

Augmented reality devices in the workplace boost short-term productivity, risk long-term innovation and efficiency

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Companies that utilize augmented reality (AR) glasses as a new training and workforce tool to increase worker productivity risk stunting



workforce innovation and ingenuity, according to new research findings published in the INFORMS journal *Manufacturing & Service Operations Management*.

The study, "Seeing the Bigger Picture? Ramping up Production with the Use of Augmented Reality," finds that workers in a manufacturing environment are immediately faster at their jobs when instructed through augmented reality devices, compared to traditional paper instructions, yet they aren't forced to internalize the actions. Thus, while augmented reality helps workers perform tasks in 44% less time, it creates other substantial problems down the road, including longer-term declines in innovation and productivity.

The research was conducted by Heilbronn Enno Siemsen of the University of Wisconsin-Madison, David Wuttke and Ankit Upadhyay, both of Technische Universität München, and Alexandra Wuttke-Linnemann of Landeskrankenhaus Mainz. The researchers say these findings can help firms understand when to implement AR (and when not to). The findings may also trigger equipment manufacturers to plan for the future of AR devices more critically.

More information: David Wuttke et al, Seeing the Bigger Picture? Ramping up Production with the Use of Augmented Reality, *Manufacturing & Service Operations Management* (2022). DOI: 10.1287/msom.2021.1070

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