Advances: Jurnal Ekonomi & Bisnis
Volume 4, Issue 1 (2026). 88-110
DOI: https://doi.org/10.60079/ajeb.v4i1.916
OPEN ACCESS
e-ISSN: 2985-9859

Data-Driven Decision Making in Marketing: Trends, Insights, and Future Research Outlook

Yeane Koyongian [1*] Deske W. Mandagi [2]

[1*, 2] Faculty of Economics and Business, Universitas Klabat, Manado, Indonesia
Email: jwalean@unklab.ac.id, deskemandagi@unklab.ac.id

ARTICLE HISTORY

Submitted	:	February 03, 2026
Reviewed	:	February 08, 2026
Revised	:	February 21, 2026
Accepted	:	February 26, 2026
Published	:	February 28, 2026

Conflict of Interest Statement:
The author(s) declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

ABSTRACT

Purpose: The rapid growth of big data, artificial intelligence, and advanced analytics has transformed Data-Driven Decision Making (DDM) into a strategic capability for contemporary marketing. Despite the increasing volume of research, the literature remains fragmented across multiple disciplines and application domains, limiting a comprehensive understanding of its intellectual development and future directions.

Research Method: This study systematically reviews the DDM literature through a PRISMA-guided systematic literature review (SLR) and bibliometric analysis of 426 Scopus-indexed journal articles published between 1993 and 2025.

Results and Discussion: The findings identify eight major research clusters: Data-Driven Marketing and Decision Making, Digital Marketing and Artificial Intelligence, Big Data Analytics and Consumer Intelligence, Commerce and Predictive Analytics, Information Management and Machine Learning, Market Segmentation and Customer Analytics, Retail Analytics and Competitive Strategy, and Social Media Analytics. Overlay visualization reveals a clear thematic evolution from early research focused on big data, customer analysis, and market segmentation toward emerging themes such as artificial intelligence, digital marketing, privacy, sustainability, and data-driven strategy.

Implications: Building on these findings, the study develops a future research agenda using the Theory–Context–Characteristics–Methodology (TCCM) framework, highlighting opportunities for stronger theoretical foundations, broader contextual applications, greater attention to ethical and sustainability issues, and more sophisticated methodological approaches.

Originality: By consolidating the intellectual structure and evolution of DDM research, this study provides a foundation for advancing future scholarship and guiding the strategic application of data-driven marketing practices.

Keywords: data-driven decision making; marketing analytics; big data analytics; artificial intelligence; digital marketing; bibliometric analysis..

1. Introduction

The rapid digitalization of markets has fundamentally transformed how organizations collect, process, and utilize information for strategic decision-making. The proliferation of digital platforms, social media, e-commerce ecosystems, mobile technologies, customer relationship management systems, and artificial intelligence has generated unprecedented volumes of consumer and market data. As firms

Advances: Jurnal Ekonomi & Bisnis
Volume 4, Issue 1 (2026). 88-110
DOI: https://doi.org/10.60079/ajeb.v4i1.916
OPEN ACCESS
e-ISSN: 2985-9859

increasingly compete in data-rich environments, the ability to transform data into actionable insights has become a critical source of competitive advantage. Recent studies highlight that data-driven approaches are reshaping marketing practice through predictive analytics, artificial intelligence, machine learning, customer intelligence, and real-time decision systems (Kushwaha *et al.,* 2021; De Luca *et al.,* 2021; Saura *et al.,* 2021; Mariani *et al.,* 2022; Rosário & Dias, 2023). Simultaneously, organizations face growing pressure to improve marketing effectiveness, personalize customer experiences, optimize resource allocation, and enhance business performance through evidence-based decision making (Diorio *et al.,* 2022; Liu *et al.,* 2020). The increasing strategic importance of data assets, combined with the rapid emergence of advanced analytical technologies, has elevated DDM in marketing from a managerial tool to a strategic imperative. Consequently, understanding the evolution, intellectual structure, and future directions of DDM in marketing has become an urgent research priority.

DDM in marketing refers to the systematic use of data, analytics, and technological capabilities to support marketing decisions, customer engagement strategies, resource allocation, and value creation. Rather than relying primarily on managerial intuition, DDM enables organizations to leverage consumer data, market intelligence, and analytical models to improve decision quality and marketing outcomes. Existing research demonstrates that data-driven marketing contributes to customer segmentation (Dolničar, 2004), customer insight generation (Diorio *et al.,* 2022), service innovation (De Luca *et al.,* 2021), digital customer relationship management (Saura *et al.,* 2021), and marketing performance enhancement (Liu *et al.,* 2020). Moreover, the integration of artificial intelligence, big data analytics, and predictive modeling has significantly expanded the scope and sophistication of marketing decision-making processes (Sheng *et al.,* 2017; Kushwaha *et al.,* 2021; Mariani *et al.,* 2022). In the digital economy, where consumer behavior continuously evolves across multiple online and offline touchpoints, the ability to derive actionable knowledge from data has become essential for maintaining competitiveness and delivering superior customer value.

Despite the growing body of literature, research on DDM in marketing remains fragmented across multiple disciplines, contexts, and technological domains. Existing studies have examined diverse topics such as big data analytics (Choi *et al.,* 2018; Kushwaha *et al.,* 2021), artificial intelligence applications (Mariani *et al.,* 2022; Hentzen *et al.,* 2022; Law *et al.,* 2024), customer analytics (Diorio *et al.,* 2022), digital marketing transformation (Krishen *et al.,* 2021), privacy and online advertising (Goldfarb & Tucker, 2011), social media analytics (Shin *et al.,* 2020), and data-driven marketing strategies (Rosário & Dias, 2023). While these studies have generated valuable insights, the literature remains dispersed across different theoretical perspectives, methodological approaches, industrial sectors, and technological applications. Furthermore, the accelerated adoption of artificial intelligence, machine learning, automation, and advanced analytics has introduced new research streams that have not been systematically synthesized. As a result, scholars and practitioners lack a comprehensive understanding of how the field has evolved, which themes dominate the literature, who the key contributors are, and where future research opportunities exist.

Given the rapid expansion and increasing complexity of this research domain, a systematic review is both timely and necessary. Although several studies have reviewed specific aspects of marketing analytics, artificial intelligence, or big data applications (Kushwaha *et al.,* 2021; Mariani *et al.,* 2022; Hentzen *et al.,* 2022; Law *et al.,* 2024), a comprehensive examination of the broader DDM marketing literature remains limited. This study addresses this gap through a SLR and bibliometric analysis of DDM in Marketing research. Specifically, this study seeks to answer the following research

Volume 4, Issue 1 (2026). 88-110
DOI: https://doi.org/10.60079/ajeb.v4i1.916
OPEN ACCESS
e-ISSN: 2985-9859

questions: (RQ1) How has DDM in Marketing research evolved over time? (RQ2) Who are the most influential authors, journals, institutions, and publications in this field? (RQ3) What are the dominant intellectual and thematic structures underpinning the literature? (RQ4) What emerging trends and future research directions can be identified to advance knowledge on DDM in Marketing? By addressing these questions, this study provides a comprehensive synthesis of the field and establishes a foundation for future theoretical and managerial developments.

The remainder of this paper is organized as follows. Section 2 provides a literature review and hypothesis development. Section 3 presents the research method and design. Section 4 provides the results and discussion. Section 5 is Concluding Remarks and Recommendations.

2. Literature Review and Hypothesis Development

2.1 Data-Driven Decision Making in Marketing

Data-Driven Decision Making (DDM) refers to the systematic use of data, analytics, and technological capabilities to support managerial decisions and optimize organizational performance. In marketing, DDM enables firms to transform customer, market, and operational data into actionable insights that improve targeting, personalization, resource allocation, and strategic planning. As digital technologies continue to generate unprecedented volumes of data, organizations increasingly rely on analytics-driven approaches rather than intuition-based decision making to achieve competitive advantage (Liu *et al.,* 2020; Diorio *et al.,* 2022; Rosário & Dias, 2023). The growing importance of DDM is closely associated with advances in big data analytics, artificial intelligence (AI), machine learning, and digital marketing technologies. These technologies enable organizations to process large and complex datasets, identify hidden patterns, predict customer behavior, and automate decision processes (Sheng *et al.,* 2017; Choi *et al.,* 2018; Kushwaha *et al.,* 2021). Consequently, DDM has evolved from a supporting analytical tool into a strategic organizational capability that influences customer engagement, innovation, and business performance (De Luca *et al.,* 2021).

2.2 Big Data Analytics and Customer Intelligence

One of the foundational streams of DDM research focuses on big data analytics and customer intelligence. The emergence of big data has significantly expanded organizations' ability to collect and analyze information from multiple customer touchpoints, including social media, e-commerce platforms, mobile applications, and customer relationship management systems. Research suggests that big data analytics enhances organizational decision quality by improving market sensing, customer understanding, and strategic responsiveness (Sheng *et al.,* 2017; Choi *et al.,* 2018). Kushwaha *et al.,* (2021) demonstrate that big data applications have expanded rapidly across management disciplines, becoming an essential mechanism for generating competitive advantage. Similarly, De Luca *et al.,* (2021) show that investments in big data analytics contribute to service innovation and marketing effectiveness by enabling firms to identify and exploit market opportunities more efficiently. These studies collectively position analytics capability as a critical organizational resource for evidence-based decision making.

