MONICA

Management Of Networked IoT Wearables – Very Large Scale Demonstration of Cultural Societal Applications
(Grant Agreement No 732350)

D11.4 Entrepreneurship and Innovation Promotion Service Package

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Index:

1 Executive Summary

This deliverable is part of WP11 Socio-economic & Business Processes and task T11.4 Entrepreneurship and Innovation.

The IoT Entrepreneurship and Innovation Promotion Service Package is a comprehensive packet of start-up services consisting of access to open data sets, a MONICA Development toolbox and a Business Growth Programme. The package is available as an incubator service for the winners of the three MONICA hackathons described in this document but will also be available on the MONICA website and promoted to a broader group of stakeholders with an interest in utilising MONICA results.

To create opportunities for entrepreneurs from all over Europe and get them involved in the project, three local hackathons have been organized at three different locations in Europe (Roskilde Denmark, Leeds England, and Torino Italy). The overall joint theme of the three hackathon events is user engagement and enhancing user experience. At the hackathons, entrepreneurs were able to meet and collaborate intensely on developing application prototypes that can be used and tested in the MONICA project pilots. The entrepreneurs can also develop new software based on the MONICA Use Cases as well as the data generated in the T11.3. MONICA Open Data Portal and data sets.

The best entrepreneur or start-up at each hackathon event have won a prize of 5,000 EUR and participate in a customised MONICA Business Growth Programme and finally they will be able to test their prototype at one of the project's six pilot sites during the second phase demonstration.

To ensure a wider impact of the Service Package, several activities have taken place and are planned. Among these activities is further material and presentation as well as the release of the MONICA Toolbox. Also, the online promotion of the MONICA Collective Awareness Platforms is planned together with workshops attracting SMEs for the business aspects and promoting the Service Package. Collaboration with Activity Group 4 creates synergy with other LSP on attracting SMEs and promoting the MONICA tools.

2   IoT Entrepreneurship and Innovation Promotion Service Package

The IoT Entrepreneurship and Innovation Promotion Service Package is a comprehensive packet of start-up services consisting of access to open data sets, a MONICA Development toolbox and a Business Growth Programme.

The package is available as an incubator service for the winners of the three MONICA hackathons described in this document but will also be available on the MONICA website at http://www.monica-project.eu/index.php/get-involved/ and promoted to a broader group of stakeholders with an interest in utilising MONICA results.
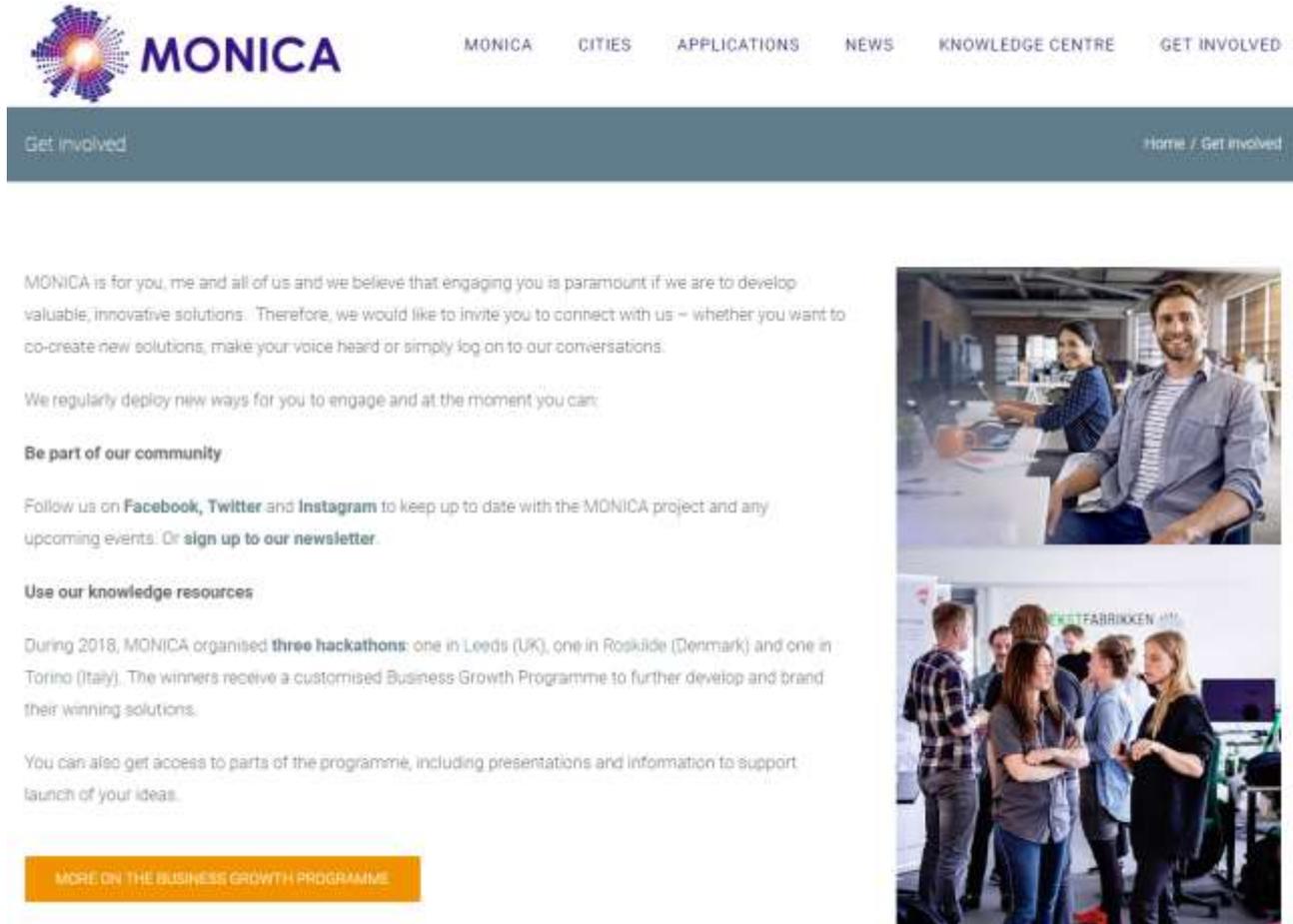
Figure 1 The Get Involved page on the MONICA Website

Figure 1 shows the main entrance page to connect with MONICA and the promotion package. It is continuously updated and promoted with new services. The package will be promoted at project level but also through the existing network of project partners

2.1 MONICA Business Growth Programme

The Business Growth Programme contains several specialised consultancy services regarding business concept, models and development, business economics and finance as well as costumer relations and organzation.

A customised programme is offered to the winners of the MONICA hackathons which includes customised consulting with a business development consultant, workshops on business aspects and guidance by technical project partners (see further details in Section 4).

Finally, the winners will be able to test their prototypes at one of the projects' six pilot sites. A detailed description of the growth programme is available at:

https://www.monica-project.eu/business-growth-programme-and-resources/

To reach a broader group of stakeholders, elements of the programme will be available on the MONICA website and promoted through the existing networks of Vaeksthus Zealand (VHSJ) and other project partners. These services are described in the following section.

2.1.1 Business Consultancy Services

To support entrepreneurs and SME's starting or developing their business derived from the MONICA Project, MONICA offers a range of business consultancy services online. An information package is available with presentations on business development and marketing providing A-Z information on getting a business started and further developed.

The material from VHSJ provides guidelines on establishing a business and developing a product and provides key points on costumer relations, marketing, sales strategies and Go-to market plans.

Additionally, a comprehensive list of links and contact information to key support initiatives is displayed. All support initiatives are designed to help business grow for entrepreneurs and SMEs.

