Learn all about digital twins

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Considered one of the key technologies of Industry 4.0, digital twins are the ultimate step in digitisation, creating a virtual representation of a real entity and organising an iterative exchange loop between the digital and the real world. There is, however, a knowledge gap in terms of teaching and learning, research and development, integration and consultancy. This observation led academics, researchers and companies to come together and design the 'Digital Twin Academy'.

Digital twins are used in many areas, such as process development, production, customer service, logistics or maintenance. They integrate the complete life cycle of products, machines, production lines or even entire companies. In general, digital twins offer economic advantages, e.g. through time savings in the development and production process, condition monitoring in real time or money savings by dispensing with costly prototypes.

Within the next few years, the use of digital twins will rocket, changing the way we conduct innovation, research and development, design, prototyping, production, integration, maintenance, IOT and data management, customer service and logistics. Therefore, it affects all companies, regardless of their size or area of operation.

Filling the gap

Digital twin technologies are still very innovative and there is a knowledge gap in in terms of teaching and learning, research and development, integration and consultancy. This observation led universities, higher education institutions, research centres, and innovative companies to come together and design the Interreg project 'Digital Twin Academy'.

The Digital Twin Academy aims to fill the knowledge gap by building a network between universities, engineering schools, training and research centres and industry partners. We will build an ecosystem that breaks down the barriers between seminars/colloquiums, bachelor's and master's degrees, lifelong learning courses, fundamental research and applied research concerning digital twins.

The project will raise the general level of knowledge and expertise regarding digital twins in the Euregio Maas-Rhein, through targeted training and webinars on the one hand, and to test digital twins in a real business environment and learn from it on the other.

The Digital Twin Academy project is being carried out within the context of Interreg V-A Euregio Meuse-Rhine and with the European Regional Development Fund.

Authors

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