2.3 Digital Marketing and Artificial Intelligence

Recent developments in artificial intelligence have accelerated the transformation of marketing decision-making processes. AI technologies allow organizations to automate customer interactions,

Advances: Jurnal Ekonomi & Bisnis
Volume 4, Issue 1 (2026). 88-110
DOI: https://doi.org/10.60079/ajeb.v4i1.916
OPEN ACCESS
e-ISSN: 2985-9859

improve personalization, optimize marketing campaigns, and generate predictive insights at unprecedented scales (Mariani *et al.,* 2022; Law *et al.,* 2024). As a result, AI has become increasingly integrated into customer relationship management, recommendation systems, and marketing automation platforms. Saura *et al.,* (2021) argue that AI-enabled customer relationship management systems have fundamentally changed how organizations manage customer data and interactions. Likewise, Hentzen *et al.,* (2022) highlight the growing adoption of AI technologies in customer-facing services, emphasizing their role in enhancing decision quality and operational efficiency. The integration of AI into marketing processes therefore represents a major shift from descriptive analytics toward predictive and prescriptive decision-making systems.

2.4 Customer Analytics and Market Segmentation

Customer analytics represents another important research stream within DDM. Organizations increasingly utilize analytical tools to understand customer behavior, identify market opportunities, and develop more effective segmentation strategies. Early studies on market segmentation emphasized the importance of identifying heterogeneous customer groups to improve targeting and marketing effectiveness (Dolničar, 2004; Dolnicar, 2005). Recent developments in customer analytics have expanded segmentation beyond demographic classifications toward behavior-based and data-driven approaches. Customer intelligence systems now integrate multiple sources of customer information to generate deeper insights into preferences, purchasing behavior, and customer lifetime value (Diorio *et al.,* 2022). These developments have strengthened the role of analytics in supporting personalized marketing strategies and customer relationship management.

2.5 Privacy, Ethics, and Emerging Challenges

While DDM offers substantial opportunities for organizational performance improvement, it also introduces important ethical and regulatory challenges. The increasing collection and utilization of consumer data have intensified concerns regarding privacy, transparency, and responsible data use. Goldfarb and Tucker (2011) highlight how privacy regulations significantly influence online advertising effectiveness and organizational marketing practices. More recent studies suggest that concerns regarding data governance, algorithmic transparency, and ethical AI are becoming increasingly important within digital marketing environments (Rosário & Dias, 2023; Mariani *et al.,* 2022). Organizations must therefore balance the strategic benefits of data utilization with consumer trust, regulatory compliance, and responsible business practices. These issues have emerged as important research frontiers as DDM becomes more deeply embedded in organizational decision-making processes.

3. Research Method

3.1 Research Design

This study employs a SLR combined with bibliometric analysis to examine the intellectual development of DDM in Marketing. The purpose of the study is to systematically identify, evaluate, and synthesize the existing body of knowledge, map the intellectual structure of the field, identify influential publications and contributors, and uncover emerging research themes and future directions. The

Advances: Jurnal Ekonomi & Bisnis
Volume 4, Issue 1 (2026). 88-110
DOI: https://doi.org/10.60079/ajeb.v4i1.916
OPEN ACCESS
e-ISSN: 2985-9859

combination of SLR and bibliometric techniques provides a rigorous, transparent, and replicable approach for reviewing a large and rapidly growing body of literature while minimizing researcher bias.

To ensure methodological rigor, the review follows the PRISMA framework. PRISMA offers a structured procedure for article identification, screening, eligibility assessment, and final inclusion, thereby enhancing the transparency and reproducibility of the review process.

3.2. Research Protocol

The research protocol was developed prior to data collection to ensure consistency throughout the review process. As summarized in Table 1, the study focused exclusively on peer-reviewed journal articles indexed in the Scopus database. Scopus was selected because it is one of the largest and most comprehensive multidisciplinary databases, providing extensive coverage of high-quality marketing, management, business analytics, and information systems research.

Table 1. Research Protocol

Protocol Component	Description
Document Type	Peer-reviewed journal articles
Database Source	Scopus
Search Period	1993–2025
Search Fields	Title, Abstract, and Keywords
Language	English
Search Query	TITLE-ABS-KEY("data-driven" AND marketing AND management) OR TITLE-ABS-KEY("data-driven" AND marketing) OR TITLE-ABS-KEY("analytics-driven" AND marketing)
Subject Area	Business, Management and Accounting
Inclusion Criteria	(1) Published in peer-reviewed journals; (2) Written in English; (3) Indexed in Scopus; (4) Focused on data-driven decision making, marketing analytics, or analytics-driven marketing management; (5) Full-text accessible.
Exclusion Criteria	(1) Conference papers, books, book chapters, editorials, notes, and working papers; (2) Non-English publications; (3) Studies unrelated to marketing decision-making; (4) Duplicate records; (5) Articles without accessible full text.
Screening Procedure	Identification, screening, eligibility assessment, and final inclusion following the PRISMA framework.
Analysis Techniques	Descriptive bibliometric analysis, performance analysis, science mapping, and thematic synthesis.
Software	Bibliometrix and VOSviewer
Citation Retrieval Date	15 May 2026

Only studies that explicitly addressed DDM, marketing analytics, data-driven marketing, marketing intelligence, customer analytics, or analytics-driven marketing management were considered for inclusion. To ensure quality and accessibility, articles were required to be published in English, indexed in Scopus, and available in full-text format.

Several exclusion criteria were applied to improve the relevance and quality of the dataset. Conference proceedings, books, book chapters, editorials, notes, and working papers were excluded

Advances: Jurnal Ekonomi & Bisnis
Volume 4, Issue 1 (2026). 88-110
DOI: https://doi.org/10.60079/ajeb.v4i1.916
OPEN ACCESS
e-ISSN: 2985-9859

because they generally do not undergo the same level of peer review as journal articles. Non-English publications, duplicate records, studies unrelated to marketing decision-making, and articles without accessible full text were also removed from the dataset.

Bibliometric analyses were conducted using Bibliometrix and VOSviewer, which are widely recognized tools for performance analysis, citation analysis, co-authorship analysis, co-citation analysis, keyword co-occurrence analysis, and science mapping. Citation data were retrieved on 15 May 2026, ensuring consistency in citation counts and bibliometric indicators throughout the analysis.

3.3. Study Selection Process

The article selection process followed the four stages recommended by the PRISMA framework: identification, screening, eligibility assessment, and final inclusion. The complete selection procedure is presented in Figure 1.

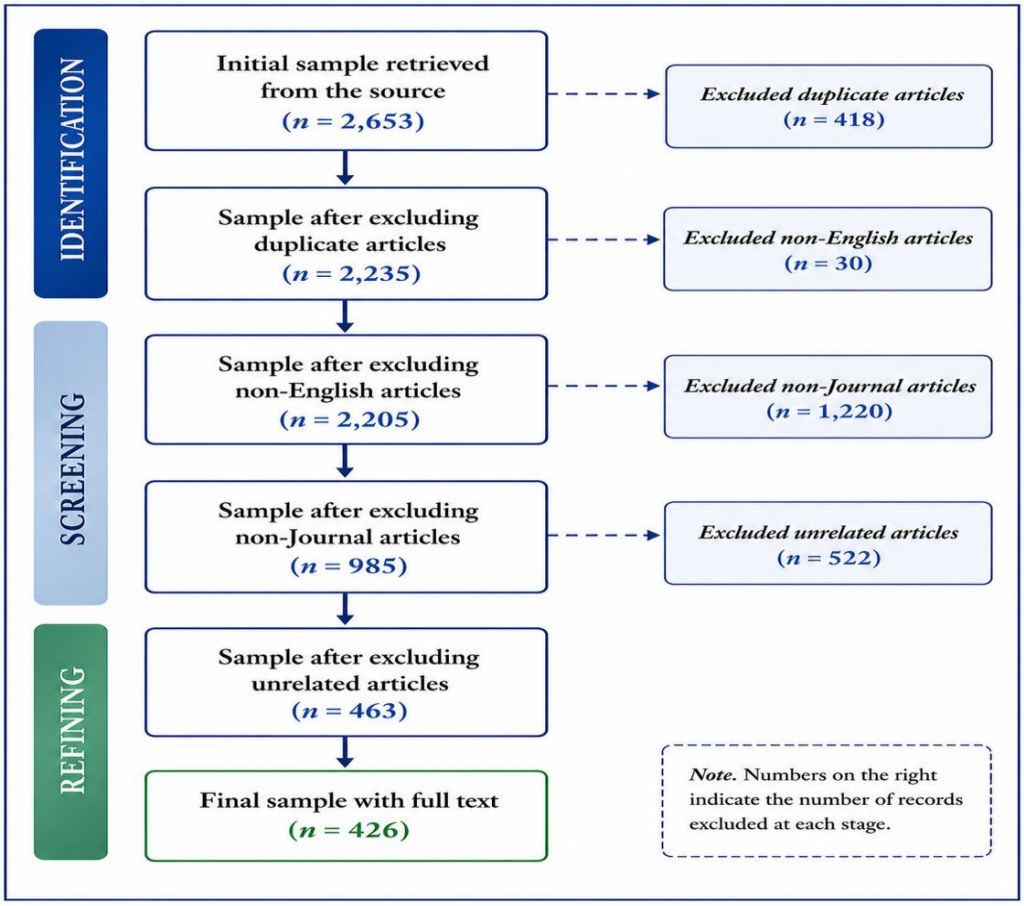

Figure 1. PRISMA Flow Diagram of the Literature Selection Process

During the identification stage, an initial search of the Scopus database yielded 2,653 records related to DDM in Marketing. After removing 418 duplicate articles, a total of 2,235 unique records remained. Subsequently, 30 non-English publications were excluded, resulting in 2,205 articles eligible for screening. In the screening stage, publication type criteria were applied. A total of 1,220 non-journal articles (including conference papers, books, book chapters, editorials, and other non-peer-reviewed sources) were excluded. This reduced the dataset to 985 journal articles.

