CF	The process continues: Development task description is complemented by drawing on the information collected in the current status mapping: a description is produced of the change aimed for, the customers and the participating SoHe professionals; an initial proposal concerning the scope and duration of the project is drawn up, and the types of external actors that could be potential implementers of the co-creation or piloting process are described.
CF	SoHe	Initial practical implementation plan of the co-creation or piloting process: which areas, which health centres, which SoHe professionals
SoHe	CF	An initial cost estimate (including the working time input of SoHe professionals, initial estimate of any equipment and material costs) and funding options
HOther	CF	Consultation with procurement legislation experts
	SoHe	DECISION after a more detailed development task description and an initial budget have been produced: will the development task be made public to outsiders?
		IF not, the process ends, or a decision is made to resolve the development task by the professionals and customers of the City.

TABLE 1. DEFINITION OF THE NEED/CHALLENGE/DEVELOPMENT TASK

Participates	Main responsibility	What needs to be done?
CF	SoHe	A decision on the degree of openness of the publication: Should the development task be made fully and openly public, for example on the website of the City? Or should proposals for developing solutions only be requested from a limited group of actors, for example by e-mail or an invitation to a workshop?
SoHe	CF	Preparation of a publication plan for each target group: customers, SoHe professionals of the City, other employees of the City, companies, third sector organisations, research institutes, universities, higher education institutions and other educational institutions. If necessary, a separate publication plan for those health centres where the co-creation or piloting process will be implemented. Planning of the publication channel: electronic communication, potential workshops. Instructions for preparing suggestions for developing solutions, for example an eForm, other document template.
SoHe FVH	CF	Organisation of potential workshops for actors interested in the development task (both City employees and external actors)
	CF	After publication, answering the questions of actors interested in the development task before the deadline for submitting suggested solutions.

TABLE 2. PUBLICATION OF THE DEVELOPMENT TASK

Participates	Main responsibility	What needs to be done?
Cst SoHe HOther RDI	Comp 3sec	All actors interested in resolving the development task submit their proposals to the *Circle of Facilitators*.

TABLE 3. SUBMITTING PROPOSALS FOR DEVELOPING A SOLUTION

Participates	Main responsibility	What needs to be done?
FVH HBH RDI	SoHe CF	The submitted proposals are evaluated using the indicators in Appendix 1. The resources required for implementation are also taken into account in the evaluation (personnel working time, other costs); compared to initial cost and funding budget.
SoHe FVH RDI	CF	Feedback on the proposals is also requested from the staff at the health centres were the co-creation or piloting process is to be carried out. If necessary, the proposals can already be presented at this stage to the target group of the new services (for example, a so-called co-creation workshop can be organised, where the customers can develop the proposals further or create completely new proposals for solutions); participation of e.g. FVH, RDI actors in workshop implementation.
SoHe	CF	The proposals of different actors may be combined and merged to form more comprehensive concepts, in which case the parties having submitted the proposals should be talked to, or a workshop should to be organised where several proposed solutions are discussed simultaneously, striving to develop a new, broader service concept or operating model.
	SoHe	DECISION After the proposals for developing a solution have been EVALUATED: a) the proposed solution that best meets the evaluation criteria goes further; in other words, an implementation plan for a co-creation and/or piloting process is formulated; b) it is necessary to go back to phase 1 (definition of the development task); c) the process is dropped.
		IF none of the proposed solutions adequately meets the evaluation criteria and redefining the development task is not necessary, the process ends here by decision of SoHe.

TABLE 4. EVALUATION OF PROPOSALS FOR DEVELOPING A SOLUTION

Participates	Main responsibility	What needs to be done?
Sohe Comp 3sec HOther RDI	CF	Action plan: the change aimed for and other goals; customers participating in the experiment (description and plan for identifying and motivating the customers), health centres and their personnel as well as other social and health service employees in Helsinki (description and plan for motivating), measures and responsibilities for implementing them, timeline. All implementing parties participate, especially close involvement of personnel representatives of the health centres participating in implementation is necessary
SoHe Comp 3sec HOther	CF	Cost and funding budget
SoHe Comp 3sec HOther RDI	CF	Evaluation plan: evaluation criteria, sets of indicators, methods, documentation of material; interim and final evaluation; responsibilities and division of labour of different actors in the evaluation; publicity of outcome reports. The evaluation plan covers the evaluation of both individual pilots and the development and experimentation platform activities as a whole. All actors involved in the relevant process participate in preparing the evaluation plan; in addition, RDI actors participate as experts if necessary.
SoHe	CF	Communication plan: information activities as the co-creation and piloting process begins, during the process and at its conclusion, both within Helsinki SoHe services and the entire City, to other actors participating in the process, to actors participating in phase 2, to other limited target groups and the so-called general public.
HOther:	CF SoHe	Minor procurement or lease contracts of the equipment and software needed to implement the pilot, purchasing contracts of services, consultation of procurement experts
Comp 3sec HOther	CF	IPR (Intellectual Property Rights) agreements, consultation with lawyers if necessary
SoHe Comp 3sec HOther RDI	CF	Agreements on the different actors' duties and division of responsibilities in pilots (including the distribution of any equipment to customers, transfer agreements, user instruction, functionality of equipment, responding to problem situations, liaising with the customers, returning and checking the condition of the equipment, acknowledgements of returns)

TABLE 5. PLANNING OF THE CO-CREATION OR PILOTING PROCESS

Participates	Main responsibility	What needs to be done?
Comp 3sec HOther RDI	SoHe Cst CF	Practical implementation following the action plan
SoHe	CF	Implementation of the communication plan
SoHe RDI	CF	Implementation of the interim evaluation
Comp 3sec HOther RDI	CF SoHe	Analysis of the interim evaluation results and conclusions: can the process be continued according to the plan, are the interim results sufficiently encouraging, are changes needed in the implementation; for example, do some elements need to be added to the service concept
	SoHe	DECISION on how to continue or whether the process should be dropped
	CF	IF a decision is made to drop the process, the implementation of the experiment is documented. Feedback is collected on development and experimentation platform activities.
		IF no changes are needed in the implementation plan after the interim evaluation, the process continues.
	CF	IF changes are needed in the implementation plan after the interim evaluation, phase 5 needs to be revisited to some extent and the necessary changes need to be made in the implementation and other plans.

