



Horizon 2020 European Union funding for Research & Innovation

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Introduction

Introduction

This guideline is for those who would like to organise social hackathon events in their local community in order to co-create solutions for wicked problems in their neighbourhood.

Hackathons originated in the IT sector and refer to events designed to bring teams together for 48 hours of intensive development in competition to solve a specific problem or challenge. Traditionally hackathon events have focused on software and hardware development in the tech sector.

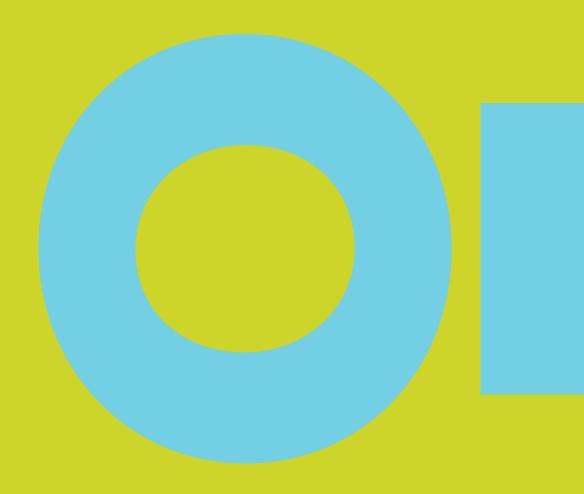
We adapted this very effective and intense development method to address the social and environmental challenges of local communities.

The social hackathon method was developed within the framework of the CoSIE project (Co-Creation of Service Innovation in Europe) in Estonia.

Participating organisations were:

- OI Tallinn University, School of Governance, Law and Society
- OI Võrumaa Arenduskeskus
- OI Helpific MTÜ





Theoretical background

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Keywords: Theory of Change, Innovation theories, Living Lab concept, Co-creation

Innovation

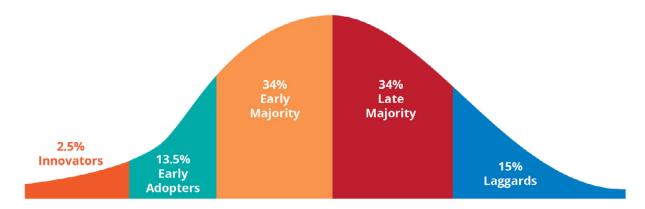
Innovation is defined as 'the implementation of a new or significantly improved product (good or service), or process, a new marketing method, or a new organisational method in business practices, workplace organisation or external relations' (Oslo Manual, OECD, 2005).

We can distinguish between different types of innovation:

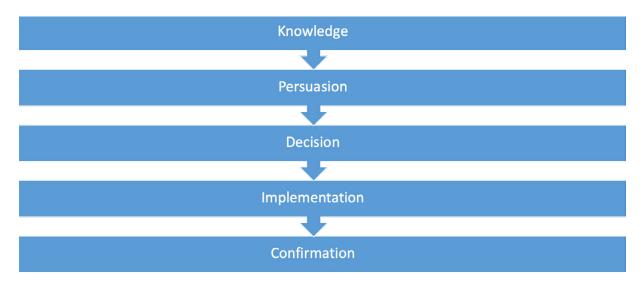
- OI Product innovation: A good or service that is new or significantly improved (technical specifications, components and materials, product software, user friendliness or other functional characteristics [e.g., ID-card, validator in public transport, map applications, alarm button for the elderly]).
- OI Process innovation: A new or significantly improved production or delivery method (e.g., imprisonment at home with electronic tag, IT solution for joint login to public services, digitization of work processes, national tests for schools, planning for hospitals using a virtual environment).
- OI Marketing innovation: A new marketing method involving significant changes in product design or packaging, product placement, product promotion or pricing (e.g., open consultations and hearings, SMS and email notifications to distribute information to the population, electronic updates to bus schedule at bus stops, local governments on Facebook).
- OI Organisational innovation: A new organisational method in business practices, workplace organisation or external relations (e.g., the SOS Family House, transfer of tasks to external agencies).
- OI Social innovation: Innovations that are both social in their ends and in their means (European Commission, 2010). 'Innovative activities and services that are motivated by the goal of meeting a social need and that are predominantly developed and diffused through organisations whose primary purposes are social' (Mulgan et al., 2007).

Diffusion of innovation

It is not easy to introduce innovations into society. According to Rogers (1995), innovation begins with the innovators and spreads to early adopters, early majority, and late majority. When it comes to social hackathon events, our focus is on the early majority for innovation activities.



The innovation adoption decision process happens in phases:



According to Rogers (1995), during the knowledge stage, the individual would like to learn more about the innovation. In the persuasion phase, the individual is interested in the innovation and actively seeks related details. In the decision stage, the individual weighs the advantages and disadvantages of using the innovation and decides whether to adopt or reject the innovation. In the implementation phase, the individual employs the innovation to a varying degree depending on the situation. During this stage the individual makes a determination about the usefulness of the innovation. In the confirmation stage, the individual decides whether or not to continue using the innovation.

Living labs

There is no agreed-upon definition of the concept of living labs (LL). It has been defined as a methodology, an organization, a system, an arena, an environment, and/or a systemic innovation approach. (Ståhlbröst, A., Holst, M., 2012).

A living lab is a research and innovation concept. Living labs are user-centred, open innovation ecosystems, often operating in a territorial or regional context (e.g., city, agglomeration, region), integrating concurrent research and innovation processes within a citizen-public-private partnership (Schumacher, 2013) (Akhilesh, K.B., 2017).

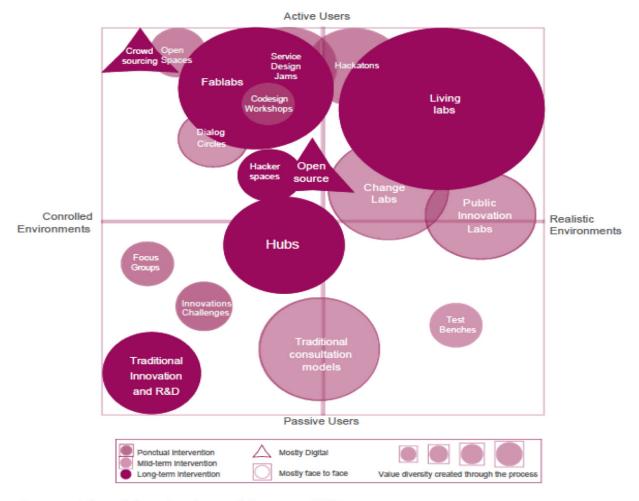
LLs focus on user-centred innovations. Dutilleul et al. (2010) additionally mention a real-life social setting.