The information package is available at:

https://www.monica-project.eu/business-consultancy-services/

Figure 2: Presentations on business foundation and marketing

2.2 MONICA open data portal and data sets

Some of the data collected in the MONICA pilots are available at the MONICA open data portal. These data sets can be used by external parties for any purpose. Not all MONICA collected data is available as open data since there are different restrictions due to privacy, security or other issues with the data.

There are two main ways of accessing the MONICA open data:
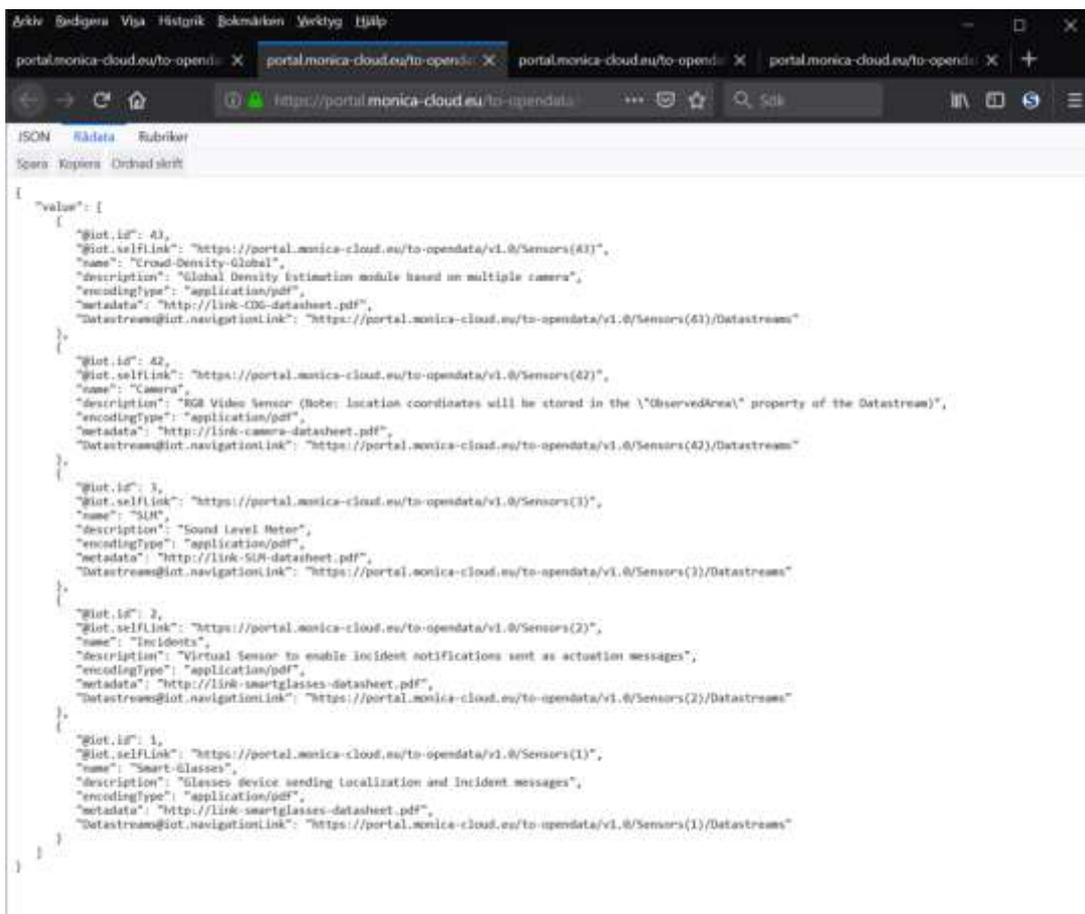
• The actual Open Data Sets using OGC SensorThings API

- Visualised and processed data

2.2.1 Open Data Sets (OGC SensorThings API database)

Some of the data collected during the MONICA pilots is available as open data sets that can be queried and processed. The data is available in an OGC Sensorthings API database. Open Geospatial Consortium (OGC) SensorThings API is a standard for storing and accessing sensor-based data which is commonly used. We will not go in to the details of OGC Sensorthings API here, a good introduction can be found here http://developers.sensorup.com/docs/#introduction.

The following screenshots show examples of the open data collected from the Movida pilot in Torino. The data is publicly available at https://portal.monica-cloud.eu/to-opendata/v1.0.

Figure **3** shows the available sensor types at the Movida pilot which have collected open data.

Figure 3**: The available sensors in the Movida pilot in raw json**

The available sensor types are:

- Crowd density global: Aggregated crowd density data from all cameras deployed in Movida;

- Camera: Individual data streams from each camera deployed at Movida. The camera data streams available here are only processed data which does not include any imagery, such as people count etc.;

- Sound Level Meter: Sound level data from the deployed sound meters;

- Incidents and Smart-Glasses: Created as part of the Hackathon in Copenhagen and does not contain any real collected data.

The easiest way to browse an OGC SensorThings API database is to use the Firefox web browser since it interprets the json and creates links that can be used to follow the links directly. Figure 4 shows all the available data streams from sound level meters at Movida using Firefox.
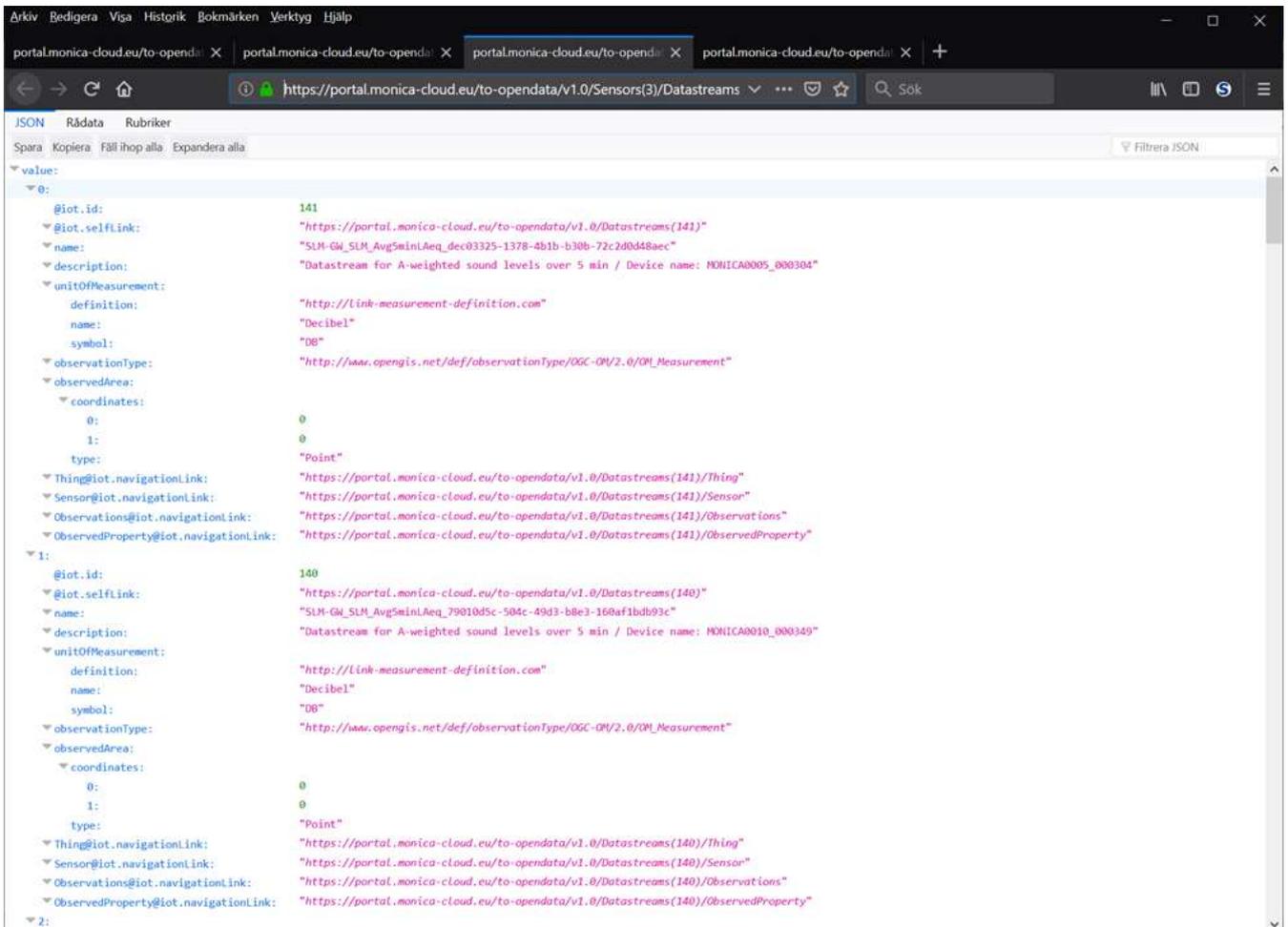
Figure 4: Sound Level Meters in the Movida pilot

