

Output factsheet: Tools

Version 1

Project index number and acronym	CE1171 SYNERGY
Lead partner	Wrocław University of Science and Technology
Output number and title	O.T1.1 Synergic Consortia and match-making open source online IT instrument
Responsible partner (PP name and number)	PROFACTOR GmbH, PP 2
Project website	http://www.interreg-central.eu/SYNERGY
Delivery date	02.2018

Summary description of the key features of the tool (developed and/or implemented)

Synergy Profiling Tool is a software tool that analyses multiple project features and organizations competences in order to create synergy effect between entities: looking for new contacts, wanting to establish wider international cooperation, which are interested in finding a partner in the fields of additive manufacturing, micro- and nanotechnologies and industry 4.0.

The tool is divided into three main sections: PROJECTS, ORGANIZATIONS and MAP. Additionally, the tool delivers functionality to build and maintain matchmaking.

- ✓ Section PROJECTS is a living database of finalized and running projects located mainly in Central Europe. The projects are assigned to one (or more than one) of the three Key Project's Areas (KPAs)
- ✓ Section ORGANIZATIONS is a database of entities taking part in the projects listed in the PROJECTS sections. Mainly lead partners of the projects are presented. However, it is possible to register any organization in the database, connection to the project is not obligatory.
- ✓ Section MAP presents records of organization based on selected criteria, it includes also visualization.

The tool is available online via a web browser for authorized users to edit the data. Software is open for viewing the data. The application can be run in the environment of popular distributions of operating systems Linux and on the Windows platform. For safety reasons connection between the server and the user is encrypted.

In addition, the tool includes matchmaking functionality that supports building relationships and cooperation between innovative organizations. This module implements algorithms based on graph theory, which enable finding multicriteria links between the research and business areas of individual organizations.

NUTS region(s) where the tool has been developed and/or implemented (relevant NUTS level)

Regions where the tool have been developed and implemented:

- ✓ Dolnośląskie (PL51)
- ✓ Oberösterreich (AT31)
- ✓ Chemnitz (DED4)
- ✓ Zahodna Slovenija (SI02)
- ✓ Karlsruhe (DE12)
- ✓ Jadranska Hrvatska (HR03)

- ✓ Emilia-Romagna (ITH5)

The tool was used during activity A.T1.2 and A.T1.3 by all partners.

The developed solution in an open IT tool that can be used without any geographical barriers, so it is hard to assess the NUTS range of all users.

Expected impact and benefits of the tool for the concerned territories and target groups

SYNERGY idea is to analyze projects, then profile selected institutions and cluster them into 3 Key Project's Areas (KPAs) covering the most promising modern industrial technologies Additive Manufacturing and 3D-Printing, Micro- and Nanotechnology-related Processes, as well as Materials and Industry 4.0.

The developed tool allows analyses of multiple finalized project features and finds the aspects and competencies that can create synergies between different regional organizations by defining common areas of interest within KPAs.

CE special project key factors has been identified to describe the projects' database and served as a basis for the project analysis.

The main impacts and benefits are:

- International cooperation improvement
- Access to project results and achievements
- Supporting synergies between organizations
- Possibility of offering organizations' services and infrastructure

Sustainability of the tool and its transferability to other territories and stakeholders

The application has been written in Internet technologies using the latest solutions and programming technology. The data has been collected in the database on the server. It gives the opportunity to easily manage and create a backup copy of the application. The Tool will be regularly maintained. Universality of the core of the application allows to transfer it to other territories and stakeholders, however details needs to be shaped in further research.

The sustainability will be mostly assured by making the IT Tool part of the Synergic Crowd Innovation Platform (O.T3.1).

Also:

- Installation and service/maintenance of the tool on servers managed by Wroclaw Super Computing Center located at Wroclaw University of Science and Technology.
- User support is delivered by IT team of WrUST
- Standard architecture and open source allow easy transfer to other territories and stakeholders
- User interface in English - no language barriers and common database content understandable for all users

Lessons learned from the development/implementation process of the tool and added value of transnational cooperation

Lessons learned can be divided into two groups:

- 1) lessons learned from the procedure of software development process,
- 2) lessons learned from functional issues of the software.

The first group showed that due to bureaucracy and law issues procurement procedure takes much more time than expected.

In the second group the consortium members took part in functional tests. Intensive and good quality testing is crucial for future functioning of the tool.

References to relevant deliverables and web-links If applicable, pictures or images to be provided as annex

References:

D.T1.2.1 Report: tailored Synergic Consortia creation & profiling IT tool with matchmaking functionality - tool
D.T1.2.3 Methodology of IT tool development

Web-link:

<https://synpro.e-science.pl>

Annex:

IT-Tool Screenshots [SYNERGY O.T1.1 Annex.zip]