TABLE 6. IMPLEMENTATION OF THE CO-CREATION OR PILOTING PROCESS INCLUDING INTERIM EVALUATIONS

Participates	Main responsibility	What needs to be done?
	CF	Implementation of final evaluation
Comp 3sec HOther RDI HEDD FVH HBH	CF SoHe	Analysis of the final evaluation results and conclusions. Talks between actors that participated in the process on any further phases.
SoHe	CF	Collecting feedback on the development and experimentation platform activities from actors who participated in the process. Analysis of the results and conclusions.
	SoHe	DECISION on what to do after the final evaluation and discussion on the conclusions: a) things learned from the co-creation or piloting processes are noted and no further measures are taken, b) a decision is made on how the development of the piloted service concept will be continued based on the feedback, c) a decision is made to proceed to the procurement process.

TABLE 7. FINAL EVALUATION OF A CO-CREATION OR PILOTING PROCESS AND DECISION ON FURTHER ACTION

5 PRECONDITIONS FOR SUCCESSFUL OPERATION OF THE DEVELOPMENT AND EXPERIMENTATION PLATFORM, FUNDING ALTERNATIVES AND VALUE PROPOSITIONS

The building of the development and experimentation platform consists of many steps and has many funding options. This report concentrates on the early part of the platform's life span in 2016–2018, during which period the platform will be built, its operation will be launched, and the operating concept will be piloted in the City's own organisation.

By goal-oriented development of the capabilities and other preconditions associated with development activities, a reference platform of an international standard may be created that will also bring revenue to the City in the 2020s.

Preconditions for launching the activities and putting them on a permanent footing include

- commitment by the top management and policy-makers
- funding
- working time of SoHe employees and management
- adequate scope
- careful (impact) assessment
- development of the operating concept: a process for professionals, a customer process
- customer identification
- capabilities for co-creation
- multi-channel communication
- utilising so-called lead users in each customer segment.

Depending on the objectives of co-creation, all parties to the development and experimentation platform will contribute their competence, working time, equipment or other material or immaterial inputs of economic significance to pilot implementation as specifically agreed in each case. Fundamentally, funding will be needed for the operation of the platform in all stages of its lifespan. In the early phases, this will consist of basic funding (budgets) and complementary project funding.

The parties will expect to see the benefits (see value propositions) realised in proportion to their inputs. The basic funding may be characterised as an investment or an input in the development of the organisation's own activities, and it is thus part of each organisation's basic budget.

Basic funding from the City will secure the work inputs and the competence of the Department of Social Services and Health Care and, if necessary, other agencies of the City. Without these inputs, the development and experimentation platform cannot work. The agency's budget should also allocate funds to different procurements needed in the development and experimentation activities, purchases of services or, for instance, prizes for competitions.

Project funding will be applied for by the actors in different compositions, and the applications will be addressed to different funding programmes (Innovation Fund, Tekes, foundations, Ministries, international funding programmes including Horizon, Interreg, Nordic Innovation etc.). Obtaining funding will, however, always be uncertain. While a co-funding share is sometimes required to obtain project funding, 100% financing intended for co-creation is available in the EU's Horizon programme (the world's largest RDI programme, a total of EUR 80 billion subject to competition).

Forum Virium Helsinki, research institutes and higher education institutions usually carry the greatest risks associated with the preparation of applications for project funding. They will also apply for funding for implementing the objectives cited in this report without the involvement of the City. The participation of the City of Helsinki in a funding application as a major and natural beneficiary will increase the possibilities of the funding application being accepted.

As shown by encouraging international examples (e.g. Amsterdam, Stockholms Läns Landstinget SLL Innovation), it is possible to turn the development and innovation platform into an attractive international reference platform that sells the testing and development services produced by the platform for a fee. The establishment of a joint (legal) unit that puts the activities on a permanent footing would give the platform a long-term and stable character. This would be take place in the form of a foundation set up for a fixed term, of which experiences have already been gained (Helsinki Design Capital or Clean and Smart City) and which would be co-funded by the different actors (central government 1/3, municipality 1/3 and companies 1/3).

