

Harnessing AI-Driven Consumer Insights for Strategic Innovation and Business Decision-Making: A Systematic Literature Review

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ABSTRACT

The rapid advancement of Artificial Intelligence (AI) has transformed how organizations generate and utilize consumer insights to support strategic innovation and business decision-making. Despite the growing body of research on AI applications in marketing, analytics, and innovation, the literature remains fragmented, limiting a comprehensive understanding of the strategic role of AI-driven consumer insights. Therefore, this study aims to systematically review the existing literature and examine how AI-driven consumer insights contribute to strategic innovation and organizational decision-making. This study employed a Systematic Literature Review (SLR) approach following the PRISMA 2020 guidelines. Relevant studies were identified from ScienceDirect and Google Scholar using predefined search keywords. After applying the inclusion and exclusion criteria, 21 peer-reviewed articles published between 2021 and 2025 were selected for analysis. The findings indicate a growing research interest in AI-driven consumer insights, with Machine Learning, Predictive Analytics, Big Data Analytics, and Natural Language Processing emerging as the most widely adopted technologies. These technologies enable organizations to better understand consumer behavior, identify market opportunities, anticipate emerging needs, and support innovation and evidence-based decision-making. Furthermore, the review highlights several future research directions, including Explainable AI, AI ethics and governance, human-AI collaboration, and real-time consumer analytics. This study contributes to the literature by providing an integrated understanding of the relationship between AI-driven consumer insights, strategic innovation, and business decision-making, while offering practical implications for organizations seeking to leverage AI as a strategic resource.

Keywords: *Artificial Intelligence, Consumer Insights, Strategic Innovation, Business Decision-Making, Systematic Literature Review.*

1. INTRODUCTION

The rapid advancement of digital technologies has transformed the way organizations collect, analyze, and utilize information in strategic decision-making processes. Among these technologies, Artificial Intelligence (AI) has emerged as one of the most influential innovations, enabling organizations to process large volumes of data with unprecedented speed and accuracy. The increasing adoption of AI across industries has created new opportunities for businesses to better understand consumer behavior, identify market trends, and develop competitive strategies in increasingly dynamic and data-driven environments (Rosário & Dias, 2023; Rainy, 2025). As market competition intensifies and consumer expectations continue to evolve, the ability to transform data into actionable insights has become a critical source of organizational competitiveness and sustainable growth.

Consumer insights have long been recognized as a fundamental component of effective business strategy. Traditionally, organizations relied on surveys, interviews, focus groups, and historical sales data to understand customer preferences and behaviors. However, the emergence of digital platforms and the exponential growth of consumer-generated data have significantly increased both the volume and complexity of available information. Consequently, conventional analytical approaches are often insufficient for extracting meaningful insights from large and diverse datasets. AI technologies, including Machine Learning, Predictive Analytics, Natural Language Processing (NLP), and Big Data Analytics, provide organizations with advanced capabilities to identify behavioral patterns, predict consumer preferences, and generate valuable market intelligence that supports strategic planning and decision-making (Stylianou & Pantelidou, 2025; Zhang & Zhang, 2025).

The integration of AI into consumer analytics has expanded the strategic value of consumer insights beyond traditional marketing applications. AI-driven consumer insights enable organizations to identify emerging customer

needs, anticipate market changes, and discover innovation opportunities that may not be captured through conventional research methods. Previous studies suggest that AI technologies contribute significantly to product innovation, service development, branding strategies, customer engagement, and sustainability initiatives by providing accurate and timely information regarding consumer expectations and market dynamics (Huang & Zhou, 2025; Zhang & Zhang, 2025). Consequently, organizations increasingly view AI-generated consumer intelligence as a strategic resource that supports innovation and strengthens competitive advantage.

In addition to fostering innovation, AI-driven consumer insights play an increasingly important role in business decision-making processes. Organizations utilize AI technologies to support strategic planning, demand forecasting, pricing decisions, market expansion, and resource allocation. By transforming consumer data into actionable knowledge, AI enables managers to make evidence-based decisions, reduce uncertainty, and improve organizational responsiveness to environmental changes (Wolf et al., 2024; Alshaketheep et al., 2025). Furthermore, AI-driven decision-support systems facilitate real-time monitoring of consumer behavior and market developments, allowing organizations to adapt more effectively to rapidly changing business conditions.

