INNOCAP

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INNOCAP

INNOCAP – Capacity Building Programme Delivery Report

Document history

Version	Date of issue	Description	Authors
1.0	25/07/2024	Initial version	Lukasz Porwol (UoG)
2.0	31/07/2024	Revision	Jose Manuel San Emeterio (ERNACT)

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1 Introduction

The purpose of this document is to report on the capacity building programme delivered in the INNOCAP project to facilitate innovative pilot implementation and deployment. It follows the D1.1.1 Needs Analysis and Knowledge Mapping in D 1.2.1. In particular, the efforts reported are part of Workpackage 1, Activity 1.4. Capacity Building Programme Delivery to support work in Activity 2.1 Services co-design and Activity 2.2 Service Development towards Activity 2.3 Implementation and monitoring. In fact, in some pilots, we have progressed to Activities related to WP2 in parallel, ahead of time.

In our programme delivery, we have focused on ensuring it is tailored to specific partners' needs. We started with sessions that provided an overview of a wide range of technologies to ensure partners' exposure to emerging solutions. We have also run surveys with our partners to ensure a better experience and continuous improvement. We further aligned the sessions to match the pilot's requirements. Specifically, as per the INNOCAP framework provided for reference below, we aimed to upskill our participants by delivering workshops and showing them the specific digital solutions available. The next phase of the project focuses on supporting the procurement of innovative solutions and the deployment of the pilots.

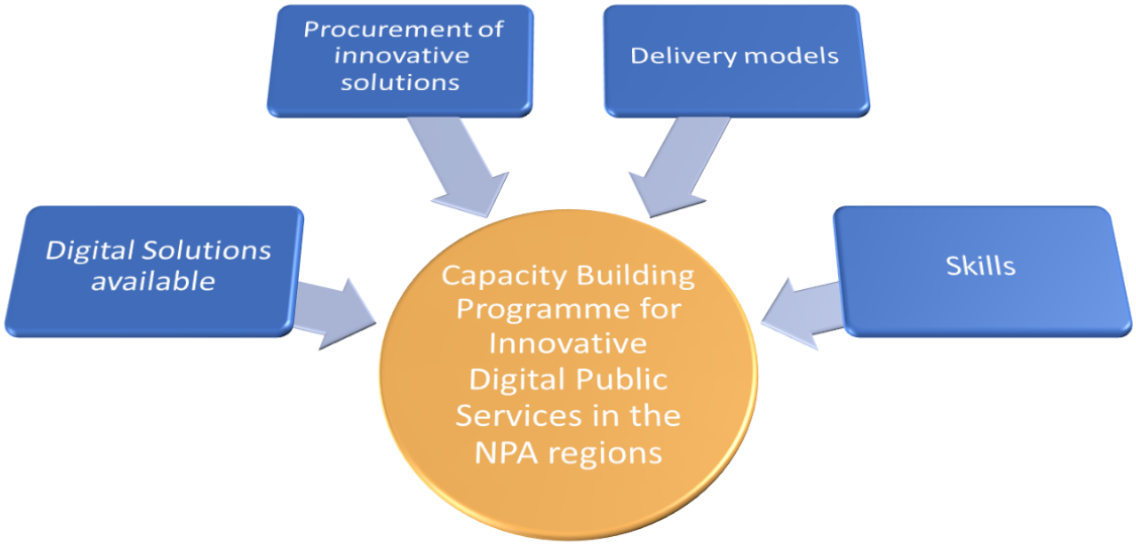

FIGURE 1: INNOCAP FRAMEWORK

2 Capacity building delivery

The capacity-building programme delivery started with an in-depth analysis of partners' needs and existing capacity. From the surveys we run and feedback obtained in the meetings, we have identified the priority areas as per the figure below.

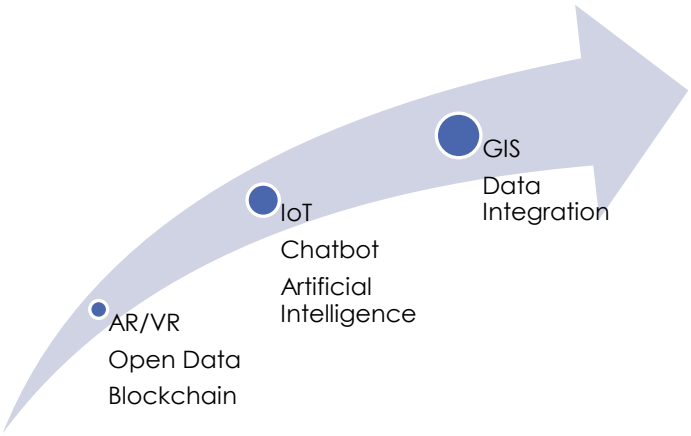

FIGURE 2: INNOCAP CAPACITY NEEDS

As it is shown the GIS and Data Integration has been put forward as a priority for all the partners. In relation to that, we have also discovered that GIS has also been a strong capacity already present in the consortium.

