NEWSLETTER

OCTOBER 2023

Decido

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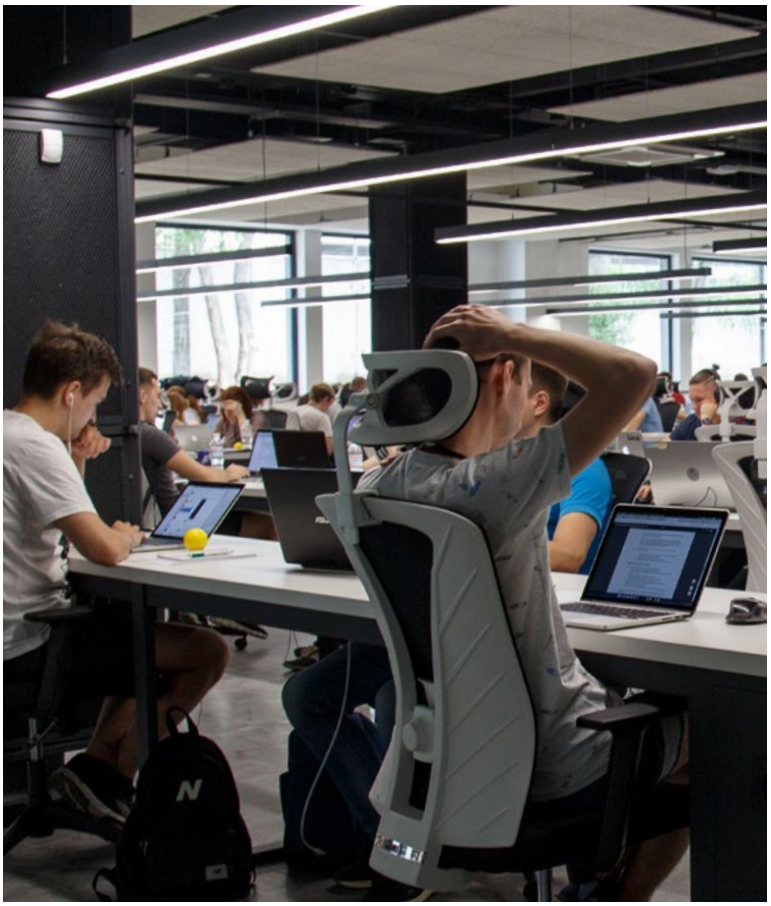


“ As many innovation projects also DECIDO has some effort dedicated to training activities. Considering its work plan, since its creation, it was decided to start this item at the ninth months from the kick-off. ”

TRAINING SUPPORT FOR DECIDO SERVICES

DECIDO training is based on the consideration that there are three relevant audience types:

- Citizens and other stakeholders providing input via the co-creation,
- Students approaching the emergency management themes,
- Public Authorities in charge of adopting policy making.

In line with the characteristic of novelty of the project DECIDO training will have both innovative and traditional channels. An example of the first category is tools like hackathons. In the second category, there are various types of frontal courses and webinars. The DECIDO training-main players are: KPRF, with the role of Coordinator and LC, KAJ, Vol.to, CTO, SCN, IBERCIVIS, ARAGON. A peculiarity in the configuration of the training provision is that the two universities belonging to the Consortium: KAMK Kajaani University of Applied Sciences and NTUA National Technical University of Athens are not directly involved in providing didactic activities. The project was inspired by a set of core principles that guided its training process. These pillars, which were followed throughout the project, can be summarized in the following sentences.

A first one to be mentioned is “Privacy”. A special effort in planning the training activity has been dedicated to the privacy adopted during any action. In general, students attending a DECIDO training will be required to sign an Informed Consent in all cases.

Another overarching principle pertains to ‘Gender Equality,’ which has prompted a dedicated effort to equip participants at all stages, beginning with the selection of learners for any training initiative, with the necessary knowledge, skills, and values to effectively support the

implementation of gender mainstreaming strategies in their respective fields, organizations, institutions, or countries.

