

## **PIDoT and co-constructive e-power looping In region Västerbotten**

(Evaluation report to Vinnova July 2013)

**Olov Forsgren, Professor Stockholm University**  
**Torbjörn Johansson, concept developer, Innovation Impact**

**Olov Forsgren** is Professor of Computer and Systems Sciences at Stockholm University, Sweden, He is the former Swedbank Sjuhärad distinguished professor at the University of Borås. He has 25 years of experience in research from Umeå University, Mid Sweden University and Örebro University. He has also been a visiting professor at IIASA, Vienna, Austria, University of Southern California and Berkeley University, California USA, Southern Methodist University, Dallas Texas USA, Asian Institute of Technology, Bangkok. He has been the initiator and scientific lead for a number of successful pioneering national and international research projects on e-services and information systems development in collaboration with several academic and industrial research partners, resulting in a number of new companies and public services, publications and dissertations. His international network of students and intellectuals are extensive.  
olov.forsgren@ dsv.su.se

**Torbjörn Johansson**, Innovation Impact, is a business and concept developer at Innovation Impact, an expert in visualization, interaction and interactive culture, with over 30 years experience in research and education planning at Umeå University. He was one of the founders of VRlab, Supercomputer Center North and High-Performance Computer Center North at Umeå University. Over the past 10 years he has worked with the Cultural and Creative Industries and e-service development. He built up HUMlab at Umeå University and was the lab's director between 1997 to 2000, a border-crossing lab for culture, the arts and digital technology. In 2000 he founded and became the studio manager of the Interactive Institute Umeå Studio Tools for Creativity. He was one of the founders of the company Innovation Impact. He has led several Vinnova projects, ISSI – Citizen-Centric Public Services in SPAs, Young and SMART and eSpinn – eService platform Inland. Torbjörn has extensive experience in international cooperation projects in the IT field, including several EU projects.

*This results presented has in part been funded by VINNOVA – the Swedish Governmental Agency for Innovation Systems. VINNOVA is the funder of the PIDoT project and together with Maestro management, Nod-A, Items International and Stockholm University the initiator of the project PIDoT.*

*Contributing partners in the implementation of the project are Maestro management-Lars Albinsson CEO, Nod-A - Stéphanie Bacquere CEO and and George Koulouris, Items International/Global Forum - Sébastien Lévy Vice-President and Tom McKenzie, Region*

*Västerbotten - Thomas Hartman, Head of marketing and Carina Andersson, event manager, Dohi Sweden - Nico Allergren, Niklas Berglund and Jonas Nordin, Strategic Business Development, Innovation Impact-Torbjörn Johansson- concept developer and Stockholm university – Professor Olov Forsgren. The PIDoT key person at VINNOVA is Madeleine Siösteen Thiel*

## **Short Summary**

This report describes background results and reflections based on a research and innovation model with multistakeholder co-creative workshops in 2013.

The results can be judged as extraordinary compared to the outcome of an ordinary conference. The PIDoT (Public Innovation DoTanks) initiative takes the ordinary conference a step further by including a number of key service prototypes in Health care, Entrepreneurship/innovation and Life long learning. These resulting prototypes with related work have stimulated a change in attitude among key stakeholders, leading to the start of three new R&D programs pushing a development of citizen centric services aiming at building a foundation for “positive living areas”. Results of the workshops have inspired development of prosperity networks of positive living areas in Europe.

## **Overview**

The report consists of four parts also possible to read separately

- 1 Introduction and approach for this study
- 2 The PIDoT-process in Northern Sweden
- 3 The results of the process
- 4 Some speculations about the future based on achievements.

### **1. Introduction and approach for this study**

#### *1.1 General short introduction*

During the last few years we have in Sweden seen a number of successful initiatives in innovation and development processes, driven by collaboration and involvement of people with different backgrounds and interests. The fuel has been citizens’ perspectives and needs of useful services in a broad sense, based on so called “should-be images (SBI)” or future ideal scenarios for different target-groups. Labeled approaches like the three COs: CO-design CO-creative development, CO-constructive development have been setting the process-framework together with concepts as Living Labs, Participatory design, Open Innovation and lately the PIDoT-process (Public Innovation Do Tank).

During the last year a collaboration between Swedish and French Actors have resulted in pioneering pilot do-tanks with the PIDoT method. The report summarizes the background and accomplished results from a research perspective.