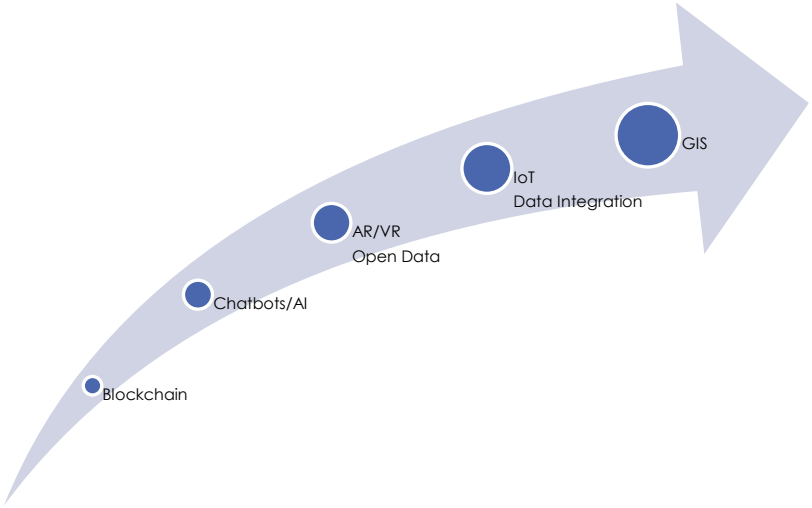

FIGURE 3: INNOCAP EXPERTISE

That encouraged us to put more emphasis on co-creation and allowing for "cross-pollination" between partners in dedicated, group capacity-building sessions.

FIGURE 4: CAPACITY BUILDING PROGRAMME - ICELAND

In delivering the programme, we have started by offering state-of-the-art awareness sessions on emerging technologies such as AI, VR, AR, GIS, Blockchain, IoT, and Open Data. Those sessions were to increase partners' knowledge in the topical areas but also to inspire innovation for the development of the upcoming service. We also exposed partners hands-on to specific tech.

FIGURE 5:INNOCAP TECH EXPOSURE

As we progressed with each session, we finetuned the delivery according to specific feedback received and the needs to be communicated. This has been particularly prominent while partners pre-selected technologies to try for innovative service delivery. The feedback has been collected via questionnaires (as shown in the example in Figure 6) and live-through notes. In addition, we have also collected feedback on the capacity building delivery for continuous improvement of our sessions to make them most relevant and impactful.

