

Innobarometer

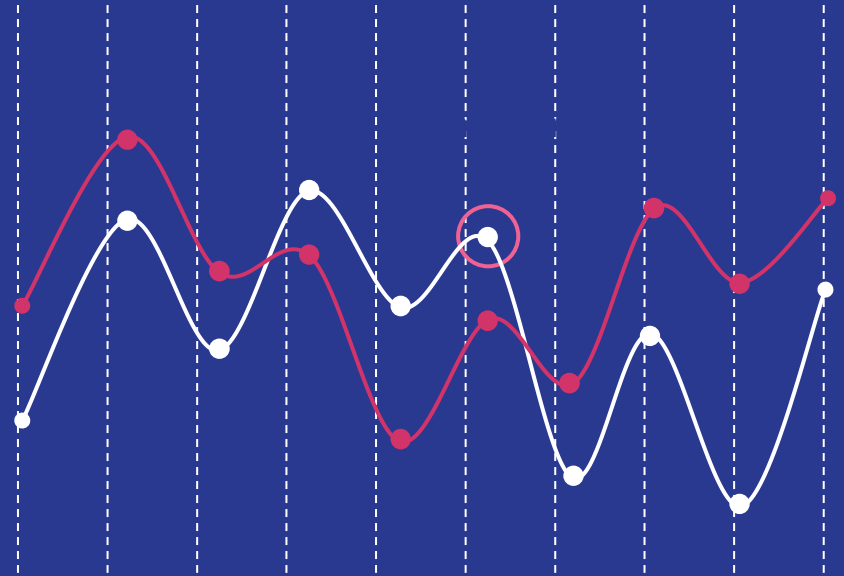
AN E-TOOL TO COLLECT AND
ANALYSE DATA ON
ENTREPRENEURSHIP AND
INNOVATION IN WESTERN
GREECE AND APULIA

Interreg
Greece-Italy

European Regional Development Fund



EUROPEAN UNION



INTRODUCTION (1)

The “Innobarometer” is an on-line platform that collects information about entrepreneurship and innovation, to be used for the construction and presentation of indices regarding the Region of Western Greece and Apulia. It includes the following **functionalities**:

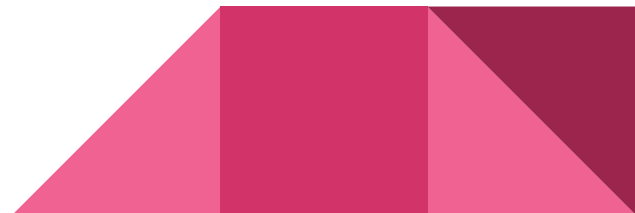
- (a) an online questionnaire to collect periodical feedback on entrepreneurship and present important information based on it,
- (b) automated and semi-automated collection of information on entrepreneurship and innovation indicators from various sources (e.g. Eurostat, national statistic organizations, EC),
- (c) extract of useful information, indicators and graphs based on the collected data from b),
- (d) a repository of good practices on e-tools for entrepreneurship support. Users will be able to view the progress of selected indices over time at an aggregated level (in both table and graph format) or view selected indices at a particular point in time (in both table and charts).



INTRODUCTION (2)

BENEFITS:

- important mean for the two Regions to help them on the effort to support entrepreneurship
- support efforts to evaluate Regional business support policies
- support the Regional chambers of commerce on their need to be able to measure the business needs in the covered areas
- provision of a new way to enhance R&D activities in the field of innovative entrepreneurship in the two Regions
- provision of information services for the general public and local SMEs in respect with Regional innovation potential and experiences.



