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A Framework for Data-Based Change Impact Analysis in Manufacturing

Fabian Sippl^{a,*}, Gunther Reinhart^a

^a*Technical University of Munich, Institute for Machine Tools and Industrial Management*

* Corresponding author. Tel.: +49-89-289-15467; fax: +49-89-289-15555. E-mail address: Fabian.sippl@iwb.tum.de

Abstract

Manufacturing companies recognize the efficient handling of technical changes as a critical success factor for the long-term competitiveness. At the same time, the increasing digitalization of the change management process leads to the availability of historical change data. This paper presents a holistic conceptual framework for the change impact analysis in manufacturing, starting with the initial description of changes and ranging to the presentation of results. It includes the use of advanced data analytics methods such as process mining for the characterization of changes and the identification of relevant stakeholders based on a digital representation of the organizational structure.

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