Advances: Jurnal Ekonomi & Bisnis
Volume 4, Issue 1 (2026). 88-110
DOI: https://doi.org/10.60079/ajeb.v4i1.916
OPEN ACCESS
e-ISSN: 2985-9859

The eligibility assessment involved a detailed review of titles, abstracts, keywords, and, where necessary, full-text content to determine the relevance of each study to DDM in Marketing. During this stage, 522 unrelated articles were excluded because they did not focus on marketing decision-making, marketing analytics, customer analytics, or related data-driven marketing topics.

Following the eligibility assessment, 463 articles remained for full-text examination. A further review identified 37 articles that did not satisfy the final inclusion requirements, resulting in a final sample of 426 peer-reviewed journal articles for bibliometric and thematic analysis. The selection process demonstrates the rigorous filtering procedures employed to ensure that the final dataset accurately represents the core body of literature on DDM in Marketing.

4. Results and Discussion

4.1 Analysis Results

4.1.1 Research profile on DDM

Publication trends

Figure 2 illustrates the longitudinal development of scholarly publications on Data- DDM in Marketing between 1993 and 2025. The publication trajectory reveals three distinct phases that collectively reflect the maturation and increasing strategic importance of the field. During the emergence phase (1993–2016), publication activity remained relatively low and stable, with only a small number of studies published annually. This period was characterized by foundational research on marketing information systems, customer databases, market intelligence, and quantitative decision-support tools. Although data had already become important in marketing practice, technological limitations, restricted data availability, and the absence of advanced analytical capabilities constrained scholarly development. Consequently, DDM remained a specialized topic rather than a mainstream research domain

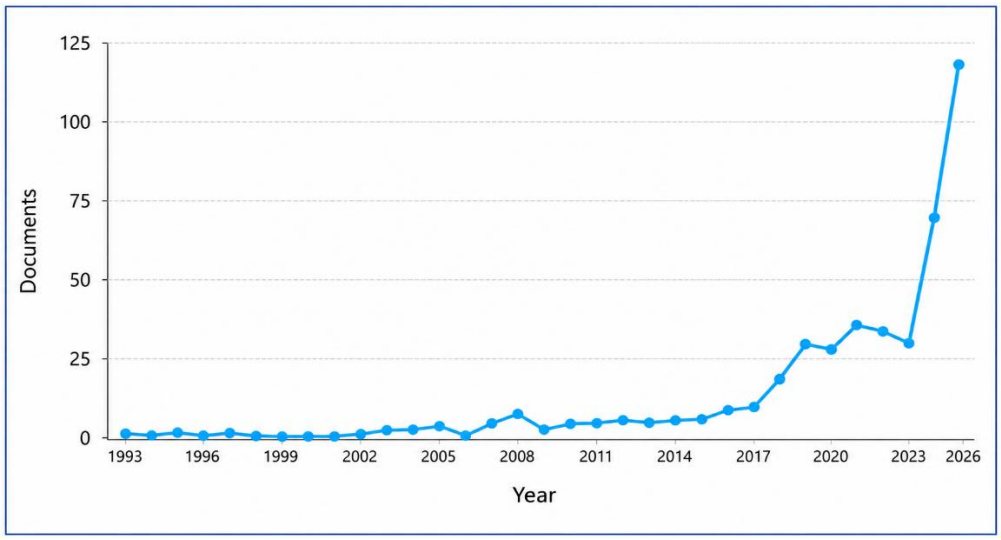

Figure 2. Publication Trends in DDM research

The growth phase (2017–2022) marks a significant shift in publication activity. Beginning around 2017, the number of studies increased steadily, coinciding with the widespread adoption of big data

Advances: Jurnal Ekonomi & Bisnis
Volume 4, Issue 1 (2026). 88-110
DOI: https://doi.org/10.60079/ajeb.v4i1.916
OPEN ACCESS
e-ISSN: 2985-9859

analytics, artificial intelligence, machine learning, cloud computing, and digital marketing technologies. This acceleration suggests that researchers increasingly recognized data as a strategic organizational resource rather than merely an operational tool. The rise of social media platforms, digital commerce, customer analytics, and real-time marketing systems created new opportunities and challenges that stimulated scholarly attention. Importantly, the increasing volume of research during this period reflects a broader transformation in marketing from intuition-based decision making toward evidence-based and analytics-driven approaches.

The most striking pattern appears in the expansion phase (2023–2025). Following a brief stabilization around 2022–2023, publication output increased dramatically, reaching its highest level in 2025. This sharp upward trajectory indicates that DDM has entered a period of rapid intellectual expansion. Rather than representing incremental growth, the surge suggests that DDM is becoming a central paradigm within contemporary marketing research. The timing of this acceleration aligns with the growing influence of generative artificial intelligence, predictive analytics, customer journey analytics, marketing automation, and advanced personalization technologies. Organizations are increasingly expected to leverage data for strategic agility, customer engagement, and competitive advantage, thereby creating substantial demand for new theoretical and empirical insights.

From a broader perspective, the figure demonstrates that DDM in Marketing is still a relatively young but rapidly maturing research field. The exponential growth observed in recent years indicates that the field has not yet reached theoretical or methodological saturation. Instead, it appears to be transitioning from a technology-focused research stream toward a more comprehensive domain encompassing strategic marketing, customer experience management, artificial intelligence, organizational capabilities, ethics, privacy, and value creation. The continued upward trajectory suggests that DDM will remain a dominant area of marketing scholarship in the coming years.

The figure therefore provides strong evidence for the timeliness and relevance of the present review. The rapid proliferation of publications creates a fragmented body of knowledge that is increasingly difficult for scholars and practitioners to navigate. As the field expands across multiple disciplines, technologies, and application contexts, a systematic review and bibliometric analysis become essential for synthesizing existing knowledge, identifying influential contributions, mapping intellectual structures, and establishing future research directions. In this sense, the publication trend not only reflects the growth of the field but also underscores the necessity of conducting a comprehensive review at this stage of its development.

Citations trends

Figure 3 presents the annual distribution of publications and citations in DDM in Marketing from 1993 to 2025. The combined analysis of publication output and citation impact provides deeper insight into the intellectual evolution, maturity, and scholarly influence of the field. The figure reveals a notable divergence between knowledge production (publications) and knowledge influence (citations). During the period from 1993 to approximately 2015, both publication and citation levels remained relatively low, indicating that DDM was still an emerging area of inquiry. Research during this period was primarily concerned with foundational topics such as database marketing, customer segmentation, marketing information systems, and early analytical decision-support tools. The limited citation activity suggests that the field had not yet achieved widespread recognition within the broader marketing literature.

Advances: Jurnal Ekonomi & Bisnis
Volume 4, Issue 1 (2026). 88-110
DOI: https://doi.org/10.60079/ajeb.v4i1.916
OPEN ACCESS
e-ISSN: 2985-9859

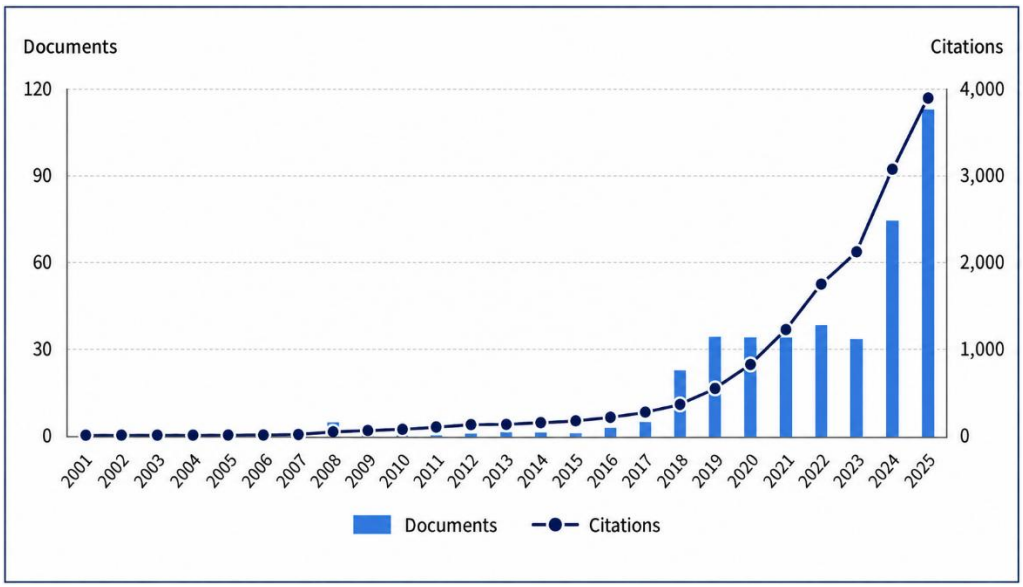

Figure 3. Citation Trends in DDM research

A significant transition occurred after 2016, when publication output began to increase steadily and citation counts accelerated at a substantially faster rate. This pattern indicates that DDM research was not only expanding in volume but also gaining intellectual influence across multiple disciplines. The disproportionate growth in citations relative to publications suggests that several influential studies emerged during this period, serving as foundational references for subsequent research. Such a pattern is characteristic of a field moving from emergence to consolidation, where seminal works establish theoretical and methodological foundations that attract increasing scholarly attention.

The most striking observation is the exponential growth in citations between 2018 and 2025. While publication output increased considerably, citation growth expanded at a much faster pace, reaching nearly 4,000 citations by 2025. This finding suggests that DDM has evolved beyond a niche marketing topic and has become a central research domain with substantial academic impact. The rapid accumulation of citations reflects the growing relevance of issues such as big data analytics, artificial intelligence, machine learning, customer analytics, predictive modeling, marketing automation, and digital transformation. Researchers across marketing, information systems, management, and analytics increasingly draw upon DDM literature to explain contemporary business phenomena.

