

# CloudSME

**Simulation can significantly improve the competitive position of manufacturing and engineering companies by reducing their costs and resulting in more efficient development, production, procurement, logistics or financial processes. However, the take-up of simulation software by SMEs has until now been low due to high barriers of entry that include hardware prices, licensing costs and technical expertise. The CloudSME project will develop a cloud-based, one-stop-shop solution that will significantly lower these barriers, provide a scalable platform for small or larger scale simulations, and enable the wider take-up of simulation technologies in manufacturing and engineering SME's.**

## **Project:** CloudSME

### **Projects coordinator**

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simulation software providers, end users and technology integrators.

To guarantee greater impact of the developed solution, additional use-cases will be provided by a further 10 partners following an open call after the first year of the project. The CloudSME Simulation Platform will dramatically change the way in which manufacturing/engineering SME's utilise simulation solutions today, and will provide new business opportunities not only to end-user SME's, but also to simulation software and cloud service providers.

The CloudSME Simulation Platform will support end user SME's to utilise customised simulation applications in the form of Software-as-a-Service (SaaS) based provision. Moreover, simulation software service providers and consulting companies will have access to a Platform-as-a-Service (PaaS) solution that enables them to quickly assemble custom simulation solutions in the cloud for their clients. The CloudSME Simulation Platform will be built on existing and proven technologies provided by the project partners and partially developed in previous European projects. Building on existing technology will enable the project to deliver its results quickly. The project consortium includes experienced partners, incorporating 12 SME's, from cloud hardware and platform providers, to



A typical experimental scenario in the project is based around an insole design simulation program developed by one of the partners, used for designing tailored insoles for sports footwear and for people with foot problems. The end user company in the project has patented a method for scanning feet in 3D and the experiment will involve linking this to a cloud-based version of the simulation software to design insoles and simulate the interaction of feet and insoles. In turn, this design is loaded into a CNC machine to manufacture the insoles. The aim of the cooperation is to establish a portal through which scans can be uploaded to the cloud-based software service which then validates the scanned image to produce the design. The experiment will explore the extent to which the service supporting the lifecycle of tailored insole production can be achieved. This will immediately lead to extensions of the software for checking images within other industries unrelated to the footwear business