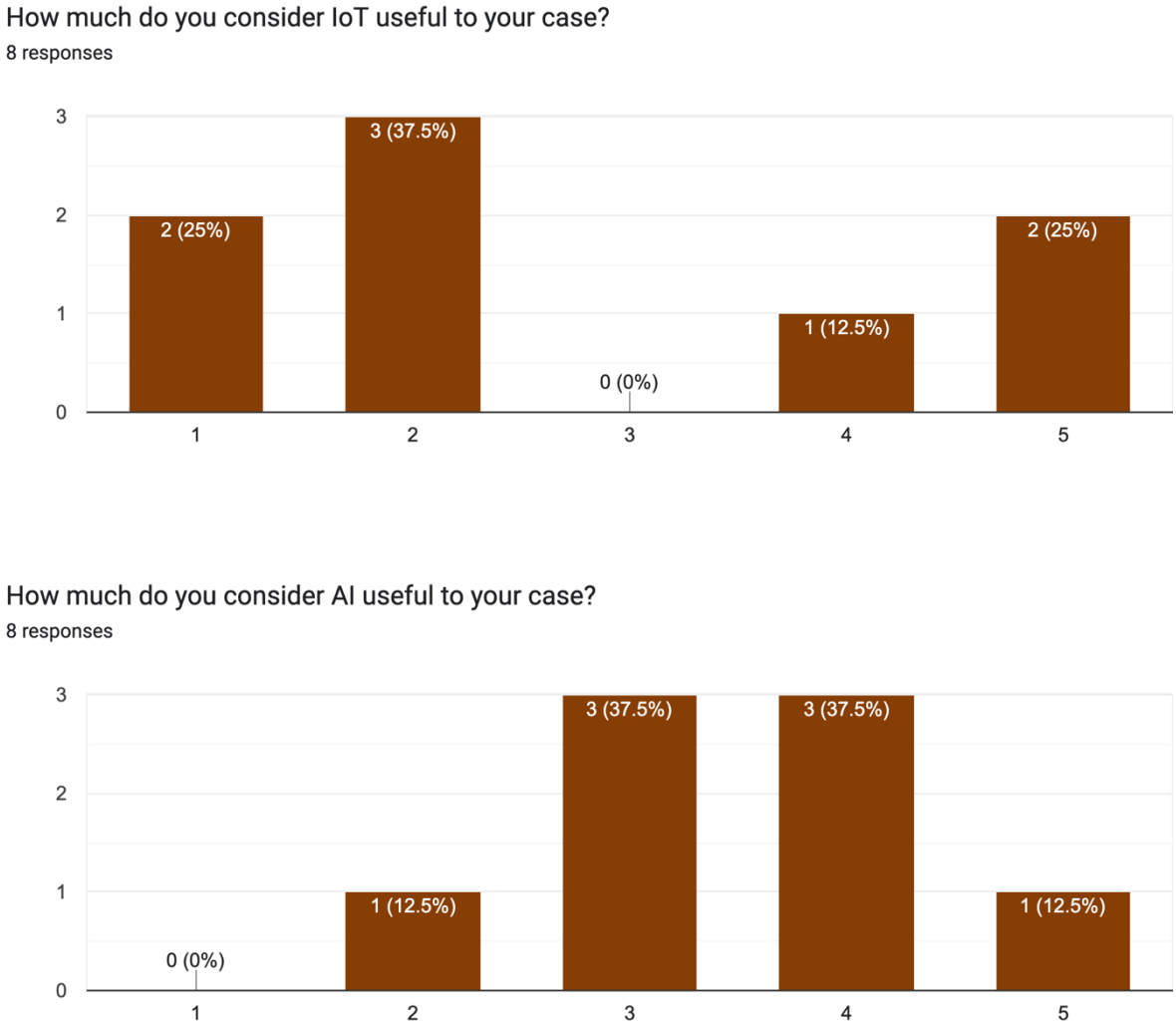

FIGURE 6: EXAMPLE QUESTIONNAIRE RESULTS

3 Capacity Building Sessions

In this section, we provide a list of capacity-building sessions delivered to our partners with basic highlights of the nature and the scope of the engagements. The list includes both online and in-person engagements with pilot partners and relevant entities.

ID	Date	Place	Scope
1	21.02.23	Letterkenny, Ireland	This very first capacity building session was collocated with the kick-off meeting. In that session we have provided a brief overview of major emerging technologies categories such as AI, VR, AR, GIS, Blockchain, IoT and Open Data to inspire partners and to facilitate the brainstorming session that followed. We have discussed each partner's vision and how we can implement it.
2	28.04.23	Online	In this first online introductory workshop we further explored potential technologies with focus on Collaboration and Engagement technologies including 2D + VR & AR guidance technologies. That session was a follow up to the in-person session in Letterkenny. We further expanded on initial presentation of emerging technologies for more awareness and further discussions.
3	9.05.23	Online	The second online introductory workshop expanded the set of technologies considered with GIS, Data Integration and AI chatbots. That was to satisfy a demand for more classic, web-oriented technologies
4	19.05.23	Online	The third online introductory workshop focused on IoT , Blockchain technologies to complement our capacity building with more hardware and data oriented technologies.
5	22.06.23	Online	We organized an online sessions to discuss the technologies presented and adjust our capacity building plan accordingly to specific needs, based of feedback provided.
6	19.09.23	Hveragerdi, Iceland	At the in-person capacity building session in Iceland we have organised an extensive engagement where partners presented their updated pilots and worked in groups through co-creation to find best possible approaches. We have also collectively investigated the Icelandic pilot roadmap in more detail as we explored the Hveragerdi.
7	16.10.23	Online	This online workshop was a result of feedback provided by partners to provide more

ID	Date	Place	Scope
			capacity building in the area of Data Integration + Open Data
8	13.11.23	Online	This online session served as a checkpoint and a venue to present updated capacity building plan with updates informed by sessions delivered so far and surveys run. Relevant summaries were presented and discussed with partners.
9	21.11.23	Galway, Ireland	The in-person meeting in Galway, Ireland was co-located with a plenary project meeting. In the first day we have included sessions that explored further the topics of Open Data, GIS and Platform Integration. We have also invited expert speakers to talk about IoT innovation an discuss it in the context of INNOCAP project pilot needs. That was followed by common brainstorming and discussions.
10	22.11.23	Galway, Ireland	The second day of in-person meeting in Galway included an invited talk by an AI expert representing a local, Galway AI company. That presentation was followed by in-depth discussions with partners on their specific AI considerations. Finally, we had a pilot-revisions co-creation session where each partner presented their re-vised pilots and discussed it with the consortium an the experts
11	8.12.23	Online	This was an online checkpoint meeting where we discussed the capacity building progress and further roadmap.
12	16.01.24	Online	This was a follow up online meeting with relevant updates by pilots and co-creation session.
13	19.02.24	Online - Finland	This dedicated workshop was a 1 on 1 capacity building session between UoG and University of Helsinki partner focused on GIS and Data Integration as key avenues for the pilot aiming and Green and Digital Transformation mapping in Finland. Specifically we explored technologies that would allow for easy multi-layer presentation and storytelling on the web.
14	23.02.24	Online - Donegal	This dedicated workshop was a 1 on 1 capacity building session between UoG and Donegal County Council partner focused on IoT an Data Integration technologies discussions. Specifically we looked at technology that would allow for taking water level measurement using IoT equipment and

