

Two Decades of Global Research Productivity Trends in Artificial Intelligence and Knowledge Management: a Bibliometric Analysis

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This study presents a comprehensive bibliometric analysis of global research trends in the fields of Artificial Intelligence (AI) and Knowledge Management (KM) over the past twenty years, from 2005 to 2024. The primary objective is to examine how AI contributes to knowledge sharing, capture, and utilization within academic and industrial frameworks, while identifying publication trends, key contributors, affiliations, funding sources, and country-wise output in this interdisciplinary domain. The research data were collected from the Scopus database using a well-defined search strategy involving the keywords “artificial intelligence” and “knowledge management” combined with Boolean operators. A total of 3953 documents were retrieved for the defined period after applying filters for language and document types. Analytical tools such as MS Excel and VOS viewer were employed to assess publication metrics, visualize co-authorship networks, and identify thematic clusters and keyword co-occurrences. Findings indicated a substantial and consistent rise in publications, particularly from 2018 onwards, with annual output increasing from 75 papers in 2005 to 385 in 2024. The analysis revealed that most publications were in the form of conference proceedings (66.9%) and journal articles (24%). China and the United States emerged as major contributors, with the Chinese Academy of Sciences being the top publishing institution. Additionally, the National Natural Science Foundation of China was identified as the most active funding agency, supporting 206 research works. The dominant subject area was Computer Science, reflecting AI’s technical foundation in KM applications. The results underscore the growing scholarly interest in integrating AI with KM, highlighting opportunities for future research in science education, ethical considerations, and policy development. The study offers valuable insights for academics, librarians, educators, and decision-makers seeking to understand and expand the impact of AI in KM.

Keywords: *Artificial Intelligence; Bibliometrics; Knowledge Management; Research trends; VOS viewer*