

Digital Twin for Smart Manufacturing

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Abstract: The overall slow digital transformation of SMEs increases the difficulty related with the time to develop new technologies. The cultural problem about changes generates slower digital transitions, as well as the tendency to work on physical and real process in Manufacturing industry because machineries and processes are real. Other times the difficult communication with the management, the different language of IT and OT technicians (in big companies), the difficult cooperation and communication among IT and OT staff increases these difficulties. Digital Twin is three years European funded project which aims to overcome the aforementioned difficulties. Digital Twin consortium comprises of eleven partners coming from five countries and the project's objectives are the improved companies' performance in commissioning, production and maintenance and the improved ability of EDU-VET providers to adapt training to industry needs. The project will deliver tangible outputs, highly transferable, such as a 450-hour e-learning course made up with training modules (IVET and CVET), and Digital Twin labs -physical and remote- to practice the e-learning course in real work scenarios. The achievement of the project specific objectives and results will lead to a decreased distance between educational system and industry, an improved ability to align with regional industrial and VET strategies, a decreased shortage of qualified workers for specific technologies, and finally an improved competitiveness of European companies in the world market.