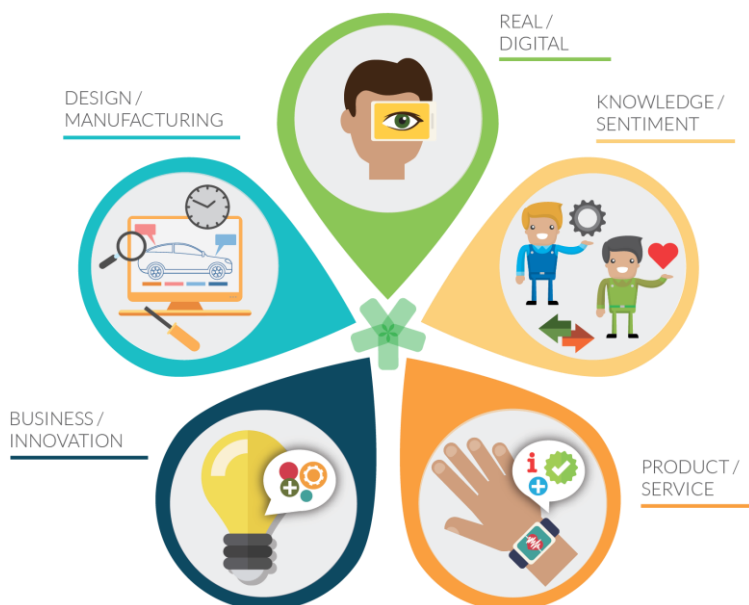## PSYMBIOSYS PROJECT

The PSYMBIOSYS concept is based on a holistic and unifying collaboration concept (the symbiosis) implemented through a five-pointed star symbolizing the following 5 main dichotomies we have identified in product-service design. The symbiosis is a new collaboration form in the value chain which aims at establishing win-win relationships among all the stakeholders involved.
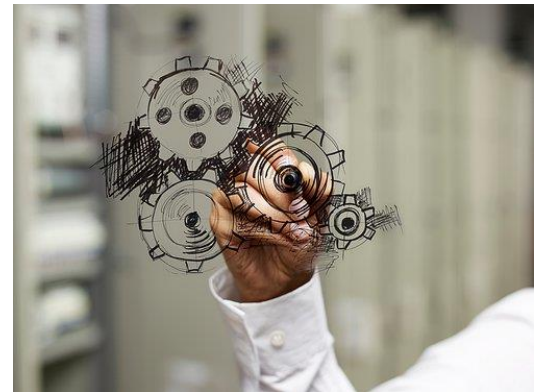
PSYMBIOSYS VISION

By 2020, manufacturing value chains will be organised in symbiotic collaboration forms which, thanks to the full availability and adoption of advanced manufacturing intelligence technologies, will dramatically reduce the barriers which currently prevent EU Manufacturing Industries to take the lead of next generation STEEP sustainable product-service solutions.

Full name: Product-Service sYMBIOtic SYStems
Acronym: PSYMBIOSYS
Type: Research and Innovation Action (RIA)
Call: H2020-FoF5-2014 - Innovative product-service design using manufacturing intelligence
Grant Agreement n.: 636804
Duration: 36 months (01/02/15 - 31/01/18)
Project Partners: 12
Budget: € 5,996,303.75

PSYMBIOSYS MISSION

PSYMBIOSYS aims at improving the competitiveness of European Manufacturing industries by developing an innovative product-service engineering environment, symbolized by a five-pointed symbiosis star – design-production, product-service, knowledge-sentiment, EDA-SOA, business-innovation – and able to dramatically reduce the time-to-market of more attractive and sustainable product-service solutions.

More information on the H2020 programme

http://ec.europa.eu/programmes/horizon2020/en/what-horizon-2020

PRODUCT SERVICE SYSTEM (PSS) CLUSTER

Psymbiosys participates to the PSS clusters, while aiming at exploring the synergies with other projects funded by the European Union. (http://www.fof-pss-cluster.eu/) and dealing with PSS topic.

The following projects are part of this cluster:

- Diversity: Cloud Manufacturing and Social Software Based Context Sensitive Product-Service Engineering Environment for Globally Distributed Enterprise
- Falcon: Feedback mechanisms across the Lifecycle for Customer-driven Optimization of Innovative Product-Service Design
- ICP4Life: An Integrated Collaborative Platform for Managing the Product-Service Engineering Lifecycle
- Manutelligence: Product Service Design and Manufacturing Intelligence Engineering Platform
- ProRegio: Customer-driven design of product-services and production networks to adapt to regional market requirement

By means of periodic workshops and meeting, the exchange of information among the five projects is intended to be strengthened; particularly, participants can share relevant publications, event reports and contacts.