### *1.2 A scientific perspective on PIDoT with generated results in North Sweden*

This report is written from a scientific perspective as a complement to other reports on the PIDoT-project. We are using a method and approach well established in philosophy of science. The approach belongs to a tradition often called soft systems-, systemic-, co-design-, co-creative- or co-constructive- approaches. The very basic idea in these approaches is that different actors can have different but legitimate views on the same situation. During a co-constructive conversation these different views will emerge. When many actors agree on a stabilized core view, this is regarded as a scientific result possible to use for different purposes.

A basic applied example of this scientific approach is the concept of time. As humans we can co-construct an infinite number of ways measuring time – but it is not possible in this approach to say that this is “a true way” to understand time. During many years of co-constructive conversations most people have agreed on a global system of measuring time related to the relative position between the earth and the sun. This view is now implemented as a view in action with enormous impact on human life. This co-constructive scientific approach is to high degree inspired by work of scientists like Kant, Bohr, Einstein, Cowan and Churchman and is possible to apply on every part of reality and PIDoT is in this report regarded to be such a part of reality.

According to this approach the suggested view has to be described in a way that other actors can review, comment on and further develop or simply disagree with the presented view. In that way the view evolves and sometimes converges and stabilizes in wider circles. If it survives and many people agree to the presented view it becomes a “view in action” with different degrees of impact.

This report is created in the following way. Olov Forsgren from Stockholm University has as a researcher participated and followed the PIDoT project during the whole process. In this process a lot of background material from performed workshops and interviews as well as from other project reports and documentation has been gathered. Our CO3-theories and processes have been implemented, tried out and refined through an iterative meta-process in the VINNOVA projects ISSI and eSpinn both projects in the area of eService development in rural areas in the municipality of Örnköldsvik in Northern Sweden. Most of this background material is in Swedish since the Swedish people - still wants to express themselves in Swedish. An important partner in this process is the company Innovation Impact, especially Torbjörn Johansson, project leader in these projects. Olov Forsgren has been the Scientific director of both projects. Because of the partner constellation and that the PIDoT project is of European and international interest we write this report in English.

The original background material has been processed into some key findings. These have then been discussed within a small group of key actors deeply involved in the

PIDoT-project in Sweden. Input has come from formal and informal conversations, workshops, surveys and responses and reactions from participants with different positions in the process. This report is based on that input. The idea is that the report will be a living document continuously evolving with new input and events, according to the co-constructive philosophy of knowledge development.

According to the co-constructive scientific approach the summary view expressed in this document will be open for comments and criticisms from a wider circle of stakeholders. In order to accomplish that, we will disseminate the material to a variety of arenas for discussions and further development. It is our ambition to review, sum up and add new perspectives and development once a year. Hopefully that can be presented in important relevant gatherings like the Global forum.

## 2 The PIDoT-process in Northern Sweden

### 2.2 The PIDoT initiative

The concept Public Innovation Do Tank is led by Lars Albinsson, Maestro Management AB and developed in collaboration with Nod-A and Items International. The initiative is funded by VINNOVA<sup>1</sup>. The PIDoT initiative offered public organizations the possibility to host a PIDoT, where the initiative would provide the organization and leading of the event without costs.

The initiative is described as<sup>2</sup>:

*The public sector organizations needs to:*

- *Increase their ability to involve citizens and other actors in innovation.*
- *Collaborate across organizational, national and professional areas.*
- *Engage in learning and research activities across organizational, national and professional areas.*

*There are numerous examples of events, conferences, educations etc that provide the opportunity to learn/inform actors in the public sector on new developments, case stories, technologies and policy. There are also think tanks and research organisations that are producing studies, reports and other documents. Many public sector organizations work with boosting the staff's own creativity, for instance with group-creativity methods, work shops.*

*While these provide valuable knowledge, there is a lack of action in them. They do not generate innovations as such.*

### **The concept of public sector is changing**

*The need for innovation and the movement in this direction is part of a bigger change, which can be characterized as a transition of the public sector from authority to service provider<sup>3</sup>. The public sector is therefore beginning to borrow strategies from the private*

---

<sup>1</sup> Grant: 2012-04294, Project Officer: Madeleine Siösteen Thiel

<sup>2</sup> Albinsson, (2012) *PIDoT - Public Innovation Do Tank: Overview*

<sup>3</sup> Albinsson, L. (2009). *Citizens' services - Nordic and Baltic research needs*. Stockholm, VINNOVA. VR 2009:26.

sector. A key such strategy is to attract larger ecosystems of people and organizations that enable and support innovation from outside the single agency, municipality or body. Such concepts have been advocated by for instance von Hippel<sup>4</sup>, popularized by Chesbrough<sup>5</sup> and adopted to generate billions in USD profits by Apple<sup>6</sup>. The most rapid development along these lines takes place in services delivered electronically, through for instance smartphones and the Internet.

