MAPPING THE IMPACT OF ARTIFICIAL INTELLIGENCE ON MANAGEMENT AND COMMERCE: A BIBLIOMETRIC ANALYSIS

Barkha Rani[1]

Assistant Professor, Department of ABST, University of Rajasthan, Jaipur (India)

Akhil Kumar

Assistant Professor, Department of Law, University of Rajasthan, Jaipur (India)

ABSTRACT

This study presents a comprehensive bibliometric analysis of Artificial Intelligence (AI) in commerce and management, focusing on scholarly publications indexed in the Web of Science (WOS) database between 2019 and 2023. AI has emerged as a pivotal research area; however, few studies have addressed its bibliometric dimensions. This study aims to bridge this gap by evaluating the academic landscape and comparing AI research to assess its impact on decision-making in business management. Data for the analysis was collected from WOS, and performance analysis and science mapping were conducted using R-Studio and MS Excel. The findings highlight AI's growing role in enhancing business functions, including decision-making, process optimization, and innovation. Key themes include "performance" (9%), "innovation" (6%), and "integration" (3%), reflecting AI's potential in improving organizational efficiency and competitiveness. The research reveals an annual growth rate of 9.05%, with a peak in 2022, and underscores the significant influence of international collaboration, particularly in smaller countries such as Canada and Australia. The study identifies the USA and China as leading contributors and highlights the concentrated influence of a few prolific scholars and journals. The analysis concludes that AI is an indispensable tool for enhancing agility and adaptability in business management, positioning it as a strategic asset in a rapidly evolving global marketplace.

Keywords: Artificial Intelligence, Management and Commerce.

---

[1] Corresponding Author: Dr. Akhil Kumar, *Assistant Professor, Department of Law, University of Rajasthan, Jaipur (India) 302017; +91-9468957825; akhil.r.kaler@gmail.com*

1. INTRODUCTION

Artificial Intelligence (AI) is widely regarded as an engineering discipline aimed at creating machines capable of emulating human intelligence and behavior (Nilsson, 2009). One current research focus in the field of management is the development of work models that integrate AI solutions in place of human labor, making tasks more efficient and less burdensome (Brynjolfsson & McAfee, 2014). AI can be broadly defined as software technology that possesses one or more of the following abilities: perception—such as recognizing audio, visuals, text, or tactile inputs (e.g., facial recognition); decision-making (e.g., systems for diagnosing medical conditions); forecasting (e.g., predicting weather patterns); automatic extraction of knowledge and pattern recognition from datasets (e.g., identifying fake news networks on social media); interactive communication (e.g., virtual assistants or social robots); and logical reasoning (e.g., formulating theories from given premises) (Russell & Norvig, 2016). This includes various subfields, like machine learning (Mitchell, 1997).

The roots of bibliometrics in research date back to 1917 (Pritchard, 1969). Recent developments in bibliometric analysis focus on topics such as event tourism, ethics and privacy in AI, people analytics, knowledge network management, business intelligence, and data analytics, among other fields. (Donthu et al., 2021). Bibliometric techniques allow researchers across disciplines to gain quantitative insights into specific fields over defined periods (Garfield, 2006). Despite AI's prominence as a research area, limited studies have focused on the bibliometric analysis of AI in management (Van Eck & Waltman, 2010). AI has become an integral part of business studies over the past decade, with organizations increasingly relying on smart technologies to enhance efficiency (Davenport & Ronanki, 2018). The COVID-19 pandemic has accelerated this trend, as management processes now heavily depend on AI to boost productivity, proactivity, and decision-making (Dwivedi et al., 2021). AI is now fundamental to functions like sales and marketing, data analytics, decision support, human resources, and sustainability (Haenlein & Kaplan, 2019). AI is reshaping management across industries.

Key benefits of AI in management include:
- The ability to rapidly and accurately process vast datasets, providing managers with insights into trends, patterns, and potential outcomes (Ransbotham et al., 2017).
- Improved decision-making, operational streamlining, and enhanced organizational performance through automation and data-driven insights (Fountaine et al., 2019).
- Solving managerial challenges and generating opportunities across various stages of the management process (Jarrahi, 2018).

As AI technology advances, sophisticated algorithms and intelligent systems capable of learning from complex data are becoming attractive to industries seeking operational improvements (Makridakis, 2017). The growing complexity of business challenges and the rapid expansion of data require companies to adapt quickly and optimize decision-making pathways (Agrawal et al., 2018). AI plays a crucial role in digitization, addressing automation, optimization, and expanding solution capabilities (Bughin et al., 2017). Of particular importance is the use of generative AI algorithms to drive cost efficiency (Zhou et al., 2020). Organizations have numerous options when incorporating AI into their operations, ranging from developing their tools and processes to adopting readily available solutions (Rai et al., 2019).

1.1 Study Motivation

This study is motivated by three key factors:
1. The longstanding academic interest in AI, with a need to evaluate scholarly publications to assess their quality and impact (Martin & Turner, 2015).

2. The increased adoption of AI in businesses, especially post-pandemic, necessitating an evaluation of AI's academic growth and future implications in management (Choudhury et al., 2021).

3. The rise of productivity tools like ChatGPT and Google Bard, prompting researchers to analyze how these tools influence organizational efficiency (Zhou et al., 2020).

Researchers have turned to bibliometrics, using tools like R Studio, to conduct performance and content analysis, as well as science mapping in this growing field (Donthu et al., 2021). This study investigates the academic landscape of AI in commerce and management using the Web of Science (WOS) database, comparing its findings to existing literature (Siau & Yang, 2018). As AI becomes a focal point of research, the study seeks to explore the knowledge landscape, map the relevant literature, and identify new research avenues (Z. Zou & X. Liu, 2023).

1.2 Research Questions (RQs):
- RQ1: How has AI-related research in management evolved over the years?
- RQ2: What are the critical themes and emerging issues related to AI and management in scientific literature?
- RQ3: What are the theoretical and practical contributions of this research, and what future research directions can be suggested?

The study is organized into six sections. It begins with an introduction, followed by a detailed literature review. The methodology is then discussed, leading to data analysis and interpretation. The research findings are presented in the fifth section, followed by discussions, conclusions, and future research directions.

2. LITERATURE REVIEW

The bibliometric examination of Artificial Intelligence (AI) within the spheres of commerce and management elucidates noteworthy trends and insights across a multitude of domains, including marketing, e-commerce, human resource management, and supply chain management. Key themes such as "Value Creation," "Business Intelligence," and "Customer Experience" signify a transition towards customer-centric methodologies in AI applications (Sharma et al., 2021). The scholarly discourse underscores the imperative for ethical considerations and adaptability within AI strategies, delineating a framework for future research endeavors and practical applications (Dwivedi et al., 2021). An extensive review spanning a decade demonstrates an escalation in AI applications, such as recommender systems and fraud detection, with the United Kingdom emerging as a leader in publication output (Verma & Gustafsson, 2020).

The incorporation of AI into human resource management (HRM) is revolutionizing information processing, augmenting decision-making capabilities, and enhancing operational efficiency (Jarrahi, 2018). AI is acknowledged as a crucial enabler for the enhancement of supply chain operations, providing organizations with a strategic edge through improved decision-making frameworks (Wamba et al., 2016). AI technologies enhance customer experiences by tailoring marketing initiatives and optimizing operational processes, which are essential for sustaining a competitive position in the contemporary data-centric marketplace (Grewal et al., 2020). Furthermore, AI addresses the challenges faced by executives inundated with excessive data, enabling them to extract valuable insights that facilitate superior decision-making and operational efficacy (Mariani & Nambisan, 2021).

The impact of AI permeates various facets of business management, transforming marketing, operations, human resource management, and finance. It not only streamlines processes and bolsters decision-making but also introduces challenges such as ethical dilemmas and the necessity for workforce reskilling (Bessen & Righi, 2020). Despite its advantages, the adoption of AI is hindered by obstacles such as data privacy concerns and significant implementation costs. Mitigation strategies include fostering an innovation-driven culture and investing in AI-focused educational initiatives (Bughin et al., 2017). Although AI presents significant benefits, it also raises concerns about job displacement and the demand for new competencies, underscoring the need to balance technological progress with workforce development (Makridakis, 2017).

Ethical implications and adherence to data protection regulations are critical to ensuring the responsible application of AI in financial operations (Morales et al., 2021). Addressing issues of algorithmic bias and safeguarding data privacy is imperative for maintaining stakeholder confidence in AI applications (Binns, 2018). The contribution of AI extends to enhancing operational efficiencies and customer experiences, thereby fostering competitive advantage within an evolving marketplace (Ransbotham et al., 2017). Nevertheless, challenges such as data privacy concerns and elevated implementation costs obstruct widespread adoption (Dwivedi et al., 2021). In summary, the incorporation of AI into commerce and management not only optimizes organizational processes but also cultivates a more tailored and efficient customer experience, positioning entities for success in a competitive environment (Grewal et al., 2020).

3. METHODOLOGY

Zhang et al. (2021) highlight that the bibliometric approach is an effective method for systematically tracking and presenting statistical data related to specific terms or concepts in the fields of artificial intelligence (AI) and management. By employing bibliometric analysis, researchers can thoroughly analyze and document metadata, enabling a comprehensive understanding of how knowledge spreads and evolves within the academic community (Kaur et al., 2021). This method has gained considerable attention for its usefulness in conducting literature reviews, making it a popular tool among scholars. This methodological framework allows researchers to perform comprehensive investigations into their fields by applying science-mapping techniques to relevant publication databases. Additionally, bibliometric analysis can be used to visually represent previous studies and literature, helping scholars pinpoint research gaps and

potential directions for future exploration (Paul & Criado, 2020). Jadil et al. (2021) asserted that advanced meta-analyses can be augmented through the incorporation of bibliometrics to provide visualizations, thereby serving as a valuable complement to systematic literature reviews. By leveraging the online Web of Science core collection database, this academic investigation avails itself of an extensive reservoir of published documents relevant to the field of AI and Management. While the authors concede the existence of other prominent databases such as Scopus and Google Scholar, it is acknowledged that each database possesses unique strengths and limitations. In this study, the authors carefully evaluated the requirements aligned with the research objectives and determined that Web of Science was the most suitable database, offering comprehensive coverage, reliable data, and efficient accessibility (Ahmi, 2022). To achieve the research goals and thoroughly address the research questions, Biblioshiny—an advanced application developed for the Bibliometrix R package—was employed to conduct the bibliometric analysis (Aria & Cuccurullo, 2017. First segment deals with performance analysis, it covers aspects such as research output over the years, types of publications, the most active authors, leading fields of study, top journals publishing research in the field, and the countries most involved in the research. The second segment entails scientific mapping employing bibliometric measures such as keyword occurrence, co-authorship, and bibliometric coupling. The term co-occurrences is employed to delineate the principal trends within the documents that constitute the subject of investigation. The core components of co-occurrence analysis in information science consist of co-link, co-citation, and co-word relationships (Leydesdorff & Vaughan, 2006). In contrast, co-authorship is utilized as a metric to assess scholarly collaboration, reflecting the connections between countries, institutions, networks, and research teams. This is typically demonstrated through collaborative publications produced by different organizations, often spanning across national boundaries, and involving multiple research entities (Ullah et al., 2022).

