



Manufacturing As A Service to Increase resilience in ValuE networks

www.maasive.eu

MAASive is funded by the European Union under Horizon Europe GA 101138040.





The Project

Background context

Traditional value chains are facing challenges due to the fast-moving markets, customer demands, and unpredictable manufacturing and logistics. To address these challenges, Manufacturing as a Service (MaaS) is introduced as a concept that utilizes existing resources in a value network by linking manufacturers to service providers on demand through a connected network.

Aim

The MAASive project aims to develop models of value networks that enable companies to recover from unforeseen external events by connecting to new services and reconfiguring value networks utilizing internal and external manufacturing services.

Manufacturing As A Service to Increase resilience in ValuE networks

MAASive



Duration



The Project TUHH **CENTRALE** NANTES Hamburg in Numbers University of POLITECNICO AALBORG Technology **MILANO 1863** UNIVERSITY 36 5.7 12 Beko **Arcelik** kamstrup **Millions Months Partners** ╞┿╧ **O** ТХТ **ETK** S∺artOpt

Consortium



Budget in €

Consortium

The MAASive consortium brings together 4 universities: Aalborg University, Politecnico of Milan, Central University of Nantes, Technical University of Hamburg, and 8 industrial organizations: Kamstrup, Arcelik, Arctic, Ilpea Plastik, Ilpea Industrie RO, SmartOpt, TXTgroup, and ETKems.



Objectives

MAASive will provide a toolkit for industry, which will consist of a blend of existing methods and technology applied in the MaaS context, and new models and technology developed as part of the project. Four distinct aspects are addressed in the MAASive project to increase resilience in value networks: network building, impact assessment, reorchestration of networks, and value network operation.





Methodology



This phase focuses on building the conceptual and technological foundations for Manufacturing As A Service (MaaS). It involves developing models that describe modular and interoperable manufacturing processes, creating the necessary structures to transform the manufacturing sector into a flexible and scalable service ecosystem. The goal is to ensure that production can adapt to changing demands and is optimized for collaboration between different companies.





IMPACT SIMULATION AND SCENARIOS

In this phase, advanced models are used to simulate various impact scenarios. The idea is to predict the economic and environmental effects of integrating this new approach to production, simulating different response scenarios to disruptions. Simulations help identify opportunities and risks, providing a solid foundation for strategic decisions regarding the implementation of MaaS in companies.



NETWORK ORCHESTRATION AND OPERATION

This phase deals with the management and coordination of MaaS production networks. It explores how to best orchestrate interactions between suppliers, manufacturers, and customers within a distributed and digitalized production system. The focus is on optimizing operations, ensuring that resources are allocated efficiently and that all actors in the network can collaborate smoothly, ensuring quick response times and customized production.



Outcome



The results of MAASive will contribute to companies being more resilient towards external, unforeseen events, by being able to utilize services in a value network better and faster, while also increasing utilization of network resources.



Contacts



Project Coordinator:

AAU - Aalborg University - Denmark Kjeld Nielsen kni@mp.aau.dk www.aau.dk

Partners:

| Politecnico di Milano - Italy Margherita Pero - margherita.pero@polimi.it | www.polimi.it |
|--|-----------------------|
| Technische Universität Hamburg – Germany Thorsten Blecker - email@thorsten-blecker.de | www.tuhh.de |
| École centrale de Nantes - France Catherine da Cunha - catherine.da-cunha@ec-nantes.fr | www.ec-nantes.fr |
| Kamstrup – Denmark Thomas Cosmus Hansen - thcn@kamstrup.com | www.kamstrup.com |
| Arçelik A.S. – Türkiye Aydogan Caglar Akcay – aydogancaglar.akcay@arcelik.com Sadra Shoarinejad – sadra.shoarinejad@arcelik.com | www.arcelikglobal.com |
| BEKO – Türkiye Iulian Mihaila – iulian.mihaila@beko.com | www.bekocorporate.com |
| Ilpea Plastik - Türkiye Halit Filik - hfilik@ilpea.com Feza Basarir - fbasarir@ilpea.com | www.ilpea.com |
| Industrie ILPEA - Romania Mihai Noaptes - mnoaptes@ilpea.com | www.ilpea.com |
| SmartOpt - Türkiye Metin Turkay - metin@smartopt.com.tr | www.smartopt.com.tr |
| TXT e-tech srl - Italy Michele Sesana - michele.sesana@txtgroup.com | www.txtgroup.com |

ETK - Denmark Mads Vejnø Lund - mads.lund@etk.dk www.etk.dk



www.maasive.eu

FOLLOW US





MAASive is funded by the European Union under Horizon Europe GA 101138040.