*What is the bleeding edge right now?*

### **Open Data**

*One strong movement is the establishment of “open data”, where public organisations provide free, stable and structured access to their data for others to use. Examples is widespread use are weather data and timetables. For instance the most widely used app for travel planning in Stockholm was developed by a private person and has become a top download on Apple’s Appstore<sup>7</sup>. In the UK the data.gov.uk offers more than 8000 open data sets. In Sweden a private initiative www.opendata.se offers both data and APIs<sup>8</sup> and VINNOVA has recently provided funding for several open data projects.*

### **Hacking competitions – Hackathons**

*To attract developers and entrepreneurs competitions with prizes are organized. They often follow a format of announcements, offering of data, tools etc during a period before an event. At the event teams who have been selected spend 2-3 days in a marathon to produce a working prototype. The jury at the end selects and awards the best prototypes. The prize can be money, contracts or resources to turn the prototype into a real service. The Swedish Travelhack<sup>9</sup> is a recurring event, with a well-established pattern for inventing travel related services.*

### **XYZ-thons**

*The concept of inviting people to an event producing something has spread outside the computing community. For instance Makathons where people build physical products, sometimes using 3D printers<sup>10</sup>, are becoming popular. An example is the recently held Make-it-up<sup>11</sup> in Paris where people gathered to design new products based in electronic “junk” to recycle or “upcycle” disused electronics.*

### **Crowdsourcing**

*Crowdsourcing is a more general term referring to a distributed problem-solving and production model. In the classic use of the term, problems are broadcast to an unknown group of solvers in the form of an open call for solutions. Users—also known as the crowd—submit solutions. Wikipedia is a well-know example of crowdsourcing.*

*What is missing?*

---

<sup>4</sup> von Hippel, E. (2005). *Democratizing innovation*. Cambridge, Mass., MIT Press.

<sup>5</sup> Chesbrough, H. W. (2003). *Open innovation : the new imperative for creating and profiting from technology*. Boston, Mass., Harvard Business School Press.

<sup>6</sup> Eg. <http://www.appolicious.com/articles/11792-apples-itunes-app-store-surpasses-600k-apps-1-9-billion-in-revenue-for-q2>

<sup>7</sup> <http://www.idg.se/2.1085/1.243947/sl-oppnar-for-att-slappa-data>

<sup>8</sup> An interface allowing other systems access to data and transactions.

<sup>9</sup> Travelhack.se

<sup>10</sup> Emerging technology where plastic wires are melted together in patterns and layers to produce any type of object.

<sup>11</sup> [makeitup.fr](http://makeitup.fr)

### ***Transforming services***

*There is still a lack of major innovation of public services. The output from hackathons etc has a few successful examples, for instance the above cited travel planner, but lack in scope. They appear to be good services to citizens, but are not transforming public sector in any greater degree.*

### ***Wider set of citizens and stakeholders***

*A key element is to engage a wider set of citizens and stakeholders. Most hackathons consist of young, educated tech people who invent services they would use themselves. We also have to remember that this group in general is not using many public services. Therefore there is a need to complement those groups with other citizens of other ages, interests and situations. Only then will we see services targeted also for families, elderly etc.*

*There is also a need to include the people from public sector, both managers and experts. This will allow more wide scoping prototypes, for instance those requiring organizational changes and development.*

### ***Faster learning and adoption***

*Networking among different groups is needed to increase the learning and adoption rates. Today most events are based on individuals with a personal passion. Their contacts and networks are not a structural resource for their organisations.*

### ***What is then a PIDoT event?***

***Public Innovation*** refers both to “public sector” and “the public” as the citizens.

***Do Tank*** refers to an the action in producing concrete output in contrast to think tanks

*A PIDoT event is addressing this by bringing together stakeholders and producing a specific innovative proposal, in a concrete form, for instance a prototype. Key participants are: citizens, public service organizations as well as businesses. As key stakeholders are taking part, the solutions are likely to be realistic and possible agendas for turning them in to practice can be explored during the event. A PIDoT event follows a strong format to allow for effective and meaningful communication between participants.*

