

BRAINPORT DEVELOPMENT, EINDHOVEN

FROM LIVING LAB DE COEVERING TO BRAINPORT HEALTHY LIVING LAB FOSTERING A HEALTHY WAY OF LIFE IN CO-CREATION WITH CITIZENS

1. The project

The LSG involved organizations have the ambition to take action and make a large living lab focusing on healthy ageing. In this zone large experiments and implementations with available technological and social innovations will take place. These innovations improve the vitality, healthy ageing and carry for people on individual and community level.

The living lab offers present and yet to establish companies optimal pilot opportunities to test new ICT solutions. With these solutions they come faster to the market and contribute to the high quality of life for people and economic growing potential.

2. The Context

During the 4DCities project the Local Support Group (LSG) initiated Living Lab De Coevering. De Coevering is a district of Geldrop-Mierlo, a municipality located near Eindhoven. De Coevering has 9.290 inhabitants, with more than 50% over 45 years old and 75+ years old representing 7% of the inhabitants. This last group is expected to increase to more than 12% of the total population in 2030. Additionally, the group of 65+ will expand to a third or more of the total inhabitants, which is linked to the expectation that the amount of people in need for care will double compared to the current situation.

De Coevering characterises a high concentration of immigrants and a relative low income as well as low social cohesion and feeling of togetherness. Even though the municipality Geldrop-Mierlo is known for a good offer of sport facilities and social associations figures show that (sport) participation of the inhabitants of De Coevering is really low. Compared to the other districts of Geldrop-Mierlo experience the inhabitants of De Coevering less good health and less (physical) activity. The people over 65 more often experience a chronic disease and severe overweight compared to the other districts.

The municipality of Geldrop-Mierlo wants to present itself as a community which highly values care, sports and exercise, and where a healthy living environment ensures that people with a disability could continue living at home as long as possible. Now, but certainly in the future. The high risk of health problems and lack of exercise in De Coevering is a motivation for the municipality to start (sport) prevention.

Living Lab De Coevering is the start of a bigger regional initiative called Brainport Healthy Living, which Living Lab focus not on a district but on a regional level (the Brainport Region in which with the city of Eindhoven is the core. The Brainport region has a population of 753,000 inhabitants with 17% older than 65 years. The Brainport region is known for its unique ecosystem in which the quadruple helix – companies & care and wellbeing organisations, knowledge institutes, government and end users – work together to accelerate high-tech growth. The Brainport philosophy is a unique form of collaboration that lays the foundation for open innovation: sharing knowledge to multiply knowledge. High-tech and design go hand in hand with top-quality manufacturing and entrepreneurship. Collaboration and cooperation, a considerable dose of intelligence and the ability to

constantly adapt help accelerate the economy and get the individual moving, attracting talented students, knowledge workers, entrepreneurs and investors from around the world.

The region distinguishes itself with its unique open innovation system that results from collaboration, exchange of knowledge and close proximity. Partners share and multiply knowledge in an open environment. From the open innovation ecosystem, clusters of companies and knowledge institutes develop, at the cutting edge of technology, possible solutions for social challenges.

The total health sector in the region generates 9,2% of the added value of the whole region (= 2.3 billion euros) and demonstrates exceptional growth. The regional health care sector indicates 4 hospitals (of which 2 status top clinical hospitals) together representing 2,000 beds and 560,000 first visitors.

3. The rationale

The main occasion for this initiative is our ageing society. The life expectancy increased by 6 years in the past 20 years (World Health Organization). More than 50% of the 65+ population experience less quality of life (National Public Health Compass). We become older but these extra years do not automatically mean more quality of life. At the same time health care costs continue to rise and there is a grand challenge in ensuring quality affordable care to our citizens. The care system in the Netherlands focuses on diagnosis and treatment and hinders prevention. We see that the involved parties in health care system often have contradictory interests. There are barriers in legislation and funding. Income and expenses are covered elsewhere.