4.1.2 Performance profile of research on DDM

Most influential journals

Table 2 reveals a notable distinction between journal productivity and scholarly influence in DDM research. Applied Marketing Analytics is the most productive outlet, publishing 27 articles, followed by Industrial Marketing Management (17 articles) and the Journal of Retailing and Consumer Services (11 articles). The prominence of these journals indicates that DDM has become an established topic across marketing analytics, industrial marketing, and consumer research. The presence of specialized outlets such as the Journal of Marketing Analytics and Journal of Digital and Social Media Marketing further reflects the growing importance of analytics, digital technologies, and data-driven strategies in contemporary marketing scholarship.

Advances: Jurnal Ekonomi & Bisnis
Volume 4, Issue 1 (2026). 88-110
DOI: https://doi.org/10.60079/ajeb.v4i1.916
OPEN ACCESS
e-ISSN: 2985-9859

Table 2. Most Influential Journals by Number of Articles Published in DDM Research (Top 10)

Rank	Source Title	TA	TC
1	Applied Marketing Analytics	27	64
2	Industrial Marketing Management	17	1,410
3	Journal of Retailing and Consumer Services	11	425
4	Journal of Digital and Social Media Marketing	10	18
5	Journal of Business Research	9	659
6	Journal of Marketing Education	9	302
7	Journal of Marketing Analytics	9	141
8	Innovative Marketing	6	85
9	Journal of Strategic Marketing	6	84
10	Journal of Business and Industrial Marketing	6	76

However, publication volume does not necessarily translate into academic influence. Industrial Marketing Management emerges as the most influential journal, generating 1,410 citations from 17 articles, followed by the Journal of Business Research with 659 citations from 9 articles, and the Journal of Retailing and Consumer Services with 425 citations from 11 articles. These findings suggest that the intellectual foundations of DDM research are concentrated in established marketing and business journals that connect analytics-driven decision making to broader strategic, organizational, and customer-related issues. Overall, the results indicate that while specialized journals drive publication growth, the greatest scholarly impact is generated by mainstream marketing journals, reflecting the evolution of DDM from a technical analytics topic into a core strategic domain within marketing research.

Most influential authors

Figure 4 presents the most productive authors in Data-Driven Decision Making (DDM) research based on the number of publications in the dataset. Sara Dolnicar emerges as the leading contributor with seven publications, followed by M.A. Hossain and J. Akter, each contributing five articles. J.R. Surr and A.S. Krishen occupy the next positions with three publications each, while R. Boso, D. Barnes, G. Agge, A. Bargoni, and N.R. Aljohani each contributed two articles. The distribution suggests that although several authors have established themselves as key contributors, the field is not dominated by a small group of highly prolific scholars.

The relatively modest publication counts among the top authors indicate that DDM research remains a diverse and interdisciplinary field characterized by broad participation from researchers across marketing, information systems, analytics, and digital business disciplines. This pattern is typical of an emerging and rapidly evolving research area, where knowledge development is distributed across multiple research communities rather than concentrated within a few dominant scholars. The prominence of authors such as Dolnicar, Hossain, Akter, and Krishen also suggests that influential contributions have emerged from different thematic areas, including customer analytics, digital marketing, market segmentation, artificial intelligence, and data-driven strategy. Overall, the findings reflect the collaborative and multidisciplinary nature of DDM research and highlight a growing network of scholars advancing analytics-driven marketing knowledge.

Advances: Jurnal Ekonomi & Bisnis
Volume 4, Issue 1 (2026). 88-110
DOI: https://doi.org/10.60079/ajeb.v4i1.916
OPEN ACCESS
e-ISSN: 2985-9859

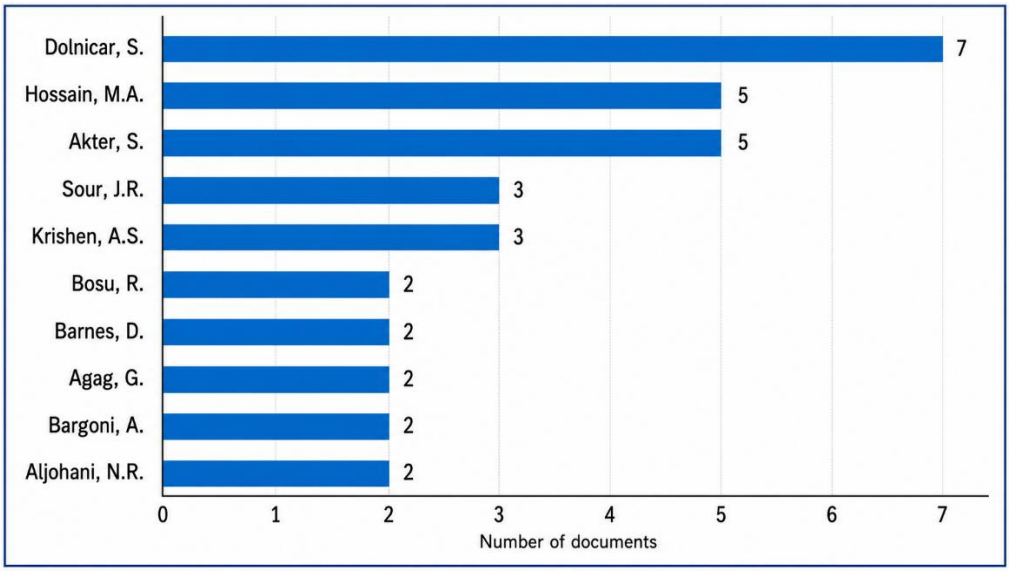

Figure 4. Most Productive Authors in DDM Research (Top 10)

Top contributing institutions

Figure 5 presents the leading institutional affiliations contributing to Data-Driven Decision Making (DDM) research based on publication output. The University of Wollongong emerges as the most productive institution with 14 publications, substantially outperforming all other affiliations in the dataset. A second tier of contributors includes Università degli Studi di Salerno, North South University, and the University of Texas at Austin, each producing five articles. The distribution suggests that DDM research is not concentrated within a single geographic region but is instead supported by institutions across Europe, North America, Asia, and Australia.

The prominence of universities from multiple continents highlights the global and interdisciplinary nature of DDM research. The strong performance of the University of Wollongong indicates the existence of a particularly active research group specializing in marketing analytics, customer intelligence, and data-driven strategy. More broadly, the diversity of leading affiliations suggests that DDM has evolved into an internationally recognized research domain that transcends traditional disciplinary boundaries. Rather than being dominated by a few elite institutions, knowledge production is distributed across a broad network of universities with expertise in marketing, information systems, business analytics, and digital transformation. This pattern reflects the growing strategic importance of data-driven decision-making in contemporary organizations. It demonstrates that scholarly interest in the field is expanding across academic traditions, regions, and research contexts.

Advances: Jurnal Ekonomi & Bisnis
Volume 4, Issue 1 (2026). 88-110
DOI: https://doi.org/10.60079/ajeb.v4i1.916
OPEN ACCESS
e-ISSN: 2985-9859

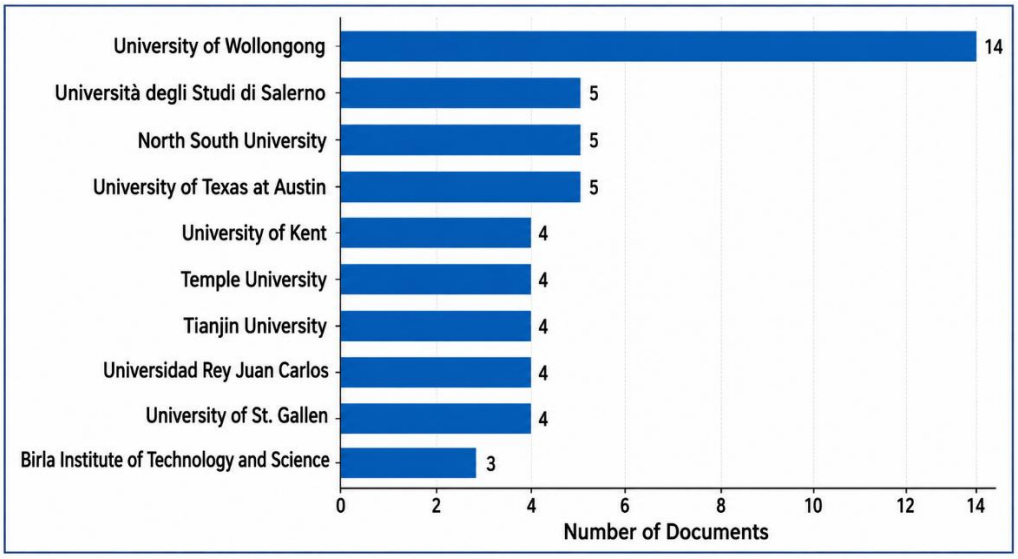

Figure 5. Most influential affiliation by number of articles published (Top 10)

Top contributing Country

Figure 6 illustrates the geographical distribution of research productivity in Data-Driven Decision Making (DDM) in Marketing. The United States is the dominant contributor, with 121 publications, accounting for a substantial share of the total literature and far exceeding those of other countries. This leadership is followed by China (49 articles), India (43 articles), and the United Kingdom (41 articles). The distribution demonstrates that DDM research is concentrated primarily in economically advanced and technologically developed nations where digital transformation, analytics capabilities, and data-intensive business practices are deeply embedded within organizations.