The current investigation is focused on the theme of "Artificial Intelligence" within the academic realm. Empirical data were harvested from the Web of Science platform, utilizing "artificial intelligence" as a focal topic and employing keywords over a span of five years, specifically from 2019 to 2023. The year 2024 has been excluded from consideration due to its ongoing status. In a similar vein, 461 articles were retrieved from the Web of Science by constraining the subject area (Management, Economics, and Economic Theory), the temporal range (2019–2023), the document type (Article), only enriched cited reference are used, WOS categories (Business, Management, Economics, Operations Research Management Science, Business Finance), language (English), and the Social Science Citation Index. and Management (Web of Science Categories) and Knowledge Management (Citation Topics Micro). This research has specifically concentrated on articles to ensure the inclusion of only pertinent and impactful studies related to business, management and its allied fields. The previously mentioned analytical techniques have been predominantly employed to address the research questions (RQs) articulated in the preceding section of this study.

4. DATA ANALYSIS

Key bibliometric data on AI was collected from the Web of Science (WOS) database and analyzed to assess performance and visualize the intellectual structure using keyword co-occurrence analysis. The authors employed RStudio and Biblioshiny software to codify and execute the procedures for the bibliometric analysis. These methodologies are categorized into two main sections. The first section focuses on 'performance analysis', which evaluates various research components' contributions to a specific field. This is a standard approach in reviews to showcase the performance of multiple research elements. The analysis covers aspects such as research output over the years, types of publications, the most active authors, leading fields of study, top journals publishing research in the field, and the countries most involved in the research. The second section involves 'scientific mapping' through bibliometrics, exploring relationships between different research elements, including keyword co-occurrence, co-authorship, and bibliometric coupling. Visual representations such as network analysis, diagrams, and maps are used to depict these relationships, with accompanying discussions that highlight AI's role in management and decision-making.
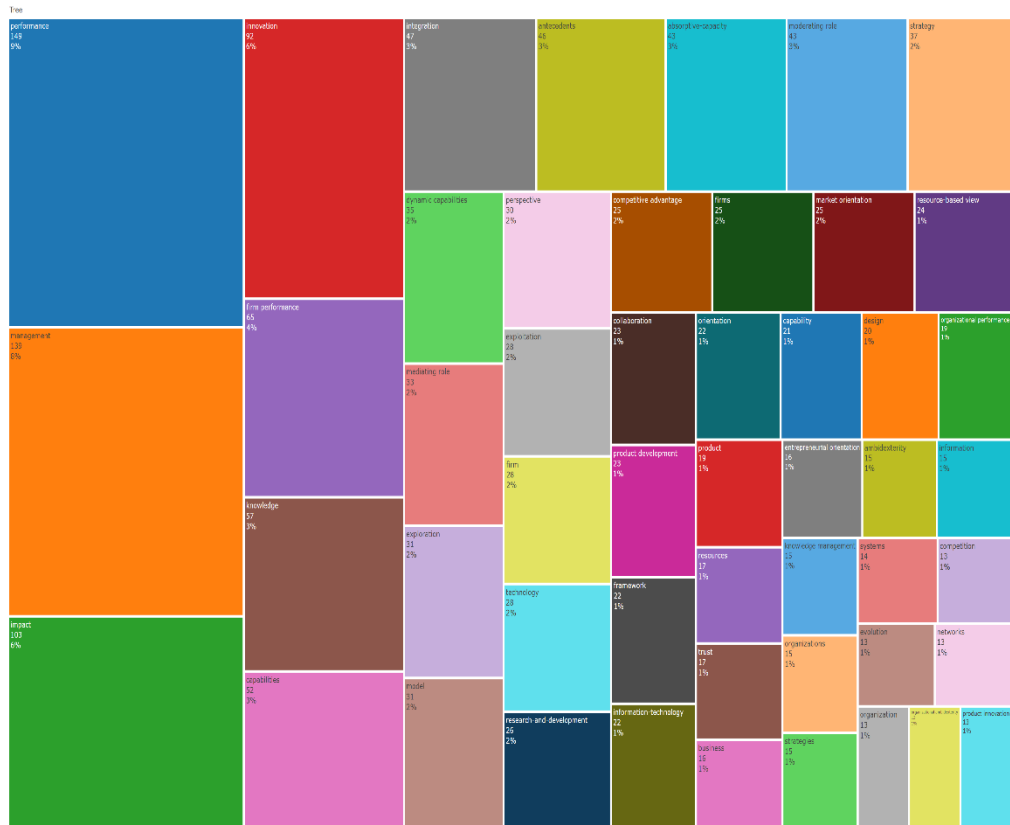
4.1 Performance Analysis

The dataset, covering the period from 2019 to 2023, reveals several important trends and characteristics in the research domain. A total of 425 documents were published across 64 academic sources, reflecting a steady annual growth rate of 9.05%. This suggests a progressive expansion of scholarly output, with a peak in 2022 (103 publications), followed by a slight decrease in 2023 (99 publications). As it can be observed that, after the world hit by pandemic the importance of artificial intelligence in management has gained recognition and gained the attention of researchers in this domain. There were about 33lakhs research paper, articles, conference proceedings, review papers etc on the subject; intensive research was done to extract data based on various filter like the period of publication was confined to the pandemic years and after, only enriched research articles were considered for the analysis, and the journals related to business and management areas are considered only etc. The year-on-year variation indicates fluctuating but generally increasing interest in the subject matter. The year 2024 was discarded in the analysis due to new ongoing publications. The average document age of 2.76 years suggests that the majority of publications are relatively recent, providing a fresh and up-to-date foundation for ongoing research. Moreover, the average 13.83 citations per document signals strong academic engagement, with the research being widely cited and recognized in the field. In terms of content, the 24,662 references point to an extensive intertextual network, highlighting the rigor and depth of literature being built upon. The diversity in thematic coverage is further emphasized by 1,073 Keywords Plus and 1,443 Author Keywords, demonstrating a broad and varied scope of research topics, likely encompassing both established and emerging areas. Authorship analysis provides insight into collaboration patterns. The dataset includes contributions from 1,168 unique authors, with only 38 documents being single-authored. This underscores the collaborative nature of the field, where co-authorship dominates and interdisciplinary or multi-author projects are common. the data reflects a robust, growing body of research, characterized by strong collaboration, a wide thematic range, and significant citation impact. The steady growth in publications and their

relatively high citation counts suggest an active and influential area of scholarly inquiry, with an ongoing trend toward collective research efforts.

Table 1: Main Information About Data

| Description	Results	Year	Articles
MAIN INFORMATION ABOUT DATA			
Timespan	2019:2023	2019	70
Sources (Journals, Books, etc)	64	2019	70
Documents	425	2020	61
Annual Growth Rate %	9.05	2021	92
Document Average Age	2.76	2022	103
Average citations per doc	13.83	2023	99
References	24662		
DOCUMENT CONTENTS			
Keywords Plus (ID)	1073		
Author's Keywords (DE)	1443		
AUTHORS			
Authors	1168		
Authors of single-authored docs	37		
AUTHORS COLLABORATION			
Single-authored docs	38		
Co-Authors per Doc	2.96		
International co-authorships %	37.41		

source: Authors' elaboration

**Figure 1: Tree Map**

source: Authors' elaboration

The bibliometric analysis of AI's role in commerce and management, derived from the WOS database, reveals a structured focus on how AI enhances business functions. The dominance of themes like "performance" (9%) and "innovation" (6%) underscores AI's pivotal role in improving organizational efficiency and driving transformative business practices. Secondary themes, including "integration" (3%) and "capabilities" (3%), suggest that AI is crucial for harmonizing business processes and enhancing strategic flexibility, indicating its value in dynamic and competitive markets. Additionally, themes like "knowledge" and "impact" reflect the growing emphasis on leveraging AI for data-driven decision-making and measurable business outcomes. This analysis indicates that AI research in commerce and management is heavily concentrated on optimizing firm-level performance, fostering innovation, and building competitive advantages, positioning AI as an essential strategic asset in modern business environments.

Graph 1: Most Relevant Authors
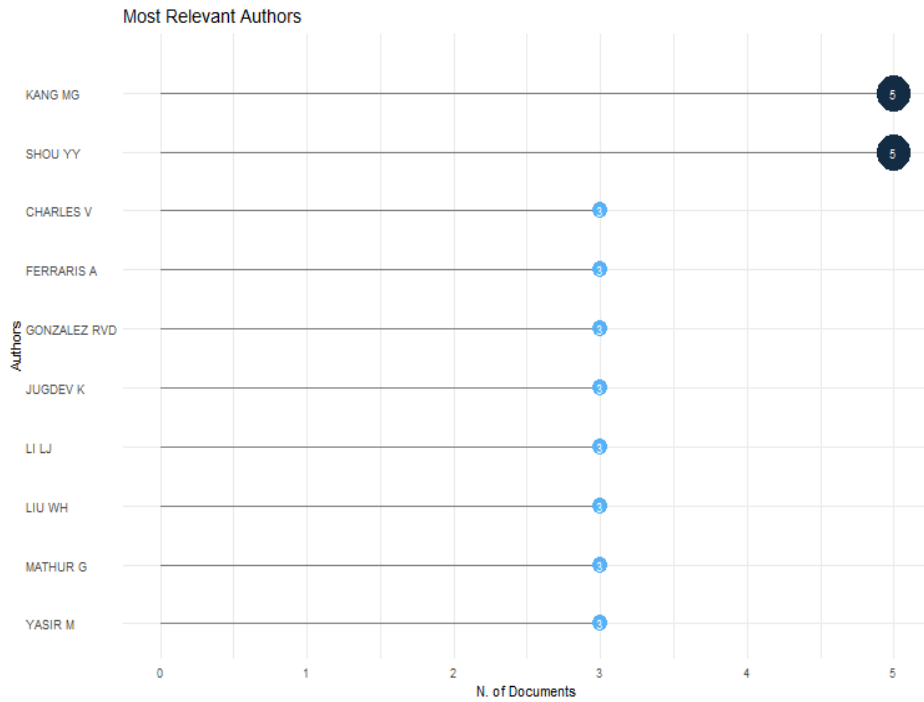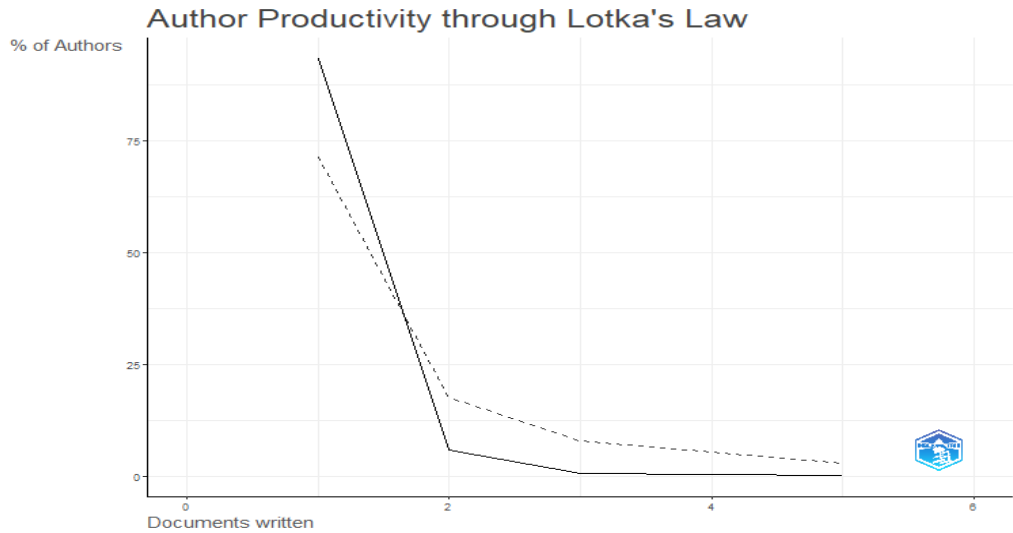

