

Automating Science: Exploring the Potential and Limits of AI-based Applications in Systematic Literature Reviews

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Abstract

Science automation, driven by advanced technologies such as artificial intelligence (AI), reshapes research in diverse domains like engineering, medicine, and management (e.g., in marketing). As publications surge, there is an urgent need for automation in systematic literature reviews (SLRs). This study delves into AI's role in supporting SLRs across different stages. Evaluating twenty-one AI applications, we identify the most valuable ones based on SLR functionalities. Our work illuminates the connection between science automation, AI, and SLRs. Our primary contribution lies in delineating the relevance of these applications across varied SLR stages. In a critical stance, we emphasize the central role of user competence in employing AI tools and stress the significance of a conscious and judicious application of this technology.

Subject Areas: *Decision-Making, Information Processing, Information Systems, New Product Development and Launch, Service Marketing*

Track: Marketing Strategy & Theory