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## Towards The Resilient Operator 5.0: The Future of Work in Smart Resilient Manufacturing Systems

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### Abstract

Most recently, the COVID-19 pandemic has shown industries all around the world that their current manufacturing systems are not as resilient as expected and therefore many are failing. The workforce is the most agile and flexible manufacturing resource and simultaneously the most fragile one due to its humanity. By making human operators more resilient against a range of factors affecting their work and workplaces, enterprises can make their manufacturing systems more resilient. This paper introduces “The Resilient Operator 5.0” concept, based on human operator resilience and human-machine systems’ resilience, providing a vision for the future of work in smart resilient manufacturing systems in the emerging Industry 5.0 hallmark. It suggests how to achieve appropriate smart manufacturing systems’ resilience from a human-centric perspective through the means of the Operator 4.0 typology and its related technical solutions.

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