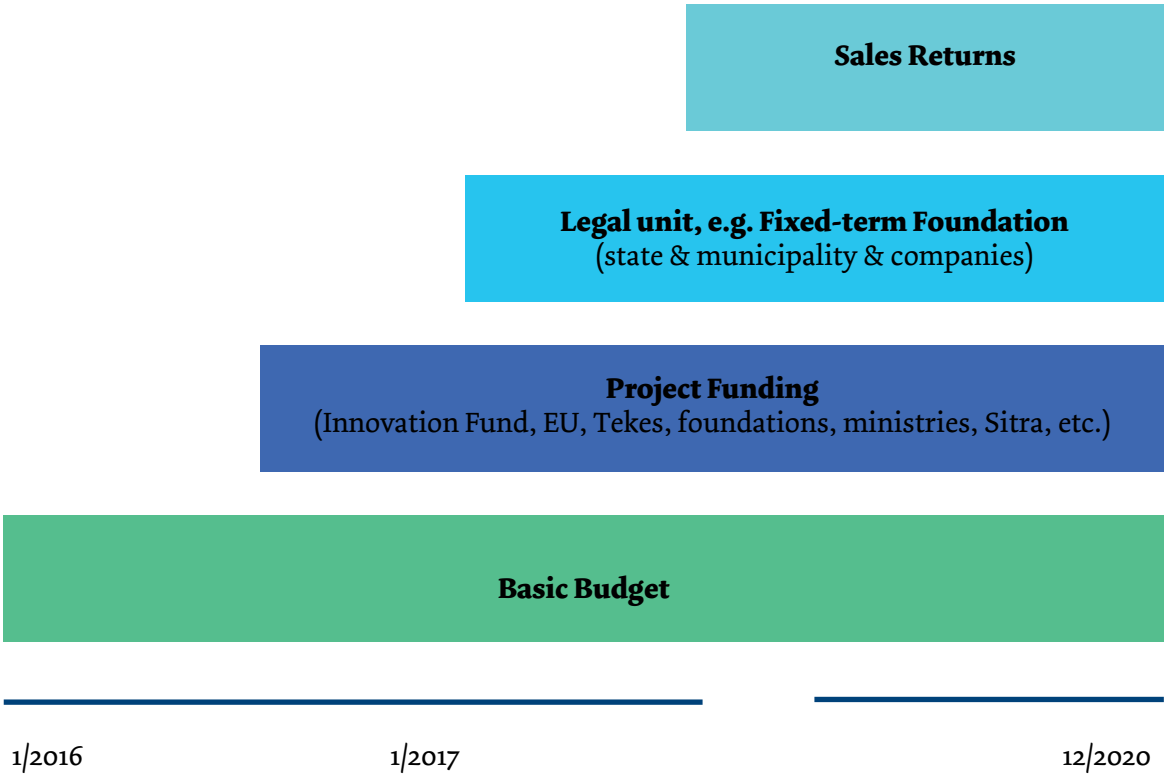

Figure 5. Funding alternatives for development and experimentation platform activities

Value propositions of the development and experimentation platform

Linking value propositions consistent with the service logic to the development and experimentation platform operating model will facilitate the formulation of a joint view and promote co-creation with partners and customers. The partner's and/or the customer's world and their dream of the value produced by the cooperation is then examined from the perspective of the City's agency, customer and/or the partner alike. From the perspective of the Department of Social Services and Health Care, the value proposition helps to structure the customer's and the partner's everyday life and the context of their activities, and to group them on this basis. From the perspective of the partner and/or customer, the value proposition answers the questions of why the partner is using the development and experimentation platform, why the customer is using the services, and what benefits they are seeking. Cooperation on the development and experimentation platform will produce both actor-specific (Table 8) and generic added value. The cooperation will create added value that benefits all partners, including:

- Identification of future mega trends and opportunities and creating a joint meaning and vision for the activities.
- Producing brokering services in Finland and internationally (Partnerships with national and international companies, the public sector, researchers and user communities).
- Innovation based on multidisciplinary co-creation, creativity, testing, evaluation and exploration, and the commercialisation and spreading or innovative deployment of new solutions.
- Validation and impact studies.
- Development of services and service processes.
- Improving personnel competence and development capabilities.
- Utilisation of design and user-centric tools and a participatory action research method (gives access to the patient's daily life).
- Gathering situational information and using it to support decision-making.
- Development and utilisation of modern guidance and advisory methods (including virtual empowerment, gamification, multisensory learning).
- Opening up channels of influence to remove bottlenecks – so-called Policy Recommendations.
- Opening of business opportunities and development of business models.
- Showroom and Road Show services.

See Table 8 (page 22) for the value propositions of the development and experimentation platform for different groups of actors.

SoHe services	The development and experimentation platform is an instrument of continuous renewal based on co-creation and used to find new services and processes that will improve the productivity, impact and accessibility of social and health services. Co-creation can rapidly reach thousands of customers and mainstream knowledge related to self-care, empowering the customers and ensuring their commitment to self-care.
The City	The development and experimentation platform actors promote national health, and the platform makes the City recognisable and attractive as a target for investment, location for companies, and home for experts. Co-creation is a way of encouraging more residents to participate and develop the City's activities.
Taxpayers	The development and experimentation platform accelerates sustainable economic growth and the creation of new jobs as well as increases tax revenue.
Health and wellbeing centre customers	The development and experimentation platform promotes the accessibility of services, improves the efficiency of the development and deployment of patient/customer-centric services, and helps the residents to make principles that promote good health and a good life reality in their own lives and daily choices.
Third sector	As a result of cooperation on the development and experimentation platform, the wellbeing of the association's/organisation's members improves and the organisation's operating models and concepts develop, the members can make their voices heard, and the impact of the organisation's services improves. Cooperation is a way of reaching new partners that bring added value to the organisation's members and attracting more people who will develop the activities and participate in them.
Start-ups	The development and experimentation platform provides start-ups feedback on impact that enables further development of the product/service/technology/solution and the company's operating concept to meet the demand and end user needs. The experimentation phase provides the start-up with a reference that will help to find and convince customers and funding providers.
SMEs	The development and experimentation platform offers the company a research-based reference endorsed by the City of Helsinki brand that will help to reach and convince new customers and promote sales and exports.
Large companies	The development and experimentation platform helps to identify new uses for existing products/services/technologies and promotes the development of new demand-driven and user-centered business.
Educational institutions, higher education institutions and research institutes	The development and experimentation platform produces demand and needs driven knowledge to support the development of education, data for research, customers for business services and partners for developing export activities.
For companies in the 2020s	"A well-being exchange where demand, supply and research-based knowledge meet." Against a fee, the development and experimentation platform offers test-bed or co-creation services (living lab) and a showroom on the turnkey principle.

TABLE 8. VALUE PROPOSITIONS OF THE DEVELOPMENT AND EXPERIMENTATION PLATFORM FOR DIFFERENT GROUPS OF ACTORS

6 ROADMAP FOR PILOTS IN 2016 - 2018

In keeping with the instructions provided for the consultation work, we are proposing an initial content-related/thematic roadmap for the pilots and a group of potential implementers. At the kick-off meeting of the consultation work, it was concluded that 3–5 pilot proposals would be a sufficient number.

While the consultation work was in progress, steering group member Lars Rosengren described a total of 13 areas of needs that he finds important targets for development and piloting activities in the context of Kalasatama health and wellbeing centre (HWC). On the basis of the consultation work and steering group discussions, five areas of needs were selected, and a decision was made to place the pilots in these:

1. Empowering customers and ensuring their commitment to their own treatment and rehabilitation process and independent promotion of health
2. Services that support the customer in coping at home after a service contact with the HWC
3. Innovative local services
4. Agile consultation and communication equipment and methods both between professionals and between professionals and customers.
5. Expanding the service package/palette with the services offered by partners.

The roadmap for pilots comprises six proposals that cover the aforementioned areas of needs as set out in Table 9.