*Key participants will be:*

- ***Citizens in general***
  - *Young people*
  - *Elderly*
  - *Families, etc*
- ***Hackers/programmers***
  - *People who can produce apps, software, services and other necessary technology*
- ***One or more public organizations***
  - *Decision makers*
  - *Service managers*
  - *Open data/service experts*

*The point is to have a diverse group collaborating to create specific novel concepts with a realistic chance of being turned into reality.*

### *2.1 Pre-events and the process before.*

During the last few years we have in Sweden seen a number of successful initiatives in innovation and development processes, driven by collaboration and involvement of people with different background and interests. The fuel has been citizens's need of useful services in a broad sense, from their perspectives, based on so called "should-be images (SBI)" or future ideal scenarios for different target-groups. Labeled approaches like the three COs: CO-design CO-creative development, CO-constructive development have been setting the process-framework together with concepts as Living Labs, Participatory design, Open Innovation and lately PIDoT-process (Public Innovation Do Tank). All those parts in the CO<sup>3</sup> paradigm are all closely related in a movement with roots far back in time.

One of the earliest and most reported sources of this movement is the CO-constructive branch of the movement. An important breakthrough inspiring many initiatives around the world, showing the *close relation between the CO<sup>3</sup> –area and information technology is the classical article "Misinformation systems" by Russel Ackoff.*<sup>12</sup> Later he wrote many books and papers focusing "*creating our cooperate future*"<sup>13</sup> all developing different important aspects and results of this new approach to innovation. A way of thinking radically different from the classical "operational research" or applied classical scientific thinking, but deeply based in the philosophical debates about knowledge and knowledge development. This line of thinking is often described in a line back in time from Ackoff via West Churchman, Tom Cowan, Edgar Singer, William James, and Immanuel Kant, also with influence from Hegel's dialectical thinking. Some other partly connecting, parallel and crossing threads are "Second order cybernetics", "Double loop learning" and "the fifth discipline", Design thinking and Soft systems thinking. Also modern natural science with names as Einstein, Pasteur, Capra, Rosen and Prigogine, are important sources to the CO<sup>3</sup> movement, possible to describe in three important levels of ambition:

- CO-1: Co-design – integrating the physical and the virtual aspects into augmented co-evolving realities and products. Early example: Steve Jobs with Apple. We have also been involved in a number of such projects. One of the most impacting cases was the MIT-project with the new synthesis between the Stores, the catalogue and the web into a co-designed Market oriented system at IKEA.<sup>14</sup>
- CO-2: Co-creative – Involving key stakeholders in an "Open innovation" approach - synthesizing different perspectives into new co-created perspectives with possible implementations and impact. A further development of Hegelian

---

<sup>12</sup> Ackoff, R. L. (1967). Management misinformation systems. *Management science*, 14(4), B-147.

<sup>13</sup> Ackoff, R.L. (1981). *Creating the corporate future: Plan or be planned for*. N Y: Wiley.

<sup>14</sup> Forsgren, O. (2006). Churchmanian Co-design—Basic Ideas and Application Examples. In *Advances in Information Systems Development* (pp. 35-46). Springer US.

thinking. Early well-known example: Russel Ackoff with Anheuser-Busch<sup>15</sup>, Edward Deming with Toyota.<sup>16</sup>

- CO-3: Co-constructive – On this level the knowledge development process is integrated with the innovation and artifact development process. The result can be described as a new worldview where the artificial walls between public, private, political, business, culture, art and knowledge development have been removed and replaced with the co-construction of Integrated service complexes governed by new forms of Public-Private-Partnerships.

In the north of Sweden this CO3 movement has influenced a number of new R/D-projects. One such project is “Innovationsslussen” focusing new services for health care in the county Västerbotten in the north of Sweden. Other projects are the VINNOVA projects eSpinn and ISSI focusing new services making life easier in rural areas in the municipality of Örnsköldsvik, aiming at implementing the Digital Agenda by raising and equalizing the level of service in the whole municipality, to make it a “positive living area”, see the subtitled video report “eSpinn Örnsköldsvik - för bygd och stad i balans (English version), <http://www.youtube.com/watch?v=rIYXtObY4GM>

All these projects are applying ideas and methods belonging to the CO3 movement and the method process can be visualized in the following picture.

---

<sup>15</sup> Ackoff, R.L. (1988). The future is now. Systemic Practice and Action Research, 1(1), 7-9.