The actual measurements from the sensors are stored as observations in the data stream. Figure 5 shows an example sound level meter observation.
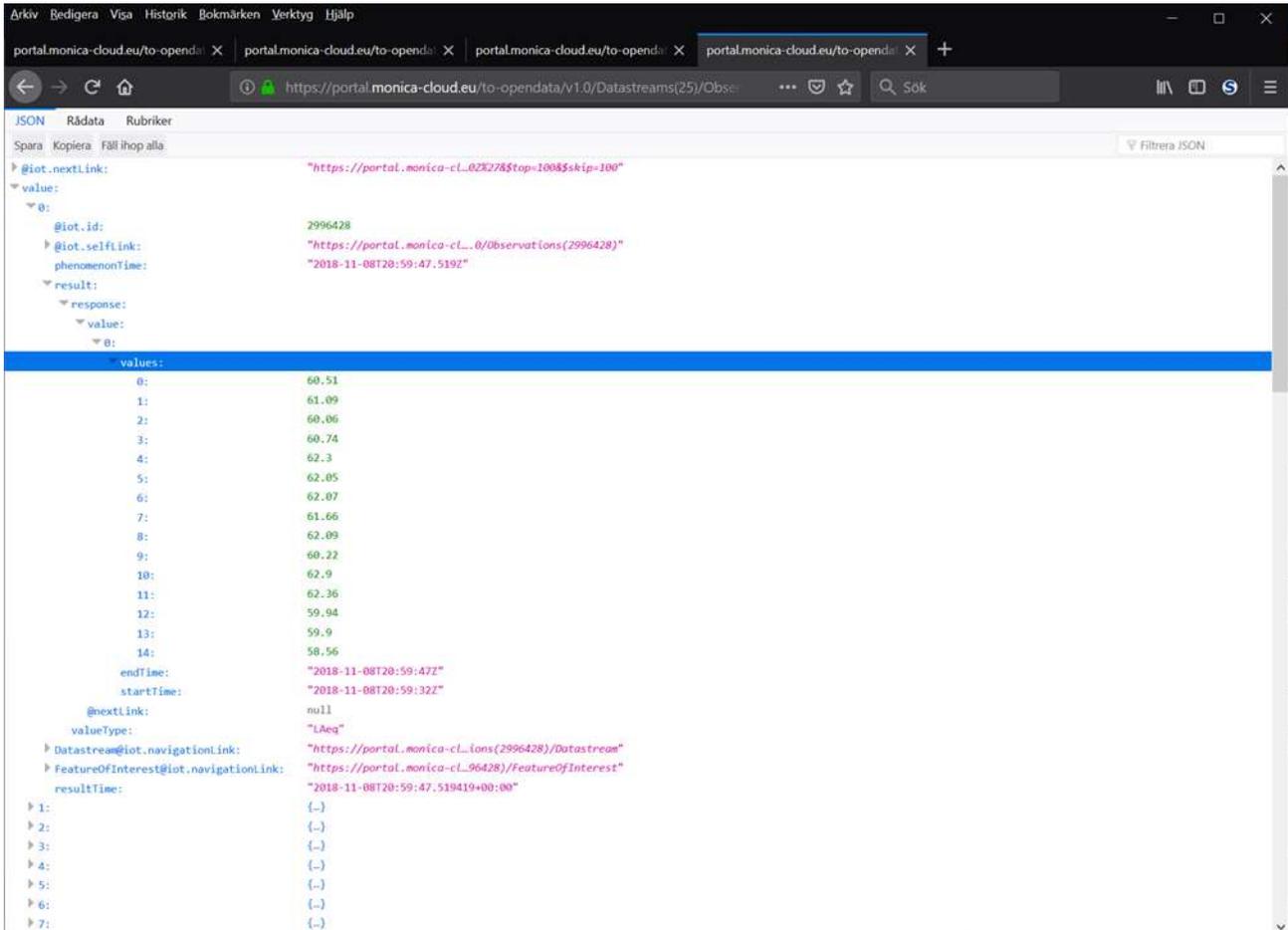
Figure 5: Example of a sound level meter observation

2.2.2 Visualised and processed data

In addition to the raw observations stored in the OGC SensorThings database there is also the possibility to look at some of the collected data visualised in different ways. The source of the visualised data is the same OGC SensorThings database data sets.

The visualised data is available at https://portal.monica-cloud.eu/grafana/. We will show some examples of visualisations. The first example, Figure 6 shows visualised camera data from the Fetè des Lumieres pilot in Lyon.
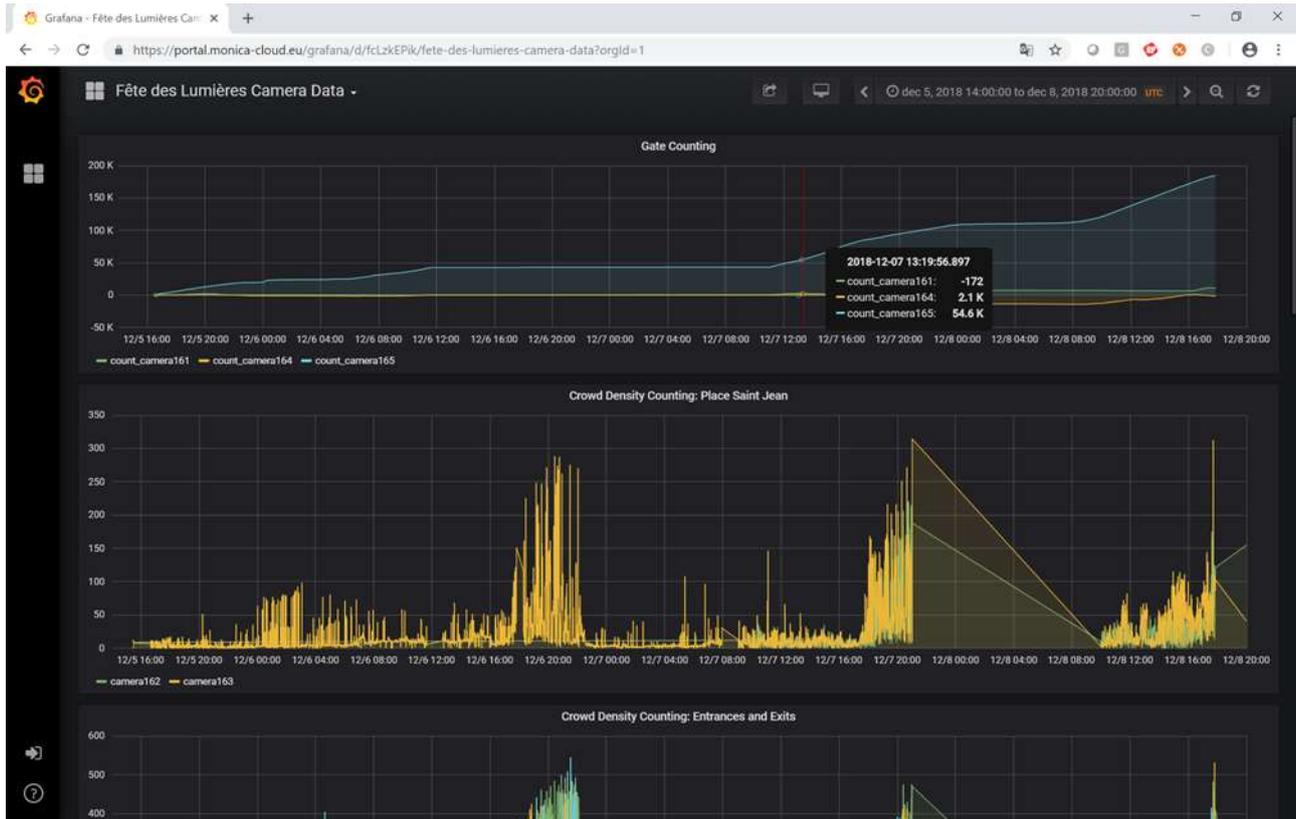
Figure 6: Visualised camera data