Pilot name	1	2	3	4	5
Get moving	x				x
Easier everyday-life for patients with long-term illnesses	x	x		x	x
Help at home after a HWC service contact for patients who have become ill unexpectedly		x		x	x
Analysis of worries and digital empowerment, 24 h	x		x		x
Pop Up DIY Wellbeing Point/Showroom			x		
How to take care of yourself in your new home city?			x		x

TABLE 9. PLACEMENT OF PILOTS IN THE SELECTED AREAS OF NEEDS

The descriptions of the pilots consist of the following elements:

- customers
- the change that is aimed for
- social and health service professionals specifically involved in the relevant pilot
- scope of the pilot (number of customers, number of health centres)
- pilot timing and duration
- potential companies
- potential third sector organisations
- potential other agencies and units of the City of Helsinki
- potential research institutes, higher education institutions and educational institutions.

We would like to stress that the list of potential implementing partners is very preliminary. It was only possible to map some of all actors to whom the pilot themes were relevant during the consultation work. The field of actors is also in constant flux, and new innovative actors whose development ideas and initial service ideas could be highly suitable, for example for pilots launched in 2017, are entering the market at an increasing speed. Consequently, we suggest that all pilots should be published openly to ensure that all current and new actors could submit their proposals for developing solutions.

In the pilot descriptions, all potential actors are listed in an alphabetical order by actor type. See Appendix 2 for a short description of potential business sector actors.

The following pages 25 - 30 contain descriptions of the pilots in a concise table format.

Pilot name	Get moving
Customers	Those who do not take exercise, overweight customers, may have mental health and/or intoxicant abuse issues or problems with life management in general; also suitable for those needing rehabilitating exercise after being injured (SoHe personnel will identify customers to be invited to participate in pilot and/or an invitation is sent to customers of a certain age living in a certain area; addresses obtained from the Population Information Register)
Change that is aimed for	The customers become enthusiastic about exercising alone, with friends and family or in a peer group; monitoring data submitted electronically to professionals; guidance and encouragement of professionals provided remotely (in addition to potential meetings)
SoHe personnel	In the identification phase: doctors, nurses, physiotherapists, social services professionals; in the implementation phase: physiotherapists, public health nurses, sports instructors
Scope	At minimum 100 customers per health centre/area; several health centres involved (at minimum 5)
Timing and duration	Early 2016, minimum duration 6 months
Potential companies	HealthFox Oy, Miils Oy (nutrition), Movendos Oy, Traxmeet Oy, Wellmo Oy, etc. as suppliers of digital services
Potential third sector organisations	Residents' associations, sports clubs and associations, etc., for example in the organisation of peer groups and provision of social support
Potential other agencies and units of the City of Helsinki	The Sports Department, e.g. organisation of peer groups and social support, possibly to provide training for third sector organisations and volunteers for leading peer groups
Possible research institutes, higher education institutions and other educational institutions	Aalto, Arcada, DIAK UAS, Haaga-Helia UAS, Laurea UAS, Metropolia UAS, Helsinki Vocational College, National Institute for Health and Welfare, UKK Institute

Pilot name	Easier every-day life for patients with long-term illnesses
Customers	Adults with long-term illnesses who visit the health centre frequently because they are uncertain about their state of health and the instructions given to them; treatment of the illness requires regular monitoring and measurements, and possibly reviews of care instructions and medication
Change that is aimed for	The customer performs at least some of the regular measurements at home; the results are submitted to professionals electronically, the professional monitors the results and comments on them for the customer; potentially also automatic alerts triggered by the measurement results; if necessary, a remote connection that enables motivating and resource-oriented dialogue between the customer and the professional. To support empowerment, peer group activities either through meetings or online discussions organised by the third sector.
SoHe personnel	Doctors and nurses, other social services and health care experts as indicated by the customer's life situation
Scope	Initially 50 customers, number to increase gradually, for example the customers of two health centres
Timing and duration	Late 2016 - early 2017; minimum duration 6 months
Potential companies	Ciegus Oy, Elisa Oyj, Medixine Oy, Wexma Oy, depending on the target group, for example Beat2Phone Oy, iSTOC Oy, Sensotrend Oy, and other companies offering digital services
Potential third sector organisations	Helsinki Missio, Organisation of Respiratory Health in Finland, Finnish Central Association for Mental Health, Finnish Heart Association and others to organise peer support
Possible other agencies and units of the City of Helsinki	
Possible research institutes, higher education institutions and other educational institutions	Aalto, Arcada, DIAK UAS, University of Helsinki, Laurea UAS, Metropolia UAS, Centre of Excellence on Social Welfare in the Helsinki Metropolitan Area, Helsinki Vocational College, National Institute for Health and Welfare

Pilot name	**Help at home after a HWC service contact for patients who have become ill unexpectedly**
Customers	Customers having visited the HWC because of a sudden illness, accident, traumatic experience or a certain procedure who need further procedures at home to regain their health
Change that is aimed for	The need for follow-up visits is reduced or even eliminated as the customers can independently take care of further procedures and their rehabilitation using remote consultation devices; professionals encourage and guide the customer if necessary
SoHe personnel	Doctor, nurse, psychiatrist, psychologist, psychiatric nurse
Scope	First pilot 3 months, 30 customers per health centre, 2 - 3 health centres, expanded as indicated by experiences gained
Timing and duration	Early 2017, at minimum 6 months
Potential companies	Carecode Oy, Digital Identity Solution Europe Oy (Patient21 service), Elisa Oyj, HealthFOX Oy, Medixine Oy, Noona Healthcare Oy, Praecom Oy, etc.
Potential third sector organisations	Selected based on the preferred targeting of the pilot
Possible other agencies and units of the City of Helsinki	
Possible research institutes, higher education institutions and other educational institutions	Aalto, Arcada, Diaconia UAS, University of Helsinki, Laurea UAS, Metropolia UAS, National Institute for Health and Welfare, Finnish Institute of Occupational Health