Despite the growing body of literature on AI-driven consumer insights, several important research gaps remain. First, existing studies are often fragmented across multiple disciplines, including marketing, information systems, innovation management, and strategic management, resulting in limited integration of knowledge across these domains (Lim et al., 2024; Alshaketheep et al., 2025). Second, many studies primarily focus on the technical capabilities of AI technologies, such as predictive accuracy and analytical performance, while providing limited discussion regarding their broader contributions to strategic innovation and managerial decision-making (Wolf et al., 2024; Deryl et al., 2023). Third, although numerous studies examine AI applications in specific business functions, relatively few studies synthesize the overall role of AI-driven consumer insights as a strategic organizational capability. Finally, the rapid emergence of technologies such as Generative AI, advanced predictive systems, and intelligent analytics creates a need for updated reviews that identify current trends, research gaps, and future research directions (Deryl et al., 2023; Mariani et al., 2023).

To address these gaps, this study employs a Systematic Literature Review (SLR) approach to examine the role of AI-driven consumer insights in supporting strategic innovation and business decision-making. By synthesizing evidence from 21 peer-reviewed studies published between 2021 and 2025, this review provides a comprehensive understanding of the evolution of research in this field, the dominant AI technologies used to generate consumer insights, their contributions to organizational innovation and managerial decision-making, and emerging opportunities for future research. Through this synthesis, the study contributes to both academic literature and managerial practice by offering an integrated perspective on how AI-driven consumer insights create strategic value for organizations.

Accordingly, this study addresses the following research questions: (RQ1) How has research on AI-driven consumer insights evolved between 2021 and 2025? (RQ2) What AI technologies are most commonly used to generate consumer insights? (RQ3) How do AI-driven consumer insights contribute to strategic innovation and business decision-making? and (RQ4) What research gaps and future research directions emerge from the existing literature? The answers to these questions are expected to provide a clearer understanding of the strategic role of AI-driven consumer insights and offer guidance for researchers and practitioners seeking to leverage AI technologies to enhance innovation, decision-making quality, and organizational performance.

2. RESEARCH METHOD

This study employed a Systematic Literature Review (SLR) approach to examine the role of AI-driven consumer insights in supporting strategic innovation and business decision-making. The review followed the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA 2020) guidelines to ensure a systematic, transparent, and replicable research process.

The literature search was conducted using two academic databases, namely ScienceDirect and Google Scholar. These databases were selected because they provide extensive coverage of peer-reviewed studies in the fields of artificial intelligence, consumer analytics, innovation, and business management. The search process utilized several keyword combinations, including “Artificial Intelligence” AND “Consumer Analytics”, “Artificial Intelligence” AND “Consumer Insights”, “Consumer Analytics” AND Innovation, “Artificial Intelligence” AND “Business Decision Making”, and “Consumer Insights” AND “Strategic Innovation”. To capture recent developments in the field, the search was limited to articles published between 2021 and 2025.

To ensure the relevance and quality of the selected studies, predefined inclusion and exclusion criteria were established. Only peer-reviewed journal articles published in English and directly related to AI-driven consumer insights, strategic innovation, and business decision-making were included in the review. Conference papers, books,

book chapters, theses, dissertations, and studies that were not aligned with the research objectives were excluded. In addition, only articles with accessible full texts were considered for analysis.

Table 1. Inclusion and Exclusion Criteria

Criteria	Inclusion Criteria	Exclusion Criteria
Publication Year	Articles published between 2021 and 2025	Articles published before 2021
Language	Articles written in English	Articles written in languages other than English
Document Type	Peer-reviewed journal articles	Conference papers, books, book chapters, theses, and dissertations
Research Topic	Studies related to AI-driven consumer insights, strategic innovation, and business decision-making	Studies not relevant to the research topic
Accessibility	Full-text articles available	Articles with inaccessible full texts