In this Brainport Healthy Living Lab we believe that eHealth is a tool to promote health and independence. It covers all aspects of the new model of care: organization, communication, administrative relations and content of care. But the problem in the current system is as follow: the technology to provide quality of life is available but the adoption and real use is low. There is too much technology available. What is of real value for the user? How does the citizen, client or care professional know what is good and what is not?

In De Coevering Geldrop we developed a method how to co-create meaningful solutions to improve health and activity with citizens from the neighbourhood. In the scaling-up strategy to the Brainport Healthy Living Lab we will further develop and implement technological and social innovations with citizens from the whole region.

4. The Theory of Change

Ageing should not be associated with decrease of quality of life. It is our mission to show in the Brainport region that the quality of life can be maintained in a new model of care focusing on two important aspects:

1. Better health: the ability to adapt and self-manage
2. Economic value: exploit opportunities and reduce health care costs.

How we are going to do that in this Brainport Healthy Living Lab?

In executing the Living Lab we apply the following principles:

- From technology to usability

This can be achieved by the use of e-health (technology), but only in combination with social innovation. The Brainport region has the ability because the characteristics above

mentioned.

- From cost efficiency to income efficiency

At the moment the costs are covered elsewhere than the benefits. We want to bring down the barriers between legislation and funding. We must develop a model of fair (revenue) sharing. We would like to maximize the potential as far as possible.

- From making alone to making together

We believe in an enterprising approach, where public and private funding are combined. The stakeholders from the LSG in the Brainport region have an excellent ability to collaborate. This creates the basis for a digital infrastructure where many parties work together.

- From supplier driven to demand driven

All innovative solutions have to give a visible short-term benefit to the vulnerable groups of citizens in the region. Also on the longer term there must be a visible effect by maintaining quality of life. Only then we achieve a rapid short-term effect and long-term impact.

5. The project objectives

In the Brainport Healthy Living Lab the involved organizations from the LSG have the ambition to realize two healthy extra life years before 2030 within a sustainable health system in a way people can contribute longer economically and socially. We will start in different areas (both in a rural area and in a city area) in the region where De Coevering Geldrop is an important pillar to build on and will be one of the areas.

Goals:

- Start with a five year initiative
- Grow to 20.000 participants in 5 years
- Bring a sustainable change
- Set a model in a entrepreneurial context (with founded business cases)

6. The local policies and areas involved

The 4DCities project with the Living Lab in De Coevering Geldrop was one of the drivers to think about the next step in both the municipality of Geldrop as in the whole region. Several smaller initiatives, similar to Geldrop, were seeking for scaling up with more citizens and more impact. At the same time the Brainport Board felt the need to make a step in their policy for the next generation.