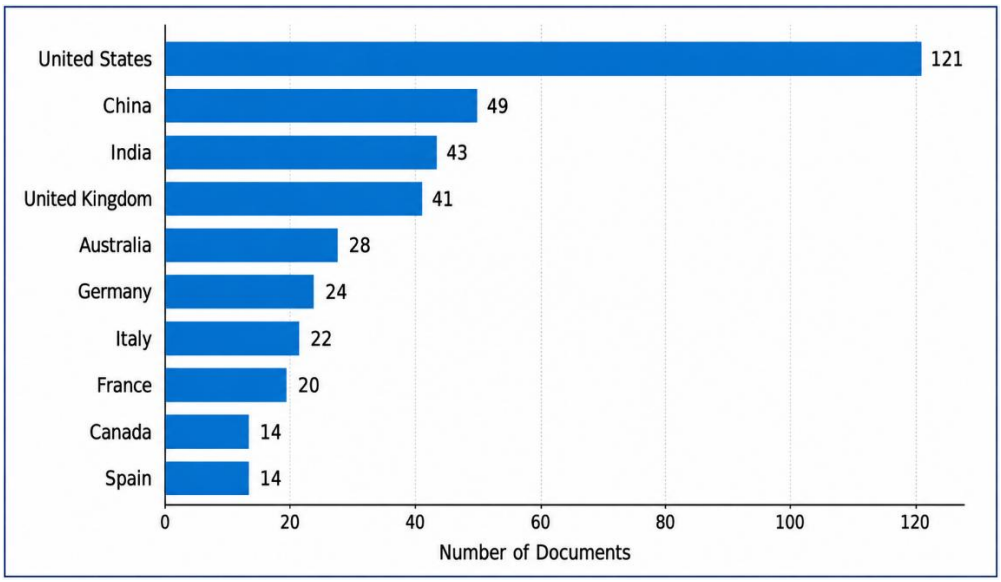

Figure 6. Most influential country by the number of articles published in this field (Top 10)

Advances: Jurnal Ekonomi & Bisnis
Volume 4, Issue 1 (2026). 88-110
DOI: https://doi.org/10.60079/ajeb.v4i1.916
OPEN ACCESS
e-ISSN: 2985-9859

The findings also reveal an important shift in the global knowledge landscape. While the United States remains the intellectual hub of DDM research, the strong contributions from China and India indicate the growing role of emerging economies in shaping the future of analytics-driven marketing scholarship. The presence of countries from North America, Europe, Asia, and Oceania suggests that DDM has evolved into a genuinely global research domain rather than a regionally confined topic. This international dispersion reflects the universal relevance of data-driven decision making as organizations worldwide increasingly adopt big data analytics, artificial intelligence, customer intelligence systems, and digital marketing technologies. However, the concentration of publications within a limited number of countries also highlights potential geographic imbalances in knowledge production. Regions such as Africa, Latin America, and parts of Southeast Asia remain underrepresented, suggesting opportunities for future research to explore DDM implementation in diverse institutional, cultural, and economic contexts. Overall, the figure demonstrates that DDM research is being driven by countries at the forefront of digital innovation, while also revealing opportunities to broaden the field's global representation and contextual diversity.

4.1.3 Most influential research on DDM

Table 3 highlights the intellectual foundations of Data-Driven Decision Making (DDM) research by identifying the most highly cited publications in the field. The most influential study is Choi *et al.,* (2018), Big Data Analytics in Operations Management, which has accumulated 820 citations, demonstrating the central role of big data analytics as a core capability for organizational decision-making. Other highly cited studies, including Kushwaha *et al.,* (2021), Saura *et al.,* (2021), and Krishen *et al.,* (2021), further confirm the growing importance of analytics, artificial intelligence, and digital marketing technologies in transforming managerial and marketing practices. The prominence of these studies indicates that the intellectual development of DDM research has been driven largely by advances in big data, customer analytics, digital platforms, and technology-enabled decision processes. Moreover, the presence of highly cited articles in leading journals such as Journal of Business Research, Industrial Marketing Management, Journal of the Academy of Marketing Science, and MIS Quarterly suggests that DDM has gained recognition across multiple disciplines, including marketing, information systems, operations management, and innovation studies.

A closer examination of the most influential studies reveals three dominant knowledge streams shaping the field. The first focuses on big data analytics capabilities and organizational value creation, represented by studies such as Choi *et al.,* (2018), Sheng *et al.,* (2017), and Dremel *et al.,* (2020), which emphasize how firms leverage data resources to enhance decision quality and operational performance. The second stream centers on data-driven marketing and customer relationship management, exemplified by Saura *et al.,* (2021), Liu *et al.,* (2020), and De Luca *et al.,* (2021), highlighting the role of analytics in customer engagement, service innovation, and strategic marketing decisions. The third stream examines the broader implications of digital transformation and artificial intelligence, as reflected in Krishen *et al.,* (2021), Shin *et al.,* (2020), and van den Heuvel *et al.,* (2017), which explore how emerging technologies reshape organizational processes and decision-making structures. Collectively, these influential studies demonstrate that DDM research has evolved from a narrow focus on data processing and analytical techniques toward a broader strategic perspective that views data as a critical organizational asset for innovation, competitive advantage, and value creation. The concentration of highly cited publications between 2017 and 2021 further suggests that the field experienced a

Advances: Jurnal Ekonomi & Bisnis
Volume 4, Issue 1 (2026). 88-110
DOI: https://doi.org/10.60079/ajeb.v4i1.916
OPEN ACCESS
e-ISSN: 2985-9859

significant intellectual breakthrough during this period, laying the foundation for the rapid growth in DDM scholarship observed in recent years.

Table 3. Most influential research on DDM

Title	Authors	Year	Source title	Cited by
Big Data Analytics in Operations Management	Choi *et al.,*	2018	Production and Operations Management	820
Applications of big data in emerging management disciplines: A literature review using text mining	Kushwaha *et al.,*	2021	International Journal of Information Management Data Insights	260
Setting B2B digital marketing in artificial intelligence-based CRMs: A review and directions for future research	Saura *et al.,*	2021	Industrial Marketing Management	246
A broad overview of interactive digital marketing: A bibliometric network analysis	Krishen *et al.,*	2021	Journal of Business Research	216
The rise (and fall?) of HR analytics: A study into the future application, value, structure, and system support	van den Heuvel *et al.,*	2017	Journal of Organizational Effectiveness	199
A multidisciplinary perspective of big data in management research	Sheng *et al.,*	2017	International Journal of Production Economics	195
Enhancing social media analysis with visual data analytics: A deep learning approach	Shin *et al.,*	2020	MIS Quarterly: Management Information Systems	195
The impacts of market size and data-driven marketing on the sales mode selection in an Internet platform-based supply chain	Liu *et al.,*	2020	Transportation Research Part E: Logistics and Transportation Review	194
How and when do big data investments pay off? The role of marketing affordances and service innovation	De Luca *et al.,*	2021	Journal of the Academy of Marketing Science	170
Actualizing big data analytics affordances: A revelatory case study	Dremel *et al.,*	2020	Information and Management	170

** Citation counts as of May 2026*

4.1.4 Current Research Trend in DDM

Keywords co-occurrence analysis

Figure 7 presents a keyword co-occurrence network generated using VOSviewer, illustrating the intellectual structure of DDM research in marketing. In the network, node size reflects the frequency of keyword occurrence, link strength indicates the degree of co-occurrence between keywords, and colors represent thematic clusters. The visualization reveals a highly interconnected research landscape, suggesting that DDM is a multidisciplinary field integrating marketing, analytics, information systems, artificial intelligence, and digital business. Table 6 shows clusters of high-frequency keywords related to DDM, along with their corresponding keywords and related studies.

Advances: Jurnal Ekonomi & Bisnis
Volume 4, Issue 1 (2026). 88-110
DOI: https://doi.org/10.60079/ajeb.v4i1.916
OPEN ACCESS
e-ISSN: 2985-9859

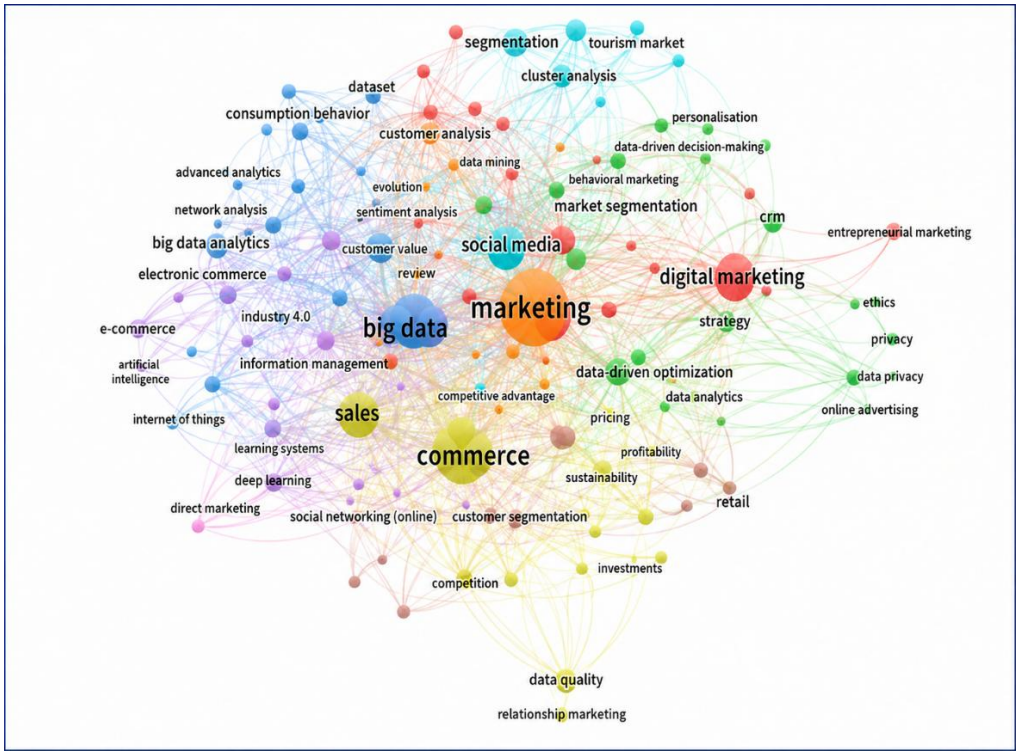

Figure 7. Keyword co-occurrence analysis

Cluster 1: Data-Driven Marketing and Decision Making. This cluster forms the intellectual core of DDM research by emphasizing the transformation of marketing from intuition-based decision making to evidence-based strategic management. The literature demonstrates that organizations increasingly rely on customer and market intelligence to guide segmentation, targeting, resource allocation, and performance optimization. While earlier studies focused primarily on improving marketing efficiency, more recent research positions data as a strategic asset that enables firms to develop customer-centric capabilities and achieve sustainable competitive advantage. For example, Diorio *et al.,* (2022) highlight the growing role of customer intelligence in supporting marketing decisions, while Russo (2022) and García-Y-García *et al.,* (2025) extend this perspective by showing how data-driven approaches contribute to strategic planning and organizational performance. Collectively, this cluster reflects the shift of DDM from an operational tool to a strategic marketing capability.