Study of related work

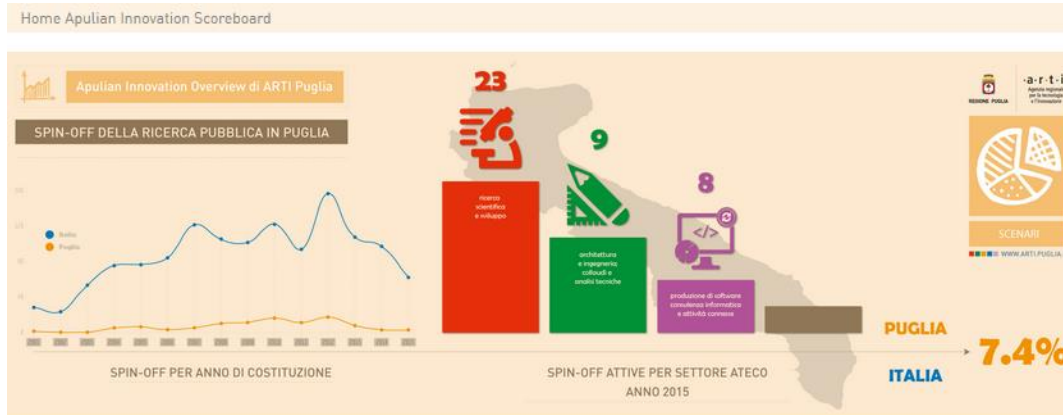
To develop the tool, as a first step, the project carried out an extensive desk research on current e-tools (12) world widely in order to assess their relevance with the specific situation and needs of the Regions covered and provide the needed basis for the design of the “Innobarometer”.

Below we give a selected list from the 12 tools studied.



Apulian Innovation Overview (ARTI)

- An information system, constantly updated, which systematizes historical series of indicators related to the socio-economic system and innovation from Apulia deriving from:
 - official sources, monitoring activities of Regional measures
 - experimental investigations.

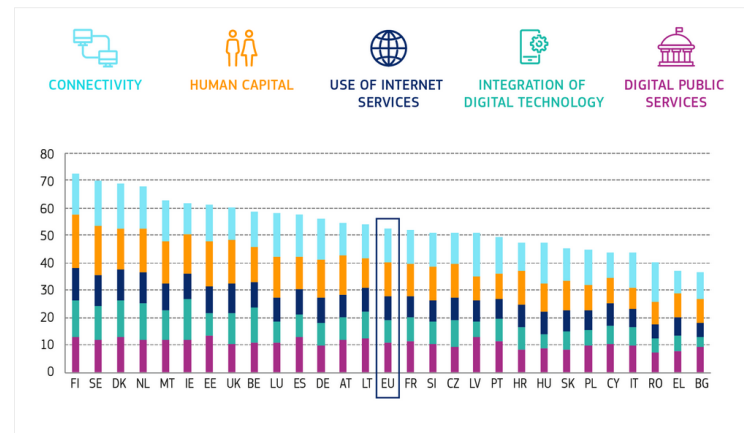


The Digital Economy and Society Index (DESI)

- Progress of EU countries towards a digital economy and society.
- It brings together a set of relevant indicators on Europe's current digital policy mix
- Summarizing relevant indicators on Europe's digital performance and track the evolution of EU Member States in digital competitiveness.

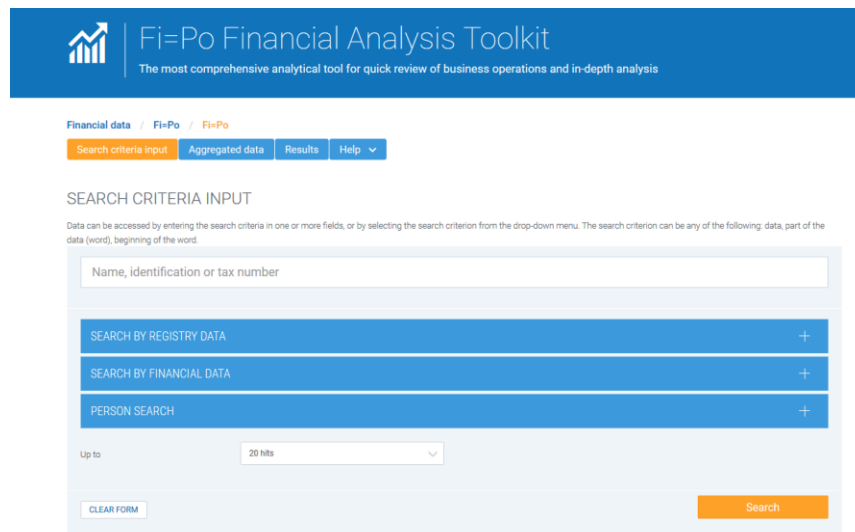
The Digital Economy and Society Index (DESI)

DESI 2020



The Slovenian Business Register (ePRS)