A third fundamental principle is associated with the “Do No Significant Harm” (DNSH) guideline, which has been adhered to throughout the training process. In fact, in the DECIDO training the environmental sustainability was considered a must. As known, in the month of April 2021 the EU Commission adopted a delegated act laying out assessment criteria regarding the contribution of certain economic activities to objectives of the European Green Deal. These environmental objectives are defined as part of the EU Taxonomy Regulation, as the classification system for environmentally sustainable economic activities, which came into force in July 2020. Training activities could not be related to all the six objectives but, at least, the first two environmental objectives (climate change mitigation and climate change adaptation). In fact, making the DECIDO Training Green has meant to be, as much as possible, paper-less and where this was not possible using environmentally compatible materials like: eco-ink, recycled paper, etc.

About the development of the training within DECIDO the methodology used was based on a common categorisation of training split in two types:

- preservice training
- inservice training.

Preservice training, more academic in nature and offered by formal institutions, followed definite curricula and syllabuses for a certain duration offered a sort of diploma issued by the Consortium. Instead, inservice training, on the other hand, was offered mainly by the organisations involved in the pilot activity from time to time for the development of skills and knowledge of the incumbents.

In the end, DECIDO training staff considered the training as a circular process which begun with needs identification and, after a number of steps, ended with the evaluation of the training activity (both in term the teacher and the learner). A change or deficiency in any step of the training process has the power to affect the whole system, and therefore it is important for a trainer to have a clear understanding about all phases and steps of the training process.

EOSC SERVICES IN THE PHASE 2

In the second phase of the project some of the services offered by EGI have been identified, tested and made available. Following is an overview of those services that are the building blocks on which the other components are deployed and running:

- EGI Check-In (https://marketplace.eosc-portal.eu/services/egi-check-in): Check-in is a proxy service that allows scientific communities to securely access and control access to resources in the EGI Federated infrastructure. It operates as a central hub that connects federated Identity Providers (IdPs) with EGI service providers. Users can authenticate with their preferred IdP (e.g an eduGAIN account, institutional account, social media account, etc.) to access and use EGI services in a uniform and easy way.

- EGI Notebooks (https://marketplace.eosc-portal.eu/services/egi-notebooks) : Notebooks offers an environment based on the Jupyter technology, and offers a browser-based tool for interactive data analysis. This environment provides users with notebooks where they can combine text, mathematics, computations and rich media output. EGI Notebooks is a multi-user service that can scale on demand, being powered by the compute services of EGI.

- EGI DataHub (https://marketplace.eosc-portal.eu/services/egi-datahub): DataHub is a high-performance data management solution that offers unified data access across globally distributed environments and multiple types of underlying storage. It allows researchers to share, collaborate and perform computations on the stored data easily.

- EGI Cloud Compute (https://marketplace.eosc-portal.eu/services/egi-cloud-compute): several EGI services are available to automate the creation and management of cloud and Kubernetes clusters however we have opted to use the standard OpenStack interface offered by the EGI provider selected to support the DECIDO project.

- Amnesia: (https://marketplace.eosc-portal.eu/services/amnesia) Amnesia is a tool that allows end users to anonymize sensitive data to share them with a broad audience. The service enables the user to guide the anonymization process and decide on a flexible trade-off between privacy guarantee and data utility.

- Zenodo (https://zenodo.org/communities/h2020decido/): Zenodo is the general-purpose repository that enables researchers, scientists, projects and institutions to share, preserve and showcase multidisciplinary research results (data, software and publications) that are not part of the existing institutional or subject-based repositories of the research communities. It is founded in the trustworthy CERN data centre and is used by more than 50K researchers and 3K communities all over the world. In DECIDO it has been used to create a community as placeholder to share all produced publications, newsletters and other dissemination material.

By exploiting the services offered and described here, DECIDO was able to integrate all the components with a single user management tool, EGI Check-In. The users of the portal have been granted access through the registration in the dedicated Virtual Organisation (VO) and by joining the appropriate groups within the same VO. Using its features DECIDO was able to group the different pilots and grant access to different parts of the portal. This allowed not only the access to the portal but, using the same credentials, the access to the other services offered by EGI. In particular the access and operation on the datasets that have been stored in a DataHub space dedicated to the project. Furthermore this space is accessible only to the VO members of the DECIDO project and, by using the groups defined in Check-In it has been possible to grant different levels of access to different sets of data using both the web interface and the API. During the project DECIDO users have used both interfaces to simply upload dataset through the DataHub web interface, or use calls coded in the DECIDO portal to interact with the API to interact with the API to automate the necessary operations. Furthermore DECIDO project has been using the EGI Notebooks that is accessible through Check-In and is connected to DataHub as well which allows the storing, accessing and analysis of the data in a seamless and integrated way. The computing and storage resources have been provisioned from one of the EGI providers that can be accessed through the standard OpenStack inter-

