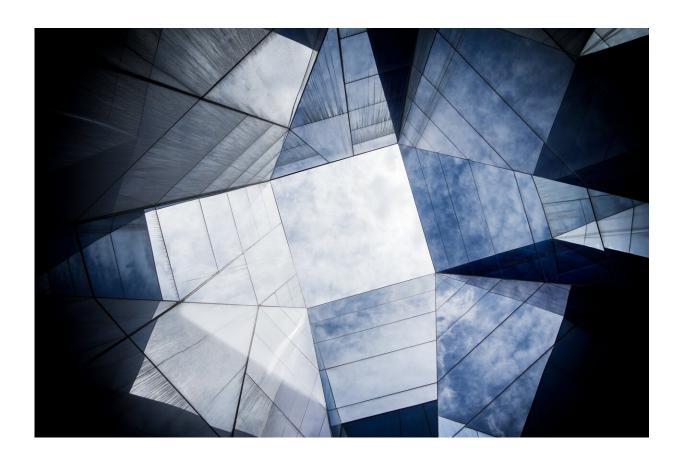


## Study reveals strategies for effective Industry 4.0 implementation

June 20 2024, by Rebecca Knecht



Credit: Pixabay/CC0 Public Domain



Constructor University researchers, Prof. Dr.-Ing. Hendro Wicaksono, Linda Angreani and Annas Vijaya, published a <u>study</u> on Industry 4.0 technologies in the *Journal of Manufacturing Technology Management*.

Their research powerfully illustrates how companies can navigate the complexities of integrating advanced technologies, such as automation and the Internet of Things (IoT) into their <u>manufacturing processes</u>.

This research is unique as it is the first to explore the alignment between maturity models and reference architecture models, offering valuable insights for companies striving to enhance their Industry 4.0 adoption strategies.

The study does so by introducing a comprehensive maturity <u>model</u> to assess an industry's readiness to adopt Industry 4.0, aligned with reference architecture models (RAMs) like RAMI4.0, NIST-SME, IMSA, IVRA, and IIRA, enabling better implementation strategies for companies.

"One of the significant findings is the identification of varied interpretations of Industry 4.0 maturity models within organizations. The research highlights the critical challenge of aligning these models with established RAMs, which is essential for a successful Industry 4.0 transformation," write Angreani and Vijaya, both research associates under Prof Hendro Wicaksono, from Constructor University.

"Additionally, the study reveals that both maturity models and reference architectures often overlook human and cultural aspects, which are vital for effective implementation."

More information: Linda Salma Angreani et al, Enhancing strategy



for Industry 4.0 implementation through maturity models and standard reference architectures alignment, *Journal of Manufacturing Technology Management* (2024). DOI: 10.1108/JMTM-07-2022-0269

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