The creation and editing of different visualisation require that one is a registered user with credentials, i.e. it is not open to everybody.

2.3 MONICA Development Toolbox

The MONICA development toolbox provided by CNet is described in detail in D7.5 The MONICA Development Toolbox 1 but we will give a short overview of the contents here. There are three main parts in the MONICA development toolbox:

- Open Source Components: Which consists of open source code repositories and readymade docker containers that can be reused or extended;

- Open Data: Data that can be reused and visualised collected at the different pilot sites, see section 2.2;

- Extending MONICA: Description and cookbooks of extending the MONICA platform with new devices as well as new backend functionality.

Note that all parts are not complete at the current time in the project, but materials will be added when they become available.

Both the open data and development toolbox will be accessible via the MONICA project website.

3 Create opportunities: The three MONICA hackathons

To create opportunities for entrepreneurs from all over Europe to get involved in the project, three local hackathons have been organized at three different locations in Europe (Roskilde Denmark, Leeds England, and Torino Italy). The overall joint theme of the three hackathon events is user engagement and enhancing user experience.

During the hackathon events, start-ups and software developers from all over Europe were able to meet and collaborate intensely on developing app prototypes and solutions built on the MONICA Use Cases and where available IoT infrastructure and underpinning the broader application objectives of the project.

Figure 7: invitation for developers to apply for the MONICA Hackathons

3.1 The overall organizing of the 3 hackathons in Europe

The organization of the hackathons and the decision to split them in three Hackathons was decided at Project Coordinator level. This organization was agreed upon to ensure that hackathon is local/national grounded and spread over the European countries that are participating and to ensure as much diversity in the participation of new businesses and entrepreneurs/developers.

It was decided that the winners of each of the hackathons should receive a winning prize and a customised growth programme but also that other participants at the hackathons should be invited to connect and stay in dialogue with the MONICA project.

It was agreed to split the subcontracting money between the hackathon organizers to ensure local embedding and to secure best value for money, by having local partners assign the best supplier for the task. This was also done to avoid any unnecessary losses for the project in form of VAT issues when buying from suppliers in other countries.

The local partners in each of the three hosting cities were responsible for organizing, financing and promoting each event at local level.

The three local partners each received 40,000 EUR as co-financing for organising their local hackathon activities as described in WP 11 Socio-Economic and Business Processes (T11.4 Entrepreneurship and Innovation) of the Grant Agreement.

The 40,000 EUR for organising the event covered:

- 5,000 EUR for prize money

- 35,000 EUR for organising the hackathon event. The 40,000 EUR is part of the budget of 150,000 EUR that has been allocated to implement these.

Table 1: Budget of 150,000 EUR for Entrepreneurship and Innovation activities

Activity	EUR
Growth Program activities and business consultant	30.000
Hackathon 1 - organization of event	35.000
Hackathon 1 - prize money	5.000
Hackathon 2 - organization of event	35.000
Hackathon 2 - prize money	5.000
Hackathon 3 - organization of event	35.000
Hackathon 3 - prize money	5.000
Total	150.000

3.1.1   Joint theme of the 3 hackathon events

The overall joint theme of the three hackathon events is **user engagement and enhancing user experience**.

This means that the apps and solutions developed and presented by the start-ups during the hackathon are focusing on involving users and enhancing their experience at large open-air events in the city.

Apps could be e.g. volume controls for hearing aids, augmented reality for events, gamification etc.

The three local hackathon events will each be focusing on a sub-theme defined in relation to the local project pilots. The sub-themes will be described further in the description of each of the Hackathons

3.1.2   Overall promotion of hackathon events

In March 2018, MONICA launched the promotion of the three local hackathon events All three hackathons have been promoted extensively at project and partner level, through online channels and face-to-face meetings and events.

3.1.3   Target groups and communication plan

In table2 we have identified a set of target groups, covering the full range of potential users and stakeholders.

Table 2 Target Groups and Communication

Target groups	Role	Interest in MONICA	Communication Channels

Start-ups Entrepreneurs Software developers Students	Develop new solutions built on the MONICA IoT infrastructure and/or the MONICA broader objectives and thereby creating new business opportunities	Use the MONICA generated data and toolboxes (The Entrepreneurship and Innovation Promotion Service Package) to develop new applications and solutions, participate in hackathons and test prototypes at project pilots	Innovation and incubator hubs, accelerators, developer and tech communities, IoT ecosystems, universities

The main online communication channels are listed below, of which the first three are described in this deliverable:

- Project website and newsletter

- Social media

- Partner websites and social media platforms

- MONICA partners websites and network

- Press and online networks

Applicants could apply to participate in one or more of the three local hackathon events. The registration of interest was available online through The Entrepreneurship Promotion Service Package at http://www.monica-project.eu/index.php/get-involved/

As well as on the local hackathon organizers' website in Leeds, Torino and Roskilde.

Prior to each hackathon event, the most promising start-ups with the best and most relevant ideas are pre-selected and will be invited for the hackathon event they applied to participate in.

The three local hackathons are held at three different locations during the autumn of 2018. The three hackathon events are described further in this chapter.

3.2   The organizing of the MONICA Open Air Hackathon

3.2.1   Organizing the MONICA Open Air Hackathon – selection of organizer

The MONICA Open Air Hackathon was organized together with Musicon and Growth Factory Copenhagen Sound (VHSJ).

After a bid round where three Hackathon organizers were invited to give a bid on the organization of the MONICA Open Air Hackathon, Musicon was selected. The criteria for selection was especially due to their experience in organization of Hackathons, besides that, they could offer:

- Access to their large network of Festival (e.g. Roskilde Festival)

- Using the famous Museum Ragnarock and the Musicon district as the setting for a Creative Hackathon

- The prospect of using Orange Makerspace for developing prototypes and testing ideas directly on a large audience, and the creative platform.

Parallel with this, Musicon ran a cultural festival, Rabalder Festival which enabled the participants to use the smart city lights, concerts, audience and security for testing their prototypes.

MONICA Partners IN-JET and Copenhagen Municipality took part in the planning of the MONICA Open Air Hackathon.

3.2.2 Recruitment and advertisement activities

The advertising of the MONICA Open Air Hackathon already started in November 2017. More than 30 meetings with entrepreneurs were held in the Innovation Hub of Copenhagen Sound to present the MONICA Hackathons.