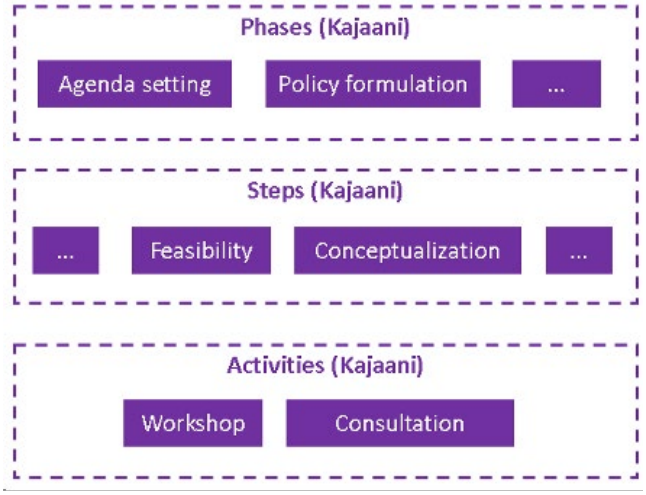
face using Check-In as authentication. The use of Cloud Computing allowed DECIDO the flexibility to increase or decrease the amount of computing resources and storage capacity assigned to the project depending on the needs.

After analysing the needs of the project the EGI identified Amnesia as a useful tool for the anonymisation of data. The service is offered through a web interface that allows users to explore the anonymized data visually and also offers a Rest API. It is part of the EOSC offering and it has been used in the anonymisation of datasets in the DECIDO project which was highly requested by public authorities.

DECIDO PORTAL

DESCRIPTION:

Following the initial phase of experimentation and considering the feedback received from pilots and DECIDO members, a comprehensive revamp of the portal was planned. During an agile conceptual phase, a new portal structure, including the data model and user interface, was created, also taking into account the previous developments but also the shortcomings expressed by the pilots.



The DECIDO portal serves as the central component of the DECIDO ecosystem, seamlessly connecting the policy making process with the array of tools offered by DECIDO. It facilitates a flexible and uncomplicated integration of various data stages (collection, storage, analysis) into the policy making process. For this purpose, the DECIDO portal introduces key concepts that effectively articulate data handling and policy making processes.

- A Policy Lab is a dedicated workspace that encompasses all other entities related to the policy making process. The Policy Lab is the parent entity for every other data model (Policy Process, Phases, Steps, Activities, Stakeholders, Resources). Furthermore, a Policy Lab has dedicated spaces in each of the tools introduced for the DECIDO project. This ensures that each pilot can manage its own policy processes independently from the others, protecting their processes and data.

- Toolbox and Resource pool. The toolbox represents the collection of the DECIDO tools. Such tools are integrated through the creation of dedicated spaces for each of the Policy Labs. Upon the creation of a policy lab, dedicated spaces are created in each of the tools. Pilots can use their own spaces according to their needs. The tools generate resources, for example dashboards, which are then collected and saved in the DECIDO portal in the Resource pool of each Policy Lab. The resources can be added to Activities as a support or evidence of the policy making process.

- Policy Process with Phases, Steps, and Activities: Each Policy Lab can accommodate multiple policy processes, which are further divided into Phases, Steps, and Activities. For

instance, a Phase like “Agenda Setting” may consist of a Step called “Feasibility,” which, in turn, can be linked to an activity like “Idea.” These entities function as data models within the backend, granting the flexibility to design policy processes with various Phases, Steps, and Activities. Moreover, the DECIDO portal generates a public story for each Policy Process, showcasing the organized Phases, Steps, and Activities to the public.

- Stakeholders are persons or institutions that participate in a Policy Lab or a Policy Process. The stakeholders can be added to policy processes to showcase their participation and legitimate the results.

These concepts are pivotal to both the user experience and the development of the portal. Each concept is translated into a data model that can be created, edited, or removed through the user interface. The data model and user interface faithfully replicate the hierarchical structure, effectively organizing Policy Processes, Stakeholders, and Resources around Policy Labs.

In summary, the DECIDO portal offers a straightforward yet flexible and expandable structure, enabling the seamless integration of a wide range of data processing tools into decision-making and policy-making processes.