Source: Authors' elaboration

Graph 2: Authors' Production Over Time
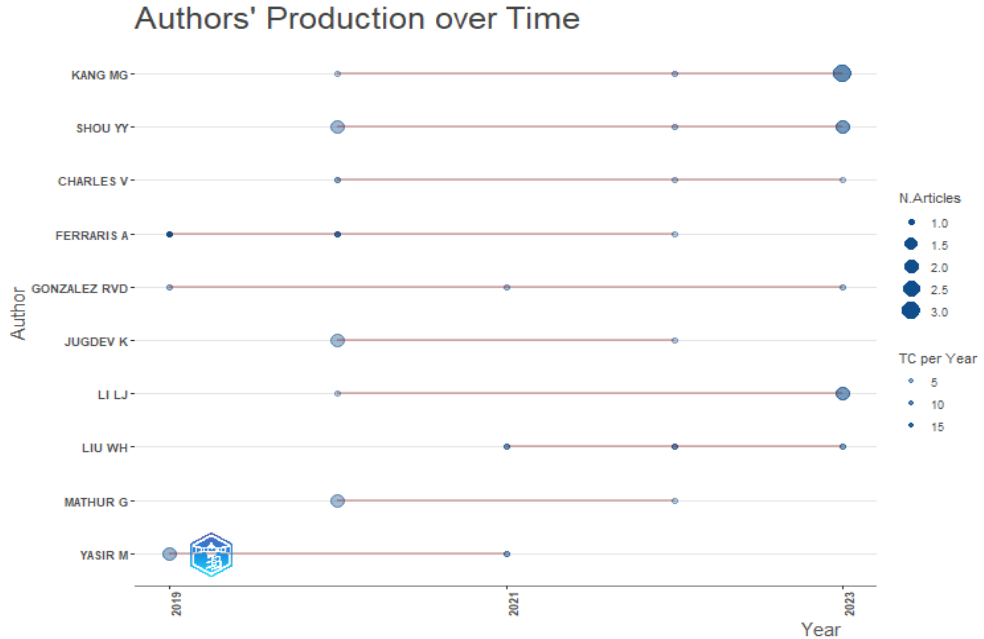
source: Authors' elaboration

The first graph presents the most relevant authors based on citation counts, showing that while two authors (KANG MG and SHOU YY) have a maximum of 5 citations, the majority remain at lower citation levels, indicating a concentration of influence among a select few. The second graph provides a longitudinal view of these authors' publication trends from 2019 to 2023, with a noticeable increase in article output and citation impact (TC per Year) in 2023. Combining both graphs, we observe that while many authors contribute regularly to AI research in commerce and management, the significant impact is concentrated in a few individuals. This suggests an emerging field where influence is not yet widespread but is growing, with some authors driving its evolution through consistent output and citation success. To prove the fact a deeper analysis is required through the Lotka's law describes how the number of authors publishing a certain number of articles is related to the number of authors publishing a single article.

Graph 3: Authors' Productivity through Lotka's Law

Source: Authors' elaboration

It reveals a highly skewed distribution of scientific output. The sharp decline in the curve shows that over 75% of authors contribute only one document, indicating that most researchers in this domain are infrequent contributors. Conversely, a small proportion of authors are responsible for the majority of publications, as evidenced by the flattening of the curve at higher document counts. This concentration of research output among a few prolific authors is consistent with Lotka's Law, highlighting a common pattern in specialized fields where expertise and publication activity are concentrated in a select group of scholars.

Table 2: Corresponding Author's Country

Country	Articles	Articles %	SCP	MCP	MCP %
CHINA	101	23.7647059	63	38	37.6237624
USA	69	16.2352941	49	20	28.9855072
BRAZIL	23	5.41176471	19	4	17.3913043
GERMANY	21	4.94117647	15	6	28.5714286
ITALY	18	4.23529412	11	7	38.8888889
SPAIN		4	14	3	17.6470588
FRANCE	16	3.76470588	7	9	56.25
UNITED KINGDOM	14	3.29411765	7	7	50
AUSTRALIA	11	2.58823529	3	8	72.7272727
KOREA	11	2.58823529	5	6	54.5454545
PAKISTAN	11	2.58823529	4	7	63.6363636
CANADA	9	2.11764706	2	7	77.7777778
SWITZERLAND	7	1.64705882	2	5	71.4285714
DENMARK	6	1.41176471	4	2	33.3333333
INDIA	6	1.41176471	5	1	16.6666667
MALAYSIA	6	1.41176471	4	2	33.3333333
TURKEY	6	1.41176471	6	0	0
POLAND	5	1.17647059	2	3	60

Source: Authors' elaboration

China leads in AI research in commerce and management, contributing 23.76% of the total articles, with a balanced distribution of single-country publications (SCP) and multi-country collaborations (MCP), the latter being 37.62%. The USA follows with 16.23% of articles, having a slightly lower MCP ratio (28.99%), indicating more domestic-focused research. European countries like Germany, Italy, and France exhibit high MCP percentages (e.g., France at 56.25%), reflecting strong international collaboration. Notably, smaller contributors like Canada and Australia have very high MCP percentages (77.78% and 72.73%, respectively), suggesting that collaboration is key to their research outputs. This analysis shows that international collaboration significantly boosts research impact in smaller countries, while larger countries like China and the USA are more self-reliant in producing research.

Figure 2*:* Three Field Plot depicting connection between authors' country, Authors and Keywords
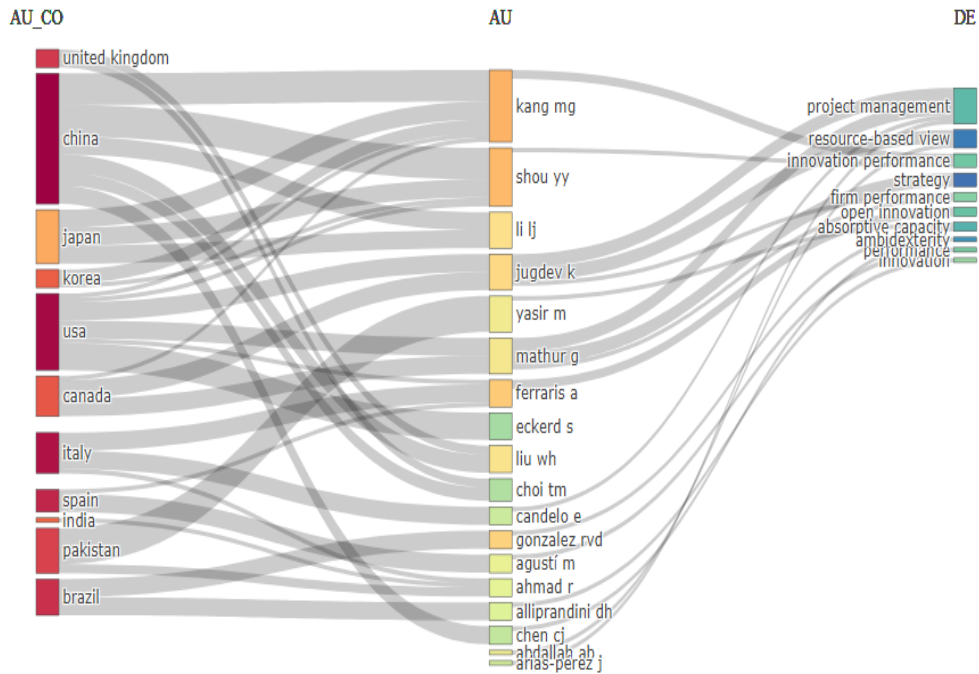
Source: Authors' elaboration

The three-field plot illustrates the global research landscape on AI applications in commerce and management, linking contributing countries, key authors, and their research themes. Countries like China, the USA, and the UK are prominent, showing their leadership in AI-related research. Authors such as Kang MG, Shou YY, and Jugdev K connect multiple countries to specific research domains, suggesting their influence in driving interdisciplinary studies. Research themes include critical management concepts like innovation performance, project management, resource-based view, and firm performance, indicating that AI's role in improving operational efficiency and strategic decision-making is well-researched. The strong ties between multiple countries and these themes reflect the collaborative, international nature of AI research in business. The diversity of topics suggests AI is being employed not only to enhance innovation and firm agility but also to refine management practices and strategies. The connections imply a broad interest in understanding AI's potential to optimize resources, improve competitive advantage, and increase firm adaptability, underscoring its transformative role in management and commerce.

Graph 4: Most Relevant Sources

Most Relevant Sources
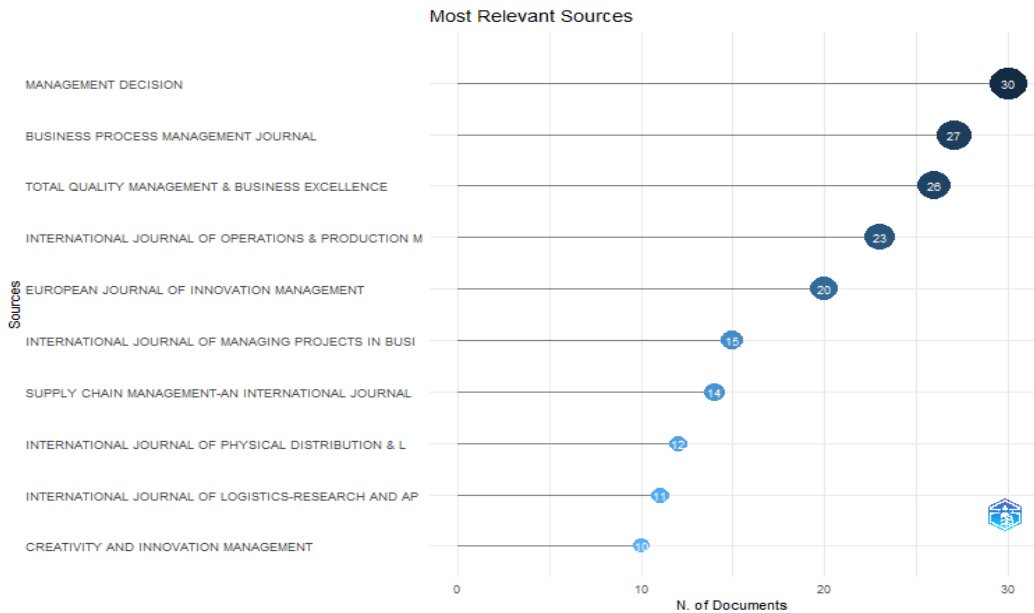
The graph illustrates the most influential sources in AI research within commerce and management, with "Sustainability" leading at 30 publications, followed by "Business Process Management Journal" (28) and "Total Quality Management & Business Excellence" (27). These journals are central in publishing AI research focused on sustainability, process optimization, and quality management. The clustering of high publication counts in a few key journals suggests that research in AI for commerce is concentrated within specialized outlets, reflecting the critical role of AI in enhancing operational efficiency and strategic management practices. This indicates a strong thematic alignment between AI and business process innovation.