<sup>16</sup> Rafael Aguayo. (1991). Dr. Deming: The American who taught the Japanese about quality. SimonandSchuster. com.



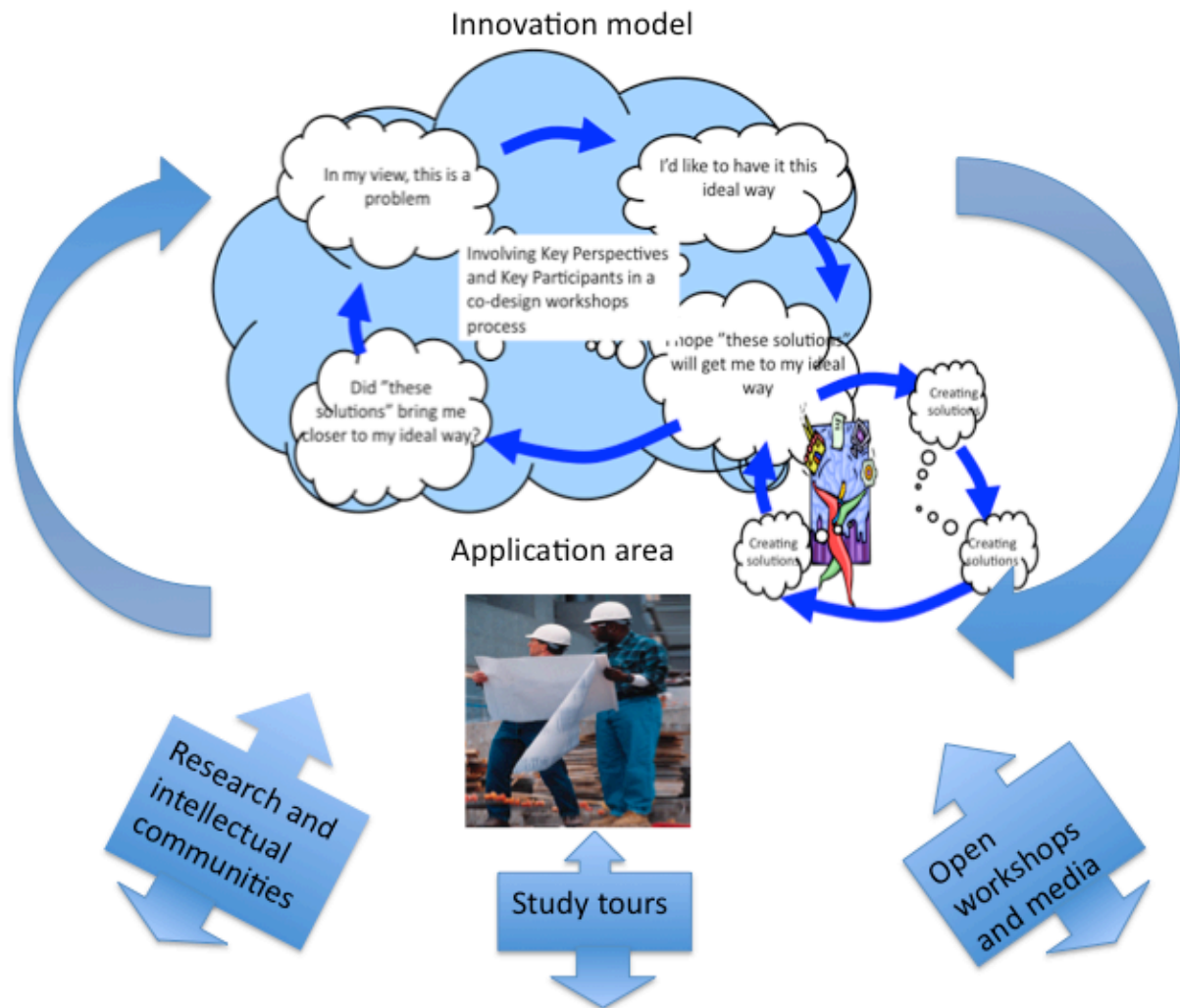


Figure 1

Shortly stakeholders and key expertise are invited to series of design-oriented workshops encompassing problem-design, ideal scenario design, solution design and follow-up design. The total loop is normally 6-18 month.

## 2.2 The PIDoT events

From this perspective the PIDoT concept can be regarded as a compressed co-design process into one or two days also adding a result-driving competition between proposed solutions to given thematic tasks.