The process of innovation has been described as happening in stages. A staged methodology of product or service development would include the following three stages (Bergvall-Kåreborn et al. 2006):

- 1. the design of concepts
- 2. the design of prototypes
- 3. the design of the final system

Almirall et al. (2012) have shown how the methodology evolves in spiral through these three stages. Product or service development is a dynamic and iterative process where one needs to test the services and products, receive feedback and make necessary changes, and start the process again before commercialisation.

There are many different types of labs and hubs. Living labs stand out as they have the highest level of user involvement and are the closest to real environments.



Source: Adapted from Sanders and Stappers, 2008

Figure: Lehmann et al. (2015)

Co-creation

Co-creation and experimental testing of products in real-life cases are key aspects of living labs. According to the European Network of Living Labs (ENOLL), living labs perform 4 main activities:

- OI Co-creation: co-design by users and producers.
- OI Exploration: discovery of emerging usages, behaviours, and market opportunities.
- OI Experimentation: implementation of live scenarios within communities of users.
- OI Evaluation: assessment of concepts, products, and services according to socio-ergonomic, socio-cognitive, and socio-economic criteria.



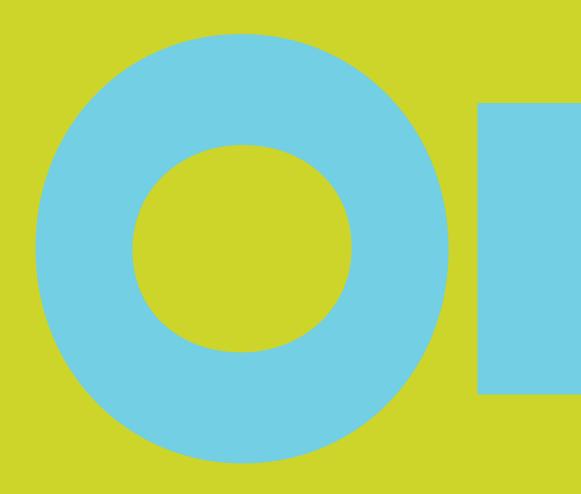
CO-CREATION IN THE PUBLIC SECTOR

Co-creation is a trend in public sector management. Involvement, co-creation, and design thinking in the development of services is becoming more common. When improving public sector services through co-creation, we cannot forget about policymaking. All key stakeholders must be involved in the co-creation process for a successful outcome. The active participation of multiple, diverse parties through constructive discussion is imperative for co-creation. It will be difficult to find a common solution if any party opts out of discussion by sitting quietly on the side-lines, or on the contrary, if any party jumps in immediately to push a particular position. Successful co-creation requires each party's views to be heard and considered, even conflicting or non-supportive views. External facilitators are extremely beneficial to the co-creation process: moderators and leaders who do not contribute to the content, whose focus is rather to ensure a level playing field for all the parties brought together in discussion. The result will be much broader field from which to find a solution.

Understanding the root cause of a problem is critical to finding an effective solution. For example, the solution for an unemployed individual with a disability is not for him/her to simply find a job. The nature of the problem is social, the problems does not lie just with one individual. Systems keep people in a constant state (e.g., unemployed). In this case, if there are existing support services and the person is motivated to work, but a single link (e.g., social transport) is missing or does not work, then the system itself is not flexible and does not work; does not work, because one part of it does not work. The only viable solution is for all stakeholders to come together to analyse what is wrong with the current system, identify what must be improved, and for the stakeholders to then implement the necessary changes to make the whole system more supportive.

If the aim is to enact change through co-creation, then the pre-condition is that the stakeholders have a common understanding of the situation: what it is, what the goals are, how to reach the goals, what is the context. In order to make the change a reality it is necessary to come together, to generate various solutions, discuss, argue, visualise together. This is how design thinking comes into play.





Mission

Mission

The main purpose of the social hackathon event.

Social hackathon events can be organised with different purposes in mind. They may serve to develop a certain geographic area, they can be used to address wicked problems (e.g., unemployment, transportation issues, disability care, elderly care), or they can address the challenges of a company/ organization.

In the corporate world, companies commonly use hackathon events to find solutions to challenges they have been unable to solve in-house: they organise a hackathon event around the challenge and invite start-ups and other creative minds to find a solution. The same concept can be applied to social topics, where local municipalities, ministries, NGOs, or social and health services can announce the challenges they are facing, and social hackathons are then organised around these challenges.

The mission is always the same: to use the hackathon as a co-creation tool to solve existing problems in a time-efficient manner.





Organizing a hackathon event

Organizing a hackathon event

Team building

What kind of team is needed to organise a social hackathon? What are the main tasks/roles in an organiser's team? What kind of professionals do we need?

Production of a successful hackathon event requires a very organised team working not only during the 48 hours of the event, but also during the months of preparation that lead up to the event, and the months of follow-up after the event.

When a team is organising a social hackathon event for the first time, patience and a lot of preparation are needed. We suggest spending a minimum of 6 months, but optimally 9 months, on preparation, and during that time the entire organising team should be active.

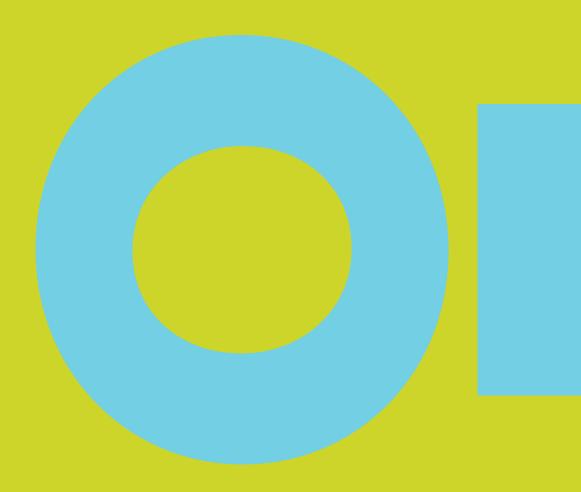
Online hackathon events organised in many countries during the COVID-19 pandemic showed us that it is possible to organise such events within a few weeks mobilising thousands of people, but these events were usually organised by very experienced teams with years of experience running hackathon events.

Our experience is that it is impossible to organise a social hackathon event alone. Without a strong team of at least 5-6 people, the challenges might easily become overwhelming, even for the most committed and enthusiastic.