From the start of June 2018 until end of August the more targeted recruitment started. During that period the following recruitment activities was executed:

3.2.2.1 Flyer

A flyer was distributed on all social platforms like LinkedIn, Facebook, Twitter calling all developers to participate in the hackathon.

3.2.2.2 Advertising on Social Media and MONICA website

The hackathon was launched and promoted through the MONICA website, social media channels and newsletter and via MONICA project partners websites.

Figure 8 The MONICA Open Air Hackathon Call at https://www.monica-project.eu/musicon-hackathon/

The communications strategy was to reach as many *qualified* entrepreneurs and potential hackathon participants as possible – both inside and outside Denmark.

The invitation was posted to the most relevant partners from the network within the music and sound industry to help us distribute news about the MONICA Open Air Hackathon at Musicon. See further in the following sections.

3.2.2.3 Facebook campaign

Besides weekly news about the MONICA project, a customized campaign was distributed on both the Facebook and Instagram page both on partner and project level

The aim was to present the experts from the MONICA jury and partners and to let them motivate and persuade the audience to participate in the MONICA Open Air Hackathon. Each jury member was asked to answer the question: *Why should people sign up for the Monica Open Air Hackathon?* Afterwards their statements were posted together with a picture using the same graphic design/template. By doing this we also highlighted the fact that the participants would get the chance to meet with these thought leaders during the hackathon.

The campaign reached out to 1.400 people on Facebook

We posted in the following FB groups:

HUMTEK, DTU Skylab, Roskilde powered by DTU, Hackathon Hackers, Codeher, IOT for developers, women in tech, venture cup, IOT meetup Denmark, VR/AR, Orange Makerspace,

3.2.2.4 Targeted communication

Via emails and meetings targeted emails and called relevant people/networks/companies/universities

Newsletters

The call for participants was distributed to following newsletters:

Growth House Zealand (4.610 subscribers)

Danish Sound Network (600 members)

Gramex (Collective Music Rights) (10.000 subscribers)

Creative Business Cup (66 partners worldwide)

Sonic College (approx. 100 students (sound designers)

Aalborg University (MA students from Sound and Music Computing)

Distribution on European hackathon sites and through the European Large-Scale Pilots Programme network

3.2.2.5 Instagram campaign

We have also posted the Facebook campaign on Instagram. Besides that, we have posted several pictures and videos during the hackathon event on both *Lydens Hus* and *Monicamatters* Instagram page.

Furthermore, Instagram-stories with snapchats from each day of the event and from the final pitches were posted.
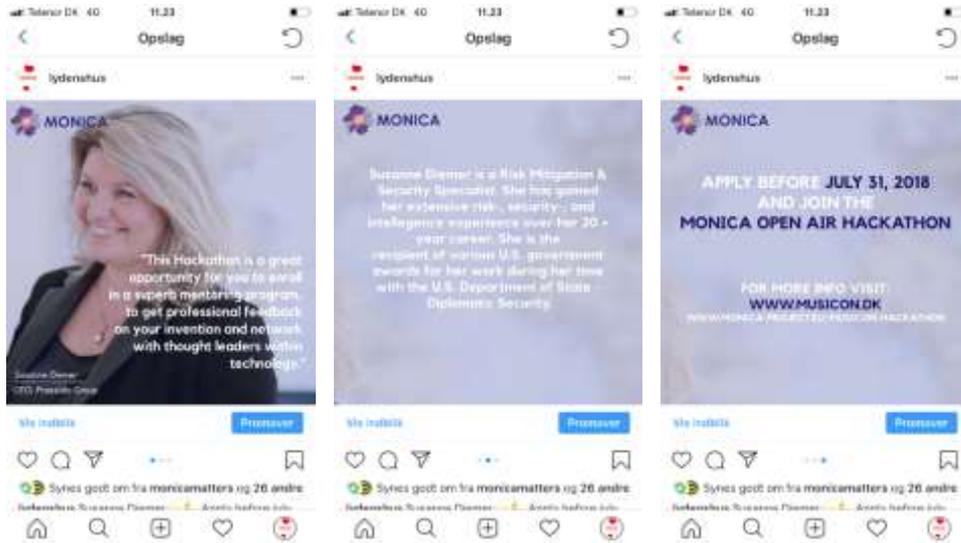
Figure 9 Instagram Campaign

3.2.3 Application forms and selection of the participants

An online application form was made available through The Entrepreneurship and Innovation Promotion Service Package on http://www.monica-project.eu/index.php/get-involved/ and on the local hackathon organizers' websites.
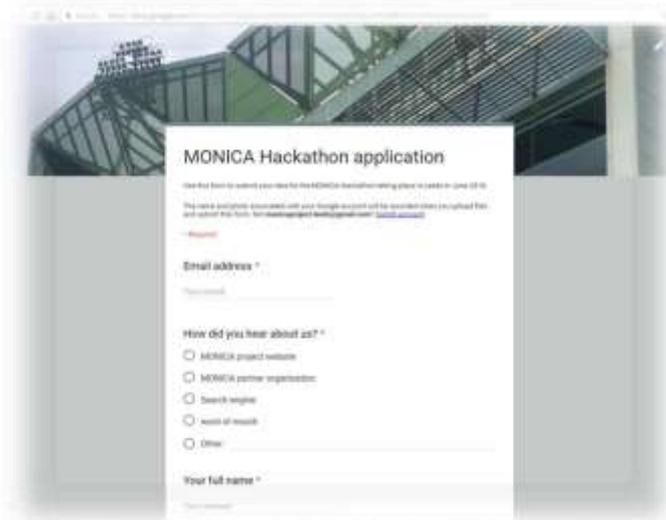
Figure 10 MONICA Application form

Already here, the selection process started since the start-ups and entrepreneurs from all European countries could apply by uploading proposals describing their business idea, technical solution, team, the commercial potential/sustainability of their solutions and opportunities for scalability within the selected Case scenarios for the MONICA Open Air Hackathon.

The applicants could/should hereby describe and propose solutions focused on user involvement and enhancing user experience at open-air *concert and music events* in the city

Case scenarios:

- Augmented or virtual reality or gamification for events
- Apps where audience in creative ways can interact with performing acts, other fans or give instant feedback to event organizers,
- Security solutions in relation to crowd management eg. guidance to entrance or shortest queues

By making the application form like this we ensured that applications we received was according to the Use cases and overall target of the MONICA project.

The application forms for the hackathons was open for registration two to three months prior to each hackathon event.

Twenty viable applications were received. Besides two all of them had excellent ideas that was in line with the overall case scenarios and they were all invited to participate in the MONICA Open Air Hackathon

3.2.4 The execution of the MONICA Open Air Hackathon

The MONICA open air Hackathon was held from the 24-26th of August 2018 at the Ragnarock Museum in the Musicon district in Roskilde, Denmark. The Ragnarock Museum was open 24 hours and participants were able to work there. There were provided meeting rooms, common rooms, a stage for the opening and the hackathon finals, a café, and technical assistance. Common rooms were used for workshops and checking in.

The participants had the opportunity to use the Musicon district during the Hackathon. They were able to use Makerspace for developing prototypes and testing ideas directly on a large audience, and the creative platform. Parallel with the hackathon Musicon ran a cultural festival, Rabalder festival. The festival was a good place for participants to take fun breaks, but it also enabled them to use the smart city lights, concerts, audience and security for testing their prototypes.

Program for the hackathon days

A detailed program for the hackathon days were developed. An overall presentation of the MONICA project was given and together with technical and pilot partners in MONIC different use cases were presented as a starting point. Throughout the weekend different workshops was offered within Business Model Canvas, Pretotyping and pitch training.

