ARTIFICIAL INTELLIGENCE AND DYNAMIC CAPABILITIES: A BIBLIOMETRIC ANALYSIS AND FUTURE RESEARCH AGENDA

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Comunicação:
O XIV SINGEP foi realizado em conjunto com a 14th Conferência Internacional do CIK (CYRUS Institute of Knowledge) e com a SPARK (Society for Promoting Academic Research and Knowledge), em formato híbrido, com sede presencial na UNINOVE - Universidade Nove de Julho, no Brasil.

Agradecimento à orgão de fomento:
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Study purpose
This study examines the intellectual structure of research connecting artificial intelligence (AI) and dynamic capabilities and explains how AI strengthens organizational sensing, seizing, and transforming to promote agility, value creation, and sustained competitive advantage.

Relevance / originality
Existing research often treats AI as a technological resource and remains fragmented across strategy, innovation, and information-systems domains. This study reconceptualizes AI as a capability-enabling mechanism and integrates these streams into a unified strategic framework and future research agenda.

Methodology / approach
A bibliometric review examined 213 peer-reviewed Web of Science management articles published between 2018 and 2025. Co-citation analysis of the 25 most influential publications used Ochiai-normalized coefficients and multidimensional scaling to map the field's intellectual structure and research clusters.

Main results
Seven research clusters emerged, spanning digital strategy, core dynamic capabilities, agile sensing and seizing, AI-enabled services, AI microfoundations, ecosystems and value creation, and knowledge and innovation. AI creates advantage by enabling, rather than independently constituting, dynamic capabilities.

Theoretical / methodological contributions
The study integrates contextual drivers, AI-enabled microfoundations, sensing–seizing–transforming processes, and strategic outcomes within one framework. It extends dynamic capabilities theory by specifying AI's enabling mechanisms and demonstrates how bibliometric mapping can consolidate a fragmented interdisciplinary knowledge base.

Social / management contributions
Managers should embed AI within decision routines, organizational learning, resource allocation, business-model renewal, and ecosystem collaboration rather than pursue isolated technology investments. The framework helps leaders align AI initiatives with adaptability, responsible human–AI coordination, innovation, and durable value creation.

Keywords: Artificial intelligence, dynamic capabilities, strategic management, organizational agility, competitive advantage