Specific roles/areas of responsibility within the organising team include:

- OI Stakeholder relations (participants, partners, sponsors, contractors)
- OI Venue management (finding a proper place, technology, logistics, room management, accommodation options, transportation, catering)
- Event management (methodology, customer/participant guide, pitching event, team creation, mentor checkpoints, progress reports, seminars and workshops, final presentations, award ceremony)
- OI PR, marketing, and communication (website, social media management, media relations)
- Follow-up (continuation of projects, networking, new opportunities, acceleration, governmental and corporate relations, spin-off)

When we organised our first social hackathon events in Estonia, we improved our teamwork and re-defined roles during the event to ensure the smooth running of the hackathon and maximum involvement of the participants. In this kind of big event, with more than 100 participants and 10 or more teams working in parallel in large venues (schoolhouses), quick information sharing within the team of organisers and an understanding of the inner workings of the event are key factors to ensure the integrity of the hackathon event. Preparation of this kind of massive and intensive co-creation process should be very detailed and possible scenarios for the event must be played out within the organising team beforehand.



Partners

Partners

Who are the main partners/stakeholders that should be involved in the organization of a social hackathon event?

As social hackathons are about co-creation, it is simpler and healthier to make the organisational work also a co-creation. As is the case for teams participating in the event, the diverse perspectives of the various stakeholders bring added value to the initiative.

In our Estonian pilot project, we organised social hackathon events as a cooperation between a university, a local government development centre, and a social start-up. Other partners may also join: ministries and other governmental institutions might sponsor the event, phrase a challenge, or give awards; corporations, companies, and local entrepreneurs can be relevant resources and very useful partners. Each stakeholder has its own network, its own expertise, and involving them can open doors to sectors and people to whom our organisation doesn't normally have access.

We recommend holding regular meetings between the key partners in charge of organising the events.

In our case, partners were more than 200km away from each other. We tried different meeting schedules and solutions. First, we met in person as a group every month at a midpoint between our locations. Everyone had to travel 100+km and it was fair enough like that. Later, when our monthly meetings evolved to focus more on the local partners and stakeholders in the vicinity of the hackathon's location, we all travelled there. Once we had more experience and the partners knew and trusted each other, we moved to weekly, online (Skype) partner meetings. That became our mainstream communication method between the core organisers.

With other partners, ministries, companies, NGOs, local governments, and active citizens, personal meetings remained important during the entire process.





Pre-events

Pre-events

What are the pre-events about? How many of them do we need? What happens at a pre-event? Who should participate? What is the purpose/aim of a pre-event?

A minimum of two pre-events are typically needed before the actual hackathon event. These events are usually a few hours long and organised mainly for the upcoming hackathon participants, in particular for those who have not participated in similar events before. Pre-events are also a great opportunity to invite partners, sponsors, decision makers, and other stakeholders, as well as a great occasion to create media awareness for the upcoming social hackathon.

The main functions of pre-events:

- OI To provide information about the methodology and rules of the social hackathon event.
- OI To collect feedback and ideas from partners and participants, thereby turning preparation into co-creation.
- OI To explore what kinds of ideas and project plans the participants plan to bring in.
- OI To test the willingness and motivation of participants and boost their motivation.
- OI To create encounters between different stakeholders and get feedback on what kinds of stakeholders are still missing.
- OI To practice co-creation and teamwork through small games and exercises.
- OI To create media materials (photos, videos) for social media and event advertisement.
- OI To invite journalists, local opinion leaders, and influencers in order to increase the visibility and reputation of the planned event.

Ideally pre-events are organised within a 3-month window before the actual social hackathon event. It its organised too early, motivation and enthusiasm will wane, but if organised too late there won't be enough time to adjust the plans and allow participants to influence the event.





Venue(s)

Venue(s)

What are the physical requirements of a social hackathon and its pre-events? How large a venue is needed? How many rooms, with what kind of functions are needed? What kind of tools and equipment are required at the venue?

Important considerations for the venue:

- OI A large hall able to accommodate 100 people for the opening ceremony, pitching session, team creation, motivational training sessions, closing ceremony, social events.
- OIA building that is accessible for people with disabilities. Involving vulnerable members of the community is crucial when it comes to developing public services.
- OI Audio-visual technology and equipment, and 2-3 big screens.
- OI Separate smaller rooms for teamwork (e.g., classrooms). For an event with 100 participants, you can calculate 12-15 teams. Each of them will need a separate room/corner for teamwork.
- OI A separate room for mentors to hold meetings and discussions.
- OI A room for staff and office supplies (printer, copy machine, stationery etc).
- OI An open area for coffee and snacks throughout the event. Catering is very important, a 48-hour hackathon is exhausting. If you can't provide catering, make sure food is available nearby.
- OI A canteen for the main meals.
- OI Childcare, playground, playroom. A place for pets. Making the event family friendly increases the chances of involving more people from the local community. For many families, being away for an entire weekend is not affordable if they need to abandon their children and pets.
- OI A wardrobe.
- OI A parking lot.
- OI An overall environment that allows for relaxation in addition to intensive work (mattresses, sofas, seat balls, creativity tools etc.).

We found that school buildings are perfect venues for social hackathon events. Likewise, cultural houses, conference centres, universities, town halls, and sport centres could serve as venues. If the climate is supportive, hackathon events can be organised outdoors as well.





Marketing, PR

Marketing, PR

How do we recruit team members, mentors, partners, the jury, and most importantly... the participants?

A hackathon event requires a well-prepared, conscious marketing strategy. In order to attract 100 people around a given topic or in a certain geographic area, you need to build trust between the organisers and partners/participants, and you must also reach a critical number of people.

It is imperative that your marketing strategy be built around your main purpose.

To address a given problem, to find participants willing to address the challenge, a strong narrative is required to describe the problem, and a call-to-action that inspires the right people: people who are capable of solving that problem.

If your aim is to develop a certain geographic area or improve the quality of life of a community, your main narrative should build on the local identities and on a vision for the future.

Based on your main narrative you can create your marketing plan.

This plan should define in a detailed manner your target group: what kind of people are you expecting to participate in your event? What kind of partners are you willing to work with?

It is not enough to invite 100 random people to the hackathon event. You must make sure that participants represent the diversity of the local community, come from very different professional backgrounds, and differ in many other dimensions. A social hackathon event works only if you create encounters between people who do not usually meet and work together. If your social hackathon event will be organised with 100 social workers from the region, who already know each other from different agencies and service providers or conferences, your innovation potential will be very small as these people will remain in their own bubble. A hackathon event is, in a way, a method for creative destruction, interrupting existing social networks and problem-solving routes to create fresh ones through completely new encounters.