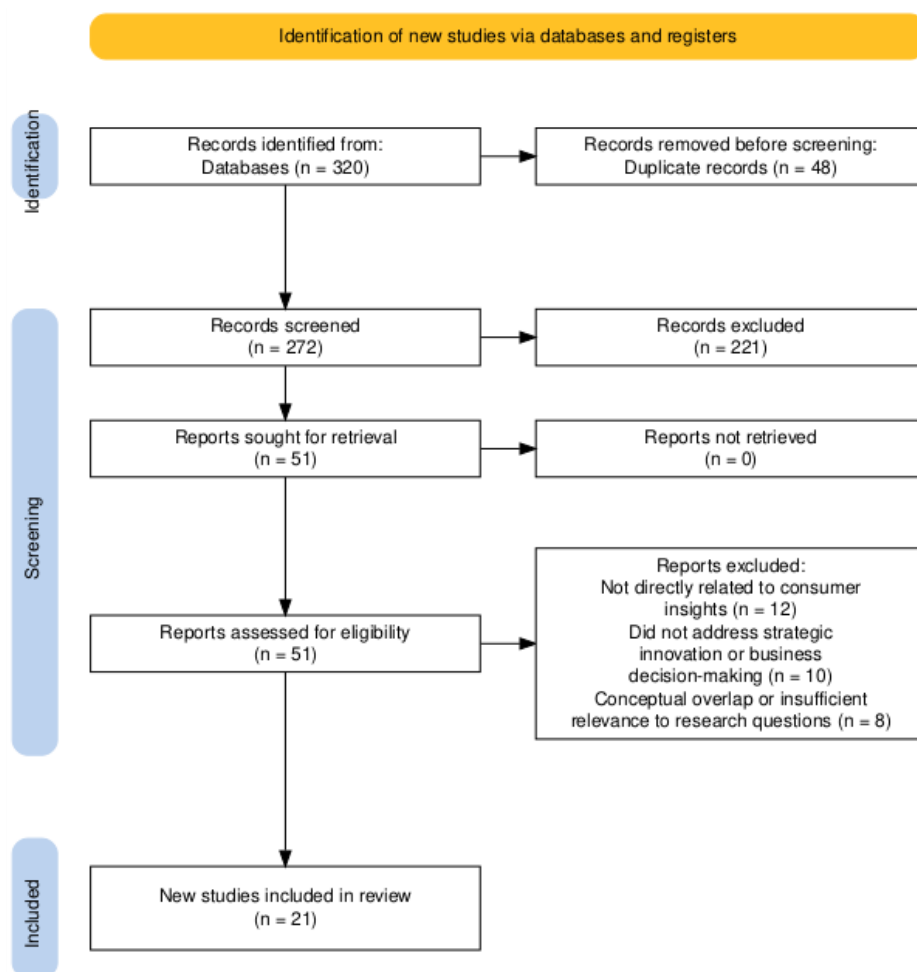


Figure 1. PRISMA 2020 Flow Diagram of the Study Selection Process

As illustrated in Figure 1, the initial search identified 320 records from ScienceDirect and Google Scholar. After removing 48 duplicate records, 272 records remained for title and abstract screening. During the screening stage, 221 records were excluded because they did not meet the predefined inclusion criteria. Subsequently, 51 full-text articles were assessed for eligibility, resulting in the exclusion of 30 articles due to insufficient relevance to the research objectives and research questions. Finally, 21 articles were included in the systematic literature review and analyzed through thematic synthesis.

Data extraction was performed using a structured synthesis matrix that recorded information on the authors, publication year, AI technologies employed, consumer insight focus, strategic contributions, and key findings of each study. The extracted data were analyzed using thematic analysis to identify recurring patterns and major themes across the literature. The analysis focused on four areas: the evolution of AI-driven consumer insights research, the AI technologies used to generate consumer insights, their contributions to strategic innovation and business decision-making, and future research directions.

3. RESULTS AND DISCUSSIONS

The synthesis of the 21 selected studies demonstrates the growing importance of AI-driven consumer insights in supporting strategic innovation and business decision-making. The reviewed literature reveals that artificial intelligence technologies are increasingly utilized to collect, analyze, and interpret consumer data, enabling organizations to generate actionable insights that improve competitiveness and organizational performance. Furthermore, the findings indicate that AI-driven consumer insights have evolved beyond traditional marketing applications and now play a strategic role in product innovation, branding, sustainability initiatives, customer engagement, and managerial decision-making (Lim et al., 2024; Huang & Zhou, 2025).

The reviewed studies also highlight the rapid expansion of research in this field during the period 2021–2025. This growth reflects the increasing adoption of AI technologies across industries and the growing recognition of consumer insights as a valuable strategic asset. To systematically address the research objectives, the findings are organized according to the four research questions (RQ1–RQ4).