With this background the idea was born that the PIDoT could be a great sum up event for the co-design projects eSpinn and eHealth/Innovationssslussen". In a dialogue with the Region Västerbotten an idea of the need of some more action oriented conference format were discussed. The end result of these conversations was a setup where the two final project workshops from eSpinn and eHealth served as arenas for two PIDoT pre-events. The results from these were taken further into the big regional conference in Lycksele where a final two day PIDoT event was planned, integrated and performed.

At this big conference, “Meeting-place Lycksele” also ordinary conference sessions were held. That created a special task how to combine and interact between an ordinary conference and a PIDoT do-tank event. The solution can be viewed in the following schedule and setup, also indicating the main elements in the PIDoT-process. More detailed information can be found on the PIDoT site. “<http://pidot.eu/>”

Figure: 2 PIDoT Agenda (From the PIDoT project)

<p><b>Dag 1</b></p> <p><b>Uppgift:</b> <i>Ta fram en första version, en mock-up och en 5 minuters presentation.</i></p> <p><b>INSPIRATION (10:00 - 11:30)</b> PIDoTen börjar med inspirerande presentationer, “trade shows etc.” för att ge ramar och inspiration till deltagarna. Presentatörerna inkluderar experter inom innovation, Hälsa, Entreprenörskap, Kompetens &amp; UX Design.</p> <p><b>MEDBORGAREN ÄR KUNG (11:30 - 14:00)</b> Deltagarna sätter medborgaren i främsta rummet redan från början. I en PIDoT börjar lagen med att identifiera en typisk användare för att sedan ta fram idéer och användningssituationer.</p> <p><b>ITERATIV UTVECKLING (14:00 - 15:00)</b> Lagen presenterar för varandra för att förbättra alla idéer. De får också stöd av coacherna i detta.</p> <p><b>PROTOTYP (15:00 - 18:00)</b> Lagen börjar med prototyper på sina lösningar. Alla “leverabler” specas och påbörjas samtidigt.</p> <p><b>REVIEW (18:00-18:30)</b> Lagen reviewar sitt eget och de andras arbeten för att se hur långt de kommit.</p>	<p><u>Day 1 -Task</u> first version of solution and 5 min presentation</p> <p>Inspiration Trade shows etc.</p> <p>The main idea: the Citizen is the King. Identify typical citizen. Persona.</p> <p>Co-creative iterations of solutions with other teams and coaches.</p> <p>Specifying the solutions into prototypes.</p> <p>Review of results between teams.</p>
<p><b>Dag 2</b></p> <p><b>Uppgift:</b> <i>Presentera arbetet!</i></p> <p><b>PROTOTYP (9:00-11:30)</b> Lagen itererar utvecklingen av sina prototyper, presentationer och posters.</p> <p><b>CRASH TEST! (11:30-12:00)</b> Varje lag får presentera för coacherna sina “leverabler” för att se hur det ligger till och hur det fungerar.</p> <p><b>SLUTPUTS (12:00-13:30)</b> Lagen slutputsar sinar “leverabler” baserat på feedbacken från coacherna.</p> <p><b>SHOW TIME! (13:30-14:30)</b> Lagen presenterar sina eTjänster för en utvald skara med hjälp av sina 5 minuters presentationer och posters.</p> <p><b>PRISER! (14:30-15:00)</b> Lagen presenterar sina eTjänster för Mötesplats Lyckseles deltagare vid avslutning. Priser utdelas.</p>	<p><u>Day 2 – Task</u> Create selling presentations including demonstrators</p> <p>Iteration of prototypes, presentations and posters</p> <p>Crash test – review between teams</p> <p>Final corrections before Pitch</p> <p>Pitch for selected group of experts and all participants.</p> <p>Voting and winners presented</p>

### 3 The results of the process

#### 3.1 Three main tracks /areas

From the pre-event workshops three main areas of importance emerged also reflected in the main PIDoT workshop.