Taking this into consideration, your marketing plan should go after different target groups. During your campaign you need to track what kind of people have already registered and which demographics are missing. Additional campaigns will be required if a certain group is still unrepresented, and it is good practice to set up quotas for each target group to avoid over-representation.

In our Estonian social hackathon events in the rural area of Võrumaa county we identified the following main target-group members:

- OI Ministries, local municipalities and their public servants
- OI End users of social and health care services, vulnerable citizens of the local community
- OI Experts, professionals from different fields (IT, service development, marketing, etc)
- OI Public service providers (social workers, teachers, health care professionals)
- OI NGOs, representatives of the civil sector
- OI Local entrepreneurs, business representatives
- OI Local citizens, community members

Each target group will require different channels and different language when approached.

Inviting government representatives, local municipalities, decision makers, and public servants requires more formal channels, official appointments, and formal invitation letters using formal language.

Experts, professionals, service providers, and NGOs can be reached through professional networks and events, but personal visits, appointments are also important, particularly in small communities. The same applies to entrepreneurs and local businesses, taking into consideration the differences between the public and private sector.

Local citizens and community members can be approached through social media and traditional media (newspaper, TV and Radio channels). We experienced a huge difference between the way young people use media versus older people, or how people engaged with our content in urban areas vs. in the countryside. While in urban regions social media worked very well for us, in rural areas we relied more on local newspapers, radio and tv channels, and personal meetings with local opinion leaders.

Involving vulnerable people (people with disabilities, mental health problems, or elderly people in rural areas) needs a very specific strategy. Simply posting on social media didn't really work for us, a more complex approach was needed, combining personal visits to relevant organizations and user groups, dealing with transportation and personal assistance issues, and organizing continuous support before, during, and after the event.

Another important element of the communication and marketing strategy is the language. As mentioned, when targeting government representatives, authorities, and professional services we use a more formal language and a very formal mode of communication.

In contrast, when we want to attract youth, especially teenagers, high-school students, or university students, modern communication tools, social media, and solutions like videos, memes, emojis, animation, cartoons, comics, etc., coupled with a rather informal, friendly language, are more effective.

When it comes to vulnerable people and fellow citizens, it is very important to abandon the professional jargon, making the event accessible not only physically but inclusive also in language and communication.

In Estonia, we worked in a local community where people speak special dialects that are slightly different from the mainstream language. We paid particular attention, using this dialect in our communication, we used local symbols and colours, emphasizing local identities and creating an atmosphere familiar for local people. We hired a local poet as copywriter, we created all our media and social media production with local entrepreneurs who are not only operating in the given community but were also members of it.

Social media and modern ICT tools are useful not only for marketing purposes; they also enable us to extend our event by delivering our message broadly and increasing the number of participants through online involvement.

It is relatively simple and inexpensive to solve online broadcasting (Facebook or YouTube live) of the most relevant parts of the event, and individuals who follow the development work online can be involved to vote for the best projects or to participate in teams remotely.

Most of the teams consist of people from very different professional backgrounds and from different towns and cities, therefore project development can easily be continued with online management and

communication tools like Slack, Basecamp, Trello etc.

During the COVID-19 pandemic crisis we had to cancel and postpone one of our social hackathon events, and when we rebooted the event, we did it as a hybrid, combining face-to-face meetings in small groups and online connection with other participants. Teams were together physically in small groups, but mentors, plenary sessions, and pitches occurred online, mainly with Zoom. We had to improvise at the beginning but now we have relevant experience with online events and ICT tools and can assert with confidence that the social hackathon method works perfectly in the online environment.

Recommended digital marketing channels for event registration (sample landing page – title: www.socialhackaton.ee/register-for-event):

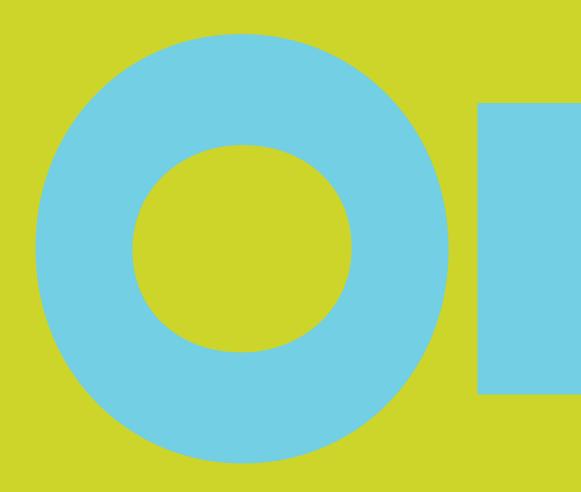
- Event registration campaigns should be done through Facebook Business, as it is a professional tool that helps reach a specific audience rather than a broad audience. Future campaigns should also include retargeting (example: person did not register but he/she visited the registration page). Through Facebook Business you can reach audiences from very specific locations. Possible ad channels: Facebook, Instagram, and Audience Network
- OI Google Ads campaigns help to reach the audience of people searching for particular keywords in Google. This also adds the possibility of advertising on YouTube. <u>Possible ad channels</u>: Google Search, Google Audience network (BBC page, for example), YouTube, Mobile applications
- OI Newsletter campaigns (Mailchimp or similar). If you have a list of email addresses that you have permission to use, you should use it to let people know about your upcoming event. Newsletter marketing is still a very efficient way to notify people.

Tools to measure digital marketing data and make marketing better for future events: Google Analytics, Facebook Pixel, Facebook Business. Note: these programs should be documented on the event registration landing page, in the terms and conditions or privacy policy page according to the GDPR (General Data Protection Regulation).

It is very important to follow and continuously analyse campaigns, as this is the only way to get information about the effectiveness and efficiency of the chosen communication methods.

Some tips for communication on social media:

- OI We created a timetable for social media posts that should be done (reminders of how much time is left before the hackathon, calls to sign up, calls to find and submit topics, mentor introductions, etc). These posts were pre-made and scheduled. These pre-planned posts were supplemented by operational posts with information that is relevant or attractive in the moment, such as day-to-day politics, others posts or recommendation about the hackathon, etc.
- OI During the second hackathon we started to introduce the topics submitted to the hackathon before the event. We encouraged participants to submit topics beforehand so that we could use them in our communication (on social media and in face-to-face meetings) to generate more attention and engage more stakeholders.
- OI Keep posting regularly! In the month leading up to the hackathon, we posted at least once per day. 2-3 months prior we were posting 2-3 times per week.
- OI Posts followed a common aesthetic and were similarly edited, and focused on the call-to-action, encouragement to co-create, highlighted local challenges and community power. We have created a clear brand for our social hackathons.