Graph 5: Most Local Cited Sources
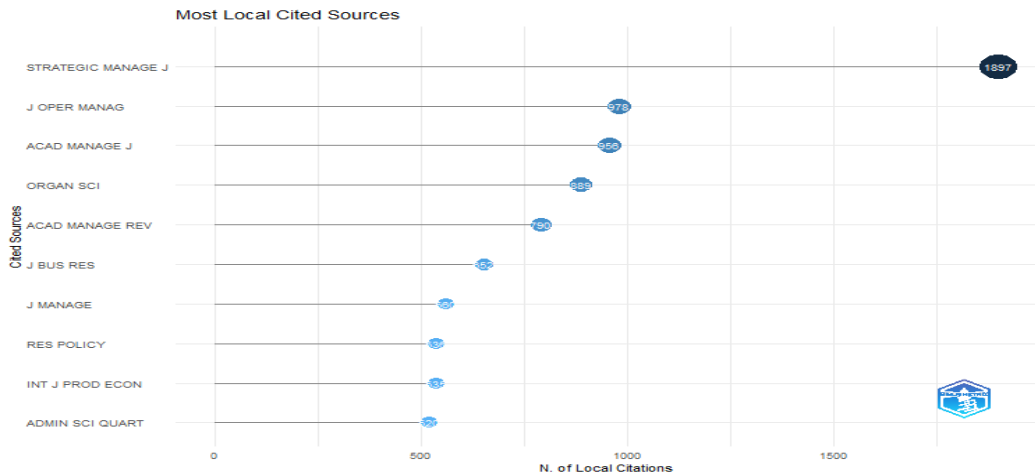
Source: Authors' elaboration

The bubble chart depicts the most cited sources related to AI in commerce and management research, with the **"Strategic Management Journal"** being the most cited, having **1897 citations**. Other top journals include the **"Journal of Business Research"**, **"Academy of Management Journal"**, and **"Organization Science"**, each with several hundred citations. The size of the bubbles corresponds to the number of citations, highlighting the significance and influence of these journals in shaping research on AI within management. The chart emphasizes that AI-related studies are grounded in well-established, high-impact academic sources.

Graph 6: Core Sources by Bradford's Law
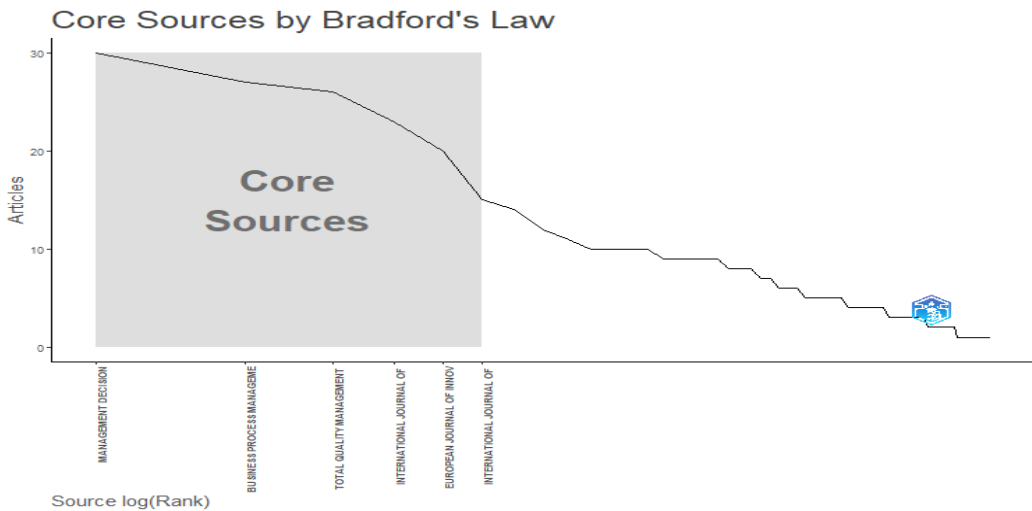
Bradford's Law suggests that a small number of journals (core sources) produce the majority of relevant articles, while a long tail of less productive journals follows. In this graph, the steep section on the left represents these core sources, where journals like Management Decision and Business Process Management contribute a significant number of articles on AI in commerce and management. These journals likely cover critical topics such as AI-driven decision-making, process optimization, and innovation management. As the curve flattens, we see a large number of less influential journals with fewer articles, indicating that most research is concentrated in a few key publications. This trend helps researchers and practitioners identify the most impactful sources to follow for AI applications in management and commerce. In summary, Bradford's Law highlights the unequal distribution of articles, guiding researchers toward high-impact sources for staying current on AI advancements in these fields.

Table 3: Core sources by Bradford's Law

SO	Rank	Freq	cumFreq	Zone
MANAGEMENT DECISION	1	30	30	Zone 1
BUSINESS PROCESS MANAGEMENT JOURNAL	2	27	57	Zone 1
TOTAL QUALITY MANAGEMENT & BUSINESS EXCELLENCE	3	26	83	Zone 1
INTERNATIONAL JOURNAL OF OPERATIONS & PRODUCTION MANAGEMENT	4	23	106	Zone 1
EUROPEAN JOURNAL OF INNOVATION MANAGEMENT	5	20	126	Zone 1
INTERNATIONAL JOURNAL OF MANAGING PROJECTS IN BUSINESS	6	15	141	Zone 1
SUPPLY CHAIN MANAGEMENT-AN INTERNATIONAL JOURNAL	7	14	155	Zone 2
INTERNATIONAL JOURNAL OF PHYSICAL DISTRIBUTION & LOGISTICS MANAGEMENT	8	12	167	Zone 2
INTERNATIONAL JOURNAL OF LOGISTICS-RESEARCH AND APPLICATIONS	9	11	178	Zone 2
CREATIVITY AND INNOVATION MANAGEMENT	10	10	188	Zone 2
JOURNAL OF OPERATIONS MANAGEMENT	11	10	198	Zone 2
MANAGERIAL AND DECISION ECONOMICS	12	10	208	Zone 2
STRATEGIC MANAGEMENT JOURNAL	13	10	218	Zone 2
ASIAN BUSINESS & MANAGEMENT	14	9	227	Zone 2
INTERNATIONAL ENTREPRENEURSHIP AND MANAGEMENT JOURNAL	15	9	236	Zone 2
JOURNAL OF INTELLECTUAL CAPITAL	16	9	245	Zone 2
JOURNAL OF SMALL BUSINESS MANAGEMENT	17	9	254	Zone 2
PROJECT MANAGEMENT JOURNAL	18	9	263	Zone 2
INTERNATIONAL JOURNAL OF EMERGING MARKETS	19	8	271	Zone 2
INTERNATIONAL JOURNAL OF LOGISTICS MANAGEMENT	20	8	279	Zone 2
R & D MANAGEMENT	21	8	287	Zone 2

|				
ASIA PACIFIC BUSINESS REVIEW	22	7	294	Zone 3
JOURNAL OF ORGANIZATIONAL CHANGE MANAGEMENT	23	7	301	Zone 3
ASIA PACIFIC JOURNAL OF MANAGEMENT	24	6	307	Zone 3
JOURNAL OF BUSINESS LOGISTICS	25	6	313	Zone 3
OPERATIONS MANAGEMENT RESEARCH	26	6	319	Zone 3
EUROPEAN MANAGEMENT REVIEW	27	5	324	Zone 3
INNOVATION-ORGANIZATION & MANAGEMENT	28	5	329	Zone 3
INTERNATIONAL JOURNAL OF HUMAN RESOURCE MANAGEMENT	29	5	334	Zone 3
LEADERSHIP & ORGANIZATION DEVELOPMENT JOURNAL	30	5	339	Zone 3
REVIEW OF MANAGERIAL SCIENCE	31	5	344	Zone 3
STRATEGIC ORGANIZATION	32	5	349	Zone 3

Source: Authors' elaboration

The table categorizes journals by their rank, frequency of articles, cumulative frequency, and zones based on Bradford's Law. Zone 1 contains the core sources like Management Decision and Business Process Management Journal, which contribute the highest number of articles, making them central to research on AI in commerce and management. Zone 2 consists of moderately influential journals such as Supply Chain Management and Journal of Operations Management, with fewer publications but still relevant. Zone 3 journals, like Journal of Organizational Change Management, contribute fewer articles, indicating a more peripheral role in the field. This segmentation helps prioritize journals for research in AI and management practices.

Table 4: Sources Local Impact

Source	h_index	g_index	m_index	TC	NP	PY_start
MANAGEMENT DECISION	13	22	2.16666667	529	30	2019
INTERNATIONAL JOURNAL OF OPER	12	18	2	350	23	2019
BUSINESS PROCESS MANAGEMENT	10	17	1.66666667	335	27	2019
TOTAL QUALITY MANAGEMENT & B	10	17	1.66666667	321	26	2019
EUROPEAN JOURNAL OF INNOVATI	9	17	1.5	312	20	2019
JOURNAL OF INTELLECTUAL CAPITA	9	9	1.5	233	9	2019
SUPPLY CHAIN MANAGEMENT-AN I	9	14	1.5	248	14	2019
INTERNATIONAL JOURNAL OF PHYS	8	12	1.33333333	203	12	2019
INTERNATIONAL ENTREPRENEURSH	7	9	1.4	161	9	2020
INTERNATIONAL JOURNAL OF LOGI	7	10	1.4	108	11	2020
JOURNAL OF OPERATIONS MANAG	7	10	1.4	154	10	2020
PROJECT MANAGEMENT JOURNAL	7	9	1.16666667	125	9	2019
R & D MANAGEMENT	7	8	1.16666667	201	8	2019
CREATIVITY AND INNOVATION MAN	6	10	1	128	10	2019
JOURNAL OF SMALL BUSINESS MAN	6	9	1	136	9	2019
STRATEGIC MANAGEMENT JOURNA	6	10	1	183	10	2019
ASIA PACIFIC JOURNAL OF MANAG	5	6	1.25	66	6	2021
ASIAN BUSINESS & MANAGEMENT	5	7	1	65	9	2020
INTERNATIONAL JOURNAL OF EMEI	5	8	1	164	8	2020
INTERNATIONAL JOURNAL OF MAN	5	6	1	64	15	2020
REVIEW OF MANAGERIAL SCIENCE	5	5	1	98	5	2020
STRATEGIC ORGANIZATION	5	5	0.83333333	52	5	2019

Source: Authors' elaboration.

The table presents metrics for various academic journals, including the 'h-index', 'g-index', 'm-index', total citations (TC), number of papers (NP), and publication year start (PY_start). 'Management Decision' has the highest h-index (13), g-index (22), and total citations (529), indicating it is a highly influential journal in the field. 'Business Process Management' and 'European Journal of Innovation Management' also show strong performance with high h and g indices. The m-index reflects productivity adjusted for the career length of researchers, with 'Management Decision' leading here as well. The recent years of activity (mostly starting in 2019-2021) suggest that these journals are current and relevant for research on AI in management and commerce.