*Young Entrepreneurship - as a driver for regional development*

*Competence matching – a hub for life long learning a key for a prosperous society*

*Health - Patient communication as a key area for future health care*

The ideas from the pre-events were further developed in the three focus areas. In each area teams were formed with roles and competencies according to the PIDoT model(see figure 3)

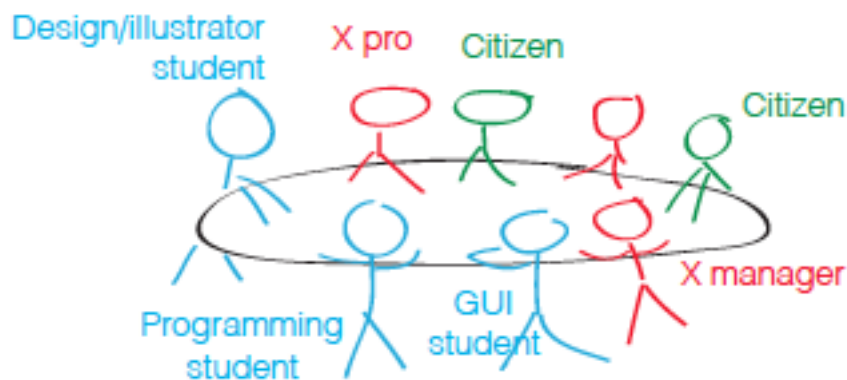


Figure 3

The teams worked intensely according to the schedule and in the last part of the work each team had to design selling pitches for the solution they had agreed on. The selling pitches were presented to all participants and afterwards each individual could vote on the best pitch performed. Based on the result three winners were selected. During this process visitors from the ordinary conference could visit the workspace and watch and ask questions.

In the following section a brief overview of the solutions were presented together with a comment about how this work has impacted further work and implementations.

Detailed information about the solutions can be read on the PIDoT website (<http://pidot.eu/events/ehealth-pidot/>)

#### 3.2 Entrepreneurship, special Young entrepreneurs as drivers for regional development

##### 1 CONNECTING COMPETENCY

*We want to develop a website/app that will enable entrepreneurs and people in general to search and find "mentors" of specific competencies. That way they can be guided in order to properly get their companies/projects started up and running! Having people of all sorts of competency available for contact will also enable them to group together if needed for*

*starting said companies, and enable companies to reach out to possible new recruits. Search functions will be available to help all members search for the relevant competencies they need. Pitch (one sentence): Our goal is to help create new contacts between people when they require specific competencies by providing a digital meetingplace.*

### **2 ENTREPRENÖREN/The ENTREPRENEUR**

*Our digital meeting place helps those who are thinking about starting their own business. By bridging the gap from idea to startup, with help from experienced mentors and others who have traveled down the same path. By sharing experiences and building your own network, our solution helps you reach your goals.*

### **3 CONNECTIFIED**

*Connecting mentors and entrepreneurs through keywords derived from his or her idea. Creates an encouraged environment to pursue improved business skills. Allows mentors to connect and share their knowledge to the next generation. Increases awareness of relevant events and lectures based on your location of choice.*

### **Comment on Impact based on interviews and further work after the PIDoT events:**

The main PIDoT event In Lycksele was hosted by the county organization Region Västerbotten (RV). Key people from RV were heavily involved in both the planning and the activities during both pre-events and the main Lycksele event. The results including prototypes, co-creative workshops and presentations impressed the RV key people. As a result they decided to continue work for more workshops in this direction. An idea in progress is to invite both companies and public organizations in the region to apply for a possibility to arrange pre-events, where the results will be further developed and presented in a new Lycksele Mötesplats event. The presented prototypes have formed input to the participating consulting companies and work is in progress.

### **3.4 Life long learning a key for a prosperous society**

#### **1. GROW APP**

*An website to match the students skills sets for future jobs. A guidance to early get knowledge about which education to choose for in the future and to receive support on how to reach the goal, towards ones career.*

### **Comment about Impact based on interviews and further work after the PIDoT events:**

The municipality of Örnsköldsvik hosted the PIDoT pre-event in Gideå. Key people from Örnsköldsvik also attended the main PIDoT event in Lycksele. Based on their impressions of this whole chain of work the managers of the Municipality together with the political leaders have now decided on a special task force focusing development of e-service infrastructures to raise and equalize the level of service in the municipality to transform the whole municipality into a “positive living area”

The presented prototype has served as input for further development of the eSPINN(eService Platform INNelandet platform).