Mentors

Mentors

What is the role of mentors? Who can be a mentor?

It is important to develop your own mentoring program and worksheets that best support the purpose of your social hackathon event.

It is crucial to design tools (methods, worksheets, canvases) that support intensive development of any kind of ideas during these 48 hours, and that help to get the teams working more effectively.

Mentor guidelines must be developed, and mentoring has to be carefully coordinated during the event. Social hackathon events are relatively different from IT and business hackathons. Inviting even very experienced mentors from the field of IT, design, marketing, and finance requires proper preparation work, as social and environmental issues are often more connected to the public sector, which operates with very different working methods and logic than the business sector. On the other hand, it is important to learn from the innovative start-up or IT sector, applying business approaches to societal problems, as they can be very fruitful and innovative.

We recommend inviting mentors who represent different fields: business, technology, marketing, public service development, design, IT, environmental experts, media, and professionals dealing with vulnerable groups. The more diverse the pool of experts the better.

During the hackathon event, mentors rotate all the time. The mentor coordinator has a separate, critical role in a hackathon. His/her responsibilities are to introduce the mentors to the methodology used in hackathon; track the mentors' rotation during the event to ensure that each team gets the mentoring they need, organise information transfer between mentors about ongoing mentoring, to 'hand over the mentoring stick' (regular quick meetings with all mentors), and to collect feedback from mentors.

It is recommended that the mentor coordinator be hired not only for the 48 hours of the hackathon events, but that he/she be one of the core organising team members participating in the hackathon event development work from day one.

This is not important only from the perspective of preparation and aligning with the purpose and mission of the events, but the mentor coordinator also plays a crucial role after the hackathon, during project follow up.

Important tasks related to the follow-up process:

- OI Identifying and highlighting those projects that are the most promising to involve, support, and empower highlighted target group members
- OI Supporting the selected projects to advance on their development journey
- OI Connecting selected projects with relevant stakeholders, local municipalities and other agencies in order to embed them into the public sector or finding them a place as social entrepreneurs



What is happening at a social hackathon event?

What happens at a social hackathon event?

Timing

In our experience the optimal timeframe for a hackathon event is 48 hours over three days. In order to maximise the number of participants, it is recommended to start the event on Friday afternoon around 5:00PM after most people finish their working hours.

The introduction, the pitching events, and team creation can occur on the first evening, and the direct development work can be started the next morning around 8:00AM. The second day and the morning of the third day are completely dedicated to project development, supported by mentors, the prepared development methods and materials, and also by workshops, presentations, and matchmaking meetings.

During the development period we recommend organising checkpoints every 6-8 hours in order to get an understanding of the progress of each team. Checkpoints can be organised as plenary events but it often it works just as well to have mentors visit each project as a group and engage in a short conversation with them about their progress.

Final presentations begin at 2:00PM on the third day, and winners are announced and celebrated. This is one of the moments worth broadcasting online and you can look to involve the audience and potentially the public in the voting process. You also can set up a jury and invite experts and decision makers, corporate representatives, embassies and local entrepreneurs who also can be sponsors and supporters of the social hackathon event.

In Estonia, the first social hackathon event was organised from Friday afternoon to Sunday evening, but based on the feedback from participants we shifted the following events to Thursday-to-Saturday leaving at least one day free for the weekend.

Our first two events were organised with an invited jury who chose the winning projects, with an open category for the audience's choice award. The third social hackathon event was organised in such a way that people voted directly for the best project without any pre-selected jury. Both solutions have advantages and disadvantages.





Introduction, kick-off

Introduction, kick-off

The event starts with a plenary kick-off event where the hosts can introduce themselves, the mentors, and other key members, and explain the aim and purpose of the event. Logistical instructions and discussion of the planned timetable are also important, as is the explanation of the hackathon method.

We recommend keeping this introduction event short, no more than 60 mins. Apart from setting the rules and sharing information, it is critical to involve ice-breaking games, exercises, and fun to create a friendly, easy atmosphere.

The kick-off event is also the perfect occasion to introduce and involve sponsors and supporters, to give the floor to local politicians and opinion leaders, and to encourage local citizens and vulnerable members of the community to make their voices heard. In addition to the closing ceremony, the kick-off event and the pitching event also can be broadcast online with media presence.





Pitching

Pitching

What is pitching? How do we instruct people? How do we help them to prepare for it? What is its function during the hackathon event? How long does it have to be?

Pitching is a short, one-person presentation summarizing the core elements of the project idea in order to raise the attention and interest of potential team members who may wish to join the development team during the social hackathon event.

There are various ways to pitch. One common format is to invite one person to the stage to present the idea in 90-180 seconds and with only 1 single slide in the background - or no slides at all. This simple format works very well, and we recommend taking the time limits very seriously. If the participants are familiar with the method and experienced in participating in hackathon events, the allowed time for a pitch can be set to 90 seconds.

When we work mostly with inexperienced people, and especially if vulnerable members of the community are also participating, we recommend extending the time to 3 minutes.

We do not recommend exceeding 3 minutes for the pitches, and the host of the event must be very strict about muting microphones or interrupting the pitcher once the time is up. One best practice is to display a timer that is visible to everyone and signal the end of the time period with a sound.

This strict approach is crucial for creating a flow to the event and allows even 20-30 pitches in a row without exhausting participants at the very beginning of a long journey. We also recommend offering pitch practice with experts during the pre-events and providing short instructions, as well as advice on the spot.





Team building

Team building

How will the idea holders attract team members? How does the hackathon event support team creation?

During the pitching session, organisers can create small posters summarising each idea. Once finished with the pitch, the idea holders can move to different corners of the plenary room and create a small stand for themselves.

After the pitch event these stands work as an idea fair, where participants can walk around and ask questions, and ultimately decide which team to join for the event

Ideas can only continue to the development phase if they manage to find enough team members. In the case of 100 participants and 20 pitches, it makes sense to set the condition of 5 members per team. It's important to clarify that team members should come from different professional backgrounds or status. For this, participants can receive coloured tags or sticky notes, each colour representing a certain category (e.g., experts, public servants, service users, citizens, or IT, design, marketing, business development). Categories will depend on the topic of the hackathon and the aim of the organisers.

With an approximate 2-hour timeframe, participants can visit each stand and negotiate with idea holders about their projects, their need for help, and the potential roles within the team. This is a very intense part of the event.