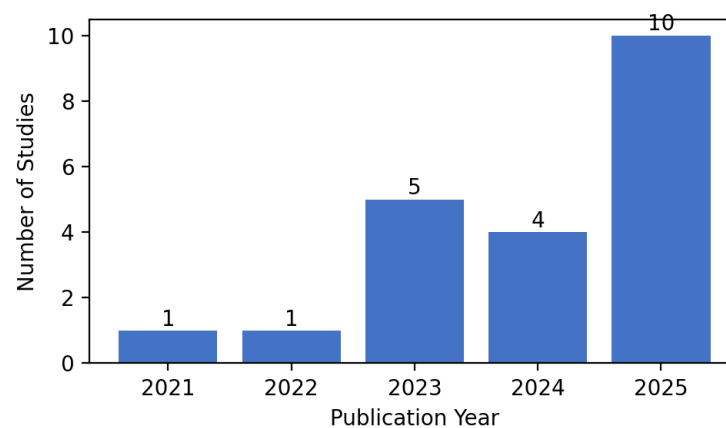


Figure 2. Annual Distribution of Publications (2021–2025)

RQ1: How Has Research on AI-Driven Consumer Insights Evolved Between 2021 and 2025?

The analysis of publication trends reveals a significant increase in scholarly attention toward AI-driven consumer insights between 2021 and 2025. Among the 21 selected studies, only one article was published in 2021 and one article in 2022. The number increased substantially in 2023 and continued to grow until reaching its highest level in 2025. This pattern suggests that AI-driven consumer insights have become an increasingly important topic within business, management, marketing, and innovation research (Deryl et al., 2023; Kekez et al., 2025).

The reviewed literature indicates that the evolution of this field is closely associated with rapid advancements in artificial intelligence technologies and the growing need for data-driven decision-making. Earlier studies primarily focused on customer engagement, consumer behavior prediction, and digital marketing applications. For example, research conducted during the early stage of the review period emphasized the role of AI in strengthening customer interactions and improving engagement outcomes through personalized communication systems (Zhang & Zhang, 2025).

As the field matured, research attention expanded toward broader strategic applications. Recent studies increasingly investigate AI applications in innovation management, sustainability, branding, predictive analytics, and organizational growth. These studies suggest that AI is no longer perceived solely as an operational tool but rather as a strategic capability that enables organizations to identify opportunities, anticipate market changes, and improve competitive performance (Valluri, 2023; Wolf et al., 2024).

Moreover, the growing publication volume reflects the increasing recognition of consumer insights as a strategic organizational resource. AI technologies enable organizations to transform vast amounts of consumer data into meaningful knowledge that supports innovation and strategic planning. Consequently, AI-driven consumer insights are becoming central to digital transformation initiatives and long-term business development strategies (Stylianou & Pantelidou, 2025; Amin et al., 2025). The evolution of the literature demonstrates a clear shift from descriptive consumer analytics toward predictive and strategic applications of AI. This transition indicates that organizations increasingly value consumer intelligence not only for understanding current customer behavior but also for anticipating future trends and guiding strategic actions. The findings further suggest that AI-driven consumer insights have emerged as a multidisciplinary research domain that integrates marketing, innovation management, information systems, and strategic management perspectives (Gandía et al., 2025; Kekez et al., 2025).

RQ2: What AI Technologies Are Most Commonly Used to Generate Consumer Insights?

To answer the second research question, a synthesis of the 21 selected studies was conducted to identify the dominant AI technologies used to generate consumer insights. The findings reveal that Artificial Intelligence (AI), Machine Learning (ML), Predictive Analytics, Big Data Analytics, Natural Language Processing (NLP), Generative AI, Blockchain-enabled intelligence, and Digital Twin technologies constitute the primary technological approaches employed across the reviewed literature.