ID	Date	Place	Scope
			data transmission in the absence of mobile network connectivity. That is to measure the effectiveness of Donegal CC natural methods implemented for flood prevention.
15	01.03.24	Online - Iceland	This dedicated workshop was a 1 on 1 capacity building session between UoG and SASS partner. We have discussed specific needs of the pilot related to Data Integration and potential avenues related to IoT and Smart Bins. Specifically we looked at technologies supporting extraction and convergence data from waste management companies in a single dashboard. We also looked at possibility to monitor bin levels and optimise routes. All of that was discussed in the context of existing pilot engagements and potential suppliers.
16	12.03.24	Västernorrland, Sweden	The in-person capacity building session was collocated with the project plenary meeting. In the first day we focused discussing the capacity building programme with relevant updates and feedback along with the immediate roadmap. We also run a co-creation session in which each partner presented their pilot and discussed with the consortium. We also hosted a full dedicated capacity building session focused on the Swedish pilot. Specifically we defined specific milestones and technical framework.
17	13.03.24	Västernorrland, Sweden	In the second day of the in-person session in Sweden we continued discussions and brainstorming with each partner and provided a sum up strategy for immediate future of capacity building and pilot definition.
18	23.04.24	Online	This was on online workshop aiming at re-assessing the capacity building and do immediate planning for the near future
19	05.06.24	Online - Sweden	This dedicated workshop was a 1 on 1 capacity building session between UoG and Västernorrland, Sweden. The partner presented their vision and requirements and UoG presented the technology that should fulfil those requirements.
20	12.06.24	Online - Sweden	This dedicated workshop was a follow-up 1 on one capacity building session. The Swedish partner progressed on their pilot development and further consultancy was delivered by UoG.

ID	Date	Place	Scope
21	13.06.24	Online - Finland	This dedicated workshop was a 1 on 1 capacity building session between UoG and University of Helsinki, Finland. This capacity building session was focused on reviewing specific candidate GIS and storytelling technologies and specific solutions and early prototypes of data presentation for Green and Digital transition case.
22	24.06.24	Online	That was the capacity building session sum-up and re-assessment meeting with relevant updates provide.
23	09.07.24	Online – Ireland	This dedicated workshop was a 1 on 1 capacity building session between UoG and Donegal CC, Ireland. The session included Insight IoT expert. We discussed technology options in detail and immediate next steps to progress the pilot.

3.1 Technology Choices

During the delivery of the programme, we have taken the partners and stakeholders on a journey through multiple emerging technologies. From the initial and in-depth exposure it became quickly clear that tech that solves immediate problems at moderate time-investment is the favoured one. Specifically, technologies such as GIS, Data Integration and Chatbots that are strongly applicable to the current web-portal-based services have been a naturally appealing option. IoT has followed due to the very specific nature of the proposed pilot in Donegal CC that simply requires that type of technology, while it has been considered an optional asset for the Icelandic pilot. Technologies such as AR, VR or Blockchain have been put as lower priority due to the lack of immediate benefit to the planned services. That is with the exception of the Swedish pilot, where VR technology is seen as a good extension of the social innovation platform.

3.2 Challenges

In the course of delivering the capacity-building programme, no major challenges were faced. We have encountered some non-blocking challenges. Those relate to the disparity in the nature of different pilots. Some pilots, such as the one in Iceland, were very focused on technical definition and on the course to quickly progress to WP2 activities with development implementation and procurement efforts engaged. The Swedish pilot, despite a preliminary general, open definition, in the course of

capacity building, quickly converged with very specific needs on social platforms for digital innovators and engaged in early implementation. The pilots in Finland and Ireland required a bit more brainstorming and planning in order to clarify the scope of tasks that could possibly be implemented within the project time frame. This is due to the more exploratory nature of those pilots in the broader context of services expected to be developed in connection to INNOCAP innovation.

4 Conclusions

In this document, we have described the capacity-building programme delivered during INNOCAP project. The proposed sessions have effectively helped partners to converge on the ideas and means to achieve the goals set for the projected pilots. The set of technologies introduced and selected the partners has been diverse. The current technological focus has been on GIS, Data Integration, IoT and Collaborative Platforms with VR components. The effective collaboration and co-creation in many online and in-person capacity-building sessions resulted in early progression to Work Package 2 tasks, with activities related to pilot development and implementation reflected strongly in the latest capacity-building sessions.