

THE DARK SIDE OF AI IN MARKETING: PHYSIOLOGICAL MANIPULATION OR ENHANCED CONSUMER EXPERIENCE

MD RAHIK REDWAN

M.S in Marketing Emphasis in Analytics, Department of Business, Webster University, St. Louis, Missouri, United States. Email: mdrahikredwan@webster.edu

Abstract

The use of Artificial Intelligence (AI) in marketing has changed the experience and interaction of consumers by personalizing their engagement with hyper-personal instances and instant interaction. The convenience and satisfaction that people will get after they start using AI come with serious ethical concerns on the line, consumer freedom and the strategies of manipulation. To discover the two-fold nature of AI in marketing, in this paper the author is going to discuss critically the art and science that comes with these advanced technologies that both improve customer experiences and bring in a related experience of manipulating their psychology and physiology. The article was based on an analysis of recent empirical research and theoretical insights and explanations in understanding how AI operates to interfere with consumer decision-making, emotional states, and behavioral actions in many cases without the informed consent of consumers. It looks at the ethical dimensions of the emerging tendencies such as emotional AI, deep fakes, and algorithmic targeting, too.

Keywords: Artificial Intelligence in Marketing, Consumer Manipulation, Personalized Marketing, AI Ethics, Psychological Influence, Algorithmic Targeting, Customer Experience, Emotional AI.

1. INTRODUCTION

Artificial Intelligence (AI) has revolutionized the marketing landscape by enabling highly personalized, data-driven interactions between brands and consumers. With tools such as predictive analytics, chatbots, and emotional AI, marketers can deliver content that feels increasingly relevant and human-like (Grewal et al., 2020; Liu-Thompkins et al., 2022). However, this technological empowerment is accompanied by a growing ethical concern: where does enhancement end and manipulation begin?

While existing literature extensively documents AI's ability to enhance customer experiences (De Bruyn et al., 2020; Hoyer et al., 2020), there is a **notable gap** in understanding how **these same AI systems may covertly influence consumer cognition, emotions, and autonomy**.

The intersection of **behavioral science, AI ethics, and marketing manipulation** remains fragmented, with most studies focusing either on technological functionality or general ethical principles—rarely both (Barari et al., 2024; Bhardwaj et al., 2025).

This paper addresses that gap by providing a **dual-perspective framework** that analyzes AI's functional benefits alongside its psychological and physiological influence mechanisms.

In bridging these domains, the study contributes to a more comprehensive and critical discourse on **responsible AI adoption in marketing**, calling for stronger regulatory and ethical safeguards.

i. History of AI Implementation in Marketing

Artificial Intelligence (AI) has squarely become an agent of change in the marketing environment as companies continue to redefine their relationships with customers, in terms of understanding, engaging with and influencing them. Since it allows brands to integrate all the channels used to communicate to the digital environment, can include capabilities like data-driven personalization, automation in real-time (De Bruyn et al., 2020; Grewal et al., 2020).

In an effort to understand the consumer behavior and future expectations better than ever, marketers are on the augment of using machine learning algorithms, natural language processing, and computer vision to decode the behavioral code to better understand customer decision making processes. Big data and computing power have enhanced the development of AI in marketing, which has resulted in the popularization of such tools as chatbots, recommendation systems, voice assistants, and predictive analytics (Nguyen et al., 2023; El Bakkouri et al., 2022).

Such technologies improve the consumer experience due to their convenience, interactiveness, and customization (that can approximate a human form of communication in the form of anthropomorphism of digital interface (Uysal et al., 2022; Letheren et al., 2021).

Nevertheless, this high level of technological sophistication leads to increasing concerns. Ethical concerns related to consent and autonomy, as well as issues of manipulation, have arisen due to the persuasive capacity and the increasing emotional intelligence of the AI system as it impacts consumer cognition and behavioral decision-making (Barari et al., 2024; Bhardwaj et al., 2025).

The dichotomy of AI in marketing as something that can make the user experience significantly better and, at the same time, as a possible method of covert psychological influence extracts at the center of discussion that needs more research.

ii. Rising Duality: Enhancement Cannot be Equated with Manipulation

There is an intricate paradox that arises with the use of AI in marketing. On the one hand, the use of AI allows marketers to create hyper-personalized and contextual experiences that result in customer satisfaction and retention (Liu-Thompkins et al., 2022; Hoyer et al., 2020).