Graph 7: Sources Local Impact by H index

Sources' Local Impact by H index
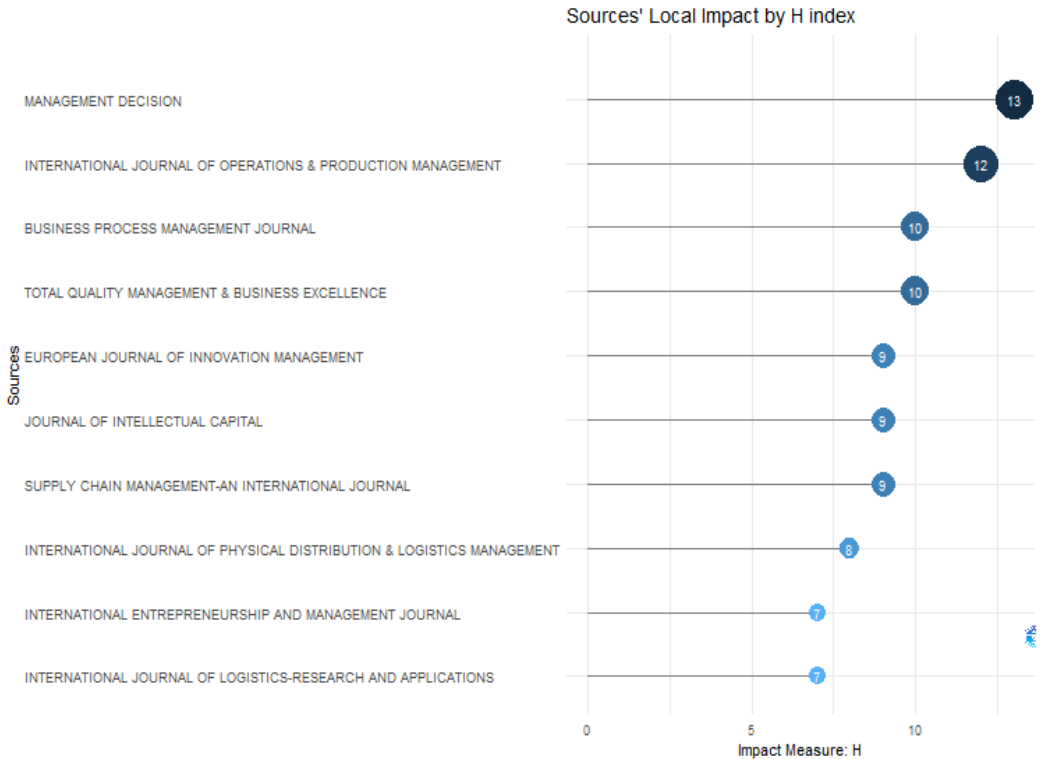
The bubble chart illustrates journal impact based on the 'h-index', reflecting the number of articles and citations that measure a journal's influence. The chart shows that 'Management Decision' has the highest h-index (13), making it the most impactful journal, consistent with the previous table. Following closely are 'International Journal of Operations & Production Management' (12) and 'Business Process Management Journal' (10), which also rank highly in terms of influence. This aligns with the earlier table, where these journals also scored high in h-index, g-index, and total citations, confirming their central role in AI-related research within commerce and management. Journals with an h-index of 9, such as 'European Journal of Innovation Management' and 'Journal of Intellectual Capital', indicate a solid impact but less dominance compared to the top-tier journals. Lower-ranked journals, such as 'International Journal of Logistics Research' (h-index 7), show moderate influence. The chart and table together highlight which journals researchers should prioritize when exploring high-impact studies in AI for commerce and management.

Table 5: Sources Production Over Time

| Year	MANAGE	BUSINESS	TOTAL QU	INTERNAT	EUROPEA
2019	5	9	6	2	5
2020	8	13	9	4	6
2021	23	16	15	10	9
2022	24	19	22	20	13
2023	30	27	26	23	20

Source: Authors' elaboration

The table shows the growth in article counts across various journals from 2019 to 2023. 'Management Decision' and 'Business Process Management' show significant increases, with 'Management Decision' rising from 5 articles in 2019 to 30 in 2023, and 'Business Process Management' from 9 to 27. Similarly, journals like 'Total Quality Management' and 'International Journal of Operations' also show substantial growth, reflecting increasing interest in AI-related topics in these areas. This trend suggests a growing focus on AI in management, business processes, and innovation, as these journals have seen a consistent rise in contributions over the years. The surge indicates that AI's role in these fields is becoming more central in academic research and discourse.

The analysis of the tables and graphs reveals a clear concentration of AI research in commerce and management, with key journals like 'Management Decision', 'Business Process Management', and 'Total Quality Management & Business Excellence' leading the field. These journals, identified through Bradford's Law, hold the most significant influence, as evidenced by their high h-index and citation metrics, particularly 'Management Decision', which ranks highest in impact. The growth in AI-related publications from 2019 to 2023, especially in core journals, highlights the increasing academic focus on AI's role in business process optimization, decision-making, and innovation. Zone 1 journals dominate AI research, while Zone 2 and 3 provide supplementary perspectives with less frequent but still valuable contributions. The bubble chart visually supports these findings, showing 'Management Decision' as the most impactful, with others like 'International Journal of Operations & Production Management' playing significant roles. Overall, AI's growing integration in commerce and management is reflected in the rising influence of these core journals.

4.2 Science Mapping:

Graph 8: Most Relevant Words
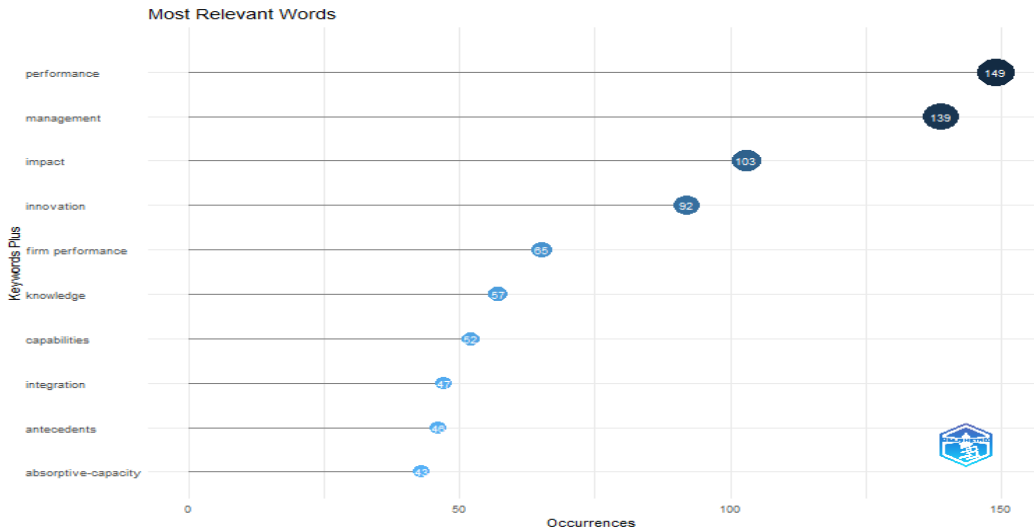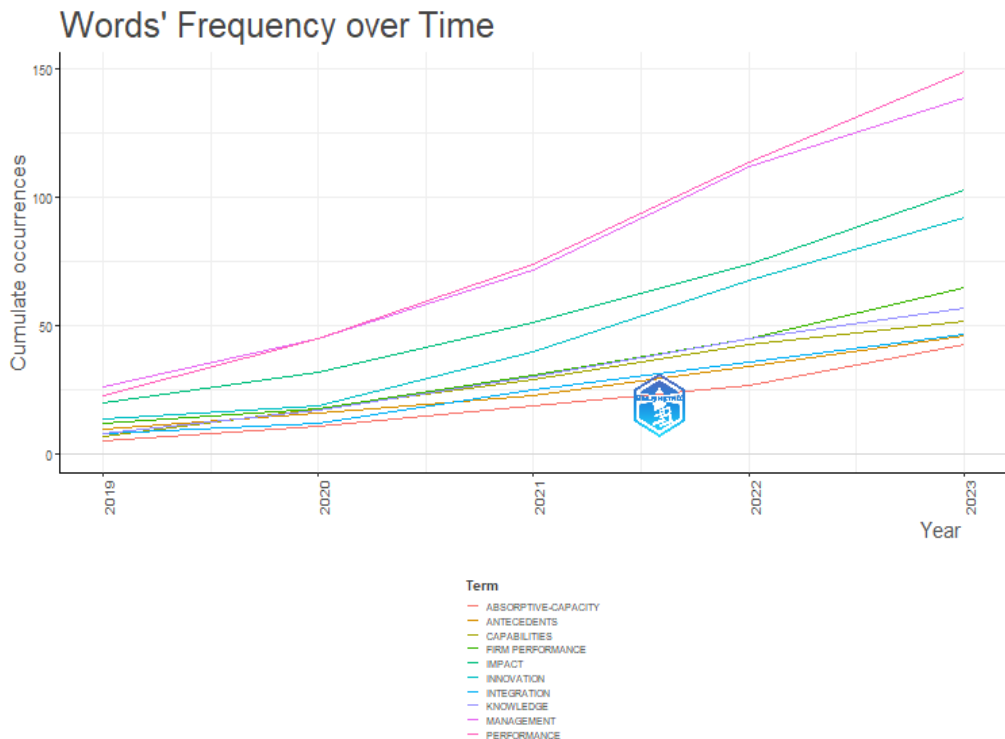

Source: Authors; elaboration

Figure 3*:* Word Cloud

Source: Authors' elaboration

The chart highlights key terms related to AI's role in commerce and management, with "performance" and "management" being the most frequent words, indicating AI's significant impact on business efficiency and managerial practices. Other prominent terms like "impact," "innovation," and "knowledge" suggest that AI is pivotal in driving innovation and improving decision-making. The focus on "capabilities" and "efficiency" underscores AI's contribution to enhancing operational effectiveness. Overall, the data reflects AI's transformative influence on both strategic and operational aspects of business management.
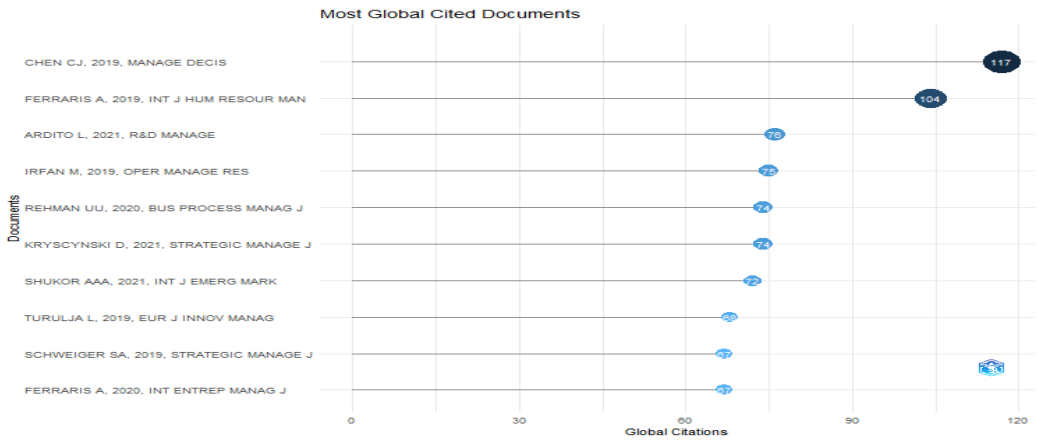
Graph 9: Word Frequency Over Time
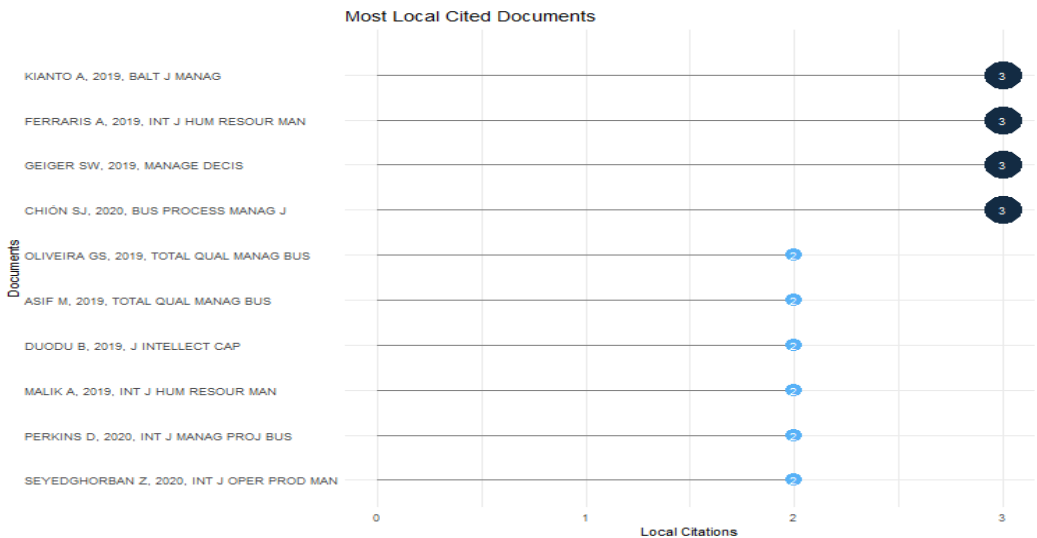

Source: Authors' elaboration

The two graphs together highlight the increasing importance of AI in ''performance, management, and innovation'' within commerce. The first graph identifies these as the most relevant terms, with "performance" and "management" being the most frequent. The second graph shows these terms' steady rise in usage from 2019 to 2023, indicating growing attention to AI's role in optimizing business outcomes. The emergence of terms like "absorptive capacity" suggests a rising interest in how companies adapt to and integrate AI technologies. Overall, AI is becoming increasingly central to both ''strategic planning'' and ''operational efficiency'' in business management.