The MONICA project introductions and description of use cases kicked off the formation of groups. Participants who already had projects were given one minute at the very start of the event to describe what they were working on. This gave other participants the chance to join these projects. We ended up going from 9 groups to 5 groups, because the participants teamed up and could use each other's qualifications. After the pretotyping workshop, participants had the opportunity to go to Makerspace to work on digital production, mini computers, 3D printing, laser cutting, soldering and much more besides. Afterwards everyone was able to test ideas directly on a large audience and on the creative platform.

Participation of the MONICA Partners

During the hackathon professional experts, case presenters and jury were involved and available to the participants.

• Steffen Ring, Ring Advocacy, MONICA Partner

• Peeter Cool, CNET, MONICA Partner

• Susanne Diemer, Presidio group, MONICA Partner

• Henrik Christiansen, TIVOLI, MONICA Partner

• Steffen Johansen, STRØM

• Lasse Sørensen, Væksthussjælland

• Mikael Pass, Roskilde Muncipality

Hackathon finals

The finals took place on stage at Ragnarock, before a live audience. The participants made their final five-minute pitches followed by three minutes of questions from the jury.

Once the teams had all presented their ideas the jury retired to deliberate. There were three award categories:

• BEST MVP

• BEST ENERGY

• OVERALL WINNER

The judges were MONICA partners and a coming judging form was used and the criteria for winning the Hackathon was the idea in relation to the MONICA Use Cases/ Case scenarios, The Business Model, The User engagement and enhancing user experience, Costumer Validation, Execution and Design.

3.2.5 The results of the MONICA Open Air Hackathon

The overall winner of the MONICA open air Hackathon was Auricle.

Auricle usually works with the technologies of today. Devices with screens and regular headphones tend to require complete focus, fully absorbing a human sense such as sight or hearing. Auricle is a technology that, by sending sound waves in form of vibration directly to the human skull, always permits the user's ears and eyes to be free, and therefore completely aware of the surroundings.

Auricle is a personal audio electronics device that promotes awareness, communication, safety and hearing in everyday life situations. Furthermore, it is Auricle's ultimate goal to democratize and de-stigmatize hearing loss; Auricle is both for those with normal hearing and for users with impaired hearing.

Auricle had three strong use cases for MONICA, all revolving around communications.

1. FOR SECURITY: so that they didn't have to rely on headsets clogging their ear canals, enabling them to be spatially and locally aware always.

2. FOR SOUND ENGINEERS: allowing them to perform their operations (i.e. live sound mixing) and communicate at the same time without interfering with their sound perception while working.

3. FOR STAFF MEMBERS FOR REGULAR COMMUNICATIONS.

The winner of **BEST ENERGY** was **Airwallet** –Mobile payment integrated in the MONICA wristband. The visitor will be able to use the wristband to pay at all services at the open-air event. The easy payment will enhance user engagement and experience at open-air concerts and music events. Air wallets innovative interplay between hardware and software enables all services to get the upgrade for mobile payment.

The winner of **BEST MVP** was Kraut management. Their solution focused on Crowd management at big open-air concerts. The team developed a festival app with information about the surroundings.

Target group:

· Festival visitor (services, exits, toilets etc.)

· Service providers (API for caterers, DATA collection)

· Crowd safety manager (Dashboard crowd safety management)

Video of the hackathon days

During the hackathon a video was made. See the video here

https://www.monica-project.eu/innovative-audio-device-wins-the-first-monica-hackathon/

3.3   The organizing of the Hackingley Hackathon in Leeds

After a call for organizers, put out in June 2018, four proposals for the organization of the hackathon in Leeds were received – two from local organizations, one from an international event organizing specialist and one from European SME IoT Tribe.

IoT Tribe was selected because they showed the greatest ability to reach potential participants from across Europe and had good relevant hackathon experience. IoT Tribe is an accelerator for start-ups based in Barnsley near Leeds.

The Hackathon in Leeds took place from the 26th-28th October 2018 at Headingley stadium.

3.3.1   Recruitment and advertisement activities

At MONICA project level a call for developers was established at the MONICA website.
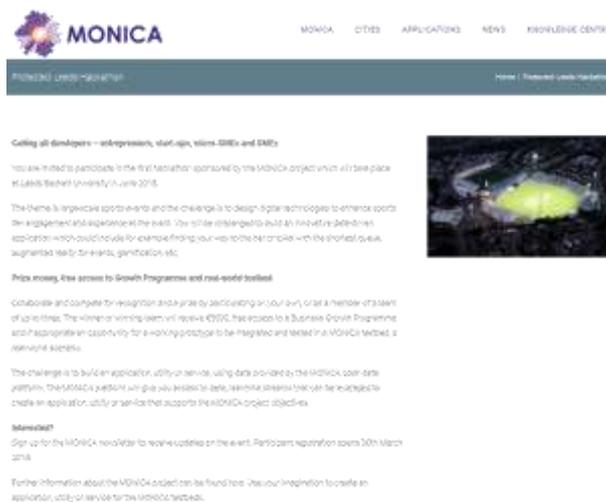
Picture 11 Call for developers to Leeds Hackathon

The aim of the recruitment was to source technical talent from a diversified base. The hackathon was open to teams from any EU country who were provided 250 € towards their travel cost.

The following channels were used to reach the largest number of potential participants in the time available:

•   Blasts to the Startup Europe network, with 361 members

•   Dissemination through technical and other start-up partners including the Cloud Incubator Hub (Spain)

•   Startup.be (Belgium), Cross spring (Netherlands) Startup Wise guys (Baltics)

•   Key IoT networks including Hardware Pioneers and Internet of Things London, which despite the name, is a global community of IoT enthusiasts/geek

A more proactive approach to identifying teams was also undertaken through attendance at the following events:

•   EIC Innovators Summit, 10-11th Sept, Berlin

•   South Summit- 3-5th Oct, Madrid

3.3.2   Application forms and selection of the participants

Leeds received a total of 19 applications, from both individuals wishing to attend and teams of up to three participants, covering a total of 25 participants

•   Of these, a total of 13 applications were suitable and accepted

- 1 did not take up the offer

- 2 withdrew before the event, one due to work pressures and another because their solution was already fully developed

- 1 did not participate because of a car accident on the way to the hackathon

- Several individual applicants joined forces on arrival which resulted in a total of 8 teams taking part • One of the teams was formed by a father and his two children aged 13 and 14.

-

3.3.3   The execution of the Hackingley Hackathon

Under the theme #Hackingley, the Hackathon in Leeds took place on the weekend of 26th-28th October at the Headlingley, Leeds Beckett University Campus. Starting with a tour of the Headingley Stadium and a common briefing on the MONICA project, the teams were able to ask questions before the hackathon commenced in earnest on the Friday afternoon.

Paul Rowbotham project manager at YCCC gave the participants an overview of the stadium and described areas which would benefit from creative solutions to improve the fan experience. The teams then convened to Fairfax Hall at the Headingley Campus for the next two days working extremely hard to create what turned out to be very good solutions for the stadium. The standard was extremely high and the judging difficult.

Picture 12: Gathering before the #Hackingly start in Leeds

At the final day the solutions were presented before a jury who evaluated the pitches according to the following criteria:

- Relevance to the #Hackingley competition challenges:

- Does it fit the brief? Does it answer the challenge?

- Feasibility of the technological solution presented

- Does it work? Can it integrate into the existing solution?

- Does it comply with GDPR? Are the team free to use the IP it uses?

- Scalability of the solution across different venues and contexts

- Can the idea be upscaled? Can it be applied in other areas? Is there a wider demand for it?

- Ingenuity and innovation potential of solution and team

- Does the solution add value to users? Have the team considered the user experience?