It optimizes service, automates some tasks and makes them interact with companies in real-time, which increases the efficiency of operations and makes them convenient to consumers (El Bakkouri et al., 2022; Xu et al., 2024).

Conversely, it is possible to misuse the same capabilities of the same medicine that improves consumer experience on exploiting consumers through psychological manipulations. The AI technology can take advantage of cognitive biases, appeal to emotional susceptibility, and affect buying behavior without making people consciously aware of the fact (Kim et al., 2023; Bhardwaj et al., 2025).

Other methods, like behavioral nudging and synthetic influencers, along with deep fakes even more erase the difference between persuasion and coercion (Campbell et al., 2022; Carroll et al., 2023). It is such a tension scenario between innovation and intrusion that shows the importance of critical analysis of the ethical and social impacts of AI enabled marketing.

iii. Purpose of the Research and its Relevance

The greatest purpose of this research is to discuss the paradoxical functions of AI in marketing optical ball marketing automation and what was supposed to be relationship enhancement as well as a means of subtle mind control. Indeed, the target audience of the paper is to:

Explore the effects that the AI technologies have on the consumer control, emotional reaction, and decision processes;

- Investigate how AI technologies impact consumer autonomy, emotional response, and decision-making
- Evaluate the ethical boundaries between personalization and manipulation
- Propose a framework for responsible AI use in marketing that preserves consumer trust and well-being.

Such a study is important as it promotes the new discourse on ethical-AI government among consumers. The analysis provides a better comprehension of the trade-offs related to the use of AI to marketers, policymakers, and technologists by synthesizing the existing scholarly knowledge and the practical evolution (Barari et al., 2024; Kumar & Suthar, 2024; Aimen, 2025).

Table 1: Dual Roles of AI in Marketing – Enhancement vs. Manipulation

| Aspect | Enhanced Consumer Experience | Psychological Manipulation |
|------------------------|--|--|
| Personalization | Tailors content, offers, and services based on user preferences (Liu-Thompkins et al., 2022) | Exploits behavioral data to nudge or steer choices without full awareness (Kim et al., 2023) |
| Emotional Intelligence | Uses sentiment analysis to improve service and empathy (Uysal et al., 2022) | Alters mood and emotional state to trigger buying behavior (Bhardwaj et al., 2025) |
| Interaction Channels | Enables 24/7 interaction via chatbots, voice assistants (El Bakkouri et al., 2022) | Creates parasocial relationships that reduce critical thinking (Youn & Jin, 2021) |
| Decision Support | Recommends relevant products/services (Nguyen et al., 2023) | Overwhelms consumers with hyper-targeted options, reducing autonomy (Aimen, 2025) |
| Advertising Innovation | Engages users with AI-generated, dynamic content (Campbell et al., 2022) | Employs deepfakes or manipulative ads without disclosure (Carroll et al., 2023) |
| Data Utilization | Improves user experience through preference modeling (Hoyer et al., 2020) | Invades privacy; uses data without meaningful consent (Kumar & Suthar, 2024) |

2. UNDERSTANDING AI IN MARKETING

i. Definition and Evolution of AI in Marketing

AI in Marketing The use of advanced computational systems that have the ability of simulating human intelligence in marketing processes to automate, optimize and personalize marketing tasks is referred to as AI in marketing. The systems also employ machine learning algorithms, computer vision, natural language processing, and neural networks to process consumers data, analyze it to predict behavior and make decisions that in the past human beings were supposed to control cognitively (De Bruyn et al., 2020; Barari et al., 2024). Development of AI in marketing has also come about due to critical technological milestones. Some of the first automations in terms of marketing tasks were the creation of drip campaigns and segmentation using rule-based systems. In the long run, the realization of big data analytics and real-time monitoring of consumers had led to the emergence of predictive models, which enables firms to predict the need of its customers with startling accuracy (Kar et al., 2023). The current approaches to AI-empowered marketing enable sentiment analyses, interacting with users with human-like conversational agents, and creating adaptable content that is customized to all personal psychological and emotional characteristics (Nguyen et al., 2023; Thomaz et al., 2020).

This direction has transformed the mass communication style of marketing to one that is highly personalised. AI has been able to strengthen diverse touchpoints along the consumer path-to-purchasing including reach, consideration, purchase and the post-purchase relationship where brands communicate, and customers make decisions and establish relationships with the digital entities (Grewal et al., 2020; Uysal et al., 2022).