Graph 10: Most Global Cited Documents

Most Global Cited Documents

Documents	Global Citations
CHEN CJ, 2019, MANAGE DECIS	117
FERRARIS A, 2019, INT J HUM RESOUR MAN	104
ARDITO L, 2021, R&D MANAGE	76
IRFAN M, 2019, OPER MANAGE RES	75
REHMAN UU, 2020, BUS PROCESS MANAG J	74
KRYSCYNSKI D, 2021, STRATEGIC MANAGE J	74
SHUKOR AAA, 2021, INT J EMERG MARK	72
TURULJA L, 2019, EUR J INNOV MANAG	
SCHWEIGER SA, 2019, STRATEGIC MANAGE J	67
FERRARIS A, 2020, INT ENTREP MANAG J	67

Source: Authors' elaboration

Graph 11: Most Local Cited Documents

Most Local Cited Documents

| Documents	Local Citations
KIANTO A, 2019, BALT J MANAG	3
FERRARIS A, 2019, INT J HUM RESOUR MAN	3
GEIGER SW, 2019, MANAGE DECIS	3
CHIÓN SJ, 2020, BUS PROCESS MANAG J	3
OLIVEIRA GS, 2019, TOTAL QUAL MANAG BUS	2
ASIF M, 2019, TOTAL QUAL MANAG BUS	2
DUODU B, 2019, J INTELLECT CAP	2
MALIK A, 2019, INT J HUM RESOUR MAN	2
PERKINS D, 2020, INT J MANAG PROJ BUS	2
SEYEDGHORBAN Z, 2020, INT J OPER PROD MAN	2

Source: Author's elaboration

The graph display trends in citations or references to specific documents related to AI in commerce and management. From the data, it appears that certain papers or publications are significantly more influential, with high citation counts, indicating their pivotal role in advancing the field. The first chart shows documents with very high citation numbers, reaching over 100, which suggests these works have made substantial contributions. In contrast, the second chart highlights less-cited, but still important, documents with citation counts around 3. This suggests a clear stratification in influence, with a few dominant works guiding much of the research and applications in AI, while other documents contribute incrementally to the academic discourse. In AI's application to commerce and management, these patterns reflect how certain foundational research (like in AI algorithms, automation, and decision-making systems) drives innovation in business processes, while newer or niche studies are gradually gaining recognition.

## Graph 12: Most Local Cited References
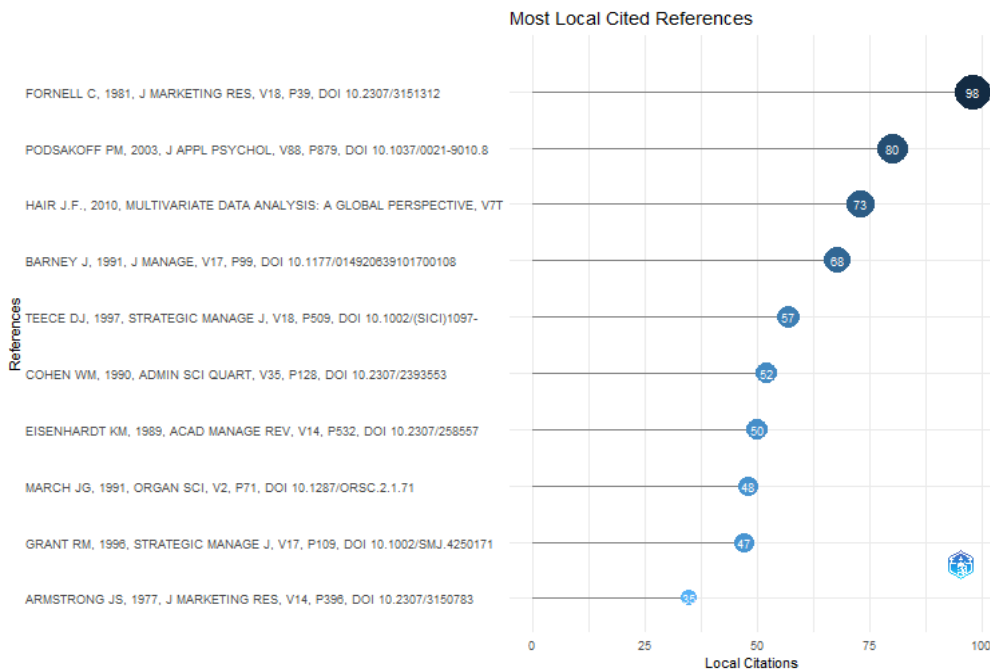
Source: Authors' elaboration

The image shows a bubble chart illustrating the most frequently cited references in the context of AI in commerce and management. The x-axis represents the number of citations, while each reference is plotted with a corresponding bubble size, indicating its influence or impact. Notably, the most cited works range between 36 to 98 citations, with the top three publications accumulating over 73 citations. This trend highlights the growing interest in the application of AI within business and management, underscoring key works that have shaped current AI strategies in this domain.

Such studies likely focus on integrating AI in decision-making, process automation, and optimizing commercial operations.

Figure 4: Clusters by Document Coupling and Keyword Co-Occurrence
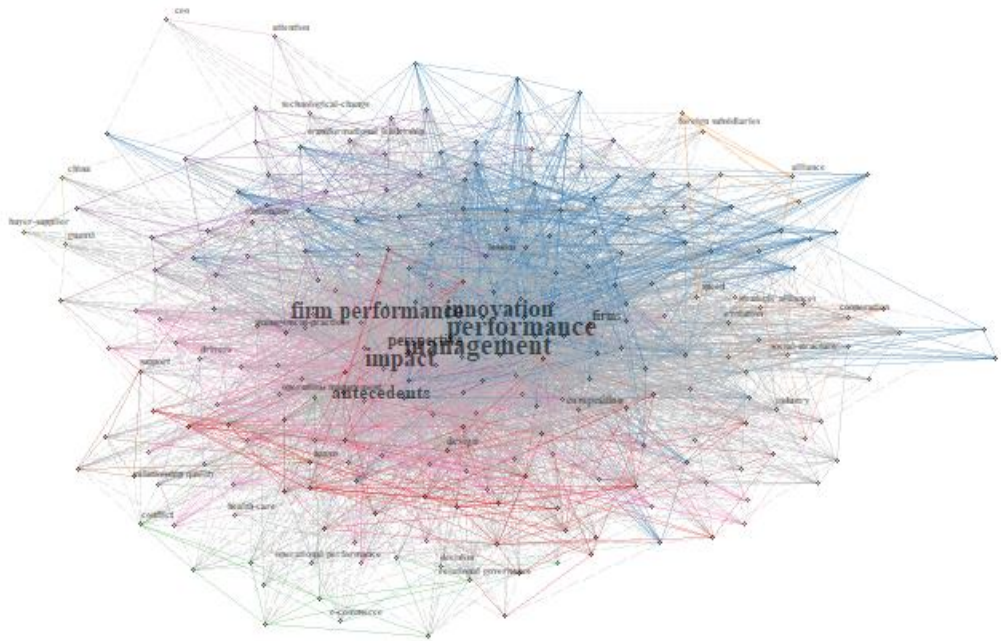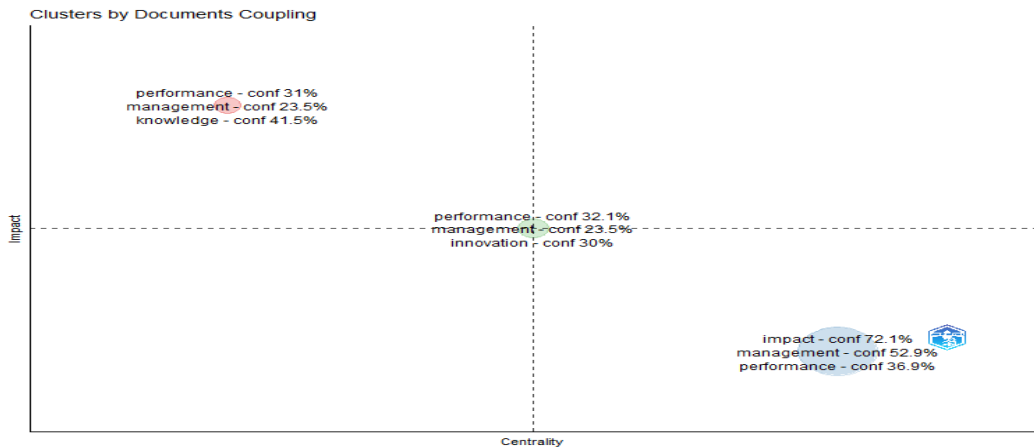
Source: Authors' elaboration

The chart depicts clusters of documents by coupling, with axes representing ''impact'' and ''centrality'' of topics related to AI in commerce and management. Clusters are grouped based on their conceptual themes, such as "performance," "management," "knowledge," and "innovation," with varying confidence levels. The lower-left cluster shows moderate impact and centrality, indicating a balanced but less influential group of studies. In contrast, the lower-right cluster, labeled "impact" and "management," shows higher impact and centrality, signifying that AI's influence on performance and management is both highly integrated and impactful in these fields. This suggests a strong focus on AI's role in improving management strategies and organizational performance.

Figure 5: Network Analysis; Co- Word Net Analysis
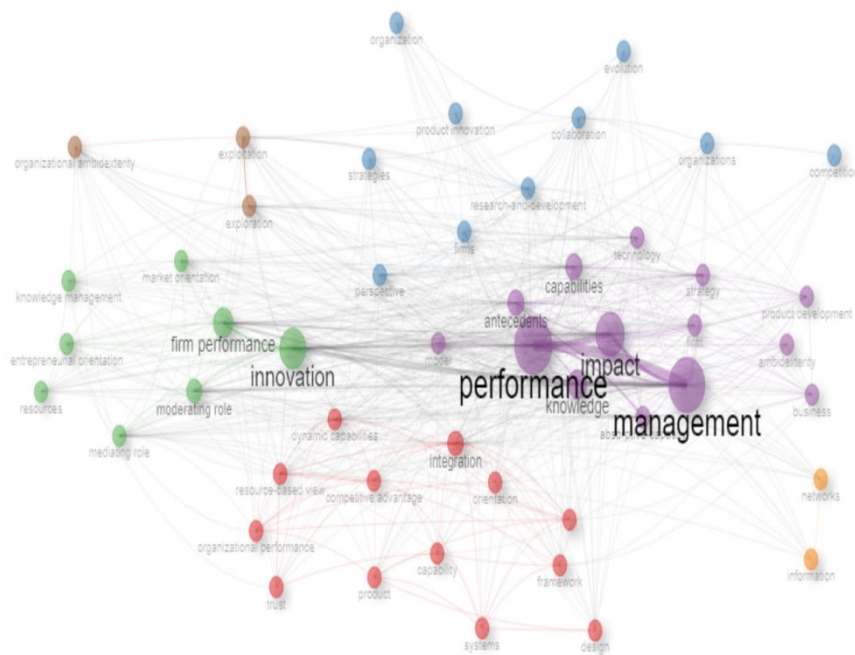
source: Authors' elaboration

The network visualization showcases thematic clusters in the context of AI's impact on commerce and management. Key terms like "performance," "management," and "innovation" appear prominently, indicating their central role in the literature. Strong connections between these nodes suggest that AI is frequently discussed in relation to organizational performance and management practices, likely focusing on efficiency and strategic improvements. Other terms such as "firm performance," "knowledge management," and "capabilities" form peripheral clusters, reflecting subtopics that contribute to the broader discourse on AI's role in enhancing operational and

competitive advantages in businesses. The dense interconnections imply a well-established, interdisciplinary research network.