### *3.3 Patient communication as a key area for future health care*

#### *1. HÄLSOAVATAR/HEALTH AVATAR*

*Health Avatar is a health record that helps doctors and patients to communicate better with visualizing patient health. Traditional text journal complemented by a graphical interface using an avatar that shows the historical and current illnesses and problems. A patient interface allows for some insight into their own medical records. The patients are in that way involved in their own health. The patient can see records and also be active in planning process. The avatar changes appearance depending on the condition of the patient. A heart disease is indicated as with a red heart and a descriptive text. Doctor's interface contains besides this also particular internal communications, test results, professional, observations and diagnoses. A developed version may also include decision support for physicians and links to patient information material.*

#### *2 FARPP*

*We have developed an application that will engage health care staff to prescribe "Physical Activities on Prescription" more often, and help motivate patients to change their lifestyle. "Physical Activities on Prescription" is not prescribed to a big extent today, since the system is complicated for the doctors to use. It is difficult to find useful activities for the patient to do and to help them stay motivated. Necessary follow-ups are often insufficient or even lacking. This application will make the doctors jobs easier, and at the same time help patients feel that they are participating and motivated.*

#### *3. VÅRDAPPEN*

*Vårdappen is an application for mobile phones and tablets that let patients upload and keep track of different measures that are related to the patient's illness. Blood sugar levels or blood pressure levels for example. The values are uploaded to the patients caretaker so the caretaker always has access to the most recent data. The app also keeps the history so the patient can watch the trend of the measured values. The app also gives patients feedback to let the patient know if the values are within the normal range and also the option to contact the caretaker to make an appointment or get more advice.*

### **Comment about Impact based on interviews and further work after the PIDoT events:**

Västerbotten County Council (VCC) was a main partner in the eHealth pre-event. Key people also attended and involved in the Lycksele main PIDoT-event. Based on the results and the process VCC has now decided to progress work with the e-service "mina vårdkontakter" as a vehicle for improving better patient communication. The ideas in the presented prototypes will be directly influencing this work.

The young medical doctors in Northern Sweden involved in advanced medical education for Specialist in General Medicine has decided to continue with a PIDoT approach hoping to find new routines and tools for patient communication.

### *3.5 Summary of results*

On the surface the results of the PIDoT-project can be described as 2 pre-events with around 100 participants and a main event with 64 team members, 16 coaches X 17 h = 1360 man hours -> 7 real prototypes. Which is a key capability of the PIDoT concept; to involve different stakeholders in co-construction in a short time-frame.

But the broader impact is even larger. The process and prototypes inspired a number of important actors from the whole region, the North of Sweden to accelerate work with co-design, co-creative and co-constructive workshops for public e-services in a prospering society. This will also be manifested in a workshop in the conference eChallenges 2013 in Dublin. "WS: CO3 - A Powerful Driver for Regional Development".

A legitimate critical question here is whether the presented results would have happened without the PIDoT project? Well, the prototypes would most surely not have been developed, at least not in this level of quality, with input and involvement from the important stakeholders. We think everybody can agree on this. Maybe that is also the key to impact. Because of the involvement the impact now have expanded into a level never reached before with an ordinary conference approach in regional development. From the interviews with the participants we can also conclude that they really enjoyed the workshops as a fantastic learning experience.

Many of them also had their own ideas on how the concept could be developed. An important aspect here is the combination and interaction between an ordinary conference and a PIDoT workshop. In the future this interaction can be further improved or may be the both formats have better to be separated?

#### **4 Some speculations about the future based on achievements.**

It is also up to us as participants and readers of this report what will happen with the PIDoT-concept and the CO3 movement in the future. One thing is clear, as the world leading trend analyzer Peter Majanen concluded in a seminar at Uminova Science Park sept 4<sup>th</sup> 2013: *The trend towards co-creation and co-design is stronger than ever.*

In a more profound theoretical and philosophical long-term view the world famous Finnish Philosopher von Wright summarizes: "The analytical philosophy of knowledge creation is now in a replacement of a number of co-constructive evolving philosophies"<sup>17</sup>(Our translation).

A clue to the most important impact of this trend gives the Swedish professor of philosophy of science Ingvar Johansson when he writes "in co-constructive approaches the scientific rationality and the political rationality is the same rationality."<sup>18</sup>(Our translation) This statement indicates the possibility of new methods and formats where politicians, experts and citizens with different background can work on new problem definitions and solutions.

---

<sup>17</sup> Von Wright, G. H. (1988). Vetenskapen och förnuftet: ett försök till orientering. Månpocket.

<sup>18</sup> Johansson, Ingvar. "Anglosaxisk vetenskapsfilosofi." Positivism, Marxism, kritisk teori (1973).



Stockholms  
universitet

The PIDoT approach shows an early example on how this can be done. The consequences of this approach is thrilling.