Road4FAME project identifies five priority research areas for manufacturing

A report advising the European Commission on priorities for research to help boost manufacturing productivity and competitiveness identified real-time data acquisition and analysis as one of several areas in need of urgent attention. The Orientation Paper released by the Road4FAME project found that research into this and other issues could reduce costs and help small and medium-size enterprises (SMEs) become more competitive and innovative.

Road4FAME is an EU-funded project aimed at developing a Strategic Research and Innovation Roadmap for Future Architectures and Services for Manufacturing in Europe. Among the areas identified in the report, research into interoperability standards is another important issue: there is a real need to find common ground across Europe on this, which will benefit all companies with export markets. Other issues to address include achieving networkcentric communication and collaboration between organisations, humans and systems across the entire manufacturing value chain, improving cybersecurity and creating architectures that enable 'smart' manufacturing systems.

Dr. Meike Reimann, Steinbeis-Europa-Zentrum's Road4FAME co-ordinator, said: "As the report shows, manufacturing companies are faced with increasing demands from customers for flexibility, customisation and track-and-trace capability. Manufacturing information and communications technology (ICT) has great potential to provide solutions, but affordability and complexity are key issues."

The report states that addressing the issues identified could have a real impact on the manufacturing industry in Europe – potentially reducing development and implementation costs, increasing SME competitiveness, improving manufacturing efficiency, quality and flexibility, creating innovative business models and better exploiting market potential.

Road4FAME is run by a consortium of leading companies, manufacturing research centres and tech transfer organisations working together to examine industry needs: THHINK Wireless Technologies Ltd (UK); Atos SA (Spain); Critical Manufacturing SA (Portugal); Fraunhofer Institute for Manufacturing Engineering and Automation IPA (Germany); Steinbeis-Europa-Zentrum (Germany); and IfM Education and Consultancy Services (IfM ECS).

The orientation papers deriving from the project recommend key topics in manufacturing information and communications technology (ICT) for inclusion in the European Commission's Horizon 2020 research and innovation programme.

Dr Nicky Athanassopoulou from IfM ECS comments: "ICT is a key driver for innovation and competitiveness. ICT solutions are needed to support manufacturing companies – especially SMEs – to maintain and boost their competitiveness locally and in the increasingly globalized markets in which they operate".

Dr. Rolf Riemenschneider, Research Programme Officer, DG Communications Networks, Content & Technology at the European Commission adds: "The use of digital technologies throughout the manufacturing value chain plays a key role in driving the productivity growth essential to a competitive Europe. In creating a research and innovation roadmap to support the future manufacturing landscape, Road4FAME is a timely and important project. Its to-date findings are feeding into our Horizon 2020 planning and we look forward to its final report and road map later this year.

NOTES TO EDITOR:

• Report

The full report can be found here: <u>http://road4fame.eu/wp-content/uploads/2015/03/Road4FAME_Orientation-</u> <u>Paper_FINAL1.pdf</u>

• Road4FAME

The Road4FAME project is co-financed under the 7th Framework Programme of the European Commission. Project website: <u>http://road4fame.eu/</u>

Road4FAME combines expertise from across the manufacturing landscape. Corporate partners THHINK Wireless Technologies Ltd (UK), Atos (Spain) and Critical Manufacturing SA (Portugal) bring strong track records in developing innovative technology solutions. Both research and development expertise is provided by The Fraunhofer Institute for Manufacturing Engineering and Automation IPA (Germany). The project is co-ordinated by Germany's Steinbeis-Europa-Centrum, which runs a network of about 1000 technology transfer centres. The project's roadmapping approach is driven by the UK's IfM Education and Consultancy Services (IfM ECS), the dissemination arm of the University of Cambridge Institute for Manufacturing, whose techniques have helped more than 250 public and private sector organisations with their strategic and technology innovation planning.

In reaching its recommendations, Road4FAME has consulted widely on the manufacturing sector's future needs. It has also examined national initiatives such as Germany's Industrie 4.0, the UK's High Value Manufacturing strategy (Innovate UK) and Smart Industry (The Netherlands).

• IfM Education and Consultancy Services

IfM Education and Consultancy Services Ltd (IfM ECS) provides a rapid dissemination route for new ideas and approaches developed at Cambridge University Institute for Manufacturing (IfM). IfM ECS consultants help companies of all sizes to apply researchbased improvement techniques via a programme of services and education. IfM ECS also runs regular events for industry at the IfM's home in Cambridge, UK.

The IfM is part of the Department of Engineering and provides a unique environment for the creation of new ideas and approaches to modern industrial practice. It integrates research and education directly with practical application in industry. The IfM gains live feedback from IfM ECS engagements helping to set the agenda for new research. IfM ECS is a wholly owned company of the University of Cambridge.

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