Pilot name	Analysis of worries and digital empowerment, 24 h
Customers	Customers who need plenty of social and health care services, customers in need of extra care, customers worried about their own or their family member's coping, customers who feel unsafe and/or lonely
Change that is aimed for	Supporting the finding of solutions for customers' life situations that cause them to worry by ensuring that help can be obtained rapidly 24 hours a day without a visit to emergency services or making an appointment with a health centre or a social services professional. Empowering the customer by means of rapid assistance and, for example, peer support.
SoHe personnel	Doctors, nurses, social services professionals
Scope	30 customers at the start, gradual expansion
Timing and duration	Late 2017 - early 2018
Potential companies	Elisa Oyj, Heimo Community, Lumi Interactive Oy, Medixine Oy, etc.
Potential third sector organisations	Helsinki Missio, Finnish Central Association for Mental Health, parishes etc.
Possible other agencies and units of the City of Helsinki	All
Possible research institutes, higher education institutions and other educational institutions	Aalto, Arcada, Diaconia UAS, University of Helsinki, Humak UAS, Laurea UAS, Metropolia UAS, Centre of Excellence on Social Welfare in the Helsinki Metropolitan Area, National Institute for Health and Welfare

Pilot name	Pop Up DIY Wellbeing Point / Showroom
Customers	Customers who visit the City's service points (incl. service points of the Department of Social Services and Health Care), shopping centres, exhibitions, events, restaurants, libraries, service stations, swimming pools etc. where a Pop up Do-It-Yourself point or a Pop up Showroom can be set up; those who seek for answers to questions niggling them or tips and ideas related to the precise theme on which the Pop up service point in question focuses.
Change that is aimed for	A method of giving the customers ideas and tips that is as agile and fast as possible. The customer has easy access to information about his or her state of health by using the instruments at the Pop up point. Making increasing numbers of customers aware of eServices. The customers can also give feedback and development ideas to social welfare, health and wellbeing services. The Pop up service point may be tailored to the special needs of a certain customer group if necessary. The Pop up service point is built around a certain theme, and the change that is aimed for is defined more accurately for each theme.
SoHe personnel	Depending on the theme of the Pop up service point
Scope	Several Pop up service points at different locations
Timing and duration	Late 2017, duration 6 months
Potential companies	Depending on the theme of the Pop up service point, also other technology companies besides health sector ones, service design companies, game sector companies etc.
Potential third sector organisations	Depending on the theme of the Pop up service point
Possible other agencies and units of the City of Helsinki	Depending on the theme of the Pop up service point
Possible research institutes, higher education institutions and other educational institutions	Aalto, Arcada, DIAK UAS, Haaga-Helia UAS, Laurea UAS, Metropolia UAS, Helsinki Vocational College, National Institute for Health and Welfare, UKK Institute

Pilot name	How to take care of yourself in your new home city?
Customers	All immigrants and asylum seekers having arrived in Helsinki in the last 12 months; also suitable for foreigners who live in Helsinki some of the time or temporarily and who are working or posted in the Metropolitan area
Change that is aimed for	Flexible and rapid access to information as part of the integration process; health examination and an electronic mapping of the life situation, referrals to further measures that may be needed based on the results
SoHe personnel	In the planning phase, professionals of both the health care and social welfare sector will participate as content producers/content production leaders
Scope	Electronic platform, not associated with a certain area or health centre; information activities will influence the extent to which target group representatives will be invited to participate in the pilot
Timing and duration	Early 2016; if the experiences are positive, the project will continue and be expanded
Potential companies	Elisa Oyj, Lumi Interactive Oy, Medixine Oy, etc.
Potential third sector organisations	Residents' associations, parishes, Finnish Red Cross, sports clubs and associations etc.
Possible other agencies and units of the City of Helsinki	All, as required
Possible research institutes, higher education institutions and other educational institutions	Aalto, Arcada, DIAK UAS, University of Helsinki, Humak UAS, Laurea UAS, Metropolia UAS, Centre of Excellence on Social Welfare in the Helsinki Metropolitan Area, Helsinki Vocational College, National Institute for Health and Welfare

Appendix 1. Evaluation criteria

	1	2	3	4	5
Impact on productivity					
Impact on the influence of treatment					
Impact on accessibility					
Impact on narrowing health gaps					
Impact on social welfare and health care service integration					
Generic nature of the pilot in terms of developing the entire health and wellbeing centre concept and operating method					
Potential for finding a solution that integrates actors in several sectors (i.e. companies, third sector, other agencies of the City, educational institutions)					
Strengthens the competiveness of the companies and third sector organisations participating in the pilots, and thus enables the increase in turnover and personnel.					

TABLE 10. PILOT EVALUATION CRITERIA, SCALE 1 - 5, MAXIMUM SCORE 5.

Appendix 2. Examples of potential companies to implement pilots

The services of 12 companies are described below. These can be regarded as examples of the type of services that are already available or that are about to enter the market. Some of the companies are in the start-up stage, and the development of their products and services is partly on-going. On the other hand, some are companies that have been operating for extended periods and that wish to develop their offer further, gearing it to the health and wellbeing service market. The companies are listed in an alphabetical order. Representatives of all the listed companies were met, or they were contacted by telephone during the consultation work.

Beat2Phone Oy

10 % of the population have cardiac symptoms, including sensations of arrhythmia. These are often difficult to diagnose as the symptoms only occur at times. Beat2phone solves this problem. This light, easy-to-use and inexpensive mobile device measures the user's heartbeat with high accuracy, shows it on the phone in real time, gives an alert if prompted by the findings, and sends the data to a cardiologist automatically through a cloud service.

Possible applications: The device enables the development of less expensive, more efficient and more accurate health care concepts, for instance for the screening and diagnostics of risk groups. The device is also highly suitable for assisting the monitoring and rehabilitation of heart patients after discharge from hospital. The devices may be purchased by consumers or lent to patients at the health centre/hospital. In home care for the elderly and health care in the developing world, the device offers an inexpensive alternative for carrying out reliable, real time cardiac examinations remotely. The device has been tested in patient examinations at Turku University Hospital. Beat2phone was a finalist in the WIN 2015 start-up competition organised by Deutsche Telekom in autumn 2015. The company was selected to take part in the autumn 2015 programme of health technology accelerator Vertical Accelerator.

www.beat2phone.com
Panu Helistö, panu.helisto@beat2phone.com, tel. +358 (0)40 578 3577

Carecode Oy

Carecode is a versatile communication solution for healthcare organisations. Healthcare actors use our software for remote communication with patients or other professionals. Our service facilitates versatile communication (messaging, images, video links, queries). Our customers are large and medium healthcare organisations, for example those providing primary healthcare, care services and occupational health care services.