Panel of Judges

- Treve Whitford, Head of marketing & Comms YCCC (stadium perspective)

- Daren Lang, Axis Communications (Innovation & business)

- Aaron Whittam, National Physics Laboratory (Innovation)

- Prof Paolo Remagnino, Kingston University (MONICA partner university, London)

- Dr Mario Marino, Leeds Beckett University (computer architectures)

- Chair – Prof Dorothy Monekosso

In the end the winning team (of 1) a young woman (electronic engineer) from Berlin scooped the €5000.00 prize money at the close of the event on Sunday Oct 28th. She will also enter into the Custumised Business Growth programme (See section4) The results of the Hackingley Hackathon

https://www.monica-project.eu/hackathon-winner-impresses-with-solution-for-stadium-visitors/

The winner, Pauline O'Callaghan, is based in Berlin. Her start-up 'Hearability's mission is to give everyone control over their personal auditory environment, making events safer and more inclusive to all.'

The judges were impressed by the inclusivity and the variety of possible uses cases inside the stadium and elsewhere.
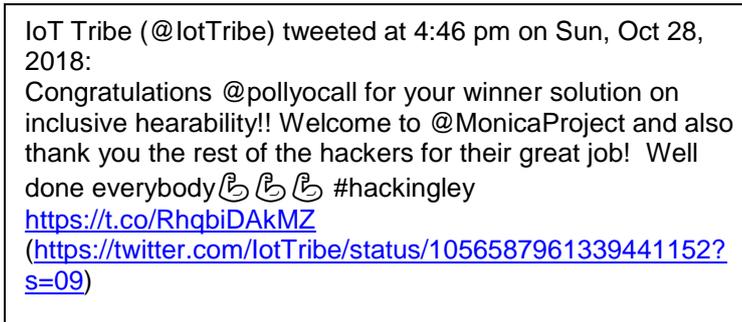

Picture 13: Scenes from the #Hackingley hackathon

Some pics of event (more photos here)

https://photos.app.goo.gl/eZ3YNiS3XipUyDXKA

Announcement of the winner on twitter:

IoT Tribe (@IotTribe) tweeted at 4:46 pm on Sun, Oct 28, 2018:
Congratulations @pollyocall for your winner solution on inclusive hearability!! Welcome to @MonicaProject and also thank you the rest of the hackers for their great job! Well done everybody 👏 👏 👏 #hackingley
https://t.co/RhqbiDAkMZ
(https://twitter.com/IotTribe/status/1056587961339441152?s=09)

Picture 14: The twitter announcement of the Hackathon winner in Leeds

3.4 The organizing of the Urban Spaces Hackathon in Torino

3.4.1 Organizing the Urban Spaces Hackathon– selection of organizer

The MONICA 'Urban Spaces' Hackathon has been organized in the context of the H2020 MONICA Project by Santer Reply SpA, in collaboration with MONICA project Partners, including Città di Torino and ISMB (Istituto Superiore Mario Boella - Torino).

Santer Reply SpA was selected as event organiser after a twostep open procedure: at first, the MONICA project, through its coordinator FIT, launched a call for expressions if interests and 5 events organisers replied; then the 5 interested organisations were invited to submit a full proposal for the overall hackathon organisation and 2 out of 5 companies sent it in due time. Santer Reply was preferred as the company was considered well equipped to ensure a local follow-up to the winning idea able to complete and reinforce the growth programme offered by MONICA project.

The City of Torino and FIT strictly collaborated for the selection of the hackathon organiser.

The challenge was to build a user-centred solution (application, utility or service), for an improved nightlife experience, starting from the data provided by the MONICA Open Data platform.

3.4.2 Recruitment and advertisement activities

The advertising of the Hackathon started at the beginning of October 2018 with different activities:

• Publication on MONICA website, social media (dedicated accounts + City of Torino and MONICA challenge);

• Launch event in San Salvario;

• Publication of a flyer and direct activities at universities' premises.

Picture 15: The poster with the call for developers to the MONICA Urban Spaces Hackathon in Torino

The City of Torino and ISMB have been deeply involved in the overall hackathon organisation that included also warm-up events.
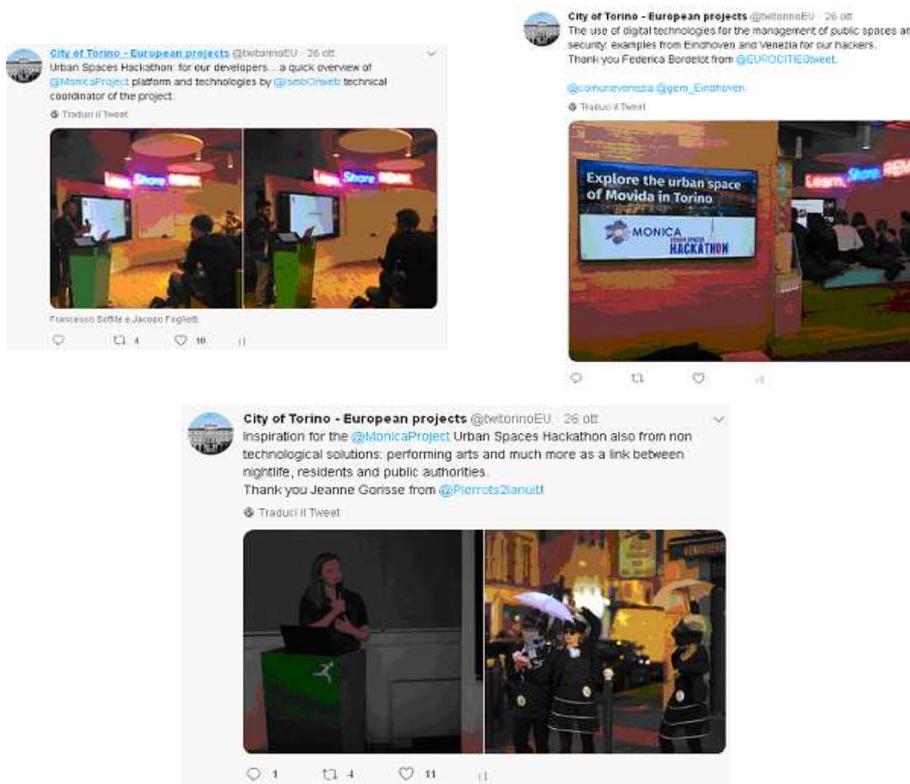
Picture 16: Twitter posts from the MONICA Urban Spaces Hackathon in Torino

From mid-October more targeted recruitment started, including:

- Facebook event

- Post on Facebook private and public groups related to relevant topics (start-up, social innovation, S. Salvario)

- Linkedin page

- Advertising with printed flyers at Universities, Incubators, S. Salvario public spaces

- Private message at Universities Professors, who have disseminated the information in their departments

- Post on TamTamy Reply's communication tool

- Newsletters for local business, start-ups (Fondazione Torino Wireless)

- Eventbrite - mandatory registration for attending the presentation https://www.eventbrite.it/e/biglietti-monica-urban-space-hackathon-presentazione-ufficiale-49648746738#

- Post on websites focusing on hackathon opportunities https://www.hackathon.com/event/monica-urban-space-hackathon---presentazione-ufficiale-49648746738

- Post on local websites https://www.mentelocale.it/torino/eventi/97895-monica-urban-spaces-hackathon-torino.htm

Through the MONICA website and via MONICA Partners websites the Hackathons was distributed and communicated. See Link: https://www.monica-project.eu/torino-hackathon/

Picture 16: The Call for MONICA Urban Spaces Hackathon on the MONICA website

3.4.3 Application forms and selection of the participants

The application form was available on the MONICA web site and posted on different social media.

The participation was open to groups or people available to form a group with the support of the organizers.

Picture 17: The application forms for the MONICA Urban Spaces Hackathon

At the deadline, a total of 57 participants ant 13 teams sent their application.

3.4.4 The execution of the Urban spaces Hackathon

The Hackathon started on Friday, November 9th, 2018, at 17:00 and ended on November 11th, 2018, at 19:00, at the conclusion of the awarding.