SOME EVENTS

- **7th CIRP conference on Industrial Product-Service Systems** (IPSS), (**BIBA, Fraunhofer**), 21-22/05/2015, St. Etienne, France
- **ASME 2015 International Design Engineering Technical Conferences & Computers and Information in Engineering Conference** IDETC/CIE 2015 (BIBA), 02-05/08/2015, Boston, Massachusetts, USA
- IFIP WG 5.7 International Conference, APMS 2015 (**BIBA, Fraunhofer, Polimi**), 07-09/09/2015, Tokyo, Japan (WP2)
- European Data Forum 2015, Session 6: Educating Data Scientists & Data Skills (**POLIMI**), 17/11/2015, Luxembourg

European Data Forum 2015

SOME WORKSHOPS

- **IoT WEEK 2015 Session "Retail and IoT"** (POLIMI), 17/06/2015, Lisbon, Portugal
- **AIOTI (Alliance for IoT Innovation) WG11 meeting**, (POLIMI) 09/09/2015, Brussels, Belgium
- **ICT 2015 Lisbon - Networking Session** (POLIMI), 21/10/2105, Lisbon, Portugal
- **IEEE IOT World Forum**, Industry forum panel (POLIMI), 16/12/2015, Milano, Italy

WORKSHOPS & MEETINGS

- **Kick-off meeting,** 16-17/03/2015, Milan, Italy
- **1st requirements Workshop**, 23-24/03/2015, Fraunhofer, Brussels, Belgium
- **General Meeting**, 08-09/06/2015, INTEROP-VLab, INNOVALIA, Brussels, Belgium
- **Meeting**, 28-30/06/2015, NTUA, Athens, Greece
- **General Meeting,** 27-30/09/2015, NTUA, Athens, Greece

PSYMBIOSYS PARTNERS

POLITECNICO DI MILANO

Politecnico di Milano is the most important technical university in Italy and one of best in Europe, according to recent rankings. Since 1836, Politecnico di Milano has been active in several scientific and technical fields and will join through the Department of Economics, Management and Industrial Engineering.

TXT e-SOLUTIONS

TXT e-Solutions is a private, mid-sized software vendor and system integration company, with its headquarters in Milan and growing branch offices in Europe. TXT is a technology intensive Company, offering to its customers' complete solutions, based upon kernel products, high-level competence on enabling, innovative IT and specific know-how in a number of application domains.

BIBA

BIBA is a scientific engineering research institute, located in the northern part of Germany. It was founded in July 1981 as one of the first affiliated institutes of the University of Bremen. It is one of the biggest research institutes of the state. BIBA is directly linked to the university's department of Production Engineering and offers lectures and workshops to educate students in mechanical engineering, management and logistics topics.

innovalia ASSOCIATION

Innovalia Association is an independent private Associated Research Lab. Innovalia, with more than 25 years of experience in technology-based product and service innovation with SMEs, assists SMEs in the development of ICT-based solutions in the areas of information security, software quality, M2M and mobile multimedia information services.

TIVOLY

NECO is a tool manufacturer which possesses an experience of over 75 years in the design, manufacturing and marketing of precision cutting tools and thread rolling tools. NECO is integrated into the structure of Tivoly Group, and currently, the plant of NECO in Elorrio has become the focal point of the group for the design and manufacturing of taps, providing solutions to all requirements of the group on such tools.

FTI

FTI Engineering Network GmbH is a medium-sized aircraft systems provider and EASA Part 21J approved Design Organization. From its background in flight test instrumentation, FTI has extended the portfolio with the design and development of aircraft systems. As a full services supplier FTI offers the development of turnkey systems, but also assists other companies with research, development and modifications of airborne solutions.

dSS Lab — Decision Support Systems Laboratory

NTUA is the most prestigious and competitive academic institution on engineering sciences in Greece. The DSSLab is a multidisciplinary scientific unit within the School of Electrical and Computer Engineering with international experience and offers R&D, consulting and training services addressing a wide range of complex research and application problems.

InterOP - VLab

The EUROPEAN VIRTUAL LABORATORY FOR ENTERPRISE INTEROPERABILITY (I-VLab) is a Belgian International non-profit making Association. I-VLab pursues the objectives to develop the Research, to coordinate the Education Programmes, to promote the Innovation and the Research Transfer and to support the development of Standard in the domain of Enterprise Interoperability and associated domains.

FINCONS GROUP

FINCONS Spa is part of the FINCONS GROUP, a leading Consulting and System Integrator company, successfully active in Europe from 30 years, providing tailored and end-to-end software solutions and ICT services to tier-1 leaders of several markets, with a relevant presence in particular in Media & Entertainment, Banking & Insurance, Transportation, Utilities & Energy, Manufacturing and Public Administration.

Fraunhofer IAO

The activities of the Fraunhofer IAO focus on investigation of current topics in the field of technology management. A holistic approach is applied to the study of commercial success, employees' interests and social consequences. The Institute helps companies to identify the technologies of relevance to them, and draws up a technology strategy aligned to the competitive environment and the market.

PIACENZA

FRATELLI PIACENZA is a leading name in the production of high-quality fabrics and clothing. They are used to facing new challenges, pioneering ingenious solutions in a host of fields in their 300 years of history. They want to keep their natural inclination towards intuition focused on producing fabrics with innovative looks and performance, while respecting the craftsmanship that is still a hallmark of the wool mill to this day.

AIDIMME

AIDIMA is the Technology Institute on Furniture, Wood, Packaging and related industries, a non-for-profit association with national and international scope that was founded in 1984. Since that moment AIDIMA has been performing very efficient research, technological development and innovation work coordinating and participating in national and European projects.

IBM

IBM Israel Science and Technology Limited, better known as IBM Research – Haifa, was first established in 1972. Since then, the lab has conducted decades of research vital to IBM's success. In Haifa, 25 percent of the technical staff have doctorate degrees in computer science, electrical engineering, mathematics, or related fields. Employees are actively involved in teaching in Israeli higher education institutions and in supervising post-graduate theses.