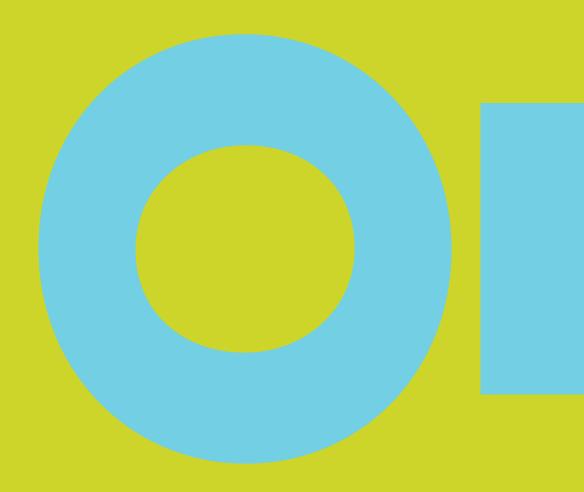
In a social hackathon, community members tend bring to the table problems which are close to their heart. This, in conjunction with an intensive development process where emotions run high, means there is always a risk of emotional crises in teams.

This is a very natural part of teamwork, and particularly when experts from different fields or people in different social categories start to collaborate, enormous work is needed to find a common language and to handle team dynamics.

Organisers have a responsibility to handle these situations gently and carefully to bring teams back together, facilitating and coaching team sessions. Mentors must be ready to support not only cocreative service design processes in teams, but also direct development of relationships and the power balance in teams, to help ensure that all voices are heard, to mediate contradictions, and to support teams in finding better synergies and collaboration within the team.

Once teams have been created, the organisers announce the ideas that attracted enough team members, and from that point on those teams are the official participants of the hackathon event. Each project/team must have a name, under which they will communicate for the duration of the 48 hours.

By the time the introduction, the pitching event, and team creation are over, it is usually 8:00-9:00 PM. Teams need to receive their own project room or settle into a comfortable corner of the building as a dedicated place for their work over the coming two days.



Development work

Development work

How does project development work? How do the teams work?

Most of the time, teams are engaged in their project development work. Out of the 48 hours, about 40 hours should be spent on intense, continuous development work.

In order to create an optimal environment for this intense work, teams need their own private rooms/ corners that they can design and arrange according to their needs. This place must be available to them continuously and exclusively during the entire event. Many times it happens that team members work in shifts. Visionaries, designers, and other professionals clarify the main functions and service elements during the day, while IT developers, who often prefer to work in isolation, code at night. At some hackathon events, team members don't even bother going home to sleep. They sleep at the venue in sleeping bags or go home for just a few hours of sleep.

If the event works well, participants won't sleep much. During our Estonian social hackathon events, many participants reported that even if they went for a sleep they were dreaming of the project and woke up very early to come back and continue the work.

Therefore, it is very important to provide a lot of opportunity for leisure and relaxation. A ping-pong table, indoor or outdoor sport facilities, and tons of coffee are very common elements of a hackathon event, as is proper catering with available high-caloric food. Incorporating morning exercise, facilitated break events, and games to handle the tension of intense work is a good idea.

Participants might arrive with their children, pets, or elderly family members and in our experience, a family friendly setting elevates the quality of the event significantly. It isn't just the accessibility of the event that will be increased, but very likely there will be project ideas addressing children, and their presence is an excellent opportunity to validate ideas with the consent of their parents.

In order to facilitate the project development process, the tools and methods prepared by mentors are extremely important. Giving small assignments, setting milestones, and visiting teams regularly at checkpoints all provide a certain structure to the development work. We frequently use an adapted version of well-known business development tools, like the Canvas business model adapted to impact-oriented initiatives, or design thinking. But there are several other possible approaches using community-development tools or theme-specific methods. It is important that these methods and the related tools, sheets, equipment be prepared prior to the event, and that participants be supported in learning how to use them.

Especially at the beginning, teams must have enough time to get to know each other, to clarify roles within the team, and to create a common language.

During the checkpoints it is crucial to give constructive, direct feedback to the teams, which helps them keep their development goals realistic and manageable, while supporting them to make corrections and changes where needed.



Final presentations and closing ceremony

Final presentations and closing ceremony

On the third day, from 2:00PM on, all the participants gather into the plenary room for the final presentations. One of the main differences between a traditional IT hackathon and a social hackathon is the expected outcome. An IT hackathon usually ends with a prototype app, software, hardware, or at least a mock-up that is only a few steps away from a minimum viable product.

Social hackathons are more sophisticated and most of the ideas and the problems they address are so complex that it is not possible to solve them with a few hours of coding. Wicked societal or environmental problems need complex answers, that involve and mobilise many stakeholders. The fields social hackathons operate in are very often strictly regulated, with governments and the public sector dominating those fields. Innovative ideas need to take into consideration the characteristics of these sectors, meet the strict regulations, and be sensitive to liability, data protection issues, and the public interest.

On the other hand, addressing real societal and environmental problems could elevate the innovative start-up sector from the world of photo-sharing and dating apps to real life problems, making sure that this extremely fast and effective method of problem solving is utilised for a larger good.

The final presentations at social hackathons are mostly still concepts: sometimes concrete or detailed plans or even products, other times strategic concepts that need to be implemented after the intense 48-hour development cycle. The real added value of the events is the co-creation, the encounter of people from very different backgrounds and their efforts to do something that none of them could have done alone but are capable of doing together.

Therefore, the final presentations are more about the demonstration of the team's potential in addressing decision makers, investors, regulators, and the public who may be able to help in realising and implementing those ideas.

A social hackathon can only work in a flexible context where public authorities are ready to embrace new ideas and negotiate about local or even national changes in regulation in order to utilise the enormous energies local communities can mobilise for solving their own problems. In this way, the social hackathon method favours an environment where bottom-up initiatives and innovation have a place and co-creation of public services is acknowledged by the authorities.

When projects are evaluated by a jury, it makes sense to invite government representatives, local municipalities, corporations, investors, and entrepreneurs who might be personally and directly impressed not only by the ideas presented to them but by the strong atmosphere of these events where creative energies are concentrated and obviously visible.

These creative energies and shared efforts must also be celebrated. It is very important to close the social hackathon event with awards, shows, and entertainment where the enthusiastic and very likely exhausted participants feel acknowledged, celebrated, and taken seriously. Music, fun, and giving the microphone to as many people as possible are very important, and the closing event itself is a perfect occasion for media awareness, social media campaigns using hashtags and keywords, networking, and community building.



Horizontal dimensions

Horizontal dimensions

User involvement

How to involve members of vulnerable groups and social/health service users into the social hackathon event.