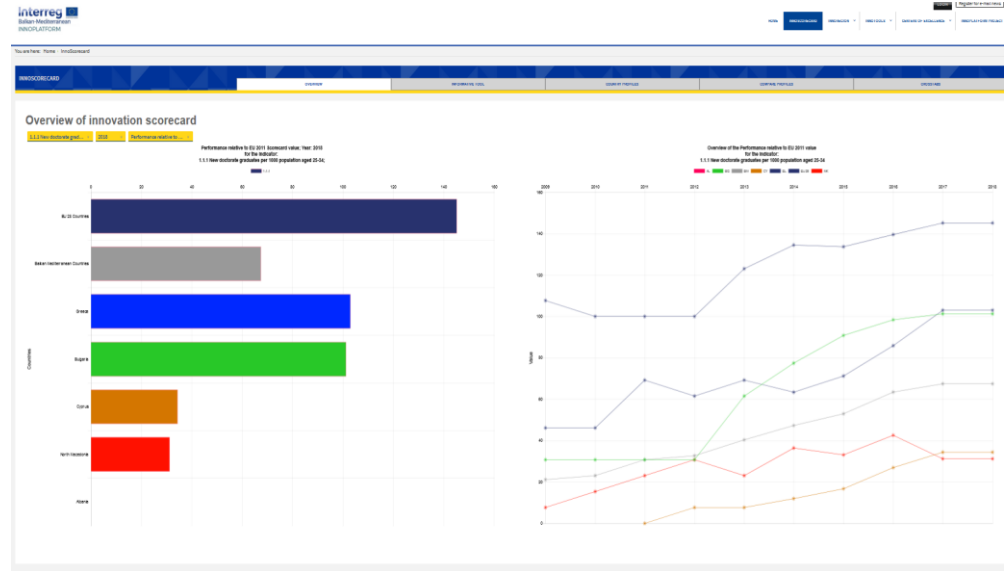
- A central database containing information about all business entities involved in a profit or non-profit activity located on the country,
- information on their subsidiaries and other divisions of business entities.
- Anyone can search for information about business entities having their principal place of business located in Slovenia.



The screenshot displays the 'Fi=Po Financial Analysis Toolkit' interface. At the top, a blue header contains the logo (a bar chart with an upward arrow) and the text 'Fi=Po Financial Analysis Toolkit' and 'The most comprehensive analytical tool for quick review of business operations and in-depth analysis'. Below the header, a navigation bar shows 'Financial data / Fi=Po / Fi=Po' and a menu with 'Search criteria input', 'Aggregated data', 'Results', and 'Help'. The main section is titled 'SEARCH CRITERIA INPUT' and includes a sub-header: 'Data can be accessed by entering the search criteria in one or more fields, or by selecting the search criterion from the drop-down menu. The search criterion can be any of the following data, part of the data (word), beginning of the word.' A search input field is labeled 'Name, identification or tax number'. Below it are three expandable search options: 'SEARCH BY REGISTRY DATA', 'SEARCH BY FINANCIAL DATA', and 'PERSON SEARCH', each with a '+' icon. A dropdown menu for 'Up to' is set to '20 hits'. At the bottom, there are 'CLEAR FORM' and 'Search' buttons.

