Artificial Intelligence

Definition (short):

Artificial Intelligence (AI) in marketing examines how computational systems enhance business decisions, consumer experiences, and market performance. Broadly, AI in marketing is studied through three sub-topics: machine learning, generative AI, and consumer behavioral and policy responses to AI. Machine learning, a subset of AI, builds data-driven computational models and applies predictive, causal, and optimization techniques for accurate prediction and adaptive marketing decisions, while addressing managerial, ethical, and privacy challenges. Generative AI (GenAI) systems such as large language models (LLMs) and multimodal systems (e.g., multimodal LLMs or MLLMs) mark a shift toward AI as a collaborator in not just understanding but also generating new content using text, images, audio, and video. This transformation opens new frontiers in personalization, market intelligence, and consumer engagement. At the same time, GenAI applications raise fundamental questions about trust, transparency, and the role of human judgment – themes examined in behavioral and policy research. Overall, AI in marketing is shaping a shift toward human-machine collaboration, creating both opportunities for innovation and challenges related to governance and societal impact.

Definition (long):

Artificial Intelligence (AI) in marketing research studies the development and implications of computational systems that perform tasks traditionally associated with human intelligence, such as learning, reasoning, perception, and language understanding, to improve marketing decisions, consumer experiences, and market performance.

Machine learning is the AI subset concerned with data-driven models that extract patterns from large, complex, high-velocity data to derive predictive, causal and prescriptive insights about consumers, markets, and marketing effectiveness. It encompasses methods for processing and analyzing diverse digital traces like social media, clickstreams, mobile sensors, transaction logs, text, audio, and video using techniques such as deep learning, natural language processing (NLP), computer vision (CV), ensemble methods, reinforcement learning (RL), and network-based models.

Generative AI (GenAI) is a class of AI systems focused on learning underlying data distributions to create or generate new, original content, such as text, images, audio, and video, that resemble human-generated outputs. Recent advances in Gen-AI, particularly large language models (LLMs) and multimodal large language models (MLLMs), are fundamentally reshaping this domain. These systems not only analyze data but also generate text, images, video, and strategic insights, enabling new forms of interaction between firms and consumers. As a result, marketing research is shifting

from purely predictive and prescriptive analytics to collaborative intelligence, where AI systems actively participate in ideation, content creation, customer engagement, and decision support.

Within this evolving landscape, scholars examine how AI technologies, such as machine learning and generative AI models, transform consumer–firm interactions, market intelligence, targeting, personalization, service automation, and innovation processes. Machine learning methods such as ensemble models and deep learning architectures improve predictive accuracy by identifying complex, non-linear patterns in consumer behavior and market dynamics, while methods like reinforcement learning enable sequential decision-making and adaptive optimization of marketing actions. GenAI systems like LLMs enable scalable analysis and synthesis of unstructured data such as reviews, conversations, and social media. In parallel, MLLMs unlock richer understanding of multimodal signals, thus integrating text, images, audio, and video to capture complex consumer perceptions such as authenticity, persuasion, and emotional response.

Behavioral and policy research in AI critically investigates consumer trust, adoption, and behavioral responses to increasingly human-like systems, as well as emerging challenges related to hallucinations, bias, transparency, privacy, and governance. It also examines how brands' use of AI-generated content shapes consumer perceptions, authenticity judgments, and engagement. The rise of AI-human hybrid workflows further raise important questions about when and how AI complements versus substitutes human judgment in marketing practice.

In summary, AI in marketing sits at the intersection of statistics, computer science, economics, behavioral theory, and managerial practice, with a dual aim: to advance predictive and generative modeling capabilities, and to deepen our understanding of the strategic, behavioral, and societal implications of AI in the marketplace.

Sub-Research Track 1: Machine Learning

Definition: Machine learning (ML) in marketing research focuses on developing data-driven models learned from large, complex, and high-velocity datasets to yield predictive, causal, and prescriptive insights about consumers, markets, and marketing effectiveness. It leverages a wide range of heterogeneous digital traces, including social media activity, clickstream data, mobile sensor signals, transaction records, and unstructured text, audio, and visual data, to uncover patterns that are often difficult to capture using traditional econometric and statistical methods. These methods enhance predictive performance by capturing complex, non-linear patterns in consumer behavior, while also offering causal and prescriptive insights that support sequential decision-making and adaptive optimization of marketing actions.

Sub-Research Track 2: Generative AI

Definition: Generative AI (GenAI) in marketing research focuses on AI systems that learn

underlying data distributions to create new, human-like content such as text, images, audio, and video. In marketing, GenAI is reshaping research and practice by enabling systems that not only analyze information but also actively generate insights, narratives, and strategic outputs. This evolution extends to AI agents and agentic workflows that can autonomously plan, coordinate, and execute multi-step marketing tasks. These capabilities facilitate new forms of interaction between firms and consumers, including AI-assisted ideation, automated content creation, personalized communication, and enhanced customer engagement. They also enable the development of digital twins of consumers and markets, allowing simulation of behaviors, preferences, and responses under different marketing conditions. GenAI systems like large language models (LLMs) and multimodal LLMs (MLLMs) enable both content generation and synthesis of unstructured and multimodal data. It is transforming marketing toward collaborative intelligence, where AI supports ideation, content creation, consumer engagement, and decision-making, while also raising key issues related to trust, authenticity, and governance.

Sub-Research Track 3: Behavioral and Policy Research in AI in Marketing

Definition: Behavioral research in AI in marketing examines how consumers perceive, trust, and respond to increasingly human-like AI systems, including their adoption and behavioral reactions. Policy research investigates concerns related to hallucinations, bias, transparency, privacy, and governance, as well as how AI-generated content influences perceptions of authenticity and engagement. Additionally, it considers the implications of AI-human hybrid workflows for decision-making, including when AI complements or substitutes human judgment in marketing. Taken together, this dual research stream integrates behavioral science and policy perspectives to understand the societal, ethical, and managerial implications of AI adoption in marketing systems.