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Design and Configuration of Digital Assistance Systems in Manual Assembly of Variant-rich Products based on Customer Journey Mapping

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Abstract

In manual assembly processes, the information flows during the process are becoming increasingly complex. Digital assistance systems will play an important role in the future by supporting employees and cooperating with them in order to increase productivity, ergonomics and flexibility. Digital assistance systems must be designed in such a way that they optimally support the abilities of the employees in an adaptive manner. This paper presents an approach to systematically analyze assembly processes with the focus on employee needs and experiences based on Customer Journey Mapping. This approach helps Industrial Engineers to design productive and accepted digital assistance systems for smart factories.

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