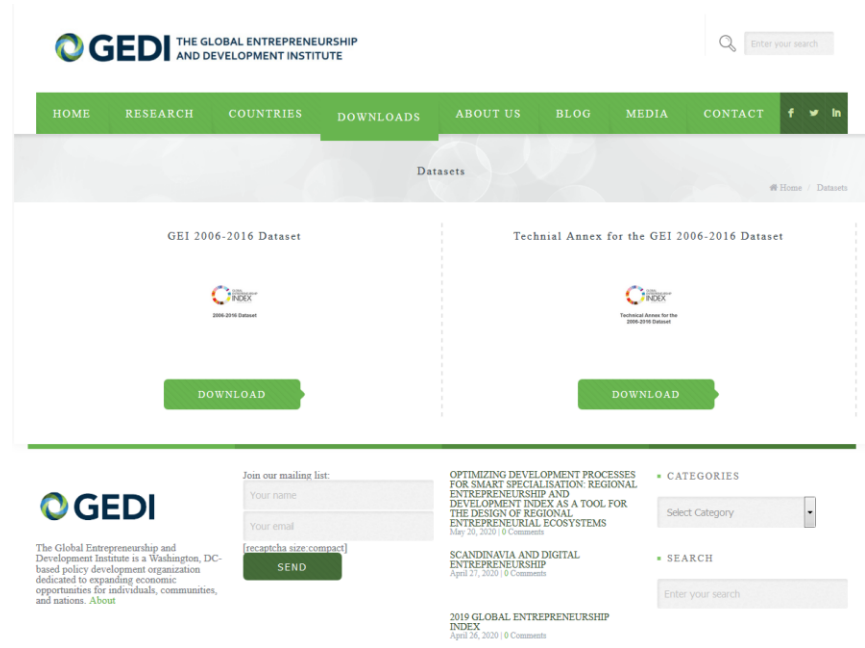
INNOSCORECARD

- A web application, assessing the innovation performance of Balkan and Mediterranean Regions based on a certain number of indicators.
- This tool allows the custom comparisons of performance scores; visualize country profiles comparisons, as well as correlations between scores, providing users with a complete view of the scores of the indicators based on actual data.



The Regional Entrepreneurship and Development Index (REDI)

- constructed in Hungary
- capturing the contextual features of entrepreneurship across Regions
- optimized version, capable to offer tailor-made policy suggestions for the seven Hungarian Regions by identifying the weaknesses of the Regional entrepreneurial climate and individual factors.



The screenshot displays the GEDI (The Global Entrepreneurship and Development Institute) website. The header includes the GEDI logo and navigation links: HOME, RESEARCH, COUNTRIES, DOWNLOADS, ABOUT US, BLOG, MEDIA, CONTACT, along with social media icons for Facebook, Twitter, and LinkedIn. A search bar is located in the top right corner.

The main content area is titled "Datasets" and features two prominent download options:

- GEI 2006-2016 Dataset**: Includes a "DOWNLOAD" button.
- Technical Annex for the GEI 2006-2016 Dataset**: Includes a "DOWNLOAD" button.

At the bottom of the page, there is a mailing list sign-up form with fields for "Your name" and "Your email", and a "SEND" button. To the right, there are sections for "CATEGORIES" (with a "Select Category" dropdown) and "SEARCH" (with an "Enter your search" input field). Below these are three article teasers:

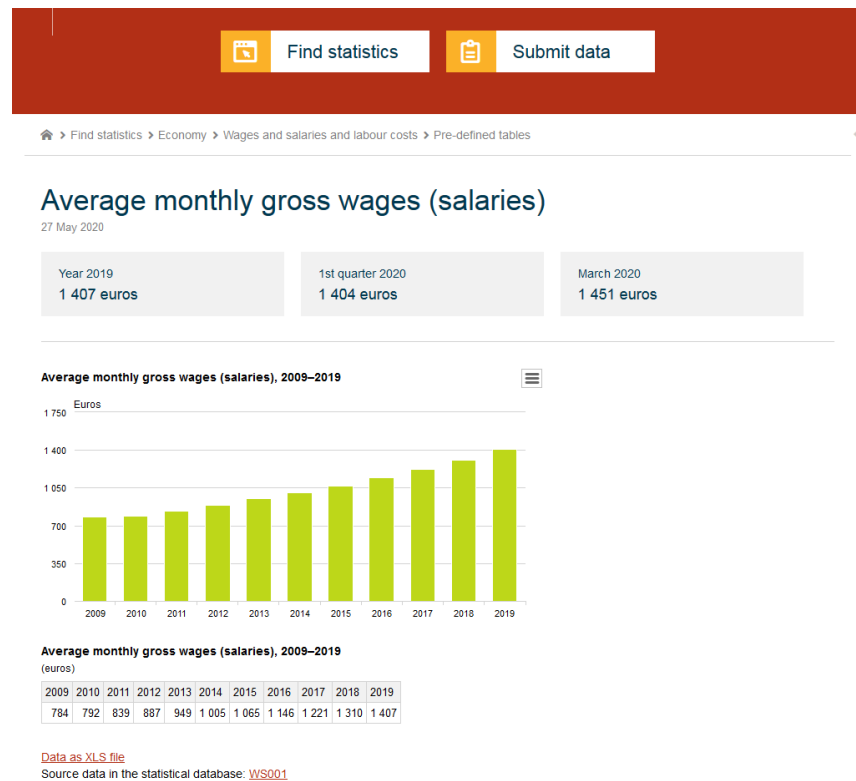
- OPTIMIZING DEVELOPMENT PROCESSES FOR SMART SPECIALISATION: REGIONAL ENTREPRENEURSHIP AND DEVELOPMENT INDEX AS A TOOL FOR THE DESIGN OF REGIONAL ENTREPRENEURIAL ECOSYSTEMS** (May 20, 2020 | 0 Comments)
- SCANDINAVIA AND DIGITAL ENTREPRENEURSHIP** (April 21, 2020 | 0 Comments)
- 2019 GLOBAL ENTREPRENEURSHIP INDEX** (April 20, 2020 | 0 Comments)

