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PRESS RELEASE

New study on digital twins in the manufacturing industry

Digital Twin Readiness Assessment shows: companies are on average still in the conception phase

- **New maturity model for evaluating the implementation of digital twins – a special feature in the study landscape**
- **Industry leaders involved: 60 percent of the companies surveyed have more than 50,000 employees**

The Fraunhofer Institute for Production Systems and Design Technology IPK and msg systems ag have examined digital twins in the manufacturing industry in a joint study. The aim of the study was to gain insights into the specific added value of digital twins and to transparently assess the companies' position regarding the deployment stage of digital twins.

To this end, a total of 26 companies in the DACH region were surveyed and a new method, the Digital Twin Readiness Assessment, was developed. This method allows to assess a company's degree of maturity regarding the implementation of the digital twin. The evaluation of all interviews showed that there is a broad understanding of digital twins, but their potential is far from being fully exploited.

85 percent of the companies surveyed have already developed concepts for a digital twin. However, only 54 percent have an end-to-end strategy for digital twins.

Consolidated overall maturity is only 51 percent

The introduction of digital twins can only succeed, if companies have reached a high level of maturity in all areas, from understanding to concept development to implementation measures. The consolidated overall maturity of all companies is currently only 51 percent.

»The full potential of the approach only unfolds through cross-company collaboration and interconnectivity of digital twins,« says Prof. Dr.-Ing. Rainer Stark, head of the Virtual Product Creation division at Fraunhofer IPK and one of the editors of the study. »This requires platforms and communication interfaces to be standardized,« adds Stark.

Director Fraunhofer IPK
Prof. Dr. h. c. Dr.-Ing. Eckart Uhlmann | Phone +49 30 39006-100 | eckart.uhlmann@ipk.fraunhofer.de | Pascalstrasse 8–9 | 10587 Berlin
Public Relations / Marketing
Claudia Engel | Phone +49 30 39006-140 | Fax +49 30 3911037 | claudia.engel@ipk.fraunhofer.de | www.ipk.fraunhofer.de

»If European companies want to be competitive and sustainable with their digital twins, companies have to break their internal data silos, but also allow the flow of information between users and suppliers,« says co-editor Markus Samarajiwa, Lead Business Consultant at msg.

David Salamon, Senior Business Consultant at msg, adds: »The information relevant for a digital twin must be made available throughout the entire product life cycle.«

In future, the Digital Twin Readiness Assessment will also be made available to companies that were unable to take part in the study. The current study is available free of charge at: www.ipk.fraunhofer.de/readiness

Your contact:
Technical: Theresa Riedelsheimer | Phone: +49 30 39006-219 | theresa.riedelsheimer@ipk.fraunhofer.de
Marketing: Anja Kunack | Phone: +49 30 39006-332 | anja.kunack@ipk.fraunhofer.de