

**A BIBLIOMETRIC REVIEW OF AI-ENABLED DIGITAL MARKETING AND
BRAND LOYALTY**

Dr Nishtha Ujjawal

Assistant Professor, School of Management, Noida Institute of Engineering and Technology,
Greater Noida

Dr Ajay Gangele

Assistant Professor, Noida Institute of Engineering and Technology, Greater Noida

Prof (Dr) Pooja Rastogi

Professor, School of Management, Noida Institute of Engineering and Technology, Greater
Noida

Dr Shagun Tomar

Independent Researcher, Hongkong

Dr. Shagun Sharma

Assistant Professor, Noida Institute of Engineering and Technology, Greater Noida

<https://doi.org/10.5281/zenodo.20149943>

ABSTRACT

Today AI's rapid progression can be included in various digital marketing techniques including optimizing of customer engagement, personalization strategy designing and brand loyalty measuring. Purpose: This study aims to offer a comprehensive bibliometric review of the research conducted on AI-powered digital marketing and brand loyalty published between 1998 and 2026. Using a structured bibliometric strategy, we studied 350 documents from 261 academic sources with the participation of 1,008 authors and 2,649 references – demonstrating an increasing academic interest in this research area. The analysis shows a yearly growth percentage of 6.91% for the marketing research AI technologies and their contribution towards the efficient functioning of firms. The highlighted collaboration pattern indicates a moderate degree of international co-authorship (19.71%) with an average of 3.03 authors per document, thus indicating the interdisciplinary research character in this field. The 27.46 citations per document as the average citation rate indicate strong academic and intellectual maturity among authors. Notable thematic clusters from the literature show that it also gravitated to AI-driven personalization, customer engagement metrics, predictive modelling, trust-based marketing and brand loyalty formation and the results shows that AI acts as a strategic enabler of building long lasting customer–brand relationship via data-based insights and adaptive marketing mechanisms. This review addresses these aspects by Mapping the Intellectual structure of AI-enabled digital marketing research and determining future directions for research at the interface of artificial intelligence and brand loyalty.

Keywords: Artificial Intelligence, Digital Marketing, Brand Loyalty, Bibliometric Review, Customer Engagement

INTRODUCTION

The rapid advancement of technology, especially Ai is playing a significant role to digital marketing era by its way of correspondence between organizations and consumers where this relationship oriented on building loyal brand relationships and building brand equity through them (Shiva & Manoharan, 2025). The arrival of machine learning, predictive analytics,

recommender systems and conversational agents as advanced AI-enabled solutions has equipped the marketers to provide real-time personalized experiences based upon more contextual understanding of customers (Alamro et al., 2025). Given that consumer-brand interactions are increasingly taking place on digital platforms, AI has been an integral part of customer journey management and optimising marketing strategies (Beyari & Hashem, 2025). Encouraging brand loyalty serves as an essential strategic goal for any organization operating on competitive digital markets. Brand loyalty of customers involves repeat purchasing behaviors and emotional connecting and advocacy for certain brands (Ahmad & Dirbawanto, 2024). According to research, AI-based marketing tools enhance this loyalty by providing greater relevance, convenience and value received in the eyes of consumers based on personalization and predictive insights (Bano et al., 2025). These AI systems consume large datasets to identify customer preferences, enhance marketing outreach and develop engagements between customers and brands across multiple other digital touchpoints.

Over the past two decades, this area has seen considerable interest from academics. The increasing popularity of AI-enabled digital marketing proved to be vastly researched. Bibliometric indicators show an increasing number of publications, confirming the almost omnipresence of AI within marketing academic research (Prados-Peña et al., 2026). Nevertheless, other than a few scattered studies across multiple disciplines such as marketing, information systems and computer science, little research has focused specifically on investigating the nuances of IT performance in this area. This dissemination makes it challenging to synthesize a unified narrative of how AI is influencing brand loyalty.

Within this context, bibliometric analysis represents systematic and quantitative mechanisms to map the intellectual structure and thematic evolution of a research domain (Pessin et al., 2022). Purpose of this bibliometric analysis aims to analyze the published research between 1998 and 2026 on AI-enabled digital marketing and brand loyalty. The aim is to summarize common themes, collaboration practices, and key findings while also discussing a few emerging research agendas and suggest recommendations for researchers and practitioners alike.