The footer contains the GEDI logo and a brief description: "The Global Entrepreneurship and Development Institute is a Washington, DC-based policy development organization dedicated to expanding economic opportunities for individuals, communities, and nations. About".

Statistics Estonia

providing institutions, businesses and organisations with online reliable information on the

- economic,
- demographic,
- social and
- environmental situation,
- as well as trends in Estonia..



Conclusions from the state of the art study combined with needs collection


Based on the collection of the above practices and the specific needs for the two Regions to be covered the developed e-tool collect two kinds of data:

- Information on entrepreneurship and innovation from various National, Regional and EU sources
- Specific information for the situation of the two Regions (using specific data collection tools such as questionnaires).



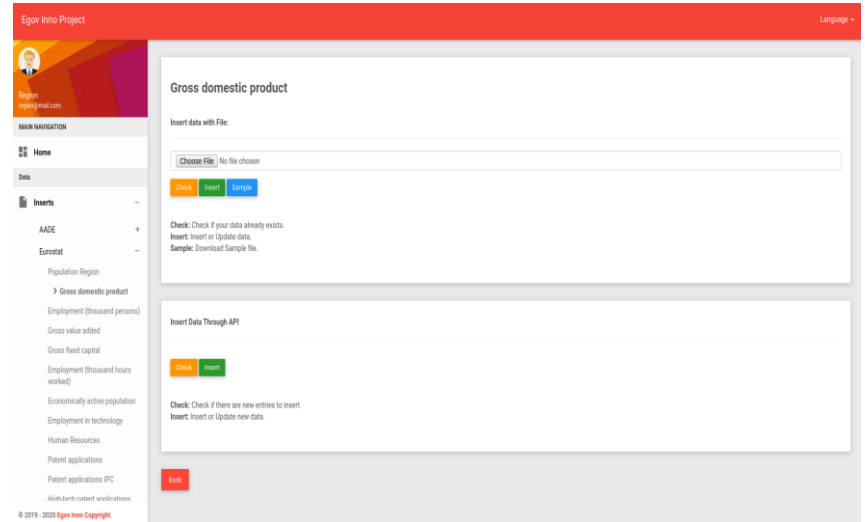
The e-tool

Functionalities:

- Insert data from various sources with specific indicators stored in different tables.
 - Export data, presentation in tables format and the ability to export and download whole information.
 - Charts for some of the tables, to present useful graphical information to the user.
 - An online questionnaire to collect periodical feedback on entrepreneurship and provide important information. Presentation of responses on tables and with graphs.
 - A repository of research work and good practices on e-tools for entrepreneurship support.
- 

