IOT4INDUSTRY

FROM THEORY TO PRACTICE: IOT4INDUSTRY FUNDED PROJECTS RESULTS

The Iot4Industry project promoted the integration and the use of IoT and related components into manufacturing tools, machines and robots through two calls for proposals: 3.7 million Euros have been allocated, distributed to 40 projects on 17 vertical sectors including metalworking, automotive, aerospace, defense and food & beverage. In the following section are projects listed which have successfully finished their participation with IoT4Industry.

PASTA TRACKER (ITA): TRACKING THE PASTA PRODUCTION TO DEFEND QUALITY
The objective of the project has been the installation of a "pilot system" for pasta value chain traceability, leveraging on blockchain technology to finally collect and store data on the "history" of pasta, exportable in the cloud and use them in the post-production commercial chain, up to the final customer. The project involved an Italian pasta factory, Rustichella d'Abruzzo and PMAR a Slovakian blockchain solution provider.

RETROFIT4PAPER (AUT): IOT SENSOR PLATFORM FOR PREDICTIVE MAINTENANCE IN PAPER MANUFACTURING
This Austrian-German project implemented an automated low-power maintenance process (AI supported) for predictive maintenance in the paper manufacturing of project partner Kämmerer Spezialpapiere GmbH. The results are primarily in the form of savings due to avoided breakdowns of machines as well as the utilization of the service life of the bearing units and the better planning of maintenance activities.

EASYDIAG IS AN EASY AND LOW-COST MACHINE DIAGNOSTIC
Thanks to the AI layer, it can automatically determine if the signal shape indicates a potential failure, or if it is simply another normal use of the machine. Thus, the maintenance manager will intervene to examine the machine before it breaks down. The project has been developed by the French GulpLug and Probayes and Schneider Electric Italia.

All projects are listed here: https://www.iot4industry.eu/funded-projects

IOT4INDUSTRY CONTEST: CELEBRATING THE BEST SOLUTIONS AT THE MTC DIGITAL MANUFACTURING

IoT is proving to be a critical tool playing a major role in the modernisation of supply chain, manufacturing and production but also in the healthcare and disaster prevention, public safety and security, as we are seeing in this period. We would like to celebrate its key role through a contest in which we will declare the best projects between the 40 projects we have funded.

The participants will realise a short video to show the innovation and the impact of their solution: the top three selected by a committee will be awarded at the MTC DIGITALISING MANUFACTURING CONFERENCE (5-6 October 2020) in Coventry, UK. The event represents a great opportunity to meet business leaders, key decision makers across all sectors and speakers from across the world and to see demonstrators. This year MTC's flagship Digitalising Manufacturing Conference 2020, will also take place virtually, dramatically increasing the visibility of the iot4industry projects! Registration opens soon.

European Union's Horizon 2020 Programme
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THE IOT4INDUSTRY AMBASSADORS' CLUSTERS: BROADERING IOT OPPORTUNITIES ACROSS EUROPE

We have interviewed two Ambassador Clusters that helped us to promote the IoT4Industry project to local Industry 4.0 stakeholders, facilitating their companies to take part into the collaborative projects. One cluster, represented by **Mr Robert Stubenrauch (RS),** is the **ITC Cluster**, **Austria's** biggest IT cooperation network located in Upper Austria focused on IT and software industry and covering sectors such as machinery, automotive, cleantech, medtech, plastics …). The other is the **Transylvanian Furniture Cluster,** represented by **its cluster manager Mr Ciprian Morcan (CM)**, located in the north-west of Romania, and focused in the field of furniture products.

Are the industrial companies in your cluster actively involved in the evolution towards Industry 4.0?

RS: Speaking for the members of our industrial clusters, industry 4.0 is definitely a topic; however, the level of implementation is quite different.

CM: The involvement differs according to their capacities, but we encourage a cross-sectorial and cross border approach, getting them involved in order to get new knowledge, examples of good practices, innovative technologies, and even funding.

Do you, as a cluster, provide specific services or activities for your companies in the light of Industry 4.0?

RS: Yes, various qualification programs, seminars, and an "industry maturity check", among others. We also offer various regional funding options for innovation projects.

CM: we address the vulnerability of the local economy to emerge technologies for example exploring the prototypes for local add value chains that enable the transition to work 4.0. "Intelligent Romania" is a project through which we worked on developing alternative public policies regarding, among others, the digitization of small and medium-sized companies.

What are, in your opinion, the major benefits of reaching Industry 4.0?

RS: Obviously an increase in efficiency and effectiveness, including quality improvement and predictive maintenance. The mid- to long-term benefits are new insights due to analytics and novel data-based business models to prevent disruption of "classic" industry businesses.

CM: As Industry 4.0 involving the human is focused on relevant tasks letting the machines work on the part of the manufacturing process that is repetitive and time-consuming. Our factories are getting smarter, they increase in productivity and efficiency and lower their cost and waste.

What are, in your opinion, the main hurdles for getting to Industry 4.0?

RS: Long invest cycles in industry, "old thinking" and lack of expert human resources.

CM: It is hard to implement at its true meaning, especially in regions with an uncertain economic and political environment and outdated social perceptions. Industry 4.0 is a complex concept that may be hard to understand and even harder to accept and implement. Even so, in time the need for change and improvement will be too overwhelming and the companies will have to adapt.

What role, if any, should cluster collaboration play in the evolution towards Industry 4.0?

RS: Making public - in a structured way - a large number of concrete best-practice examples, regional or cross-border, in all relevant sectors. Should be an online database searchable for keywords.

CM: Industrial transformations are the biggest challenges SMEs confront, but clusters can facilitate better access to a cross-sectorial collaboration and can operate as policy-makers in order to promote an innovation-based development. In addition, clusters can play a big role in the development of employees' skills and competencies that are crucial in order to create a competitive advantage and to strive towards digital transformation.

MINALOGIC BUSINESS MEETINGS 2nd June 2020: special version on line Pole SCS, DSP Valley and MESAP are members of the Silicon Europe Alliance, the European electronic based system meta-cluster, that is one of the main sponsor of the MINALOGIC BUSINESS MEETINGS: this business meeting is an international **B2B event** bringing together technology, providers and key buyers in all fields relating to digital technology (Micro/Nano/Electronics, Photonics, Software..). **This 6th Edition will be inverted into an entirely digital and online event with the B2B meetings taking place through video conferencing.** Pole SCS, DSP Valley and MESAP members have a discounted price! Details **http://www.minalogicbusinessmeetings.com/#**

5E PROJECT: THE EUROPEAN DIGITAL SHOWCASE FOR ELECTRONICS SOLUTIONS! MESAP is one of the member of the EU-funded H2020 project 5E, supporting the European electronics industry in seizing opportunities by federating the 3 European electronics ecosystems, i.e. Nanoelectronics, Electronic Smart Systems, and Flexible and Wearable Electronics and encouraging the collaborations and the cross-fertilisations of those ecosystems. The project set up an online 5E Digital Showcase (platform) to increase the visibility of innovative European electronics products and open to all kind of Innovators (students, research teams, start-ups, SMEs, mid-caps, large enterprises).The participation to the 5E Digital Showcase also gives the opportunity to join the 5E contest at the end of the year with a special ceremony. Details to join the showcase on **https://5e-project.eu/showcase/.**

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