2. LITERATURE REVIEW

2.1 AI-Enabled Digital Marketing

Artificial Intelligence (AI) is playing a transformative role in digital marketing through the automation, optimization and personalization of marketing approaches during execution across different digital platforms (Ziakis & Vlachopoulou, 2023). Organizations can leverage machine learning algorithms, predictive analytics, and natural language processing to effectively analyze large volumes of consumer data. This function enables decision making in real time and enhances targeting accuracy (Kang, 2022). So, that means AI increases marketing efficiency by reducing operational expenses and developing more responsive methods (Ojika et al., 2022).

2.2 AI and Customer Engagement

There is an area of marketing where AI has made a drastic impact and that is customer engagement. Using AI-driven solutions like chatbots, recommendation systems, and virtual assistants create a more interactive experience between brands and consumers (Bhuiyan, 2024). Research shows that connection-oriented attributes of AI-mediated experiences—such as personalization and interactivity—boost customer trust and satisfaction. These traits enable

enhanced emotional attachment and triaxial interactions that are essential to securing favourable relational outcomes (Jurišić, M. (2025).

2.3 Brand Loyalty in the Digital Context

Brand loyalty has traditionally been considered as an outcome of behavioural and attitudinal components, such as satisfaction, trust, value in digital contexts. According to this context, absolute and ease were highlighted as the primary drivers of loyalty in digital marketing (Mu & Yi, 2024). AI-powered marketing strategies can provide personalized, curated content, tailored offers and recommendations that closely match consumer preferences. By consistently gathering and examining data from customer interactions, businesses not only personalise experiences but also encourage loyalty (Rane, N. 2023).

2.4 Linking AI-Enabled Digital Marketing and Brand Loyalty

Voice, satisfaction, and engagement with the customer often act as mediating variables that demonstrate how AI-enabled digital marketing facilitates brand loyalty. According to a study that built upon existing research, personalization through AI is among the primary drivers for marketers looking to increase the intentionality behind and relevance of their strategic messaging. Moreover, predictive analytics enables marketers to make more educated decisions that drive loyalty intentions (Nehme, A. A. 2026). The impact of consumer trust, especially in connection with data privacy, algorithmic transparency and ethicality of AI service has become a decisive moderating variable.

2.5 Research Gap

While an abundance of studies has been increasingly conducted on this theme, none have systematically explored and reviewed the link between AI-enabled digital marketing and brand loyalty using bibliometric methods. While there continues to be strong interest in tracking connections with the public, current reviews have all been narrative or systematic and they fail to offer a sufficient methodology that would allow for a mapping of trends (publication, citation and collaborations networks). This gap highlights the need for a bibliometric overview that synthesizes not only recent findings, but also future research directions.

3. RESEARCH OBJECTIVES AND RESEARCH QUESTIONS

3.1 Research Objectives

This study has the objective to offer a comprehensive bibliometric review of current studies on AI-based digital marketing and brand loyalty. Specifically, the study seeks to:

1. To dive into the publication trends for AI-assisted digital marketing and brand loyalty across the specified search timeline.
2. To perform an in-depth citation analysis to gain insights into significant authors, journals, and documents within this research area.
3. To look at the collaborative authorship trends and other trends in co-authorship literature.
4. To identify keywords and prevailing topics relevant to AI-enabled digital marketing and brand competency.

Thus, the study aims to aggregate the themes schematic of literature and highlight critical research topics in this area.

3.2 Research Questions

Based on the above considerations, this research study tries to answer a set of research questions as follows:

1. **RQ1:** What is the trend analysis of research publications on AI-enabled digital marketing and brand loyalty?
2. **RQ2:** What Are the Most Influential Authors, Journals, and Documents in This Research Domain?
3. **RQ3:** What are the patterns of authorship and collaboration in the existing literature?
4. **RQ4:** What are the most relevant and frequent keywords in research on AI-enabled digital marketing and brand loyalty?
5. **RQ5:** What themes and clusters emerge from the literature?

4. RESEARCH METHODOLOGY

4.1 Research Design

A systematic bibliometric analysis of the published works on artificial intelligence (AI)-driven digital marketing and brand loyalty. Bibliometric analysis provides a quantitative view of academic literature patterns, demonstrating what research topics are on the rise, studies that form a foundation for further inquiry and thematic structures emerging in the discipline (Yan & Zhiping, 2023). Such a method allows for an objective and replicable integration of vast amounts of literature.

4.2 Data Source

This study employed Scopus as a dataset that is considered an authoritative resource for measuring literature, given its wide coverage in addition to its strict journal selection (Singh et al., 2021). Also provides standardized bibliographic data (including citation details) at the author and institutional level. By ensuring that the data is internally consistent, this kind of standardization will make macro and micro-bibliometric analyses easier.