DECIDO ARCHITECTURE:

The DECIDO platform offers policy makers a compact set of tools to initiate, manage and conclude data-driven policies.

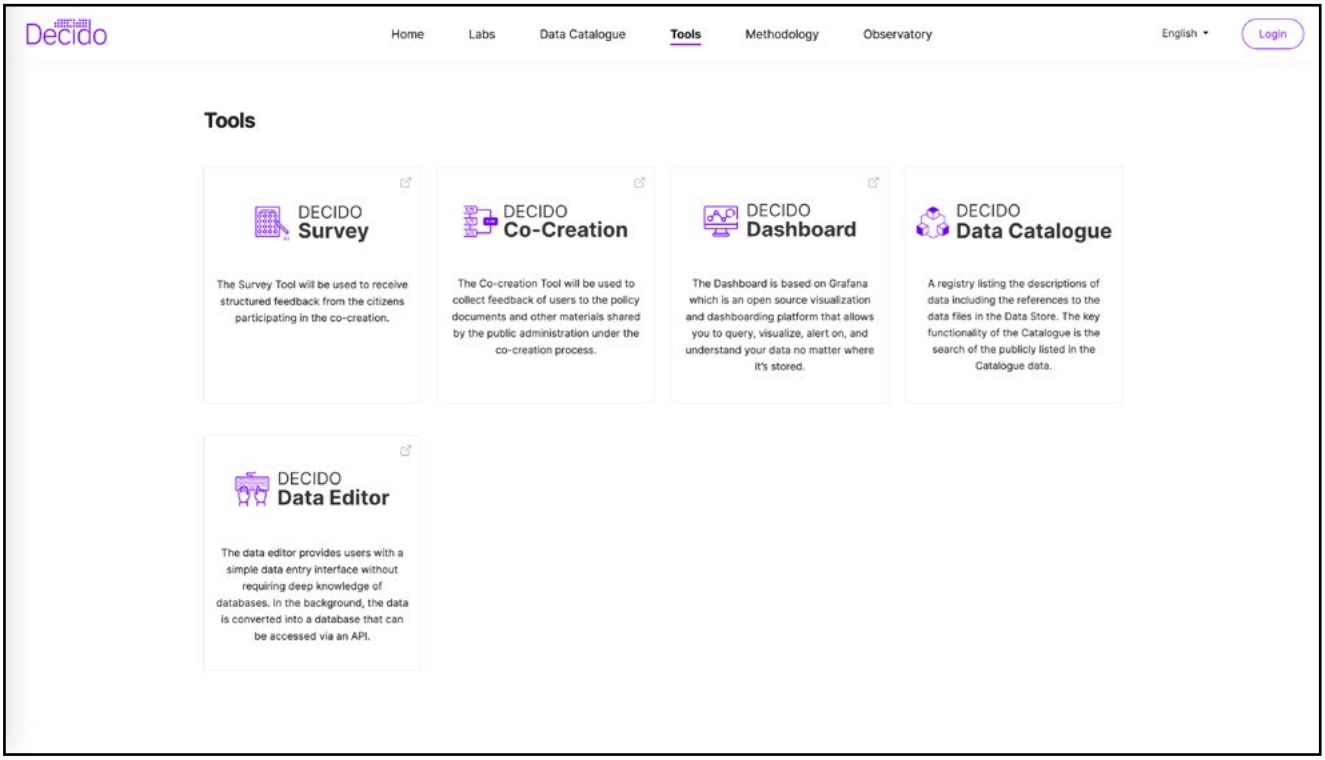
The tools allow the users to gather, store and visualize data relevant to policy making processes. Additionally, the user can link the data to the different steps of the policy making process using the DECIDO portal.

The architecture of the DECIDO platforms is based on micro-services. The services selected or implemented as part of the project offer data capabilities complementary to the various phases of the policy making, such as agenda setting, policy formulation, policy implementation, and policy evaluation Users have the flexibility to use the toolbox based on their current policy-making needs, whether it’s gathering, analysing, or visualizing data.

Additionally, the tools facilitate discussions with stakeholders and citizens.