Cluster 2: Digital Marketing and Artificial Intelligence. This cluster reflects the increasing convergence of digital marketing and artificial intelligence. The literature suggests that advances in AI, automation, and predictive technologies have fundamentally transformed how firms interact with customers, deliver personalized experiences, and optimize marketing campaigns. Early digital marketing research primarily focused on online channels and customer engagement, whereas recent studies emphasize AI-enabled personalization, recommendation systems, and intelligent decision support. Hossain *et al.,* (2022) demonstrate how AI enhances marketing effectiveness through automation and customer insights, while Herold *et al.,* (2024) and Ye *et al.,* (2024) show that AI-driven personalization is becoming a key determinant of customer experience. At the same time, Al-Hamamy *et al.,* (2025) highlights emerging concerns regarding privacy and ethical data use, suggesting that future research must balance technological innovation with responsible marketing practices.

Advances: Jurnal Ekonomi & Bisnis
Volume 4, Issue 1 (2026). 88-110
DOI: https://doi.org/10.60079/ajeb.v4i1.916
OPEN ACCESS
e-ISSN: 2985-9859

Table 6. Clusters of high frequency keywords related to DDM

Cluster	Items (n)	Keywords	Issues / Thematic Focus	Sample Studies
Cluster 1: Data-Driven Marketing & Decision Making	18	marketing, social media, customer analysis, data-driven marketing, decision-making, business analytics, innovation, market orientation	Data-driven marketing, customer insights, and strategic decision-making.	García-Y-García *et al.,* (2025); Diorio *et al.,* (2022); Russo (2022)
Cluster 2: Digital Marketing & AI	17	digital marketing, artificial intelligence, online advertising, personalization, privacy, digital strategy, entrepreneurship marketing	AI-enabled marketing, personalization, privacy, and digital transformation.	Hossain *et al.,* (2022); Herold *et al.,* (2024); Ye *et al.,* (2024); Al-Hamamy *et al.,* (2025)
Cluster 3: Big Data Analytics & Consumer Intelligence	15	big data analytics, consumer behavior, e-commerce, Industry 4.0, advanced analytics, customer intelligence	Big data analytics, consumer insights, and evidence-based marketing decisions.	Choi *et al.,* (2018); Kushwaha *et al.,* (2021); Sheng *et al.,* (2017); Engelseth and Wang (2018)
Cluster 4: Commerce, Sales & Predictive Analytics	14	commerce, sales, prediction, customer segmentation, relationship marketing, data quality, investments	Predictive analytics for sales optimization and customer relationship management.	Liu *et al.,* (2020); Murphy *et al.,* (2025); Sui and Huang (2025); Mutuku *et al.,* (2024)
Cluster 5: Information Management & Machine Learning	12	deep learning, neural networks, information management, direct marketing, social networking, machine learning	Machine learning and analytical techniques for marketing intelligence.	Shin *et al.,* (2020); Booth (2019); Dremel *et al.,* (2020); Leow *et al.,* (2023)
Cluster 6: Market Segmentation & Customer Analytics	10	segmentation, customer analytics, cluster analysis, tourism market, customer profiling, market segmentation	Customer analytics and market segmentation for targeted marketing.	Dolnicar (2005); Dolničar (2004); Carins *et al.,* (2022); Chandan (2024)
Cluster 7: Retail Analytics & Competitive Strategy	9	retail, competition, strategy, customer segmentation, networking, omnichannel retailing	Retail analytics, competitive intelligence, and strategic positioning.	Guan *et al.,* (2025); Osiyevskyy *et al.,* (2024); Tian *et al.,* (2025)
Cluster 8: Social Media & Digital Engagement Analytics	8	social media marketing, internet marketing, influencer marketing, web analytics, performance measurement	Social media analytics, digital engagement, and campaign performance measurement.	Krishen *et al.,* (2021); Sciarrino *et al.,* (2020); Weinpress (2024); Nalluri *et al.,* (2025)

Cluster 3: Big Data Analytics and Consumer Intelligence. This cluster represents the technological foundation of DDM research and is among the most influential streams in the field. The literature consistently argues that big data analytics enables firms to convert vast amounts of customer and market information into actionable insights. Foundational studies by Sheng *et al.,* (2017) and Choi *et al.,* (2018) established the strategic importance of analytics capabilities in organizational decision making, while Kushwaha *et al.,* (2021) broadened the discussion by demonstrating the growing application of big data across management disciplines. More recent work, such as Engelseth and Wang

Advances: Jurnal Ekonomi & Bisnis
Volume 4, Issue 1 (2026). 88-110
DOI: https://doi.org/10.60079/ajeb.v4i1.916
OPEN ACCESS
e-ISSN: 2985-9859

(2018), illustrates how data-driven consumer intelligence improves market sensing and strategic responsiveness. Overall, this cluster positions analytics capability as a critical organizational resource that supports evidence-based decision making and competitive advantage.

Cluster 4: Commerce, Sales, and Predictive Analytics. The central theme of this cluster is the use of predictive analytics to improve commercial performance and customer relationship outcomes. Research within this stream demonstrates how predictive models allow organizations to anticipate customer behavior, forecast demand, optimize sales strategies, and improve marketing returns. Liu *et al.,* (2020) show how data-driven marketing influences sales mode selection and supply chain decisions, highlighting the broader organizational impact of predictive analytics. More recent studies by Mutuku *et al.,* (2024), Murphy *et al.,* (2025), and Sui and Huang (2025) further illustrate the growing adoption of predictive tools for customer retention, revenue optimization, and strategic decision support. Together, these studies suggest that the value of DDM increasingly lies not merely in understanding past behavior but in predicting future outcomes.

Cluster 5: Information Management and Machine Learning. This cluster focuses on the analytical and computational infrastructure that enables data-driven decision making. Unlike other clusters that emphasize marketing applications, the studies in this stream focus on the technologies and methodologies needed to process large, complex datasets. Booth (2019) highlights the growing importance of advanced information management systems, while Dremel *et al.,* (2020) examine how organizations actualize analytics capabilities to create business value. Similarly, Shin *et al.,* (2020) demonstrate the application of deep learning and visual analytics in extracting insights from social media data, and Leow *et al.,* (2023) further illustrate the role of machine learning in automating decision processes. Collectively, this cluster highlights that technological capability is a prerequisite for effective DDM implementation.

Cluster 6: Market Segmentation and Customer Analytics. This cluster reflects one of the oldest and most established themes within marketing research. The studies emphasize the use of data-driven techniques to identify customer heterogeneity, develop market segments, and improve targeting effectiveness. Foundational contributions by Dolničar (2004) and Dolnicar (2005) established segmentation as a critical analytical process for understanding consumer behavior. More recent research by Carins *et al.,* (2022) and Chandan (2024) demonstrates how advanced analytics and customer data have enhanced the precision and sophistication of segmentation strategies. The evolution of this cluster suggests that segmentation has moved beyond demographic profiling toward dynamic, behavior-based customer analytics supported by large-scale data resources.

Cluster 7: Retail Analytics and Competitive Strategy. This cluster examines how firms utilize data-driven insights to strengthen competitive positioning in increasingly complex retail environments. The literature suggests that analytics capabilities have become essential for managing omnichannel operations, monitoring competitors, and responding to rapidly changing consumer preferences. Osiyevskyy *et al.,* (2024) emphasize the strategic role of data in competitive decision making, while Guan *et al.,* (2025) and Tian *et al.,* (2025) illustrate how retail organizations leverage analytics to optimize customer experiences and improve market performance. The cluster highlights the growing strategic significance of DDM in supporting organizational agility and competitive advantage.

Cluster 8: Social Media and Digital Engagement Analytics. This cluster focuses on social media and digital platforms as valuable sources of customer intelligence. The literature demonstrates that organizations increasingly rely on engagement metrics, user-generated content, and online behavioral

Advances: Jurnal Ekonomi & Bisnis
Volume 4, Issue 1 (2026). 88-110
DOI: https://doi.org/10.60079/ajeb.v4i1.916
OPEN ACCESS
e-ISSN: 2985-9859

data to understand consumer sentiment and evaluate marketing effectiveness. Krishen *et al.,* (2021) identify digital marketing as a rapidly expanding research area, while Sciarrino *et al.,* (2020) explore the use of social media analytics for consumer insights. More recent studies by Weinpress (2024) and Nalluri *et al.,* (2025) show that digital engagement analytics has evolved from simple performance measurement to a strategic capability that supports customer relationship-building and data-driven decision-making. This cluster underscores the growing importance of digital ecosystems as both marketing channels and intelligence-generating platforms.