In patient communications, our solution enables easy-to-manage remote communication with selected patients. Patient messages are directed to a waiting room where pre-defined professionals can pick up their cases. In communication between professionals, we enable low-threshold consultations in patient care and efficient and secure communication between care teams. Our service also enables remote appointments based on a video link and preliminary data. The case management tools facilitate straightforward communication even in extensive use and complicated treatment chains.

Our customers particularly appreciate Carecode because it is easy to deploy and use. The new work flow in our service means that Carecode does not need to be integrated to the patient information system. The summary tool makes it easier to produce summaries of remote communication.
We believe in learning from experience and taking new services forward through successes, beginning with limited deployment. We will support you in all deployments and offer first class product support.

www.carecode.fi
Heikki Tarkkila, heikki@carecode.fi, tel. +358 (0)50 1478

Ciegus Oy

The AVO® service developed by the company is an innovative and very easy to use, diary-based reminder, messaging, information gathering and response service for healthcare and social welfare professionals. AVO® reduces workloads and supports health care staff in the coordination, allocation and timing of resources and procedures. Professionals from different organisations can be linked to AVO® support, regardless of what information system they use.

AVO® support aims for the best possible customer support, regardless of the time and place. Customer-specific calendar events that provide reminders and motivation and, if necessary, collect essential information on the customer, are prepared in cooperation with the customer and their friends and family if necessary. The customers (and their friends and family) can install the service on the mobile phones, smartphones or tablets they are already using.

Service use is easy - the main view is the familiar calendar. Administrative work can be carried out within the normal working hours - yet AVO® serves the customer 24/7. The service is protected by "banking standard" encryption, and it meets the requirements of the Medical Devices Directive.

www.ciegus.com
Kari Paukkeri, kari.paukkeri@ciegus.com, tel. +358 (0)400 897 014

Digital Identity Solutions Europe Oy (DISE)

The Patient21 mobile application developed by the company facilitates and improves communication between a patient and medical care staff before and after a procedure. Patient21 looks after patients from the time they make their appointments till they arrive in the waiting room and supports recovery after discharge.

The application offers the patient personal preliminary questions, instructions and check lists, reminders and home care videos related to their specific care processes. For the care provider, the solution reduces the number of appointments for which the patient does not turn up, improves the quality and control of care, improves the patient experience and optimises the use of personnel resources.

Patient21 helps the patients access easily the specific information they need at any one time. For the care personnel, Patient21 brings a situational picture of the patients and makes it easier to get a bigger picture of the patients' preparation and recovery.

www.digital-identity.com
http://patient21.com/
Jussi Määttä, jussi.maatta@digital-identity.com, tel. +358 (0)40 552 2151

Elisa Oyj

Elisa Etämittaus – From a passive patient to an active participant

Elisa's flexible remote monitoring system can be used for diagnostics as well as for monitoring the course of an illness and the impacts of medication. Elisa Etämittaus (Remote Measurement) can be used in different care processes, including the monitoring of asthma or blood sugar levels, and monitoring during pregnancy. In this service, the data is passed on to a professional in real time, enabling fast interventions if necessary. Elisa Etämittaus is a multiple measurement platform, the service range of which may be expanded according to customer needs. Using the service is made particularly easy because it only involves a single application.

Elisa Etämittaus – Benefits

- Improved quality of care, improved patient compliance, cost savings, proactive health care and optimisation in taking of medicines.
- Improved patient cooperation
- Patients have a greater feeling of security, proactive responses are enabled, the treatment programme can be modified in real time, less travelling.
- A service that makes the professionals' work easier, improved productivity
- Professionals have a single, easy-to-use application for the monitoring and controlling of several measurement results. The need for manual reporting by doctors and nurses is eliminated, and a ready-made printout can be produced, for example for the Social Insurance Institution. The use of the service enables the monitoring of a larger collective of patients with less resources.

https://www.youtube.com/watch?v=xVMc3Z_zHuk
http://www.appelsiini.fi/pages/etamittaus.php?lang=FI
Riikka Elovaara, riikka.elovaara@elisa.fi, tel. +358 (0)50 330 7656

HealthFOX Oy

The basic idea of the HealthFOX "Easier Tomorrow" service concept is to get an injured or ill patient back to work or normal life as soon as possible using existing technologies. The service motivates the patient, ensures patient commitment to independent rehabilitation and medical care, and improves communication between the care staff and the patient.

The service includes tools for health care professionals (doctor, therapist, nurse), and a mobile and browser application for patients. The solution's architecture also takes into account other parties around the patient: friends and family, occupational health care, employers, insurance companies and the Social Insurance Institution.

Benefits of the product/service:

- Cost benefits
- Reduced absences due to illnesses, more efficient use of resources, longer careers, better quality of life, lower incidence of injuries sustained as a result of inadequate rehabilitation, e.g. prevention of limping after a leg injury.

The service concept was co-developed with Turku University Hospital in 2013 – 2015, and it was introduced in the

Hospital's knee unit in August 2015. Its contents will be expanded to pulmonary diseases in cooperation with the Finnish Lung Health Association. The HealthFOX service concept has been invited to participate in several mental health projects. It can be easily scaled to the areas of both physical and mental health and nutrition. We expect this service to have both national and international markets.

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Lumi Interactive Oy

Lumitools products
Lumi Interactive Oy has developed a method for improving the availability, take-up and use of health and wellbeing services that have personal significance for citizens. The method comprises a service package that contains an electronic control panel, a trained coach, rewards and physical health kiosks. The service will be piloted in cooperation with the largest retail chain in Finland in 2016.

The service will save public funds by supporting permanently healthier lifestyles: the citizens set their personal goals and schedules together with a professional and use the service to monitor their achievements. The electronic coach supports and guides the citizens in achieving their goals. The process is continuous, and the citizens are rewarded for active participation. The process will reduce national diseases, including the outbreak of diabetes and obesity.