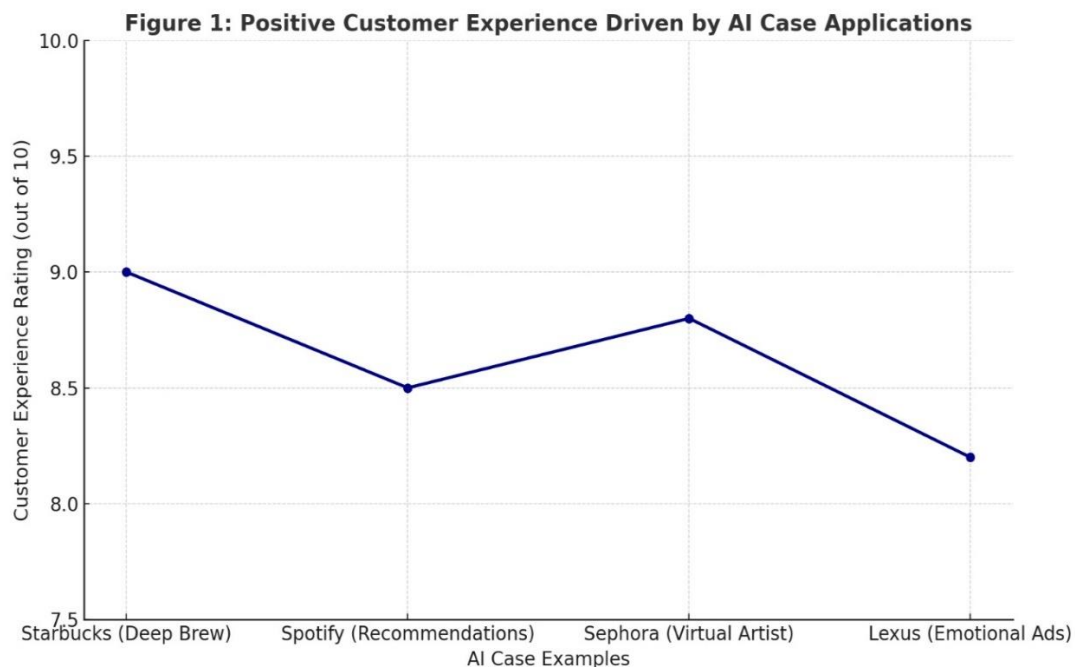


Figure 1: Positive Customer Experience Driven by AI Case Applications

ii. Current Applications and Capabilities

The present applications and capabilities of location are in the realm of concave signaling, the main focus of this webinar.

AI technologies have now been integrated into virtually all areas of contemporary marketing. AI in service to customers is implemented in the form of chatbots, voice assistants, and automatic messaging systems, which can give an immediate response and be available 24 hours a day (El Bakkouri et al., 2022; Youn & Jin, 2021). They are more than just lowering the operational cost as they are also more responsive and engaging by emulating a human interaction pattern.

The reason is that AI has found application in content generation that creates adaptive advertisements, headlines, product descriptions, and even video campaign tailored to segmented audiences or individual users (Campbell et al., 2022). Additionally, recommendation engines, enabled through collaborative filtering and deep learning, take a user through a personal purchase process, basing on their past behaviour and web-traffic trends, as well as extrapolated preferences (Nguyen et al., 2023; Liu-Thompkins et al., 2022). Market research and development of customer insights is also going through an AI revolution. Marketers can now evaluate how consumers respond in real time through sentiment analysis, detect emotions, and take action based on predictive modeling to anticipate their shift in the market (Thomaz et al., 2020; Dwivedi et al., 2023). Such abilities are particularly beneficial in the context of competition where the swiftness and accuracy are paramount.

iii. Personalization and Automation by AI

Among the biggest accomplishments the AI has made in marketing is that it can provide hyper-personalization at a large scale. In contrast to conventional segmentation based on stagnant demographic information, AI-based personalization can be dynamic and real-time, which occurs due to a persistent evaluation of the user behaviour across devices and platforms (De Bruyn et al., 2020; Hoyer et al., 2020). The result is extremely personal product suggestions, promotions and content that acknowledge specific tastes and behavioral indications.

As an example, e-commerce websites have algorithms that are guided by AI to curate the display of various products, offer related ones, and schedule promotions based on the chance of purchase by a consumer. Alongside this, streaming platforms and online media publishers use AI to suggest music, video, and news based on the user and his or her previous listening and emotional habits (Liu-Thompkins et al., 2022; Letheren et al., 2021). AI is not only applied to personalization, but also to campaign optimization. Marketers have the ability to automatically perform A/B testing, manage bids in programmatic advertising, and even schedule social media posts based on the estimated customer activity rates (Barari et al., 2024). Such a degree of automatization maximizes efficiency of the operations and gives marketing teams leather room to concentrate on more strategic and creative activities.