Table 2. Literature Synthesis Matrix of the Reviewed Studies

No	Article Title and Author	AI Technology	Consumer Insight Focus	Strategic Contribution	Key Findings
1	Bridging the digital and green divide: technology convergence and productivity in innovative manufacturing.	Digital Green Technology Convergence (DGTC), Data Analytics	Productivity and resource utilization behavior	Innovation and productivity enhancement	DGTC significantly improves productivity through efficient resource utilization and management.
2	Fostering sustainable tourism through digital innovation and green tourism initiatives in Bangladesh.	Digital Innovation, Data Analytics	Tourist preferences and travel behavior	Sustainable tourism planning and decision-making	Digital innovation accelerates tourism recovery and supports sustainable development.
3	How has data-driven marketing evolved: Challenges and opportunities with emerging technologies.	Big Data Analytics, Data-Driven Marketing Systems	Consumer and market data analysis	Customer-centered marketing strategy	Consumer data analytics improves marketing effectiveness and decision quality.
4	How does AI drive branding? Towards an integrated theoretical framework for AI-driven branding.	Artificial Intelligence	Consumer-brand relationship and purchase behavior	AI-driven branding strategy	AI enhances consumer engagement and strengthens brand-consumer relationships.
5	A machine learning approach to consumer behavior in supermarket analytics.	Apriori, K-Means, Collaborative Filtering, ARIMA	Purchase patterns, customer segmentation, demand forecasting	Marketing and inventory strategy	Machine learning accurately identifies purchasing patterns and predicts consumer demand.

6	Artificial intelligence in innovation research: A systematic review, conceptual framework, and future research directions.	Artificial Intelligence	Market and innovation intelligence	Innovation management strategy	AI adoption enhances organizational innovation and competitive advantage.
7	Do you create your content yourself? Using generative artificial intelligence for social media content creation diminishes perceived brand authenticity.	Generative AI (GenAI)	Consumer perception and brand authenticity	Digital content and branding strategy	Excessive AI-generated content reduces perceived brand authenticity and trust.
8	The Role of Artificial Intelligence and Knowledge in Enhancing Corporate Sustainability.	Machine Learning, Predictive Analytics	Sustainability-related consumer preferences	Sustainable product innovation strategy	AI supports sustainable product development and improves competitiveness.
9	Types of innovation and artificial intelligence: A systematic quantitative literature review and research agenda.	Artificial Intelligence	Innovation-related market insights	Product, process, and business model innovation	AI contributes significantly to multiple innovation types.
10	Knowledge management model in the integration of open innovation and circular economy driven by digital intelligence: A comparative multi-case study.	AI, Blockchain, Big Data Analytics, Digital Twins	Stakeholder and consumer knowledge integration	Open innovation and circular economy strategy	Digital intelligence improves collaboration and sustainability-oriented decisions.
11	Consumer flash fiction: A methodology to support the early sensing of far-future innovation opportunities.	Consumer Scenario Analytics	Future consumer expectations and emerging needs	Opportunity sensing and innovation strategy	Consumer-generated future scenarios help identify long-term innovation opportunities.
12	How to combine and clean bibliometric data and use bibliometric tools synergistically: Guidelines using metaverse research.	Bibliometric Analytics Tools	Market trends and digital behavior patterns	Strategic research and planning	Bibliometric analysis reveals emerging trends and innovation opportunities.
13	Is artificial intelligence (AI) research biased and conceptually vague? A systematic	Artificial Intelligence Systems	Consumer and employee perceptions of fairness	Ethical AI governance and decision-making	Fairness, transparency, and bias mitigation are critical for AI

	review of research on bias and discrimination in the context of using AI in human resource management.				implementation.
14	Business analytics meets artificial intelligence: Assessing the demand effects of discounts on Swiss train tickets.	Causal Machine Learning	Consumer response to discounts and pricing	Dynamic pricing and revenue management	AI predicts customer reactions to discount strategies.
15	Independence or interdependence: The role of artificial intelligence in corporate entry mode for overseas energy investments.	AI-Based Information Processing	Market uncertainty and information analysis	International expansion strategy	AI improves decision quality in foreign market entry.
16	Reshaping the contexts of online customer engagement behavior via artificial intelligence: A conceptual framework.	AI Information Processing Systems	Online customer engagement behavior	Customer engagement strategy	AI strengthens customer interactions and engagement outcomes.
17	Harnessing technological resources for effective growth hacking: A mixed-method framework using systematic literature review, content analysis, and multi-layer decision-Making.	Artificial Intelligence, Big Data	Customer acquisition and behavioral analytics	Growth hacking and business growth strategy	AI improves organizational agility, growth, and marketing effectiveness.
18	Redefining marketing strategies through sustainability: Influencing consumer behavior in the circular economy: A systematic review and future research roadmap.	Artificial Intelligence, Blockchain	Consumer trust and sustainable consumption behavior	Sustainable branding strategy	Technology-enabled transparency strengthens trust and brand value.
19	Beyond purchase patterns: harnessing predictive analytics to anticipate unarticulated consumer needs.	Predictive Analytics, Artificial Intelligence	Latent consumer needs and future preferences	Anticipatory marketing strategy	Predictive analytics helps firms identify unexpressed customer needs.