Friday evening was dedicated to:

• Technical presentation by MONICA partners and Q&A,

• Teams' formation presentation,

• A 'quiz' about S. Salvario and the Movida,

• A tour in S. Salvario with cultural and historical theme illustrated by a professional guide. During that tour, MONICA sensors' locations have been shown by the Città di Torino.

46 participants distributed in 11 teams, worked in Reply's facility on Saturday from 9 a.m. to 9 p.m., and delivered to the jury the elements relevant to the judging (solution description with enough technical details, business plan, etc.) so that the jury could analyse the proposed solutions in detail, before the presentations.

On Sunday, November 11th, each group's representative presented and demonstrated the project to the jury, the guests and the other teams (5 minutes' presentations) and answered questions from the jury members.

The Jury was composed five members, including representatives of MONICA partners, MONICA Hackathon organisers and stakeholders.

Dr. Marco Jahn chaired the Jury panel, composed of:

•   Marco Jahn, Fraunhofer Institute for applied Information Technology,

•   Elena Ciarlo, Città di Torino,

•   Chiara Marabisso, Agenzia per lo Sviluppo Locale di San Salvario Onlus,

•   Francesco Sottile, Istituto Superiore Mario Boella – Torino,

•   Maurizio Griva, Santer Reply

Three teams were mentioned as finalists:

•   Stay Out

•   San Salvario Soothers

•   Elephant

3.4.5   The results of the Urban spaces Hackathon

The winning idea is the "Shhh" solution, intending to engage in different ways bar owners and nightlifers, increasing awareness of the noise issues, giving economic incentives and discounts and reinforcing the sense of respect for the community through engagement and connection with inhabitants.

The idea was presented by Giorgio Curini, Leonardo Moiso, Ludovica Cerchi and Simone Sabba, who have won a prize that consists of 5000 Euro, and free access to a follow-up support programme provided by MONICA partners and Hackathon organisers.


Picture 18: The winners of the MONICA Urban Spaces Hackathon in Torino

4 The Customised Business Growth Programme

After the hackathons, the winners will enter in to a customised growth program. Depending on the nature of the technology or app that has won the hackathon. A specialised consulting service developed by VHSJ is offered to the winner and could consist of various consulting services regarding business concept, models and development, business economics and finance. As well as consulting regarding costumer relations and organisation.

In the same process the winner is offered technical consulting by one of the MONICA technical partners, which technical partner depends on the nature of the winning solution and will be decided accordingly. Also, they will get access to the MONICA open data portal and data sets as well as access to the MONICA Development Toolbox.

As a part of this Business growth program, the prototypes developed will also be tested at one of the MONICA pilot sites. Which pilot the prototypes will be deployed in depends on the nature of the app or technology and will be decided at the following plenary meetings, but the winners will be offered the opportunity to test the prototypes at large scale events and thereby foster direct interactions with many users in the process.
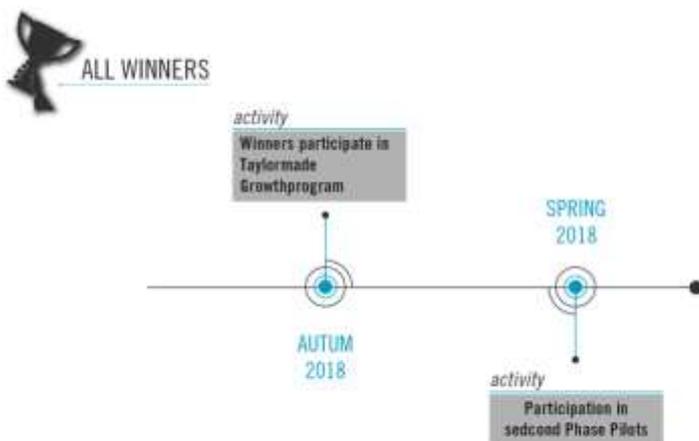
Picture 19: Timeline for the Customised Business Growth Programme

The Business Growth Programme includes:

Customised consulting with a business development consultant, either through physical meetings or Skype meetings. The winner will get:

An initial meeting with the consultants from Vaeksthus Zealand where the innovative idea is analysed in relation to the Growth Programme. In this first counselling, the plan is to define the goals and ambitions for the Growth Programme, make a first, 360-degree assessment of the idea, establish potential commercialisation and look at the winner's competences in order to define what is needed in the programme. The Growth Programme focuses on both the short-term issues that can be handled within the time period of the 6 month programme, and the long-term issues that the winner will continue working on after ending the programme.

Two to three follow-up meetings with a business consultant from VHSJ to keep the winner on track in relation to the Growth Programme. These meetings will focus on delivering and executing the set goals, ambitions and tasks.

One exit meeting to ensure that the winner is sufficiently equipped to deploy the idea in the second phase of MONICA pilot demonstrations. The exit meeting will include a full 30, 60, 90-day plan for actions and decisions needed to achieve success.

Workshops on the business aspects depending on the profile of the winner:

• Concept and business development

- Market analysis and identification of customer profile
- Product portfolio
- Sales, marketing, network, branding and PR
- Business management and organisation
- Legal aspects and processes
- Production and deliveries
- Internationalisation

Guidance by technical and pilot project partners through physical meetings or Skype meetings:
- Contact and coordination with relevant MONICA technical and pilot project partners.

Prototype testing at one of the pilot sites during the second phase of demonstrations:
- Identification of relevant pilot sites together with technical and pilot project partners from MONICA.

Picture 20: The Business Growth Programme

The Business Growth Programme is presented the MONICA Website www.monica-project.eu/business-growth-programme-and-resources/

4.1.1 Budget – Business Growth Programme

Budget for activities in MONICA Growth Program

Expenses	Hours	Euro
Consultancy services - preparation and initial meetings with winners	18	960
Consultancy services - Preparation and 2 -3 meetings with winners	54	2.880
Consultancy services - preparation and exit meetings	18	960
Workshops - 12 sessions - preparation and execution	48	2.560
Sum	**138**	**7.360**
Travel expenses 4-5 journeys		5.333
Sum	**0**	**5.333**
Coordination activities	240	12.800
Sum	**240**	**12.800**
Sum total	**378**	**25.493**

Hours based on consultanty price 400 kr./53 Euro pr Hour

5   Wider promotion of the Innovation Promotion Service Package

To ensure a wider impact of the Service Package, several activities have taking place and are planned. Initially, the focus has been on promoting the package to potential participants in the hackathons through various networks and channels.

For the rest of the project period, activities are planned for a wider awareness and include:

- • Update of the MONICA website to include all services offered in the Service Package: business consultancy services, access to open data and toolbox. Update of MONICA website making elements of the Business Growth Programme available to more stakeholders such as presentations, materials and consultancy.

- • Online and network campaigns for the Business Consultancy Services, use of open data and for the first release of the toolbox (M24); This will be linked to the promotion of the MONICA Collective Awareness Platforms with data and tools available for development of solutions;

- • Workshop early 2019 attracting SMEs for the business aspect of MONICA, and promoting the Service Package;

- • Collaboration with the Activity Group 4 to create synergies with the other LSPs on attracting SMEs and using the network to promote the MONICA tools;

Concurrent WP9, WP11 and WP12 activities will support the market uptake and its potentials by providing and promoting business models and market perspectives that are made accessible for the benefit of business stakeholders who might be further in a product development process and consider entering the IoT market.

Addressed are also cities and cultural actors who stand before a decision on the uptake of IoT or consider replication of MONICA solutions. Relevant results for the tourism sector are issued in the report on Using IoT and Smart City Platforms to Support European Tourism and Culture towards the end of the project and for the cities, the Replication Reference Book and Roadmaps for MONICA Market Replication will be available online at the end of the project,

6 List of Figures and Tables

6.1 Figures

6.2 Tables