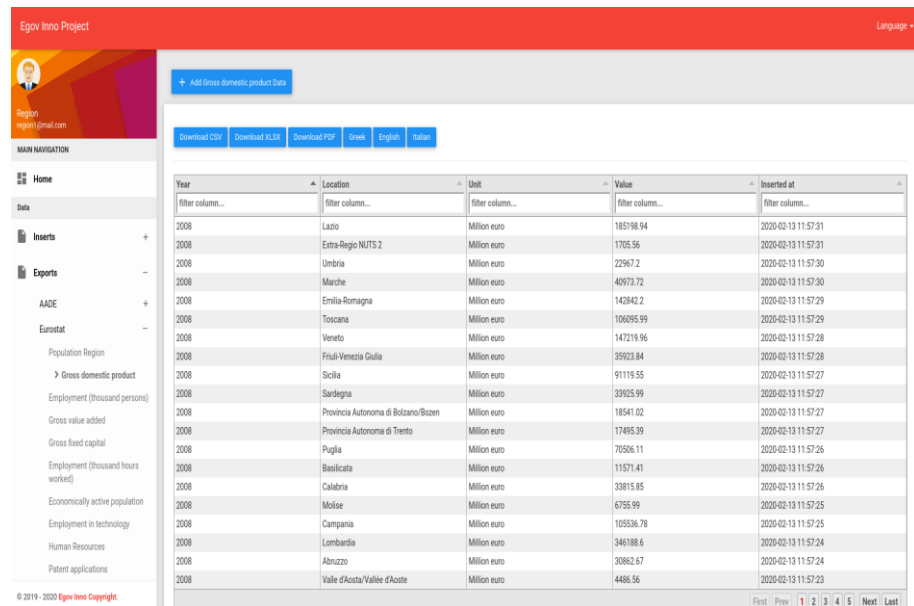
Insert data

- Five main sources, AADE (www.aade.gr), Eurostat (ec.europa.eu/Eurostat), Arti (www.arti.puglia.it), Regional Viewer (s3platform.jrc.ec.europa.eu) and Ekthete (metrics.ekt.gr).
- Automated or semi-automated way
- Specific data and indicators that provide useful information about entrepreneurship.



Export data

- Using the “Export” function the user is able to see the whole set of imported data for each table
- For each column there is a search bar that lets the user explore the dataset with specific criteria depending on his/her needs.
- The user can export and download this information in various formats.



Egov Inno Project

Region
region@gmail.com

MAIN NAVIGATION

- Home
- Data
- Inserts
- Exports
- AADE
- Eurostat
 - Population Region
 - Gross domestic product
 - Employment (thousand persons)
 - Gross value added
 - Gross fixed capital
 - Employment (thousand hours worked)
 - Economically active population
 - Employment in technology
 - Human Resources
 - Patent applications

