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# Case Study

**New Technology paradigms are crucial to unleash the full potential of digital factories**

**Cloud, Edge and 5G: The Backbone of a Fully Connected Digital Factory**

In an era shaped by rapid technological progress and digital disruption, manufacturing finds itself at the brink of the next step of transformation. The “digital factory” as a visionary concept leverages advanced digital technologies to transform traditional production systems into highly interconnected and intelligent ecosystems. The concept of the digital factory is designed to enhance efficiency and reduce cost. It minimizes the non-operational downtime for tool changes and reconfigurations and leads to an improvement in output quality. The digital factory enables the integration of company systems, as well as third-party solutions, and contributes to achieving safety and sustainability goals. As the concept matures, new paradigms like the digital twin and generative A.I. demand technologies that can function seamlessly and at scale. To put these into use, key enablers are required: cloud and edge computing, as well as 5G connectivity, are indispensable for unlocking the full potential of digital factories.



Further details can be found [here](#).

### **Keywords**

Digitalisierung