3. THE CONSUMER EXPERIENCE ENHANCEMENT

- **AI and the Personalization and Recommendation Systems**

Als have changed how brands achieve personalization in marketing by letting them offer a personalized experience at scale through the delivery of content, product recommendations, and offers among others. AI-powered personalization is more dynamic, context-sensitive and behavior-based than traditional methods of data-driven personalization that were based on demographic levels and past purchase behavior (De Bruyn et al., 2020; Liu-Thompkins et al., 2022). The patterns of browsing, click-through rates, device type, location and even sentiment are constantly being studied by the machine learning algorithms to make predictions and display what the consumer should be most enticed to do. Examples of this approach are recommendation engines, which Netflix, Spotify, or Amazon use. Rather, they run in form of collaborative or content-based filtering or a mixture of the two to enhance the relevance and accuracy of the recommendations made (Nguyen et al., 2023). This will not only drive conversion up but will also help in customer satisfaction and loyalty.

Nevertheless, too much personalization may end up being considered on the invasive or even manipulative side once it starts to create constraints in consumer choice or allow emotional triggers to stimulate a spur-of-the-moment event (Kim et al., 2023; Bhardwaj et al., 2025). It is an increasing difficulty that ethical limits should be found within the aims of relevance in relation to AI-based recommendation systems.

Original Contribution of This Study

This study offers a distinctive and multidisciplinary contribution to the growing discourse on AI ethics in marketing. Unlike previous literature that either highlights AI's functional role in personalization or raises general ethical concerns, this paper provides a **dual-perspective analysis** by synthesizing insights from **marketing science, psychology, and ethical AI design**.

Specifically, the original contributions of this study are fourfold:

1. A Unique Conceptual Framework

The paper introduces a novel **conceptual model** that maps the dual impact of AI marketing tools—emphasizing both enhanced customer experience and potential psychological manipulation. This framework is grounded in ethical AI theory (IEEE), consumer autonomy theory, and persuasive technology models (e.g., Fogg's Behavior Model), providing a deeper theoretical lens often missing from existing empirical studies.

2. Ethical Mapping of AI Tools in Marketing

By categorizing widely used AI tools (e.g., chatbots, facial recognition, sentiment analysis) based on their influence potential, the study advances an **ethical taxonomy** that highlights how the same tools can lead to either consumer empowerment or behavioral exploitation, depending on their design and deployment.

3. Introduction of the AI Marketing Ethical Risk Matrix

The paper proposes an **AI Marketing Ethical Risk Matrix**, a practical tool for both researchers and practitioners to evaluate AI applications based on their risk levels, ethical sensitivity, and need for regulatory oversight. This matrix adds a pragmatic layer to the theoretical discussion, offering a foundation for future empirical validation.

4. Cross-Disciplinary Synthesis

Through its integration of marketing, behavioral psychology, and AI ethics, this study presents a **cross-disciplinary framework** that enables a more holistic understanding of the challenges and responsibilities involved in using AI in consumer environments. This synthesis is vital to developing sustainable, human-centered marketing practices.

Together, these contributions push the conversation beyond abstract ethics, offering **applied insight and original tools** that can shape more responsible AI marketing strategies in both academic and commercial settings.

Table 2: Applications of AI in Personalization and Recommendation Systems

| Application Area | AI Technique Used | Functionality | Example |
|--|---|---|---------------------------------|
| Product Recommendations | Collaborative Filtering, Deep Learning | Suggests products based on user similarity and behavior | Amazon, eBay |
| Content Curation | Natural Language Processing (NLP) | Personalizes news, videos, and music streams | Netflix, Spotify, YouTube |
| Email Marketing Personalization | Predictive Analytics, Decision Trees | Customizes email content and send times | Mailchimp, HubSpot |
| Dynamic Web Content | Real-Time Behavioral Analysis | Alters webpage layout/content based on visitor behavior | Shopify, Wix |
| Location-Based Offers | Geofencing, Context-Aware Computing | Delivers real-time offers based on geographic location | Starbucks App, Google Ads |
| Social Media Targeting | Audience Segmentation with Machine Learning | Personalizes feed content and ad placement | Facebook, TikTok, Instagram Ads |

- **Enhancement of Customer Service through Chatbots, Virtual Assistants, etc.**

AI has revolutionized the customer service sector by making it possible to always talk to customer service representatives in form of chatbots, voice assistants, and AI based service desk. The tools can be used to perform various tasks such as providing an answer to frequently asked questions, fulfilling orders, and resolving problems without the inclusion of human beings (El Bakkouri et al., 2022; Youn & Jin, 2021).