+ Add Gross domestic product Data

Download CSV Download XLSX Download PDF Greek English Italian

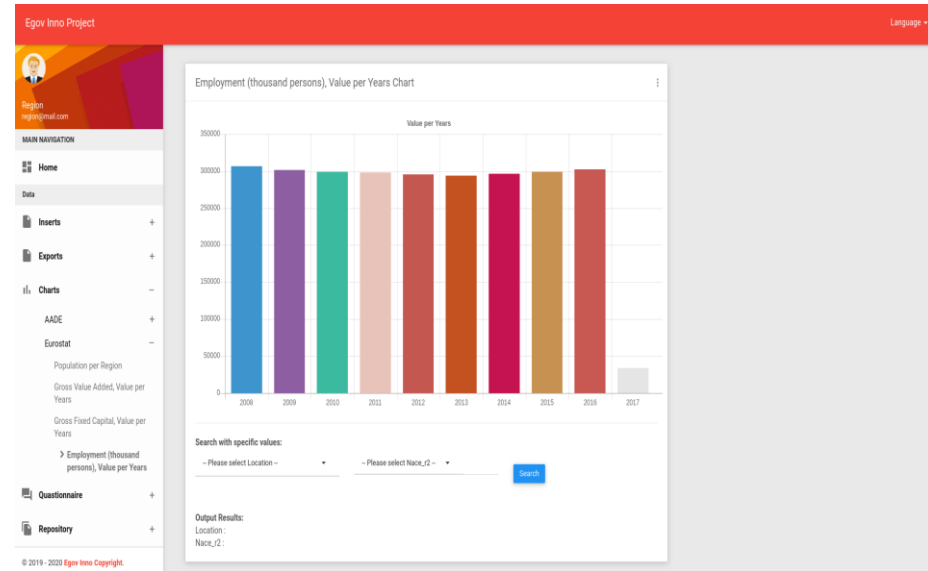
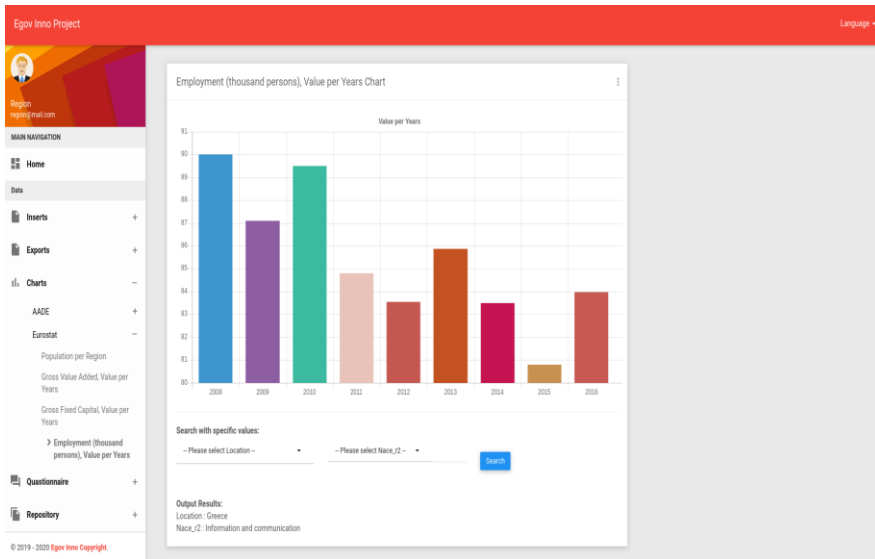
Year	Location	Unit	Value	Inserted at
2008	Lazio	Million euro	185198.94	2020-02-13 11:57:31
2008	Extra-Region NUTS 2	Million euro	1705.56	2020-02-13 11:57:31
2008	Umbria	Million euro	22967.2	2020-02-13 11:57:30
2008	Marche	Million euro	40973.72	2020-02-13 11:57:30
2008	Emilia-Romagna	Million euro	142842.2	2020-02-13 11:57:29
2008	Toscana	Million euro	106095.99	2020-02-13 11:57:29
2008	Veneto	Million euro	147219.96	2020-02-13 11:57:28
2008	Friuli-Venezia Giulia	Million euro	35923.84	2020-02-13 11:57:28
2008	Sicilia	Million euro	91119.55	2020-02-13 11:57:27
2008	Sardegna	Million euro	33925.99	2020-02-13 11:57:27
2008	Provincia Autonoma di Bolzano/Suizen	Million euro	18541.02	2020-02-13 11:57:27
2008	Provincia Autonoma di Trento	Million euro	17495.39	2020-02-13 11:57:27
2008	Puglia	Million euro	70506.11	2020-02-13 11:57:26
2008	Basilicata	Million euro	11571.41	2020-02-13 11:57:26
2008	Calabria	Million euro	33815.85	2020-02-13 11:57:26
2008	Molise	Million euro	6755.99	2020-02-13 11:57:25
2008	Campania	Million euro	105536.78	2020-02-13 11:57:25
2008	Lombardia	Million euro	346188.6	2020-02-13 11:57:24
2008	Abruzzo	Million euro	30862.67	2020-02-13 11:57:24
2008	Valle d'Aosta/Vallee d'Aoste	Million euro	4486.56	2020-02-13 11:57:23

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First Prev 1 2 3 4 5 Next Last

Charts

Innobarometer also provides information in graphs.



e-Questionnaire

This online questionnaire collects periodical feedback on entrepreneurship and presents important information based on it.

The screenshot displays the 'Egov Inno Survey' interface. The top navigation bar includes 'Egov Inno Project' and 'Language'. The main header shows 'Egov Inno Survey' and 'Active surveys'. The breadcrumb trail indicates 'Entrepreneurship and Innovation Survey (71656) → Responses and statistics'. The interface features a sidebar with navigation options: Home, Data, Inserts, Exports, Charts, Questionnaire, Insert Responses, Responses, Run, Repository, and System. The main content area shows a table of survey responses with columns for Id, seed, lastpage, completed, startlanguage, startdate, and datestamp. The table is filtered to show 10 records.