4.1.5 Future Research Directions Using the TCCM Framework

Drawing on the bibliometric findings, the keyword co-occurrence network, and the overlay visualization, future research opportunities in DDM in Marketing can be systematically organized using the TCCM framework. The analysis reveals that while the field has matured significantly through studies on big data analytics, digital marketing, customer analytics, and artificial intelligence, important theoretical, contextual, and methodological gaps remain.

Table 7. Future Research Agenda for DDM Using the TCCM Framework

Dimension	Current State	Future Directions
Theory	Predominantly grounded in analytics, technology adoption, customer intelligence, and marketing performance perspectives. Most studies focus on the instrumental value of data and analytics.	Expand theoretical foundations using Dynamic Capabilities Theory, Resource Orchestration Theory, Knowledge-Based View, AI Capability Theory, Service-Dominant Logic, and Organizational Learning Theory to explain how firms transform data resources into strategic value and sustainable competitive advantage.
Context	Research is concentrated in developed economies, large organizations, digital platforms, e-commerce, and technology-intensive sectors. The United States, China, and European countries dominate the literature.	Investigate DDM in SMEs, emerging economies, public organizations, healthcare, education, tourism, nonprofit sectors, and B2B ecosystems. Greater attention should be given to underrepresented regions such as Southeast Asia, Africa, and Latin America.
Characteristics	Emphasis on big data analytics, customer analytics, digital marketing, segmentation, and predictive analytics. Most studies examine direct effects on performance outcomes.	Explore emerging themes such as AI-driven decision autonomy, algorithmic transparency, consumer privacy, ethical AI, sustainability analytics, human–AI collaboration, and data governance. More studies should examine mediating and moderating mechanisms linking DDM capabilities to organizational outcomes.
Methodology	Dominated by quantitative surveys, regression analysis, SEM, and cross-sectional designs. Bibliometric and review studies are increasing.	Adopt longitudinal designs, experiments, mixed-method approaches, case studies, machine learning applications, and real-time behavioral analytics. Greater use of objective organizational data and multi-source datasets is needed to strengthen causal inference and external validity.

Advances: Jurnal Ekonomi & Bisnis
Volume 4, Issue 1 (2026). 88-110
DOI: https://doi.org/10.60079/ajeb.v4i1.916
OPEN ACCESS
e-ISSN: 2985-9859

4.2 Discussion

4.2.1 Theory

The bibliometric analysis reveals that DDM research has been largely driven by practical, technology-oriented perspectives, emphasizing analytical capabilities, customer intelligence, and performance improvement. While these perspectives have successfully demonstrated the value of data-driven approaches, they offer limited explanations of how organizations continuously develop, integrate, and renew their data capabilities in dynamic environments. Future studies should therefore incorporate Dynamic Capabilities Theory to explain how firms sense, seize, and transform opportunities through data-driven insights. Similarly, the Knowledge-Based View can help explain how data is converted into organizational knowledge. At the same time, Resource Orchestration Theory may provide insights into how firms combine analytical, technological, and human resources to create value. Given the growing prominence of artificial intelligence in overlay visualization, theories focusing on AI capabilities and human-technology interaction are likely to become increasingly relevant.

4.2.2 Context

The country analysis demonstrates that DDM research is heavily concentrated in technologically advanced economies, particularly the United States, China, the United Kingdom, and Australia. Consequently, current knowledge may not fully capture the challenges and opportunities associated with DDM implementation in less digitally mature environments. Future research should examine how contextual factors such as institutional development, digital infrastructure, culture, and regulatory environments influence DDM adoption and effectiveness. Moreover, the dominance of studies conducted in large firms and digital platforms suggests a need to investigate smaller organizations, startups, public institutions, healthcare providers, educational organizations, and tourism enterprises. Such diversification would improve the generalizability of existing theories and reveal context-specific drivers of successful data-driven decision making.

4.2.3 Characteristics

The thematic analysis indicates that DDM research has evolved from a focus on big data and customer analytics toward emerging themes such as artificial intelligence, digital marketing, privacy, and sustainability. However, much of the literature continues to examine direct relationships between DDM capabilities and organizational outcomes. Future studies should investigate more complex mechanisms by exploring mediators such as organizational learning, innovation capability, customer trust, customer experience, and decision quality. Likewise, moderators such as environmental uncertainty, digital maturity, organizational culture, and data governance practices may help explain variations in DDM effectiveness. The appearance of privacy and sustainability among the newest keywords suggests particularly promising opportunities to investigate ethical and responsible uses of data-driven technologies.

4.2.4 Methodology

The methodological profile of the literature suggests a strong reliance on cross-sectional surveys and conventional quantitative techniques. While these approaches have generated valuable insights, they

Advances: Jurnal Ekonomi & Bisnis
Volume 4, Issue 1 (2026). 88-110
DOI: https://doi.org/10.60079/ajeb.v4i1.916
OPEN ACCESS
e-ISSN: 2985-9859

are limited in capturing the dynamic, evolving nature of DDM capabilities. Future research should employ longitudinal studies to examine how organizations develop data-driven competencies over time and how these capabilities influence long-term performance. Experimental designs could provide stronger causal evidence regarding the effectiveness of AI-driven marketing interventions, while qualitative case studies could offer deeper insights into organizational implementation processes. Additionally, researchers should increasingly leverage real-world datasets, digital trace data, machine learning techniques, and mixed-methods approaches to better align research methods with the data-intensive nature of the phenomenon under study.

5. Concluding Remarks and Recommendation

This study provides a comprehensive overview of the evolution and intellectual structure of DDM in Marketing through a SLR and bibliometric analysis of 426 journal articles published between 1993 and 2025. The findings reveal a substantial increase in scholarly interest, particularly after 2018, reflecting the growing strategic importance of data, analytics, artificial intelligence, and digital technologies in contemporary marketing practice. The bibliometric results identify key contributors, influential journals, leading institutions, and dominant countries shaping the field. Furthermore, keyword co-occurrence and overlay analyses reveal eight major research clusters encompassing data-driven marketing, digital marketing and AI, big data analytics, predictive analytics, machine learning, customer analytics, retail strategy, and social media analytics. The overlay visualization further demonstrates a thematic shift from traditional big data and segmentation research toward emerging topics such as artificial intelligence, privacy, sustainability, customer intelligence, and data-driven strategy.

From a theoretical perspective, this study contributes to the literature by consolidating a fragmented body of knowledge into a coherent intellectual structure. The findings demonstrate that DDM has evolved from a technology-oriented research stream into a multidisciplinary strategic domain integrating marketing, information systems, analytics, and digital transformation. By identifying the major thematic clusters and their interrelationships, this study provides a foundation for future theory development. It highlights opportunities to extend existing knowledge using perspectives such as Dynamic Capabilities Theory, Knowledge-Based View, Resource Orchestration Theory, and AI capability frameworks. The study also advances understanding of how data functions not merely as an operational resource but as a strategic asset that enables innovation, customer value creation, and competitive advantage. The findings also offer several practical implications. For managers, the results underscore the growing importance of developing analytics capabilities, customer intelligence systems, and AI-enabled decision support mechanisms to enhance marketing effectiveness and organizational performance. The prominence of themes such as predictive analytics, customer analytics, and digital marketing suggests that firms should invest not only in technological infrastructure but also in analytical competencies and data governance capabilities. Furthermore, the emergence of privacy and sustainability as recent research themes highlights the need for organizations to balance data utilization with ethical responsibility, transparency, and long-term stakeholder value creation. Policymakers and practitioners may also benefit from the findings by gaining a clearer understanding of emerging trends and best practices in data-driven marketing.

This study has several limitations. First, the analysis is based exclusively on publications indexed in the Scopus database, which may exclude relevant studies from other databases such as Web of

Volume 4, Issue 1 (2026). 88-110
DOI: https://doi.org/10.60079/ajeb.v4i1.916
OPEN ACCESS
e-ISSN: 2985-9859

Science, Dimensions, or Google Scholar. Second, the review focuses solely on English-language journal articles, potentially overlooking valuable contributions published in other languages. Third, bibliometric techniques emphasize publication patterns and citation relationships but cannot fully capture the depth and contextual nuances of individual studies. Finally, because the field continues to evolve rapidly, particularly with the emergence of generative AI and advanced analytics technologies, future reviews may reveal new research streams not yet fully reflected in the current dataset. Future studies are therefore encouraged to expand database coverage, incorporate longitudinal analyses, and explore emerging themes related to artificial intelligence, ethical data use, sustainability, and human–AI collaboration in marketing decision-making. Overall, the study demonstrates that DDM has become a central pillar of modern marketing research and practice. As organizations increasingly operate in data-rich, digitally connected environments, the ability to transform data into actionable insights will remain a critical driver of innovation, strategic agility, and sustainable competitive advantage. Consequently, DDM is expected to remain one of the most influential and rapidly evolving areas of marketing scholarship in the years ahead.

Statement of Use of Generative AI

During the preparation of this work, the author used generative artificial intelligence tools to support the scientific writing process. Grammarly was used to check grammar, refine writing style, and improve clarity in scientific writing. All interpretations, analyses, and conclusions presented in this study are the sole responsibility of the author.

References

Al-Hamamy, M. A., Al-Qotaje, B. T., & Alsammak, M. (2025). How cloud knowledge management platforms enhance innovation in digital marketing strategies? *Innovative Marketing, 21*(4), 261–276. https://doi.org/10.21511/im.21(4).2025.19

Bleier, A., Goldfarb, A., & Tucker, C. (2020). Consumer privacy and the future of data-based innovation and marketing. *International Journal of Research in Marketing, 37*(3), 466–480. https://doi.org/10.1016/j.ijresmar.2020.03.006

Booth, D. (2019). Marketing analytics in the age of machine learning. *Applied Marketing Analytics, 4*(3), 214–221.