Modern chatbots leverage NLP and sentiment analysis to detect customer intent and emotional tone, allowing for smoother and more empathetic interactions. Virtual assistants such as Google Assistant or Amazon Alexa extend these capabilities by integrating with broader ecosystems, facilitating omnichannel service delivery (Uysal et

al., 2022). These AI systems not only reduce wait times and improve efficiency but also provide consistent and scalable customer experiences. However, their inability to handle nuanced or emotionally sensitive issues remains a limitation, often requiring escalation to human agents (Pavone et al., 2023; Tsai et al., 2021).

• Emotional AI and Artificial Empathy

Emotional AI—also known as affective computing—refers to the use of artificial intelligence systems that can detect, interpret, and respond to human emotions. These systems rely on inputs such as facial expressions, voice tone, text sentiment, and physiological signals to gauge emotional states and tailor marketing messages or services accordingly (Liu-Thompkins et al., 2022; Grewal et al., 2020).

Artificial empathy, a subfield of emotional AI, aims to replicate empathetic responses to create a more human-like interaction experience. For example, chatbots in healthcare or retail can recognize frustration in a customer's message and respond with calming language or escalate the issue for resolution (Youn & Jin, 2021). In customer support environments, this can significantly improve perceived care and customer satisfaction.

While artificial empathy lacks genuine emotional understanding, it often succeeds in creating the *illusion* of empathy, which is sufficient to improve engagement and trust in many service scenarios (Uysal et al., 2022). However, this simulated emotional responsiveness also raises ethical concerns when used to manipulate emotional vulnerability for commercial gain (Kim et al., 2023).

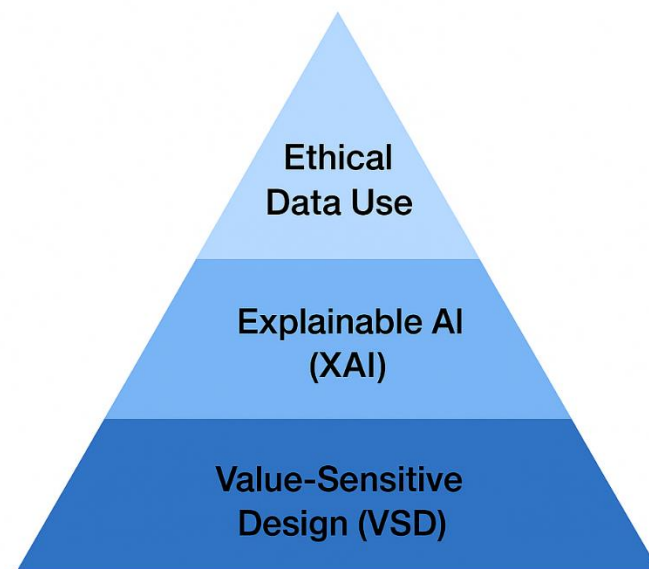


Figure 2: Responsible AI Framework for Marketing

Figure 2: Responsible AI Framework for Marketing

• Case Examples of Positive Customer Experience

Numerous case studies illustrate the capacity of AI to deliver highly positive and personalized customer experiences:

- ✚ **Starbucks' Deep Brew** uses AI to personalize promotions, store inventory, and digital content based on customer behavior and location. The integration of real-time data enables tailored offers and loyalty programs, enhancing customer retention and satisfaction (De Bruyn et al., 2020).
- ✚ **Spotify's Recommendation Engine** employs deep learning to curate daily mixes, discover weekly playlists, and generate music suggestions based on mood and listening patterns. This personalized engagement model has contributed significantly to user loyalty (Nguyen et al., 2023).
- ✚ **Sephora's Virtual Artist** leverages AI and augmented reality to help customers virtually try on makeup, combining visual recognition with preference data to deliver personalized product recommendations. This interactive experience has improved customer confidence and conversion rates (Lv et al., 2024).
- ✚ **Lexus' Emotional Advertisement Campaign**, created using IBM Watson, analyzed consumer emotions to craft emotionally resonant advertising. This demonstrated how AI can align marketing content with human feelings to improve message reception (Campbell et al., 2022).

