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Bibliometric analysis of technology management research topic trends

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Abstract

Published research is a good indicator on the trends and maturity of a scientific discipline. Bibliometric analysis is a valuable tool to assess published research. Since Technology Management is still a growing discipline, it requires a research roadmap, taking into account past research trends to derive the requirement for future growth. This paper determines the main research topics published in the Journal of Engineering and Technology Management, Technovation and Journal of Technology Analysis & Strategic Management. Natural Language Processing with Topic modelling is applied to extract the main topics from the abstracts and topics of these papers. Polynomial trends of the topics from these journals indicate which are rising or declining in popularity. Plotting the resulting trends assists in identification of research opportunities in Technology Management.