20	Ai-driven marketing analytics for retail strategy: a systematic review of data-backed campaign optimization.	Machine Learning, Deep Learning, NLP, Reinforcement Learning	Customer segmentation, personalization, sentiment analysis	Retail marketing optimization	AI significantly improves campaign performance and customer targeting.
21	The Role of Consumer Insights in Product Innovation: Leveraging Advanced Analytics and Emerging Technologies.	Advanced Analytics, Machine Learning, AI, IoT, Predictive Modeling	Consumer trends, preferences, and expectations	Product innovation strategy	AI-driven consumer insights support innovative product development.

The synthesis matrix demonstrates that Artificial Intelligence serves as the foundational technology across most studies. AI-based systems are widely utilized to analyze consumer preferences, purchasing behaviors, engagement patterns, and market dynamics. Several studies indicate that AI enhances organizations' ability to process large volumes of consumer data and transform them into meaningful insights that support strategic decision-making and innovation activities (Valluri, 2023; Rainy, 2025).

Among the identified technologies, Machine Learning emerged as one of the most frequently adopted approaches. Machine Learning techniques such as K-Means clustering, Apriori algorithms, collaborative filtering, and forecasting models are commonly employed to identify purchasing patterns, classify customer segments, and predict future demand. These capabilities allow organizations to understand consumer behavior at a deeper level and improve the accuracy of marketing and operational decisions (Alshaketheep et al., 2025). Furthermore, Machine Learning enables organizations to continuously learn from consumer interactions, thereby improving the precision of customer profiling and behavioral prediction over time (Agarwal et al., 2025).

Predictive Analytics also appears as a dominant technology in the reviewed studies. Unlike traditional descriptive analytics, predictive analytics focuses on anticipating future consumer behaviors, preferences, and market trends. Several studies demonstrate that predictive models help organizations identify latent consumer needs and emerging market opportunities before they become visible through conventional market research approaches (Perez-Vega et al., 2021). This capability enables firms to shift from reactive decision-making toward proactive and anticipatory strategic planning.

Big Data Analytics represents another important technological component identified in the literature. As organizations increasingly collect vast amounts of consumer data from multiple digital channels, Big Data Analytics provides the infrastructure and analytical capabilities necessary to process and interpret these datasets. Studies indicate that Big Data Analytics enhances market intelligence, customer understanding, and strategic planning by uncovering hidden patterns and relationships within large-scale datasets (Mahdiraji et al., 2025; Valluri, 2023).

In addition to predictive and analytical technologies, Natural Language Processing (NLP) has gained increasing attention in recent years. NLP technologies allow organizations to analyze textual consumer data generated through online reviews, social media interactions, customer feedback, and digital communication platforms. Through sentiment analysis and text mining techniques, NLP enables firms to capture consumer opinions, emotions, and perceptions more effectively than traditional survey-based approaches (Huber et al., 2022). Consequently, organizations can obtain richer and more nuanced consumer insights that support branding, marketing, and innovation decisions.

The review also identifies the emergence of Generative Artificial Intelligence as a new technological trend within consumer insight research. Generative AI technologies facilitate automated content creation, personalized communication, and interactive consumer experiences. However, the literature suggests that excessive dependence on AI-generated content may reduce perceived authenticity and negatively influence consumer trust toward brands (Kekez et al., 2025). Therefore, while Generative AI offers substantial opportunities for consumer engagement, organizations must carefully balance automation and authenticity.

Furthermore, several studies highlight the integration of AI with complementary technologies such as Blockchain, Digital Twins, and advanced knowledge management systems. These technologies contribute to more transparent, secure, and collaborative data ecosystems, enabling organizations to generate more reliable consumer insights and

improve strategic decision-making processes (Mahdiraji et al., 2025; Valluri, 2023). The convergence of multiple digital technologies appears to be an emerging direction in AI-driven consumer insight research.