The service can be found wherever the citizen is: in the pocket, at home, on the workplace and in the local supermarket. At the well-being kiosk, citizens can independently measure their blood pressure, weight and, depending on the location, blood sugar levels. The system is able to automatically screen for risk groups and direct them to public health care services. When a patient is discharged from hospital, applications linked to public services may be activated in the system to support the patient's self-care and communication with care personnel.

www.lumitools.com
Petri Seljavaara, petri.seljavaara@lumitools.com, tel. +358 (0)50 502 3005

Medixine Oy

Medixine is a Finnish software company that focuses on health care e-services. Medixine has unique 15-year experience of digital health solutions. We have implemented projects in Europe, the USA and Asia for over 200,000 patients. For the last three years, we have concentrated on developing our own product, Medixine Suite.

Medixine Suite is a cloud software product that can be used to produce digital health services. The product works on all main terminal device types and also supports the new Internet of Things concept with dozens of measuring devices that have already been integrated to the system.

Medixine Suite can produce all those communication services that health service suppliers need when introducing their new operating model based on a more active role of the patients. The product can also be used to produce services that the patients/citizens use independently to promote their health or to control their illness better.

Medixine Suite can implement services for all illnesses or conditions from the treatment of diabetes to monitoring a pregnancy or supporting weight loss.

Examples of services implemented with Medixine Suite in Finland include the Health Card of the Health District project, the national Taltioni services, the Terveystasku service in Tampere region, and national screening services implemented for the FSHS.

www.medixine.fi
Tapio Jokinen, tapio.jokinen@medixine.com, tel. +358 (0)44 555 3015

Movendos Oy

Movendos coaching combines personal meetings with remote coaching. The meetings may take place face to face and through a secure video call integrated in the remote coaching service. After an initial meeting, a remote coaching programme is prepared for the customer, which is based on individual needs and takes holistic wellbeing into account. This makes the coach's support a part of the customer's daily life: the coach encourages and motivates the customer in working for lifestyle changes, making it easy to achieve permanent change and ensuring better commitment to the process. A coaching programme may also be prepared for a group, at the same time taking individual needs into account. The customers may be supported by an individual coach or a multidisciplinary team.

For remote coaching, there is an easy-to-use Movendos mCoach tool, which works through the Internet browser of any device. The remote coaching assignments may, for example, be associated with exercise, physical wellbeing, diet, or sleep and stress management. The tool makes it easy to translate a professional's existing coaching competence

and contents into Movendos assignments. There are no limits for the creation of new content, and a ready-made assignment library is also available. The tool is based on research in health and behavioural science.

The change in each customer and the coaching assignments are recorded in the Movendos service. This also makes the change visible. The objective is to achieve a permanent change through small everyday steps with the support of a professional. The age range of the customers has been 13 - 85 years.

www.movendos.com
Paula Mäkeläinen, paula.makelainen@movendos.com, tel. +358 (0)50 405 9940

Praecom Oy

Praecom is a video and virtual negotiation services supplier with strong competence and highly satisfied customers. In addition to our solid competence, our dynamic approach, agility and easy-to-use services are aspects that, according to surveys, our customers appreciate.

The company offers its customers high-quality remote and video conferencing services for the needs of organisations big and small. The company's products are Praecom Plus, Praecom Business and Praecom Mobile, which can be developed according to customer needs.

Our service portfolio covers remote conferencing services that allow terminal device independent video and online meetings, whenever and wherever. The service portfolio also includes all leading video conferencing device brands and their maintenance and support services. Our Service Desk manned by high-class experts supports the customer in all issues related to the service.

Our mission is to enrich person-to-person digital communication with services where the human being and user experience are genuinely taken into consideration and technological expertise is not necessary. Our vision is to be a company with a strong and recognised position in the Finnish field of communications that is known for its high-quality and easy-to-use services and that helps its customers to make communication easier. The company also has experience of producing remote solutions for health care.

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Traxmeet Oy

Traxmeet Oy has developed a service called Its my life, which helps customers to make sure that they get enough exercise and rest as part of their daily lives. The service is particularly designed for easy monitoring of everyday exercise.

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Wexma Oy

Wexma Symptom Management service is intended for:

- self-management of a chronic illness (e.g. diabetes, asthma/COPD, pain)
- post-operative care and monitoring after procedures carried out by care personnel.

The purpose of the service is to ensure the commitment of health centre customers to medication and self-care, thus improving the care results.

The patients record their observations of their symptoms and medication with an extremely easy-to-use application that runs on a smartphone. The observations are saved in an analysis system implemented as a cloud service. The patient receives benefits in the form of improved treatment outcomes.

The health care personnel is automatically informed of changes in the patient's condition and the effectiveness of medication, and based on this information, can make decisions on the necessary interventions. The health care personnel can specify the aspects they would like the patient to record. The service also comes as a stand alone version, and integration to a patient information system is thus not necessarily needed in a pilot project. The care personnel can access their management and reporting view as necessary using a computer, mobile phone or tablet.

The specifications of the current service were made together with the care personnel of Helsinki University Hospital, and the service is currently being piloted for pain management patients at three HUS clinics. The service is also very easy to customise for other actors, including health centres. Additionally, social media services can be linked to it to ensure patient compliance, and it can also be offered in the form of a game.

www.wexma.com
Timo Simula, timo.simula@wexma.com, tel. +358 (0)50 550 5143

The following list contains both companies that were contacted during the consultation work and those that were not but whose names came up in different contexts in the course of the work. Consequently these, too, are examples of potential implementers of pilots. The offer of some of these companies is only intended for certain types of target groups, and their potential thus depends completely on how the target group of each pilot will be limited.