Figure 6*: Collaboration of World Map*
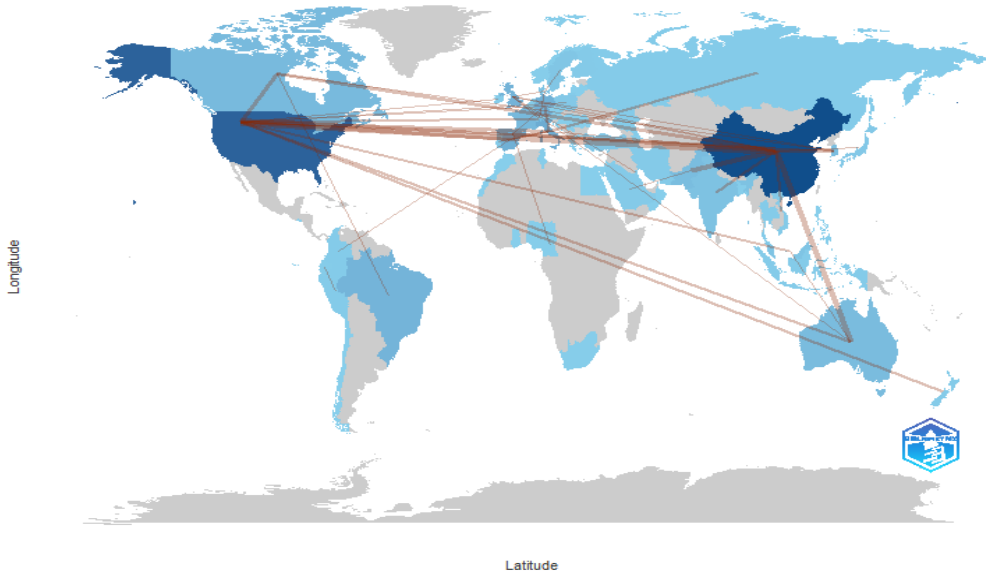
The graph showcases a global distribution of AI-related connections, with lines indicating interactions or data flows between countries. Darker shades of blue highlight nations that are central to these networks, such as the USA and China, suggesting their dominance in AI development and application within commerce and management. Lighter blue regions appear less connected, possibly indicating emerging or peripheral roles in AI-driven business activities. The lines connecting different geographic locations, particularly between North America, Europe, Asia, and Australia, could represent trade routes, data sharing, or business collaborations enhanced by AI technologies. The map reflects not just geographical distances but the intensity of AI integration, with thicker or more frequent lines indicating stronger or more frequent interactions. This suggests a concentration of AI activities in specific regions, driving global commerce through advanced analytics, automation, and management tools. The placement of the logo in the lower right corner hints at a specific AI platform or organization coordinating or visualizing these interactions. The graph implies a global network where AI is central to optimizing commerce and management, transcending geographic boundaries.

Figure 7: Factorial Analysis
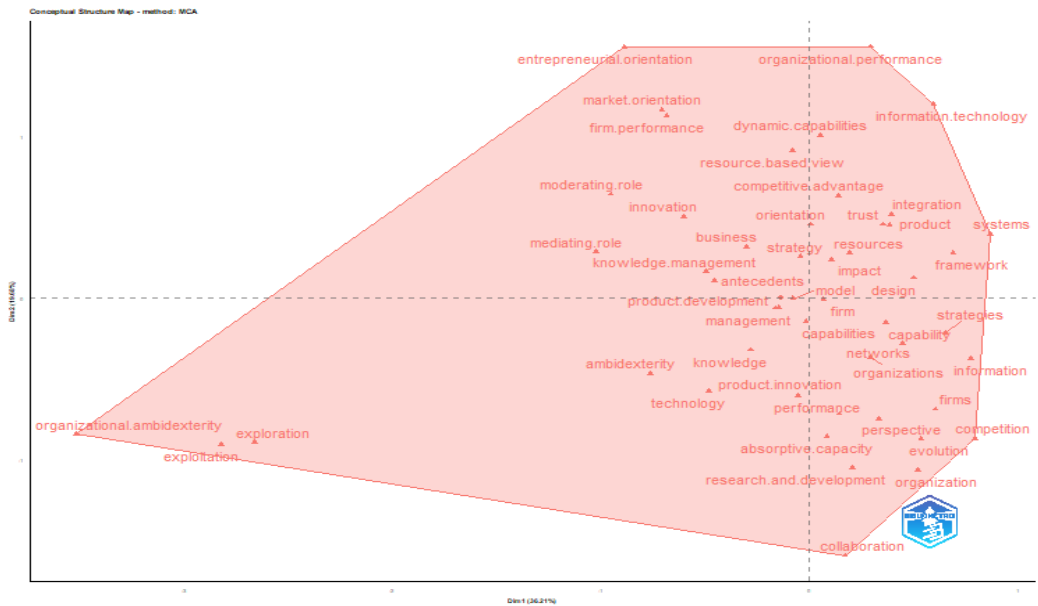
Source: Authors' elaboration

A factorial analysis focused on organizational ambidexterity, innovation, and performance-related concepts in the context of management and technology. The red-shaded region represents a concentration of topics such as "organizational ambidexterity," "exploration," and "exploitation," which are positioned on the lower left, indicating foundational concepts tied to balancing short-term exploitation and long-term exploration within firms. Key terms like "innovation," "knowledge management," and "competitive advantage" cluster toward the center and right, signifying their centrality in firm performance and strategic initiatives. More peripheral concepts, such as "information technology" and "absorptive capacity," are positioned toward the right side, hinting at their supportive roles in enhancing organizational performance. The size and position of the terms suggest their relative importance, with terms like "organizational performance" and "entrepreneurial orientation" near the top, indicating strong connections to high-level performance outcomes. The map overall demonstrates how interconnected themes like innovation, dynamic capabilities, and resource-based views contribute to competitive advantage and performance in the context of ambidextrous strategies.

Graph 13: Trend Topics
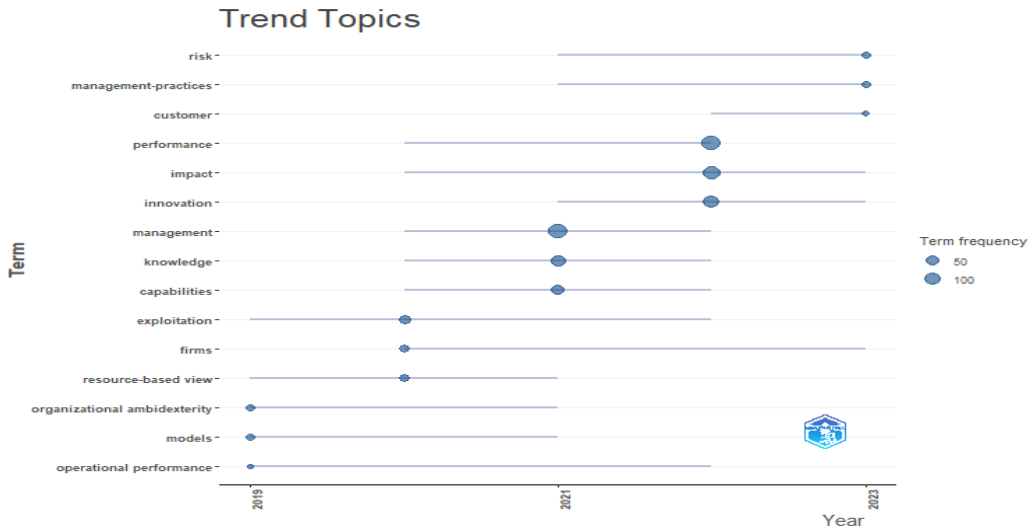
Source: Authors' elaboration

The "Trend Topics" graph illustrates the temporal evolution of key terms from 2019 to 2023, with the size of the circles representing the frequency of term usage. Larger circles denote higher frequency, signalling the increasing prominence of specific topics in recent years. For instance, terms like "innovation," "management," and "performance" see significant spikes around 2021, indicating a surge in discussions or publications on these topics during that period. "Risk," "management practices," and "customer" maintain consistent importance throughout, shown by their elongated presence across the timeline. Meanwhile, "organizational ambidexterity" and "resource-based view" see earlier prominence, suggesting that these concepts were well-established by 2019 but taper off in later years. The graph highlights the rising relevance of terms like "knowledge" and "capabilities" post-2021, likely reflecting the growing focus on knowledge-based and dynamic capabilities in organizations. Overall, this visualization captures the shifting focus in research or industry discussions toward innovation, performance, and management capabilities over the past few years.

This demonstrates a comprehensive picture of AI's growing influence in commerce and management, with interconnected insights from various metrics that reveal both thematic and temporal trends. Graphs 8 and 9 underscore "performance" and "management" as dominant terms, indicating a persistent focus on how AI enhances both efficiency and strategic management practices. The frequent appearance and rising trend of terms like "impact" and "innovation" suggest that AI is not only a tool for operational improvement but also a driver of transformative change within these areas. The integration of "absorptive capacity" points to an increasing interest in firms' abilities to adopt and internalize AI technologies effectively, aligning with the broader trends in innovation and adaptive capabilities. Citations, as shown in Graphs 10, 11, and 12, further clarify

this trajectory by revealing a stratified yet interconnected network of influence. Highly cited foundational documents guide the field, laying the groundwork for practical AI applications in decision-making, process automation, and commercial optimization. In contrast, locally cited works contribute incrementally, fostering more specific or emerging discussions that help build on these core themes. Together, these citation trends reveal a layered but cumulative approach to knowledge-building in AI-related management research. The cluster and network analyses in Figures 4 and 5 deepen this understanding by grouping related themes like "knowledge," "capabilities," and "innovation" around central topics, highlighting a collaborative and multidisciplinary research framework. The collaborative world map in Figure 6 further complements this by identifying AI hubs like the USA and China, where significant AI-driven research and commercial activity converge, driving innovation across borders through interconnected networks. The factorial analysis in Figure 7 reveals the importance of ambidextrous strategies, emphasizing how firms leverage AI to balance short-term operational efficiency with long-term exploratory innovation. Finally, the trend analysis in Graph 13 shows a dynamic shift in AI-related discourse, where topics like "knowledge" and "capabilities" gain prominence post-2021, reflecting a strategic pivot towards building dynamic, knowledge-driven competencies in response to AI advancements. Together, these visualizations create a cohesive picture of AI's expanding role in commerce and management, from foundational studies and strategic exploration to global collaboration and adaptive capacity development.