4.3 Data Collection Procedure

Based on the mentioned area, a systematic search strategy was devised to collect articles related to AI-driven digital marketing and brand loyalty in luxury sector. This required carefully extracting key terms from the extensive territory of artificial intelligence, digital marketing, and brand loyalty to help with a wide variety of studies. In order to maintain both consistency and quality, we only used peer-reviewed articles that were published in English language journals, which is common practice within bibliometrics (Jappe, 2020). The data screening and cleaning process produced a final dataset that was ready for analysis.

4.4 Data Analysis Techniques

The analysis employed standard bibliometric techniques to examine the intellectual structure of the literature. These techniques included:

- Analysis of annual publication trends
- Citation analysis of documents, authors, and journals
- Keyword frequency and co-occurrence analysis
- Thematic mapping and visualization

Such techniques are commonly used to identify core themes and research clusters within a field. Bibliometric tools were used to generate visual representations that support systematic interpretation of the findings.

5. RESULT ANALYSIS

The results offer a systematic perspective on bibliometric analysis regarding AI-enabled digital marketing and branding loyalty-related academic publications. The first style to be used was total citation analysis, and this has been followed by visualizing keyword co-occurrences and mapping techniques, in an effort to objectify the observations gleaned from the data. Together, these analyses provide a systematic overview of publication trends and key contributors while also visualizing the thematic architecture that underlies research in this domain.

5.1 Main Information about the documents

Bibliometric analysis is the use of quantitative methods to analyze academic publications by studying research output, collaboration patterns and citation impact within a specific context. This method allows for a structured investigation of the temporal progression of knowledge, analyzing indicators such as publication trends, authorship patterns, and citation impact (Westin, F. 2025).



Figure 1: Main Information about the documents

As a result, analyzation of this dataset — namely the yearly number of publications between 1998 and 2026 — shows me an average growth rate of 6.91% that results in 350 total outputs (all from 2,795,972 unique sources) show in fig 1. This trend highlights a more holistic approach to scientific dissemination in the community. The collaboration, as Quacquarelli Symonds mentioned, is particularly strong with 1,008 authors per paper (on average 3.03 co-authors per article) and a whopping number of international co-authoring at 19.71% With a mean citation per document of 27.46 and an excellent reference footprint comprising 2,649 references.

5.2 Most Global Cited Documents

Citation Analysis of Globally Cited Documents The list of globally cited documents, variously known as highly cited papers (HCP), hot papers, scientific impact etc., constitutes a fundamental tool in bibliometric studies and embody the scholarly influence, intellectual contribution and diffusion of knowledge within a discipline. The most cited documents are those that summarize major theories, methodological innovations, or paradigm-changing contributions in a well-defined scientific area (White, H. D. 2015).

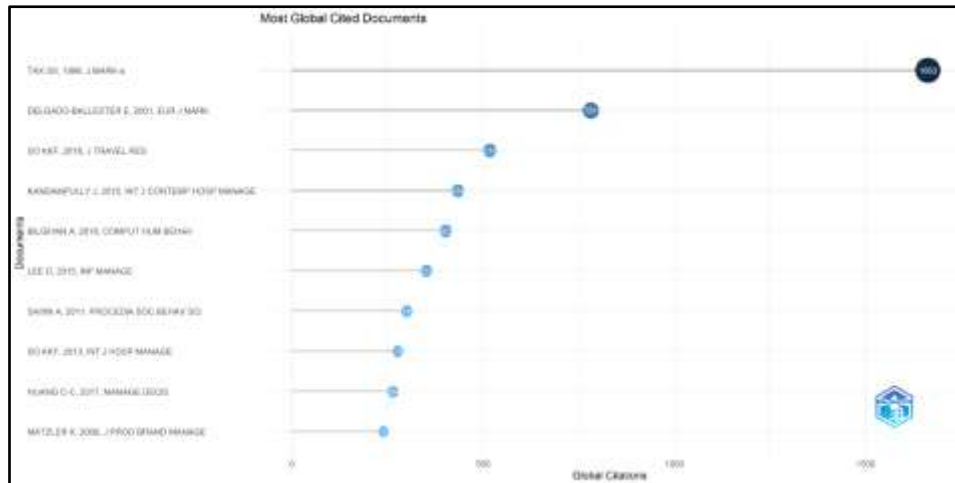


Fig 2: Most Global Cited Documents

The most broadly cited research derives from only a couple of core foundational papers building on other work, with nearly all studies having just a single paper over the 1,600-reference mark for important literature show in fig 2. Such a trend indicates the deploying number of new studies, which played a part for definitional conceptualization and topic mapping.