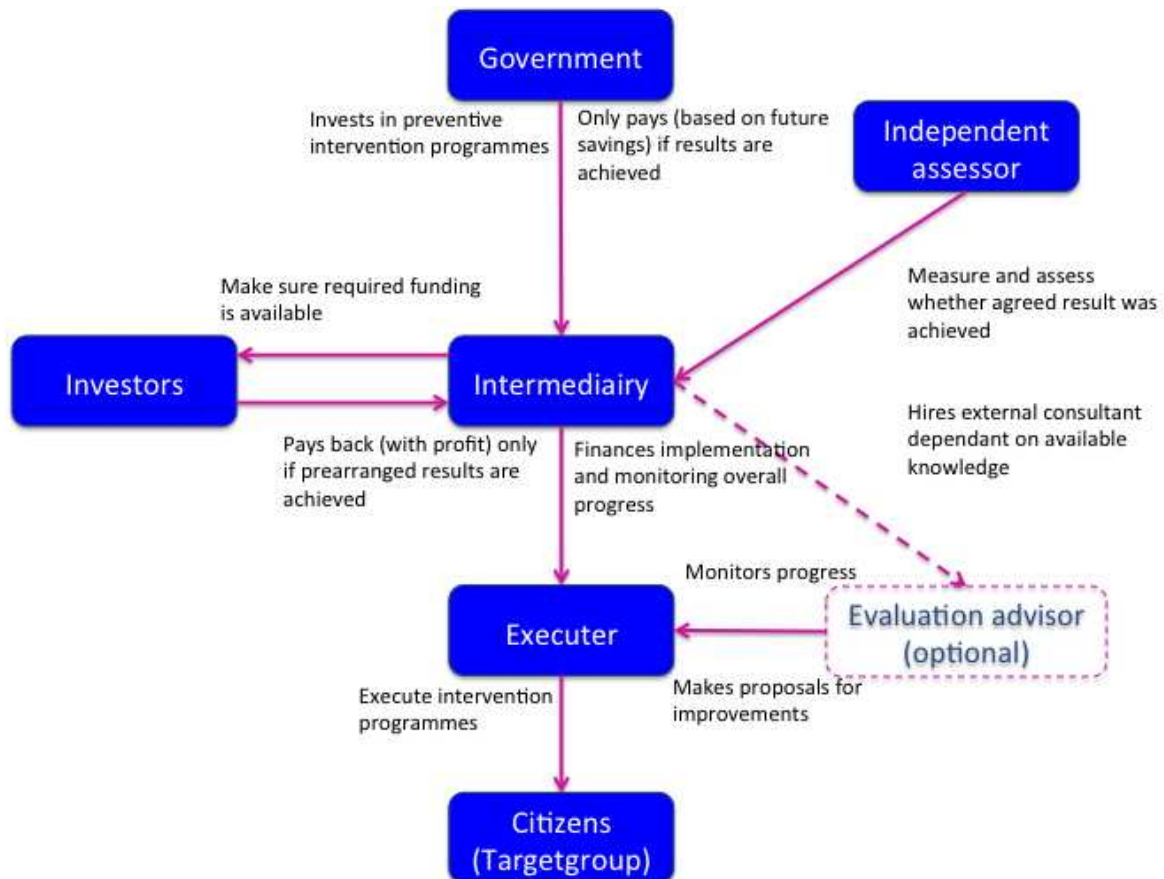
Brainport is working with representatives from industry, knowledge institutions and government to strengthen the region from an economic and technology perspective.

By bringing these two drivers together we will connect the social domain and the economic domain. The last years Brainport invested in economic enablers such as the labor market to maintain the knowledge and people in the region and also quality in high tech systems and materials. There is a great opportunity to give the economic enablers more relevance by making them of specific value for the grand challenges such as energy, mobility and off course health care.

For the involved stakeholders this means that they need to have an integrated approach and transcend their own interest in order to come to new business models with the focus on shared savings.

7. The governance. Who does what

The Brainport Healthy Living Lab is a public-private collaboration from a business and entrepreneurial approach focused on the utility of a digital company, which is powered by multiple parties. We will use the model of Social Impact Bonds (SIBs) also called 'Pay For Success contracts'. This is a new form of an innovative financing arrangement whereby governments pay only for measurable social impact after this was achieved.



Social Impact Bonds (SIB, source: Society Impact Platform Ernst & Young, june 2013)

Citizens: the aim of the SIB is to improve the health position of this group. For the Brainport Healthy Living Lab our target is scaling up technological and social innovations for 20.000 citizens in the region.

Government: municipalities in the region as Geldrop, Eindhoven, Helmond, Eersel and others. They are responsible for social care and health care at home. In this group we also place national health insurer companies as VGZ and CZ because they are together with the municipalities the funders of health care. They directly have an interest in maintaining a sustainable health care model.

Intermediary: external objective organization which connects multiple organizations and interests of these organizations. The cooperative Slimmer Leven 2020, which is a network organization with 70+ members from all relevant stakeholders in the health care domain.

Executer: non-profit and profit organizations including the health care, housing and well being organizations: GGD Brabant ZO, Wooninc, ZuidZorg. This also includes technological

companies as Medic Info, Mextal and Philips Health Care.