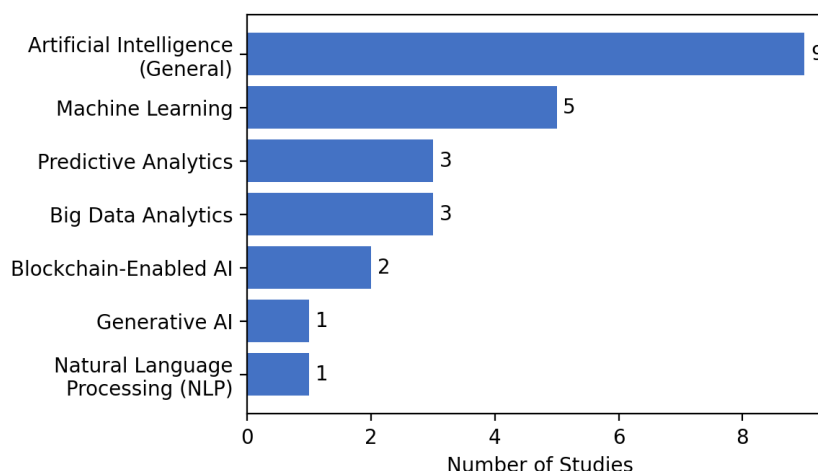


Figure 3. Distribution of AI Technologies Used in the Reviewed Studies

Figure 3 illustrates the distribution of AI technologies identified across the reviewed studies. Artificial Intelligence appears as the most dominant technological category, followed by Machine Learning, Predictive Analytics, and Big Data Analytics. Emerging technologies such as Generative AI, NLP, Blockchain-enabled intelligence, and Digital Twins are less frequently represented but demonstrate increasing relevance within recent publications. This distribution suggests that organizations continue to rely on established AI technologies while simultaneously exploring newer approaches capable of generating more sophisticated consumer insights.

The findings indicate a clear evolution in the technological landscape of consumer insight generation. Earlier studies primarily focused on descriptive and diagnostic analytics designed to explain consumer behavior based on historical data. However, more recent studies increasingly emphasize predictive and intelligent technologies capable of forecasting future consumer actions and identifying hidden market opportunities (Liu et al., 2024). This transition reflects the growing need for organizations to operate in highly dynamic and uncertain business environments.

Another important finding is the complementary nature of the identified technologies. Rather than operating independently, technologies such as Machine Learning, Predictive Analytics, Big Data Analytics, and NLP are frequently integrated within broader AI ecosystems. This integration enables organizations to capture, process, and interpret consumer information from multiple sources, thereby generating more comprehensive and actionable insights. Consequently, AI-driven consumer insight systems have evolved from isolated analytical tools into strategic intelligence platforms that support organizational innovation and decision-making.

Overall, the evidence suggests that the effectiveness of AI-driven consumer insights depends not only on the sophistication of individual technologies but also on the organization's ability to integrate multiple technological capabilities into a coherent data-driven decision-making framework. As AI technologies continue to advance, organizations are expected to increasingly adopt integrated analytical ecosystems that combine predictive, cognitive, and generative capabilities to enhance strategic competitiveness and innovation performance (Huber et al., 2022; Alshaketheep et al., 2025).

RQ3: How Do AI-Driven Consumer Insights Contribute to Strategic Innovation and Business Decision-Making?

The reviewed studies demonstrate that AI-driven consumer insights contribute significantly to strategic innovation and business decision-making. By transforming consumer data into actionable knowledge, AI enables organizations to identify market opportunities, anticipate consumer needs, reduce uncertainty, and improve strategic effectiveness (Kekez et al., 2025; Liu et al., 2024). One major contribution is the enhancement of product and service innovation. Through machine learning and predictive analytics, organizations can identify consumer preferences, emerging trends, and unmet needs, allowing firms to develop products that better align with market expectations (Huber et al., 2022; Valluri, 2023). AI-driven consumer insights also support marketing innovation by improving customer segmentation,

personalization, and campaign effectiveness, resulting in stronger customer engagement and satisfaction (Agarwal et al., 2025; Perez-Vega et al., 2021).

The literature further highlights the role of AI in branding and customer relationship management. By analyzing consumer perceptions and engagement patterns, organizations can develop more effective branding strategies and strengthen brand-consumer relationships. However, studies also suggest that excessive reliance on AI-generated content may reduce perceived authenticity and consumer trust (Zhang & Zhang, 2025; Huber et al., 2022). In addition, AI-driven consumer insights support sustainability-oriented innovation by helping organizations understand environmentally conscious consumer preferences and identify opportunities for sustainable product and service development (Lim et al., 2024).

