Agile Manufacturing as a Service: Next-Generation Resilient Supply Chains for Proactive Decision-Making and Adaptability in the Face of Unforeseen Disruptions



November 11th, 2023 (Valencia) - The NARRATE (regeNerAtive Resilient smaRt mAnufacTuring nEtworks) initiative held its first assembly with a three-day meeting in AIDIMME headquarters in the mediterranean city of Valencia (Spain). The participants worked together to outline the project's mission and next steps to enhance supply chain resilience and bring European manufacturers to the forefront of innovation.

NARRATE's mission involves developing a sophisticated solution, the Intelligent Manufacturing Custodian (IMC), utilizing Artificial Intelligence, Digital Twin, and IoT technologies. The IMC will leverage data from various production sources providing end-to-end visibility and control over supply chain operations, facilitating proactive decision-making, real-time monitoring, and coordination to foster Smart Manufacturing Networks. The goal is to predict potential disruptions or react when a disruption occurs, thereby enhancing overall supply chain resilience.

The revolutionary NARRATE solution will be able to leverage data from various production sources to enable decision-making and act as a nerve center for a supply-chain network, providing real-time monitoring and coordination of production processes and logistics; it will also

improve productivity and sustainability management across supply chain partners; and ultimately, allow manufacturers to re-specify operations to change product/material type, production volume or swap suppliers in response to disruptions.

Integrating this technology into a supply-chain will evolve manufacturers operations into a Smart Manufacturing Network: a connected and self-orchestrated ecosystem that links different stakeholders and their tiers end-to-end with programmable Manufacturing-as-a-Service capabilities that can withstand unanticipated events and disruptions. NARRATE will demonstrate its capacity through 3 pilots in substantive real-world conditions in diverse sectors: furniture production, multi-sector 3D Printing as-a-service, and semiconductors.

About NARRATE

NARRATE is a three-year initiative funded by the European Commission under the Horizon Europe programme. The project's consortium is formed by 12 partners (academia, technology institutes and industry leaders) from 6 European countries (Spain, Germany, France, Ireland, Italy, and the United Kingdom). The innovative Manufacturing-as-a-Service initiative aims to provide European ecosystem players with the possibility to timely view and enable a better understanding of the impact of disruptive events on manufacturing processes; the appropriate technologies to swiftly adapt logistics and production to external conditions, improving the resilience and sustainability of processes; and, to increase awareness around Smart manufacturing networks that are resilient and capable of self-adaptation in response to external threats.

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