AtCare Oy

AtCare Oy is a social enterprise whose mission is to improve the accessibility of mental health care services. @CARE offers the fastest route to a suitable mental health professional to ensure that those suffering from mental health problems can access professional help of the right type when they most need it. We have published the web service VapaatAjat.fi that facilitates and accelerates access to a psychotherapist nationally. The service contains the details of some 200 psychotherapists.

www.atcare.fi
Henri Valvanne, henri.valvanne@atcare.fi, tel. +358 (0)40 169 0916

Heimo Community Oy

Heimo is a mental wellbeing community where people can find peer support and safely relate their experiences. It often helps a person to solve their challenges when they encounter someone who has been through the same experience. The objective of Heimo is to help people to help each other.

https://heimo.co/
Jarmo Alastalo, jarmo@heimo.co, tel. +358 (0)400 727 373

iSTOC Oy

iSTOC's innovative approach to exploit mobile technology will disrupt the medical diagnos·tics market by changing the way in which both healthcare professionals and consumers use their phones for better health. We turn your mobile device into a Virtual Clinic, no additional attachments required. Instant results displayed on the device to make decisions quickly and accurately.

www.istoc.io
http://www.oululehti.fi/?app=NeoDirect&com=6/255/2313/5e9f303104#7315338.jpg
Jarmo Järvenpää, info@istoc.io, tel. +358 (0)40 541 6296

Mariefors Open Oy

Mariefors Open Oy and its partner, Kaukomarkkinat Oy, develop, produce and broker innovative preventive services implemented through a centralised remote service centre manned round the clock (24/7).

www.mariefors.fi
Raine Arponen, raine.arponen@mariefors.fi, tel. +358 (0)400 738 044

Mega Electronics Oy

Mega Electronics Ltd is a Finnish medical technology company specialized in biosignal monitoring for neurology, rehabilitation, occupational health and sports medicine since 1983. The company has developed a compact ambulatory technology to detect muscle activity on the skin surface both in laboratory and field conditions.

www.megaemg.com

Miils Oy

Miils – discover and share healthy meal plans! We offer easy to use tools which will let you share your best and the most nutritious recipes and meal plans with others. Or if you are still in the discovery process of choosing the right nutrition, hop on to our platform and find the recipes and meals that fit your personal needs. Each dish or ingredient that you find on Miils comes with extensive nutrition information. Moreover, this information is compared against your own individual needs.

www.miils.com
https://www.thl.fi/fi/-/thl-palkitsi-ultrahack-tapahtumassa-miils-ravitsemussovelluksen
Katja Rajamäki, katja@rategia.com, tel. +358 (0)50 486 7778

Noona Healthcare Oy

Noona is a mobile service that guides breast cancer patients through recovery. Noona enables patients to report their treatment or illness-related symptoms directly to their clinic via a mobile phone, tablet or computer. Patients independently monitor the development of their symptoms in their convenient Noona diary. Noona makes patients feel more secure as they have a continuous link with their clinic right in their pocket.

www.noonahealthcare.com
Pasi Heiskanen, pasi.heiskanen@noonahealthcare.com, tel. +358 (0)45 678 6970

Pedius Oy

Pedius is a communication system that allows Deaf and Hard of Hearing people to make phone calls using speech recognition and synthesis technologies.

www.pedius.org/en
Stefano La Cesa, stefano@pedius.org, tel. +39 334 867 3608

Sensotrend Oy

As a diabetic, you are the best expert of your own wellbeing. This is why you must make your voice heard. You can use the self-care form to record your current challenges related both to diabetes and other areas of your life. You can set your own goals for the treatment of your diabetes and assess how much time and energy you can spend at the moment on caring for yourself. You can also easily share your information with the persons in charge of your treatment so that they can familiarise themselves with it in advance. This will save time during your appointment. Pending: Sensotrend's diary retrieves data from blood sugar monitors, sensors, insulin pumps and exercise and wellbeing applications and shows them in a clear view that makes visible the impacts that the events of the day have had on the customer's blood sugar.

www.sensotrend.fi
Mikael Rinnetmäki, mikael@sensotrend.com, tel. +358 (0)50 385 5511

Shantia, You-app, Create amove Oy

Shantia's "Sources of a goof life" club is a digital library of video courses, books and recipes. It is a dissemination platform for materials produced by top class instructors and experts. You can access the material once you have registered as a club member.
www.shantia.fi

YOU-app – Small steps to a happier, healthier you. YOU-app's small steps, "micro-actions", come in 4 categories: mind, food, move, and love.
https://you-app.com/

Create amove Oy are experts of development and training related to wellbeing learning. We plan and implement wellbeing services together with our customers. Our Creact® concept offers practical guidance and training methods that promote relaxation, concentration, interaction and mindfulness skills and maintain the body. The objective of our coaching programme is to reinforce respectful encounters, quality interaction and the self-renewal and empowerment of both individuals and teams.

www.create.fi
Contact person for all of the aforementioned services
Klaus Oesch, klaus.oesch@welho.com, tel. +358 (0)400 427 689

Wellmo Oy

Wellmo is a holistic, configurable and ready-to-go cloud-based solution that enables individuals to take charge of their own health with the support of professionals. Wellmo solution consists of two components: Wellmo app and Wellmo Pro tool for health and wellbeing professionals. The easy-to-use mobile app helps users to track their health and wellbeing and aggregates data from leading wearable devices and apps, e.g. Fitbit, iHealth, Garmin and RunKeeper. Service providers can bring their own services to the app and launch activating campaigns. Wellmo Pro allows professionals to create meaningful conversations with individuals through real-time health data and stay connected through in-app messaging.

www.wellmo.com
Jaakko Olkkonen, jaakko.olkkonen@wellmo.com, tel. +358 (0)50 482 2161

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LAUREA
UNIVERSITY OF APPLIED SCIENCES

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Development and experimentation platform for social, health and wellbeing services in the context of Kalasatama health and wellbeing centre

This report is the result of a consulting work done by Laurea experts on the commission of the Department of Social Services and Health Care, Helsinki and Helsinki Business Hub. The aim of the consulting work was to construct a framework for the development and experimentation platform to be utilized in co-creation and testing new social and health care services especially in the context of the Kalasatama Health and Wellbeing Center to be opened in 2018.

The report gives guidelines how to coordinate service development processes in a network of public, private, and third sector organisations, and how to ensure that citizens, patients, their close ones, and social and health care professionals are active participants in the co-creation processes. The report can be described as a recipe book: how to implement the development and experimentation platform in practice, in the context of social and health care services in Helsinki.