Involving vulnerable people in a social hackathon event requires a complex, proactive approach during the preparation phase, and relevant support must be provided during the event and follow-up phase as well.

In our experience, face-to-face meetings with user group members, or even individual meetings where we can introduce our objectives and develop a trustful relationship, are critical.

Pre-events play an important role here. This is where we demonstrate our user-friendly approach, paying attention to accessibility and inclusion and delivering the message that the involvement of people with disabilities and mental health problems is important to us.

As a communication strategy we recommend placing an emphasis on storytelling and <u>community</u> <u>reporting</u>, thereby providing people the opportunity to share their own personal stories. This very personal communication style helps to engage vulnerable people, service users, and fellow citizens as personal stories are always more understandable than abstract professional terms and theories.

ACCESSIBILITY

Collaboration between accessibility field experts—such as organizations for people with special needs—helps to arrange social hackathons and ensure that all important questions have been taken into consideration. When planning an event, it is crucial to pay attention to communication, volunteers, the environment, and accessibility.

The whole team, including volunteers, have a vital role to play to ensure accessibility. A quick brief about accessibility is needed for team members helping to organize the hackathon. In addition, it is important to discuss how accessibility is intimately intertwined with everyone's' responsibilities: how to design a website; what kind of posters to create; where necessary, assistance equipment and instructions for use; which is the best approach to accessibility; and how to increase accessibility.

To increase accessibility, volunteers can be enlisted (see www.vabatahtlikud. ee/eng) to help people with special needs in various situations: opening doors, finding places to sit, moving around in the space, assistance when eating, helping to get dressed, etc.

It is recommended to have a separate section dedicated to accessibility information on the website. It should be easily located with the label "Accessibility", for example on the main menu, to be immediately identifiable. Technical accessibility also means ensuring that the website is legible for people with visual impairment using a screen reader, and it is therefore important that the website designer take these accessibility solutions into consideration. Including sign language accessibility solutions shows that deaf people are also welcome.

In printed material, the information about accessibility should be as clear as it is online. Where possible, a best practice is to choose a font size of 16 (recommended for Arial font style). In this way, the needs of the visually impaired are taken into account.

Where videos are shown on the screen, subtitles may be used (in addition to Estonian, consider other

languages that might be needed). This includes sign language subtitles—there will be a translator in the corner of the video. Braille should be used to assist the blind in finding directions, and it is a good idea to use highly visible signs and direction boards.

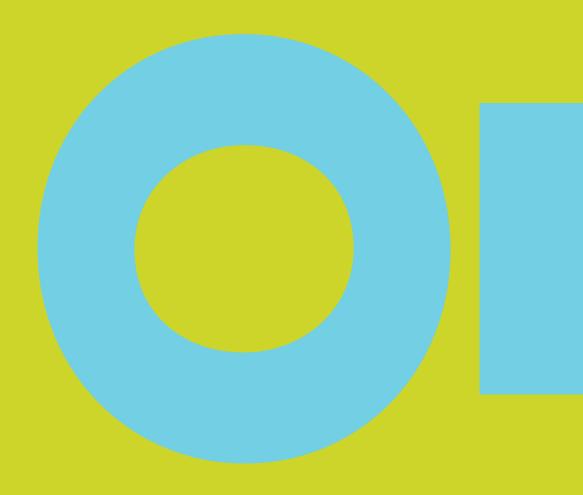
Under the accessibility information, the following questions should be answered:

- OI Are there obstacles (e.g., stairs) at the entrance to the event?
- OI Is there a bathroom for people with special needs?
- OI Is there a parking spot for people with special needs?
- OI Are the hallways and corridors between rooms and areas accessible for people with special needs?
- OI Does the hall/grandstand have spots for wheelchairs?
- OI Is an induction loop system used (a technical solution that allows people with hearing aid to hear clear audio without back noise)? In which rooms?
- OI Does the personal helper or translator get a free pass?
- OI Where can one get more information about accessibility? (phone number and email)

Information about provided translating services should also be included. For more information about accessibility, we recommend the handbook published by Sini Kaartinen and Aura Linnapuomi (2015).

Estonian text translated into English by Sten Leinasaar, Helpific.





Data management

Data management

How to handle data collected during a social hackathon event, respecting data-protection principles.

In order to properly handle all the personal data collected related to the social hackathon event, organisers need to set up an explicit privacy and data management policy.

This policy must include:

- OI What kind of personal data you are collecting,
- OI Which way data is collected,
- OI The purpose of processing the personal data,
- OI The List of persons and organizations who have access to the data,
- OI The right to request deletion and removal of collected data, and
- OI The duration and mechanism of archiving the collected data.

Participants and everyone whose data has been collected must give their consent. On a website or social media this can be solved with online forms; for the face-to-face social hackathon events we recommend using printed and signed consent forms.





Open data, and how to use data and statistics during hackathon events

Open data, and how to use data and statistics during hackathon events

Supporting teams with available statistics and data about their region and their specific fields.

Using available data and statistics, scientific studies, and evidence from research can meaningfully elevate the quality of a social hackathon event.

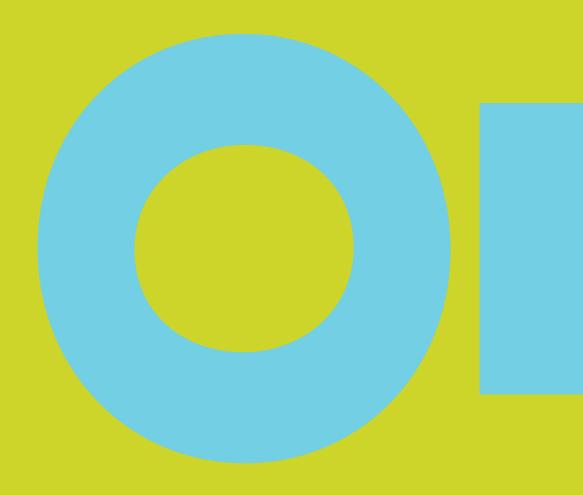
During the preparation phase it makes sense to collect all the relevant available data, studies, and research results about the topic of the hackathon and/or about the geographic area where the social hackathon will be organised. A best practice is to consolidate these data into print or online booklets to provide to each hackathon team as a handout.

During the process of designing new solutions, hackathon teams have to prove the importance of the problem they are solving on the basis of open data. Many participants arrive with personal experiences about the problems they are trying to solve, which is great, but when we are working on general solutions at a system level we need to be informed about the scale of the problem and its context. Open data, available statistics, and research help teams elevate their solution to a system level, allowing communication with relevant stakeholders and decision makers.