Investors: private investors and crowd funding.

8. What we learnt. How we use it

In our LSG in Living Lab De Coevering Geldrop we started with a new definition of 'health' and we came to a shared understanding of health being the ability to adapt and self-manage for people. In several experiments we found out that the physical health of people is dependent of social components. With a social design approach we stimulated empowerment and self-management of citizens. The aim is to make people feel more engaged and move together. In co-reflection sessions with citizens we organized citizen perspectives for activity and movement. Also they identified needs of the neighbourhood. An important motivation for people being active is the social aspect of it (more important than the health aspect). Physical disabilities and (social) traumas limits people to move and sport more.

An important part of the Brainport Healthy Living Lab is about making concrete neighbourhoods more 'vital' by identifying and connecting needs of different groups together – and designing from a systems design perspective in this context. In the past, many projects have been executed on connecting people and their environments to make them safer and more social. However, most of them have failed because many specific solutions are hard to follow up with sustainable change on a systemic level, which is a consequence from an often too strict top-down approach. These are solutions that cannot be imagined by the existing policy makers, who are also part of the same fixating 'system'. The reality is: neighbourhoods are not owned by just one group of people. This makes tackling problems that rise in the public domain complex and it asks for a more dynamic approach with strong elements of empowering citizens and inspiring bottom-up action. We will bring the experience of Living Lab De Coevering and the involved organizations to the large scaling-up Brainport Healthy Living Lab.

9. The innovation

We will be working with real life citizens and real environments to come to innovative proposals together. Work with all different stakeholders and balance their interests. A user's perspective looking at the special context of the urban real-life environment, and designing a meaningful intervention with advanced technological means, while taking the business side of this into account.

An innovative element of the Brainport Healthy Living Lab is also the focus on large rollout with 20.000 citizens involved.

10. The benefits

Benefits for citizens: 2 years of increase quality of life.

Benefits for companies: open model for testing, developing and implementing their solutions, economical growth.

Benefits for health care organizations: satisfied clients and professionals, improved organizational health care processes.

Benefits for municipalities/ health insurer companies: new health care model with outcomes on triple-aim criteria: 1) quality of health care, 2) satisfied clients/ citizens, 3) more efficient care processes and reduced costs.

11. The measurement

Key elements:

- Assessment indicators
- Mutual learning
- Dissemination activities
- Scaling up of the new GP

Robust performance monitoring and evaluation of the service will be embedded from the start of the Brainport Healthy Living Lab, to ensure the collection of high quality evidence of the benefits. Economic evaluation is needed to examine cost effectiveness, in order to guarantee the sustainability of the services and unlock the support for corporate strategies and adaptation to change. The evaluation should however, not only focus on the economic aspects but also aspects covering the patient and care giver perspectives, clinical effectiveness, health outcomes, impact on daily activities etc. Use of surveys, routinely collected data and dedicated studies to monitor and evaluate outcomes can be employed for these purposes (e.g. the EHR-IMPACT study²⁴).

12. The transferability

With the involvement of global business partners as Philips Health Care we seek to come to a transferable model. Deliberate efforts to increase the impact of health service innovations successfully tested in pilot or experimental projects so as to benefit more people and to foster policy and programme development on a lasting basis. But for scaling up to happen a true collaboration between the interested partners needs to be established, both for the scaling up within organisation as well as across organisations.

According to the magnitude of the practice to be scaled up different type of stakeholders must be engaged. The Local Action Plan of the Brainport Healthy Living Lab will identify key stakeholders relevant for each step of the implementation process. In most complex examples, an effective working partnership is needed at all levels (national, regional and local).

13. Next steps

With the Brainport Healthy Living Lab we will set an example for new health care models and large roll-out of innovative ICT solutions for citizens to gain more quality of life and at the same time create a Living Lab model which will attract business partners from technology developers till investors to stimulate economical growth in the region.

14. I want to know more

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