Beyond innovation, AI-driven consumer insights enhance business decision-making by providing managers with accurate and timely information regarding consumer behavior and market dynamics. The reviewed studies indicate that AI supports strategic planning, pricing decisions, demand forecasting, market expansion, and resource allocation, enabling organizations to make more informed and effective decisions (Kekez et al., 2025; Stylianou & Pantelidou, 2025). Overall, the findings suggest that AI-driven consumer insights function as a strategic organizational resource rather than merely an analytical tool. By improving innovation capability and decision quality, AI helps organizations achieve greater competitiveness, adaptability, and long-term business performance in increasingly dynamic market environments (Perez-Vega et al., 2021; Bruns & Meibner, 2024).

RQ4: What Research Gaps and Future Research Directions Emerge from the Existing Literature?

Despite the growing body of literature on AI-driven consumer insights, several important research gaps remain. First, most reviewed studies focus primarily on the technical capabilities of AI technologies, such as predictive accuracy, automation, and data processing efficiency. Relatively limited attention has been given to explainability and transparency, even though these factors are increasingly important as AI systems become integrated into strategic decision-making processes. Future studies should therefore investigate Explainable AI (XAI) frameworks that can enhance managerial trust, accountability, and decision transparency (Wolf et al., 2024; Mariani et al., 2023). Second, ethical and governance issues remain insufficiently explored. Although AI enables organizations to generate valuable consumer insights, concerns regarding algorithmic bias, privacy protection, fairness, and data security continue to challenge its implementation. Several studies emphasize the importance of responsible AI practices; however, comprehensive governance frameworks are still lacking. Future research should examine how organizations can balance technological innovation with ethical responsibilities and regulatory requirements (Alshaketheep et al., 2025; Valluri, 2023).

Third, the literature reveals limited investigation into the interaction between human expertise and AI-generated insights. Most studies focus on the capabilities of AI systems, while relatively few examine how managers interpret, validate, and utilize AI recommendations in real-world decision-making contexts. Future research should explore human–AI collaboration models that integrate analytical intelligence with managerial judgment to improve strategic outcomes (Stylianou & Pantelidou, 2025; Amin et al., 2025). Another notable gap concerns the dominance of studies conducted in developed economies and large organizations. Evidence regarding the adoption and effectiveness of AI-driven consumer insights in developing countries, small and medium-sized enterprises (SMEs), and emerging industries remains limited. Future studies should investigate contextual factors that influence AI implementation across different organizational and geographical settings (Gandía et al., 2025; Lim et al., 2024).

Finally, emerging technologies such as Generative AI, real-time analytics, and multimodal AI systems present promising opportunities for future research. While existing studies demonstrate their potential for enhancing consumer engagement and innovation, empirical evidence regarding their long-term impact on consumer trust, strategic innovation, and organizational performance remains scarce. Further investigation is therefore required to understand how these technologies can be effectively and responsibly integrated into business strategies (Rosario & Dias, 2023; Rainy, 2025). The identified research gaps suggest that future studies should move beyond evaluating technological performance and increasingly focus on governance, ethics, explainability, contextual implementation, and human-centered AI applications. Such efforts will contribute to a more comprehensive understanding of how AI-driven consumer insights can support strategic innovation and business decision-making while maintaining consumer trust, organizational legitimacy, and long-term sustainability.

4. CONCLUSION

This study employed a Systematic Literature Review (SLR) to examine the role of AI-driven consumer insights in supporting strategic innovation and business decision-making. Based on the analysis of 21 studies published between

2021 and 2025, the findings indicate a growing research interest in this field and highlight Artificial Intelligence, Machine Learning, Predictive Analytics, Big Data Analytics, and Natural Language Processing as the most widely used technologies. The review demonstrates that AI-driven consumer insights play a significant role in understanding consumer behavior, identifying market opportunities, supporting innovation, and enhancing managerial decision-making. These capabilities enable organizations to improve competitiveness, adaptability, and long-term business performance in increasingly dynamic market environments.

This study contributes to the literature by providing an integrated understanding of the relationship between AI technologies, consumer insights, strategic innovation, and business decision-making. Practically, the findings offer guidance for organizations seeking to utilize AI as a strategic resource. However, this review is limited to studies published between 2021 and 2025 and sourced from ScienceDirect and Google Scholar. Future research should explore emerging topics such as Explainable AI, AI ethics and governance, human–AI collaboration, and Generative AI, as well as investigate their applications across different organizational and industrial contexts.

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