We recommend instructing teams that their final presentation should consist of relevant data, and both the mentors and the jury must be instructed to pay attention to this requirement.

Open data is one of the instruments in the hackathon's toolbox. Open access usually provides online access to scientific information – research data and articles – free of charge.





Policy perspective

Policy perspective

How to have an impact at the local, regional, and national-policy level with a social hackathon event.

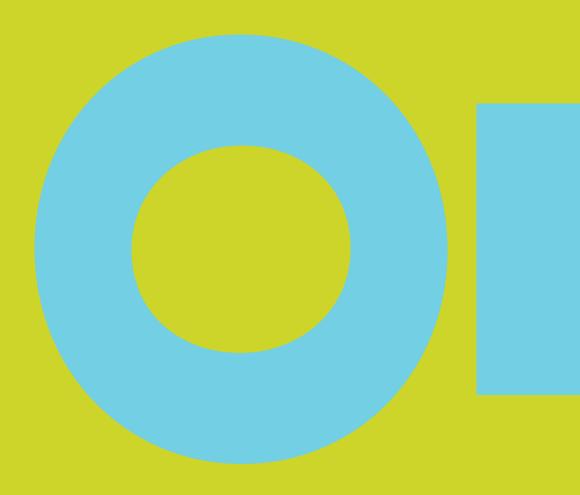
In the case of a traditional IT hackathon, the products and services developed seek market opportunities and investors as enablers and accelerators in order to enter the market.

In the case of a social hackathon, we speak rather from a policy perspective, addressing public authorities, local municipalities, and government agencies due to their regulatory role or because the addressed issue belongs to their domain. Of course, many projects can also go to market, but most likely at some point every social and environmental project will have an encounter with the public sector.

In order to create a path for successful projects to scale and turn outcomes into impact, we need to look at the new initiatives from a policy perspective. Our experience is that it is very rare for individual projects to reach this level. However, if we are able to see the interconnectedness between different projects, especially if we organise more than one hackathon event in a particular region, the separate initiatives can be perceived as a network of innovators.

Other than the hackathon events themselves, we need to build an entire ecosystem that promotes social innovation, where single initiatives are guided through a process to join their forces with other initiatives in order gain visibility on a local- and regional-policy level. This ecosystem already exists in many places, where social innovation has its own infrastructure. However, in most cases hackathon organisers are pioneers in their area. In this case, you need to make the extra effort to connect your successful project with local municipalities, service providers, decision makers, businesses, and the public, and the follow-up phase of the hackathon event will be as intense as the event itself.





ICT



What role can modern ICT tools play in organizing and running social hackathon events?

Estonia is a highly digitalised country where the opportunity to have access to the internet is legally guaranteed. Digital solutions and the extended use of ICT tools is vital in the country.

Working remotely, using online tools for team communication, and being connected online instead of physical meetings became mainstream all over the world mainly due to the COVID-19 pandemic crisis.

At a social hackathon, where people from different geographic areas and with different professional backgrounds are working together using modern info-communication technology, ICT can reach across distances to make team communication smooth both during the event (in case of online hackathons) and especially after.

Although the social hackathon event lasts for just 48 hours, the time when real encounters occur between different stakeholders and work on specific development ideas begins, we encourage teams to stay together after the event, to implement their idea. This is only possible if they have relevant tools for communication and teamwork.

There are plenty of widely used ICT tools our hackathon teams have used for co-creation:

- OI Skype, Zoom, MS Teams for videophone conversation and for exchanging files
- OI Facebook groups for closed team communication
- OI Facebook pages for branding and engaging different stakeholders and the public
- OI Facebook based communication tools (Messenger, video and phone call)
- OI Project management tools (Basecamp, Slack, Monday.com, Toggl)
- OI Online survey tools (Google forms)
- OI Document sharing opportunities (Dropbox, Google drive, Excel, Google doc, WeTransfer)
- OI Smartphone based communication platforms (WhatsApp)

It is also encouraged to develop new ICT tools.

Within the framework of the CoSIE project in Estonia our project partner Helpific MTÜ has developed an online platform supporting vulnerable people in local communities. The platform has a special function to invite, involve and support people with disabilities participating in events, including social hackathon or other co-creation events.

We also have to note that involving vulnerable people into the co-creation process requires direct communication, including personal meetings, phone calls, emailing, round-table events and seminars. The aim is to build trust and based on our experience, this will not succeed with only social media and ICT tools.

Impact measurement

There are different ways to measure the impact of a social hackathon event. It is very important to identify your indicators beforehand and stick to them during the evaluation process.

The best and most transparent way of impact measurement is through a a third party. You may cooperate with universities, research institutes, or you may order independent audits. However, self-evaluation and self-reflection are also vitally important, and this self-evaluation can also be co-created with the different participating stakeholders.

You can set short-term and long-term indicators, as well as indicators measuring your performance on micro, meso, and macro level.

Short term indicators can be those that you can measure immediately:

- OI Number of signups, participants
- OI The diversity of participants by age, gender, location, professional background, expertise
- OI The number of approached and involved stakeholders
- OI The number of project ideas pitched at your events and the number of project teams that managed to finalise the hackathon
- OI Award winners, those who were referred to other higher events, into acceleration programs, investment turns or were invited by local governments, ministries

These indicators you can measure right after your event(s) and many of them can refer to your impact. For example, if you manage to involve a large number of people from very different backgrounds and they participate in the co-creation process, you have most likely already made an impact, as nowadays very few public services are designed in this way.

But of course, long-term indicators are more important, and refer to real, long-lasting impact on policy level.

Such indicators can be:

- OI Number of projects that were successfully adopted in the local public service sector, either as a completely new service or embedded into an existing service.
- OI Number of projects that successfully innovated existing services, their operation, their effectiveness or efficiency.
- OI Number of projects that continued as a start-up, contracted by public agencies or local municipalities, or which received investment from impact investors or general business investors.
- OI You also can measure your own effect on the local or even national decision-making and policy-making process.

In our Estonian CoSIE pilot the most important impact we had was that after the 3-year project period, the five involved local municipalities of Võrumaa county decided to incorporate the method of co-creation through social hackathon events into their service development and innovation strategy. From 2020 on, they will organise social hackathon events every year. Furthermore, other local governments of Estonia and organizations from abroad also show increasing interest toward our method. This year we organised two additional social hackathon events and started a new project to replicate our method in Hungary and Romania. The president of Estonia has awarded our method as a most creative initiative in 2019 in social innovation.



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