Carins, J., Kitunen, A., & Rundle-Thiele, S. (2022). When less is more: A short-form tool to increase segmentation implementation. *Social Marketing Quarterly, 28*(3), 191–207. https://doi.org/10.1177/15245004221116082

Chandan, A. (2024). Unveiling customer personalities using segmentation and exploratory data analysis. *Health Leadership and Quality of Life, 3*. https://doi.org/10.56294/hl2024.420

Choi, T.-M., Wallace, S. W., & Wang, Y. (2018). Big data analytics in operations management. *Production and Operations Management, 27*(10), 1868–1883. https://doi.org/10.1111/poms.12838

De Luca, L. M., Herhausen, D., Troilo, G., & Rossi, A. (2021). How and when do big data investments pay off? The role of marketing affordances and service innovation. *Journal of the Academy of Marketing Science, 49*(4), 790–810. https://doi.org/10.1007/s11747-020-00739-x

Diorio, S., Hummel, C., & Rogers, B. (2022). Revenue operations: A systems approach for turning analytics into growth. *Applied Marketing Analytics, 7*(4), 306–317.

Dolničar, S. (2004). Beyond "commonsense segmentation": A systematics of segmentation approaches in tourism. *Journal of Travel Research, 42*(3), 244–250. https://doi.org/10.1177/0047287503258830

Dolnicar, S. (2005). Improved understanding of tourists' needs. *Journal of Quality Assurance in Hospitality and Tourism, 5*(2–4), 141–156. https://doi.org/10.1300/J162v05n02_08

Dremel, C., Herterich, M. M., Wulf, J., & vom Brocke, J. (2020). Actualizing big data analytics affordances: A revelatory case study. *Information and Management, 57*(1). https://doi.org/10.1016/j.im.2018.10.007

Volume 4, Issue 1 (2026). 88-110
DOI: https://doi.org/10.60079/ajeb.v4i1.916
OPEN ACCESS
e-ISSN: 2985-9859

Engelseth, P., & Wang, H. (2018). Big data and connectivity in long-linked supply chains. *Journal of Business and Industrial Marketing, 33*(8), 1201–1208. https://doi.org/10.1108/JBIM-07-2017-0168

García-Y-García, E., Rejón-Guardia, F., & Sánchez-Baltasar, L. B. (2025). Data-driven marketing image: Scale development and validation. *Revista Brasileira de Gestão de Negócios, 27*(2). https://doi.org/10.7819/rbgn.v27i02.4294

Goldfarb, A., & Tucker, C. E. (2011). Privacy regulation and online advertising. *Management Science, 57*(1), 57–71. https://doi.org/10.1287/mnsc.1100.1246

Guan, Y., Cheung, K. S., & Yiu, C. Y. (2025). Redefining retail catchment with mobile geolocation data: Insights from New Zealand. *Journal of Retailing and Consumer Services, 82*. https://doi.org/10.1016/j.jretconser.2024.104089

Hentzen, J. K., Hoffmann, A., Dolan, R., & Pala, E. (2022). Artificial intelligence in customer-facing financial services: A systematic literature review and agenda for future research. *International Journal of Bank Marketing, 40*(6), 1299–1336. https://doi.org/10.1108/IJBM-09-2021-0417

Herold, E., Singh, A., Feodoroff, B., & Breuer, C. (2024). Data-driven message optimization in dynamic sports media: An artificial intelligence approach to predict consumer response. *Sport Management Review, 27*(5), 793–816. https://doi.org/10.1080/14413523.2024.2372122

Hossain, M. A., Agnihotri, R., Rushan, M. R. I., Rahman, M. S., & Sumi, S. F. (2022). Marketing analytics capability, artificial intelligence adoption, and firms' competitive advantage: Evidence from the manufacturing industry. *Industrial Marketing Management, 106*, 240–255. https://doi.org/10.1016/j.indmarman.2022.08.017

Krishen, A. S., Dwivedi, Y. K., Bindu, N., & Kumar, K. S. (2021). A broad overview of interactive digital marketing: A bibliometric network analysis. *Journal of Business Research, 131*, 183–195. https://doi.org/10.1016/j.jbusres.2021.03.061

Kushwaha, A. K., Kar, A. K., & Dwivedi, Y. K. (2021). Applications of big data in emerging management disciplines: A literature review using text mining. *International Journal of Information Management Data Insights, 1*(2). https://doi.org/10.1016/j.jjimei.2021.100017

Law, R., Lin, K. J., Ye, H., & Fong, D. K. C. (2024). Artificial intelligence research in hospitality: A state-of-the-art review and future directions. *International Journal of Contemporary Hospitality Management, 36*(6), 2049–2068. https://doi.org/10.1108/IJCHM-02-2023-0189

Leow, K.-R., Leow, M.-C., & Ong, L.-Y. (2023). A new big data processing framework for the online roadshow. *Big Data and Cognitive Computing, 7*(3), Article 123. https://doi.org/10.3390/bdcc7030123

Liu, P., Hu, H., & Zhang, X. (2020). The impacts of market size and data-driven marketing on the sales mode selection in an Internet platform-based supply chain. *Transportation Research Part E: Logistics and Transportation Review, 136*, 101902.

Mariani, M. M., Perez-Vega, R., & Wirtz, J. (2022). AI in marketing, consumer research and psychology: A systematic literature review and research agenda. *Psychology and Marketing, 39*(4), 755–776. https://doi.org/10.1002/mar.21619

Murphy, L., Bachvarov, G., & Cotlearova, X. (2025). From gut feel to smart prioritisation: Building an artificial intelligence opportunity scoring model that sales teams actually use. *Applied Marketing Analytics*. https://doi.org/10.69554/EBOQ9169

Mutuku, A., Murage, P., & Sewe, S. (2024). Application of SARIMAX model to forecast weekly Irish potato retail prices: A case study of Kitui County, Kenya. *SN Business and Economics, 4*(11). https://doi.org/10.1007/s43546-024-00746-y

Nalluri, V., Wang, Y.-Y., Jeng, W.-D., & Chen, L.-S. (2025). Extracting advertising elements and the voice of customers in online game reviews. *Journal of Theoretical and Applied Electronic Commerce Research, 20*(4). https://doi.org/10.3390/jtaer20040321

Osiyevskyy, O., Umantsiv, Y., & Kavun, O. (2024). Strategy for striking the omnichannel balance in Retail 4.0. *Strategy & Leadership, 52*(3–4), 7–19. https://doi.org/10.1108/SL-12-2023-0120

Volume 4, Issue 1 (2026). 88-110
DOI: https://doi.org/10.60079/ajeb.v4i1.916

OPEN ACCESS
e-ISSN: 2985-9859

Osiyevskyy, O., Umantsiv, Y., & Kavun, O. (2024). Strategy for striking the omnichannel balance in Retail 4.0. *Strategy & Leadership*. https://doi.org/10.1108/SL-12-2023-0120

Osiyevskyy, O., Umantsiv, Y., & Kavun, O. (2024). *Strategy for striking the omnichannel balance in Retail 4.0. Strategy & Leadership, 52*(3–4), 7–19. https://doi.org/10.1108/SL-12-2023-0120

Rosário, A. T., & Dias, J. C. (2023). How has data-driven marketing evolved: Challenges and opportunities with emerging technologies. *International Journal of Information Management Data Insights, 3*(2), 100203. https://doi.org/10.1016/j.jjimei.2023.100203

Russo, E. L. (2022). Knowing the levers to pull to measure and optimise digital marketing performance. *Applied Marketing Analytics, 8*(3), 271–282.

Saura, J. R., Ribeiro-Soriano, D., & Palacios-Marqués, D. (2021). Setting B2B digital marketing in artificial intelligence-based CRMs: A review and directions for future research. *Industrial Marketing Management, 98*, 161–178. https://doi.org/10.1016/j.indmarman.2021.08.006

Sciarrino, J., Wilcox, G. B., & Chung, A. (2020). Measuring the effectiveness of peer-to-peer influencer marketing in an integrated brand campaign. *Journal of Digital and Social Media Marketing, 8*(1), 85–95.

Sheng, J., Amankwah-Amoah, J., & Wang, X. (2017). A multidisciplinary perspective of big data in management research. *International Journal of Production Economics, 191*, 97–112. https://doi.org/10.1016/j.ijpe.2017.06.006

Sui, J., & Huang, F. (2025). A study on data-driven optimization of gamified activities in e-commerce and its mechanism for improving brand loyalty. *Journal of Logistics, Informatics and Service Science*. https://doi.org/10.33168/JLISS.2025.1006

Tian, J., Liu, Y., & Zhang, Q. (2025). E-tailer's choice between low-quality store brand and high-quality store brand: The role of data-driven marketing. *Journal of Industrial and Management Optimization, 21*(7), 5197–5240. https://doi.org/10.3934/jimo.2025090

van den Heuvel, S., & Bondarouk, T. (2017). The rise (and fall?) of HR analytics: A study into the future application, value, structure, and system support. *Journal of Organizational Effectiveness: People and Performance, 4*(2), 157–178. https://doi.org/10.1108/JOEPP-03-2017-0022

Weinpress, A. (2024). Everything is media: A new approach to media and storytelling in the new digital era. *Journal of Brand Strategy, 13*(3), 254–270. https://doi.org/10.69554/CRHS5776

Ye, C., Kim, Y., & Cho, Y.-N. (2024). Digital marketing and analytics education: A systematic review. *Journal of Marketing Education*. https://doi.org/10.1177/02734753231166414

Corresponding author

Deske W. Mandagi can be contacted at: deskemandagi@unklab.ac.id