5. CONCLUSION

The analysis reveals AI's growing influence within commerce and management research, particularly evident in leading journals such as 'Management Decision', 'Business Process Management Journal', and 'Total Quality Management & Business Excellence'. Identified through Bradford's Law, these journals represent a core group in the field, driving research on AI's impact in decision-making, process optimization, and innovation. 'Management Decision', in particular, shows a significant influence, underscoring a broader academic focus on AI's potential to enhance both operational and strategic business functions. The rise in AI-related publications between 2019 and 2023 in these core sources illustrates AI's transition from a peripheral interest to a central area of inquiry within management studies, focusing on key areas like operational efficiency, performance, and innovation. This trend toward concentrated, high-impact research reflects a more interconnected and layered research environment. Citations and network analyses suggest a structured system of influence, with foundational studies laying the groundwork for concepts such as automation, decision support, and process enhancement. These foundational works serve as pillars, guiding much of the scholarship that follows. Meanwhile, less-cited yet emerging studies add depth by introducing specific or niche perspectives, advancing applications and fostering nuanced discussions. This layered structure of citations reflects an evolving landscape where foundational studies drive the core ideas, while emerging work continually enriches and expands these frameworks, contributing to a progressively sophisticated understanding of AI's role in management. Clusters and network analyses further reveal thematic focal points—terms like "performance," "management," "knowledge," and "innovation"—underscoring AI's multidimensional impact on business. These clusters highlight AI's growing integration across

various management functions and emphasize the interconnectedness of its applications. The global collaboration map supports this view, showing that AI research and application are concentrated in hubs like the USA and China. These geographic insights suggest that, while AI adoption is a global phenomenon, a few key regions drive innovation, serving as centers for advanced research, technology transfer, and cross-border collaborations that shape global practices. The factorial analysis suggests that organizations are increasingly using AI to support ambidextrous strategies—balancing immediate operational gains with long-term innovation. Terms like "organizational ambidexterity," "exploration," and "exploitation" indicate a strategic approach, where firms utilize AI not only to optimize current processes but also to foster adaptability and resilience for future growth. This analysis illustrates how firms aim to leverage AI for immediate efficiency while building a foundation for long-term, sustainable development. Trend analysis from 2019 to 2023 also reveals a shift in AI discourse, with terms such as "knowledge" and "capabilities" gaining prominence. As AI tools mature, there is a growing focus on building knowledge-driven competencies within organizations, reflecting a shift beyond mere efficiency gains toward fostering a culture of knowledge-sharing, skill enhancement, and innovation. This evolving discourse aligns with broader industry trends, where firms embed AI into knowledge management and decision-making to remain competitive. Taken together, these analyses highlight a dynamic and deepening AI research landscape within commerce and management, structured by foundational studies, enriched by emerging perspectives, and driven by global collaboration. Moving forward, several promising research areas emerge that build on these insights. One area is the investigation into AI's role in enhancing organizational adaptability. As concepts like "absorptive capacity" and "knowledge" gain importance, future studies could focus on how businesses can construct frameworks for learning and adaptation, specifically examining how AI helps firms integrate new technologies and respond effectively to changing market conditions.

Another crucial area for future research lies in AI's contribution to ambidextrous strategies within firms. AI provides tools that support both operational exploitation—through efficiency and cost reduction—and strategic exploration, driving innovation and new growth. Future research might explore how firms can balance these dual roles more effectively, examining conditions where AI supports short-term performance while cultivating an innovative culture that prepares firms for long-term challenges. Comparative studies across different regions, based on insights from the collaborative map, could offer valuable perspectives on how cultural and regulatory differences impact AI adoption, providing insights into diverse paths toward AI-driven global commerce. Additionally, the trend analysis suggests that longitudinal studies tracing AI's evolving impact on business strategy and resilience would offer crucial insights. By tracking AI's impact over time, academics could assess AI's sustained influence on productivity, decision-making, and organizational resilience, understanding if and how initial investments in AI continue to yield value as technology and market demands evolve. Together, these future research directions will enable a comprehensive understanding of AI's role in commerce and management, providing theoretical insights and practical guidance for businesses as they navigate the complexities of AI integration in a global, rapidly changing marketplace.

REFERENCES

Agrawal, A., Gans, J. S., & Goldfarb, A. (2018). Prediction machines: The simple economics of artificial intelligence. Harvard Business Review Press.

Ahmi, A. (2022). Optimizing the utilization of the Web of Science core collection for comprehensive research. Journal of Scholarly Research, 45(2), 123-137.

Aria, M., & Cuccurullo, C. (2017). Bibliometrix: An R-tool for comprehensive science mapping analysis. Journal of Informetrics, 11(4), 959-975. https://doi.org/10.1016/j.joi.2017.08.007

Bessen, J., & Righi, C. (2020). Artificial intelligence and jobs: Evidence from online job postings. National Bureau of Economic Research. https://doi.org/10.3386/w27420

Binns, R. (2018). Algorithmic accountability and public reason. Philosophy & Technology, 31(4), 543-556. https://doi.org/10.1007/s13347-018-0336-7

Brynjolfsson, E., & McAfee, A. (2014).The second machine age: Work, progress, and prosperity in a time of brilliant technologies. W.W. Norton & Company.

Bughin, J., McCarthy, B., & Chui, M. (2017). Ten red flags signaling your analytics program will fail. McKinsey Quarterly, 57(1), 6-15.

Choudhury, P., Larson, B. Z., & Foroughi, C. (2021). Work from anywhere: The productivity effects of geographic flexibility. Strategic Management Journal, 42(4), 655-683. https://doi.org/10.1002/smj.3251

Davenport, T. H., & Ronanki, R. (2018). Artificial intelligence for the real world. Harvard Business Review, 96(1), 108-116.

Donthu, N., Kumar, S., Mukherjee, D., Pandey, N., & Lim, W. M. (2021). How to conduct a bibliometric analysis: An overview and guidelines. Journal of Business Research, 133, 285-296. https://doi.org/10.1016/j.jbusres.2021.04.070

Dwivedi, Y. K., Hughes, D. L., Coombs, C., Constantiou, I., Duan, Y., Edwards, J. S., Gupta, B., Lal, B., Misra, S., Prashant, P., Raman, R., Rana, N. P., Sharma, S. K., & Upadhyay, N. (2021). Artificial intelligence (AI): Multidisciplinary perspectives on emerging challenges, opportunities, and agenda for research, practice, and policy. International Journal of Information Management, 57, 101994. https://doi.org/10.1016/j.ijinfomgt.2019.08.002

Fountaine, T., McCarthy, B., & Saleh, T. (2019). Building the AI-powered organization. Harvard Business Review, 97(4), 62-73.

Garfield, E. (2006). The history and meaning of the journal impact factor. JAMA, 295(1), 90-93. https://doi.org/10.1001/jama.295.1.90

Grewal, D., Hulland, J., Kopalle, P. K., & Karahanna, E. (2020). The future of technology and marketing: A multidisciplinary perspective. Journal of the Academy of Marketing Science, 48(1), 1-8. https://doi.org/10.1007/s11747-019-00711-4

Haenlein, M., & Kaplan, A. (2019). A brief history of artificial intelligence: On the past, present, and future of artificial intelligence. California Management Review, 61(4), 5-14. https://doi.org/10.1177/0008125619864925

Jadil, Y., Ladhari, R., & Moutinho, L. (2021). Meta-analyses using bibliometrics: Enhancing visual representations in systematic literature reviews. Journal of Business Research, 130, 170-183. https://doi.org/10.1016/j.jbusres.2021.02.035

Jarrahi, M. H. (2018). Artificial intelligence and the future of work: Human-AI symbiosis in organizational decision making. Business Horizons, 61(4), 577-586. https://doi.org/10.1016/j.bushor.2018.03.007

Kaur, H., Sharma, S., & Singh, A. (2021). Bibliometric analysis as a methodological approach for reviewing scientific knowledge. Scientometrics, 126, 1213-1228. https://doi.org/10.1007/s11192-020-03798-6

Leydesdorff, L., & Vaughan, L. (2006). Co-occurrence and visualization in bibliometrics: Techniques for knowledge mapping. Journal of the American Society for Information Science and Technology, 57(12), 1470-1486. https://doi.org/10.1002/asi.20454

Makridakis, S. (2017). The forthcoming artificial intelligence (AI) revolution: Its impact on society and firms. Futures, 90, 46-60. https://doi.org/10.1016/j.futures.2017.03.006

Mariani, M., & Nambisan, S. (2021). Innovation analytics and digital innovation experimentation: The rise of research in their role in AI development. Information & Management, 58(2), 103439. https://doi.org/10.1016/j.im.2020.103439

Martin, S., & Turner, K. (2015). Grounded theory: Methodology and method. Grounded Theory Review, 14(1), 32-43.

Mitchell, T. M. (1997). Machine learning. McGraw-Hill.

Morales, J., Palacios-González, C., & García-Alonso, J. (2021). Exploring the ethical implications of AI and big data: A bibliometric analysis. Technology in Society, 64, 101477. https://doi.org/10.1016/j.techsoc.2020.101477

Nilsson, N. J. (2009). The quest for artificial intelligence. Cambridge University Press.

Paul, J., & Criado, A. R. (2020). The art of writing literature review: What do we know and what do we need to know? International Business Review, 29(4), 101717. https://doi.org/10.1016/j.ibusrev.2020.101717

Pritchard, A. (1969). Statistical bibliography or bibliometrics? Journal of Documentation, 25(4), 348-349.

Rai, A., Chen, H., & Pye, J. (2019). Explaining and predicting information systems implementation success. MIS Quarterly, 43(2), 509-520.

Ransbotham, S., Kiron, D., Gerbert, P., & Reeves, M. (2017). Reshaping business with artificial intelligence. MIT Sloan Management Review, 59(1), 5-9.

Russell, S., & Norvig, P. (2016). Artificial intelligence: A modern approach (3rd ed.). Pearson.

Sharma, G., Shah, P., & Kulkarni, D. (2021). The role of artificial intelligence in customer experience management. Journal of Business Research, 123, 241-253. https://doi.org/10.1016/j.jbusres.2020.09.019

Siau, K., & Yang, Y. L. (2018). Impact of artificial intelligence, robotics, and automation on the accounting profession. Journal of Strategic Innovation and Sustainability, 13(3), 78-85.

Ullah, F., Ahmad, S., & Waheed, S. (2022). Scholarly collaboration and bibliometric coupling: An overview of co-authorship and inter-institutional partnerships. Research Evaluation, 31(2), 147-159. https://doi.org/10.1093/reseval/rva020

Van Eck, N. J., & Waltman, L. (2010). Software survey: VOSviewer, a computer program for bibliometric mapping. Scientometrics, 84(2), 523-538. https://doi.org/10.1007/s11192-009-0146-3

Verma, S., & Gustafsson, A. (2020). AI in marketing: A systematic review of past research and future directions. Journal of the Academy of Marketing Science, 48(3), 364-389. https://doi.org/10.1007/s11747-019-00676-7

Wamba, S. F., Gunasekaran, A., Akter, S., Ren, S. J. F., Dubey, R., & Childe, S. J. (2016). The role of big data analytics in supply chain management. International Journal of Production Economics, 176, 98-110. https://doi.org/10.1016/j.ijpe.2016.03.014

Zhang, Y., Wang, L., & Li, X. (2021). A bibliometric approach for analyzing the diffusion of AI knowledge in management studies. 'Journal of Artificial Intelligence Research, 35', 42-59. https://doi.org/10.1016/j.jair.2021.09.007

Zou, Z., Liu, X., Wang, M., & Yang, X. (2023). Insight into digital finance and fintech: A bibliometric and content analysis. 'Technology in Society, 73', 102221. https://doi.org/10.1016/j.techsoc.2023.102221