The following services are part of the current DECIDO platform:

- DECIDO Portal (Backend and frontend)
- DECIDO Dashboard (Grafana)
- DECIDO Co-creation (Discourse)

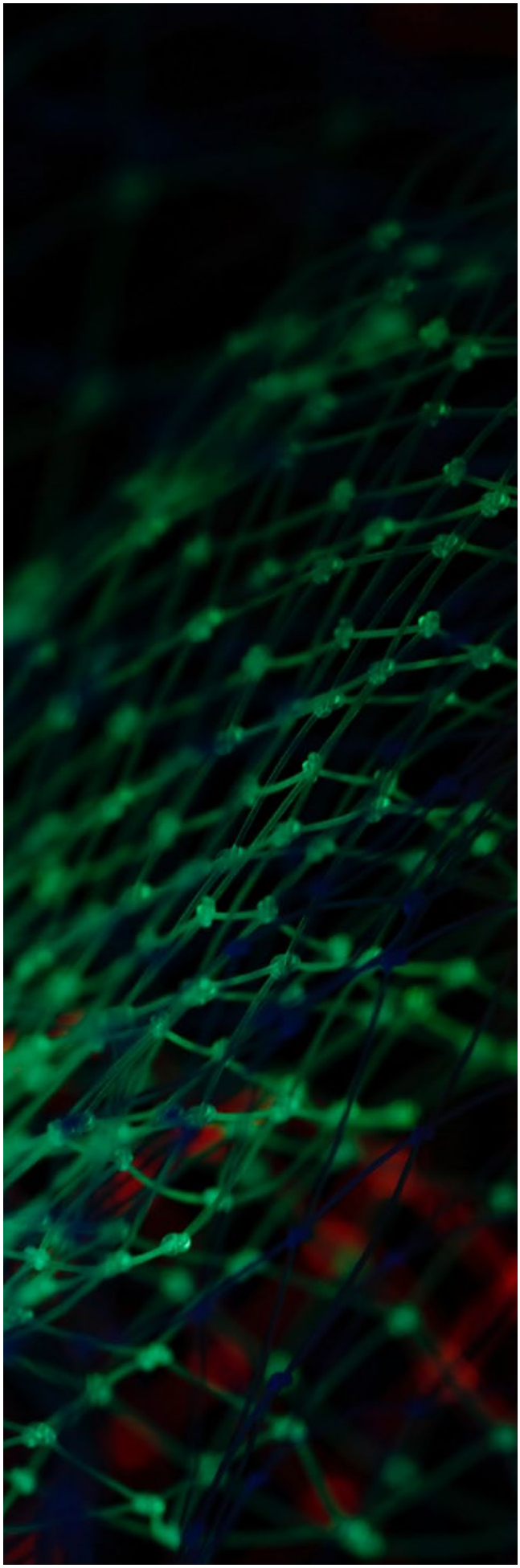


- DECIDO Data-Editor (Grist)
- DECIDO Data Catalogue (Piveau)
- DECIDO Survey (Limesurvey)
- DECIDO DataHub (EGI DataHub)
- DECIDO Observatory
- Check-in (EGI Check-In)
- Integration (Apache Airflow)

This collection offers a comprehensive toolbox for data-driven policy making. At the heart of this toolbox is the DECIDO portal, which plays a crucial role in connecting various data operations to the policy making process. Furthermore, the DECIDO portal offers a structured methodology that allows keeping a log of the entire policy making process, while bolstering each phase with data evidence generated through the use of other tools.
The architecture of the DECIDO platform has been revamped for the final version of the portal. The architecture follows the concept of data-driven policies and it connects the policy making process with the toolbox of DECIDO. For this purpose, an integration layer based on airflow was introduced. Airflow works as an abstraction layer that communicates with the different APIs of the tools and offers a single interface for all the tools. This interface is connected to backend of the DECIDO portal.

The underlying concepts of DECIDO support the work with external tools, while ensuring that the data of each Policy Labs is kept isolated. Upon the creation of a Policy Lab a dedicated space in each of the tools is created. This gives each of the DECIDO Policy Labs a dedicated workspace both in the DECIDO portal as well as in each of the tools. Upon deletion of the Policy Lab the integration layer will subsequently delete the spaces in each of the tools. This also ensures that the data of the Policy Lab is properly removed from the DECIDO Portal and the toolbox.

The toolbox of the DECIDO portal offers various methods to collect, manipulate, analyse or visualize data. The goal is to offer the users a good degree of flexibility when working with data. The DECIDO Portal integrates the components in a user-friendly online environment. The security concept of all components and the overall platform will rely on the usage of the dedicated Identity and Access Management service.



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