	Id	seed	lastpage	completed	startlanguage	startdate	datestamp
				All		Date started	Date last action
<input type="checkbox"/>	232	810475676	4	<input checked="" type="checkbox"/>	nl	20.01.2020 08:01:14	20.01.2020 08:45:55
<input type="checkbox"/>	234	1880539268	4	<input checked="" type="checkbox"/>	nl	20.01.2020 08:50:58	20.01.2020 09:26:02
<input type="checkbox"/>	235	1009090582	4	<input checked="" type="checkbox"/>	nl	20.01.2020 09:32:30	20.01.2020 09:46:11
<input type="checkbox"/>	236	1211843471		<input checked="" type="checkbox"/>	nl	20.01.2020 10:02:23	20.01.2020 10:02:23
<input type="checkbox"/>	237	196340121	4	<input checked="" type="checkbox"/>	nl	20.01.2020 10:53:56	20.01.2020 11:15:33
<input type="checkbox"/>	238	42725884	4	<input checked="" type="checkbox"/>	nl	20.01.2020 11:34:53	20.01.2020 11:54:04
<input type="checkbox"/>	239	1496258479	4	<input checked="" type="checkbox"/>	nl	21.01.2020 08:15:46	21.01.2020 09:00:34
<input type="checkbox"/>	240	1045681388	4	<input checked="" type="checkbox"/>	nl	21.01.2020 09:19:15	21.01.2020 09:32:55

The screenshot displays the 'Egov Inno Survey' interface for importing a VV response data file. The top navigation bar includes 'Egov Inno Project' and 'Language'. The main header shows 'Egov Inno Survey' and 'Active surveys'. The breadcrumb trail indicates 'Entrepreneurship and Innovation Survey (71656)'. The interface features a sidebar with navigation options: Home, Data, Inserts, Exports, Charts, Questionnaire, Insert Responses, Responses, Run, Repository, and System. The main content area shows a form titled 'Import a VV response data file' with a 'General' section. The form includes a 'Response data file (*.csv;*.xls;*.xl*) (maximum size: 2 MB)' field with a 'Choose File' button. There are also checkboxes for 'Exclude record ID?', 'Import as not finalized answers?', 'Character set of the file:' (set to Automatic (UTF-8)), and 'First line contains the code of questions:'. The 'Force import:' checkbox is also present.

Application / Results

Collection of data from 5 sources

- AADE (www.aade.gr), 1 data set (Number of Companies and Turnover with info on NACE code and Post Code), Eurostat (ec.europa.eu/Eurostat), 18 data sets (e.g. population, GDP, employment), Arti (www.arti.puglia.it), 3 data sets (e.g. Innovative companies data), Regional Viewer (s3platform.jrc.ec.europa.eu), 2 data sets (with information on structural funds and Horizon 2020 funds), Ekthete (metrics.ekt.gr), 4 data sets with information on R&D personnel.
- All imports done with customized import CSV functionality. For the Eurostat data sets there is also a possibility for automated import utilizing Eurostat web services. For the period of pilot operation, more than 115.000 rows with data have been imported from all the above sources.

Application / Results

Presentation of the data from 5 sources using export tables

- For all the imported data sets of (a)

Presentation of the data from 5 sources using Graphs

- Development of 6 graphical representations.
 - AADE (www.aade.gr), 2
 - Eurostat (ec.europa.eu/Eurostat), 4.

Creation and start collecting of answers of an e-questionnaire

- 89 questions (12 with general information, 51 with entrepreneurship information, 26 for innovative activities), Collection of >50 answers

Application / Results

- During the pilot operation phase, the following types of users have been given access to the tool:
 - Executives of the Region of Western Greece and Apulia, Executives of the Chamber of Commerce of Achaia
- During a series of meetings and events organized the collected feedback from this process was positive. Stakeholders consider this tool as a new mean for them to support their effort to design business support policies and activities. The innovative feature lies in the fact that:
 - It easily gathers important information from various source, It provides a way to combine this information with feedback coming directly from the business world of the Region
- Another important factor to support the tool's importance is connected with the interest expressed from the R&D sector to utilize the information gather in order to be able to provide targeted research analysis specifically focused on the Regional needs and not only on generalized statistical data.



Further work

- Collection of information from additional sources on National (e.g. additional data from AADE in Greece and ARTI in Italy, or EU level).
- Vertical extensions leading to the collection and presentation of reports on specific sectors (e.g. Tourism economy. Labor market, Creative industries).
- Inclusion of functionalities (through the utilization of machine learning technology) for the provision of reports on projections.



For more information

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Thank you!

www.greece-italy.eu



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