5.3 Annual Scientific Production

However, in the form of year-to-year production outputs and the evolution of papers published over time, such analyses have become a useful tool to determine trends towards expansion where research is a hot area or where it is developing. This bibliometric practice is important for understanding the evolution of research activity over time (Tian et al., 2008).

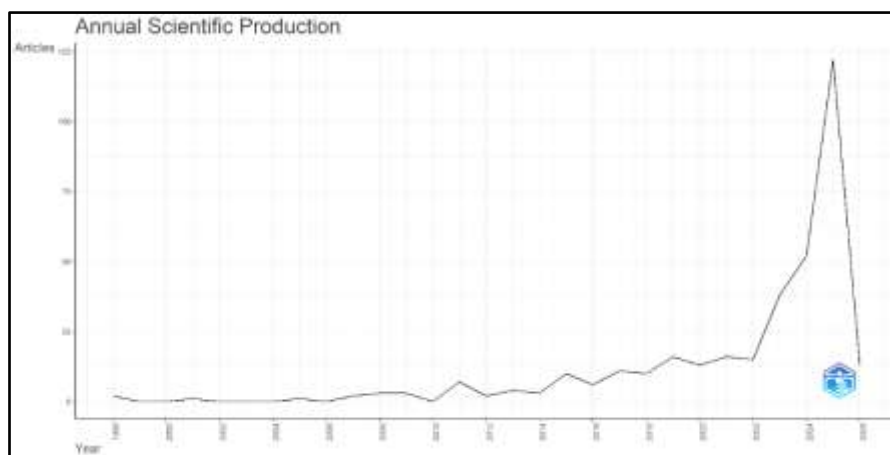


Fig 3: Annual Scientific Production

The figure 3 show the little publication activity in the early years, then a steady growth starting around 2010. Years 2 onto 4 show a significant peak followed by a steady drop in year 5. This trend reflects increasing research attention in this emerging domain over the past few years.

5.4 Word Cloud

Brand loyalty (9%) remains the most common theme—followed by sales, customer experience and customer satisfaction. Such a trend highlights an increased focus on outcome-based and relationship-driven marketing strategies show in fig 5. These principles bind them all together—brand trust, customer loyalty, digital marketing, consumer behavior and electronic commerce; you cannot separate each of these elements because they play a role in redefining the consumer behavior at a developmental perspective. Furthermore, the upsurge of subjects such as AI, virtualization and data privacy shows an important technological advancement. It champions a consumer-obsessed model and represents an advancement in that strategy, taking advantage of precisely the kind of emerging opportunity presented by our dynamic research ecosystem and digital capabilities.

6. CONCLUSION

This bibliometric analysis provides a systematic review of the current academic literature on AI-enabled digital marketing and brand loyalty, identifying trends in growth concerning publication quantity, intellectual structure and topic content analysis within this discipline. The results show an increasing trend over time, highlighting strong academic interest in the implementation of AI techniques within digital marketing scenarios. The initial studies focused on brand loyalty, trust, customer satisfaction and overall customer experience to provide the basis for later papers (Citation analysis). This indicates that new studies are based not only on typical marketing theories, but also include AI-enabled digital tools.

In addition, the thematic and keyword analysis indicate that brand loyalty constitutes a key theme in the literature, with relationship-focused variables like customer experience and customer satisfaction being its close associates. However, in this vein, AI-enabled digital marketing is generally seen as an enabler of these phenomena rather than a clearly definable and measurable construct to which there would be an need for equal analytical inquiry—albeit with a few welcome exceptions. This review integrates current knowledge into a broad overview, pointing out major trends and lines of thought in the field. This paper will aid in taking the first step toward conducting bibliometric or empirical studies focused on AI-enabled digital marketing and brand loyalty.

8. LIMITATION

This paper provides a structured summary of the literature on AI-enabled digital marketing and brand loyalty, we also need to acknowledge its limitations. H1: Limitations There are two main limitations of this bibliometric review. Building on this, Scopus is a common systematic review database given its specialized focus on high-quality peer-reviewed journals; however, relevant studies that are indexed in other databases may also be omitted.

Second, bibliometric approaches mainly shed light mostly on publication and citation trends rather than on the substantive content or methodological soundness of articles. As a result, this analysis does not assess either the theoretical sophistication or empirical robustness of the studies identified in our review. This censored data scope is further limited by the publication language analysis, as only English-language publications appearing were filtered, clearly having an impact on data scope from ongoing discourse that has not been conducted or published in English. These considerations need to be considered when evaluating the study findings and advocate for future studies exploring complement search strategies.

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