These examples reveal the immense potential of AI not only to simplify and automate interactions but also to foster a more emotionally engaging and humanized consumer journey—when deployed responsibly.

4. PHYSIOLOGICAL AND PSYCHOLOGICAL MANIPULATION DEBATE

i. Barely Disguised AI Impact on Shoppers and Their Decisions

There are usually areas in which AI systems are used in the background and are able to inform consumer behaviors through recommendation engines, algorithmic curation and predictive prompts. These tools are not just a matter of reflecting preference, but rather a way of pushing behaviors in one way or another with some worry about the degree of consumer autonomy left (Grewal et al., 2020).

As an example, AI can be used to make the same digital advert get more click-throughs by a few manipulations on time, language, or emotional context in ways that consumers remain unaware of the psychological process happening with their minds (Thomaz et al., 2020).

Such type of influence is especially effective due to the fact that it can easily bypass the level of conscious awareness and trigger subconscious urges and prejudices. As opposed to conventional marketing based on persuasion, the methods involving AI are more manipulative due to the personalization loop, amplifying particular consumption patterns (Youn & Jin, 2021).

ii. Autonomy, Consent and Subliminal persuasion Issues

Marketing assumes that consumers are rational beings who are able to make rational choices. Nevertheless, the assumption is undermined when AI uses subliminal persuasion, that is, messaging transipients under the level of conscious perception (Kim et al., 2023).

Personalization without transparency also might go against informed consent to the extent that consumers do not understand how their data are being utilized to induce a response (Liu-Thompkins et al., 2022).

Besides, in online systems, consent systems are frequently hidden deep in a pile of complicated terms of service or it is in case opt-ins. This poses a big ethical issue since users may be oblivious to the psychological profiling and behavioural targeting that they have obliged (Uysal et al., 2022).

iii. Biased Thinking and Emotional Appeals

By applying the concept of cognitive heuristics AI aims to maximize engagement and conversion; in simple terms, cognitive heuristics essentially refers to mental shorthand that humans apply when going through information. Scarcity bias, confirmation bias, and the anchoring effect are the examples of it that are quietly supported by adaptive algorithms (Barari et al., 2024).

Emotional targeting compounds the process by recognizing and acting on the level of affective state of a consumer, usually amplifying urgency or desire (Letheren et al., 2021).

Although these methods are effective in making things relevant, they render the demarcation between personalization and exploitation ambiguous. Consumers might feel they are the subjects of their own volition when it is learning algorithms that are seeking and exploiting emotional and psychological weaknesses in order to strengthen them (Nguyen et al., 2023).

iv. Deepfakes, Hyper-Personalization, and Dark Nudges

Innovative technologies, such as deepfakes, or synthetic media created by AI, can construct authentic-sounding voices, visual, and video aspects to facilitate appealing content verging on deception (Campbell et al., 2022). In advertising, it may be digitalized people instrumental to selling goods or creating demonstrations of showcasing endorsements that look real yet are completely created.

Whereas this modality of hyper-personalization enhances relevance, it faces issues when it invades personal spaces or such behavioral micro-targeting scales to such a degree that users perceive being observed or manipulated by their digital devices (El Bakkouri et al., 2022).

Likewise, dark nudges the tendency to get nudged, the design feature or the content presented manipulates the user in certain behavior with the help of artificial intelligence comprehending the information about psychological triggers (Grewal et al., 2020).

5. MORAL AND SOCIAL CONSEQUENCES

i. Transparency and Disclosure issues

A lack of transparency when it comes to the functioning of AI systems and their market effects is one of the most severe ethical issues revolving around AI in marketing. Although consumers might peep out that they are in touch with a digital system of experiences, they most often do not know to what scale their behaviors, preferences, and psychological profiles are monitored or manipulated by digital systems (Liu-Thompkins et al., 2022). Opacity of the AI algorithms, popularly known as the black box issue, implies that even the marketers and the developers cannot provide an explanation of how a particular result or decision has been determined (Campbell et al., 2022). In absence of clear transparency, business owners are holding back on consumers in terms of being able to make conscious decisions regarding their willingness to be manipulated by AI in their buying process (Barari et al., 2024).

ii. Risk of Trust, Information Privacy and Abuse

Consumer-brands relationships are built on trust, but AI has data needs that create new issues of vulnerability. Due to the increasing exposure to risks of unethical data misuse, identity profiling, and algorithmic discrimination, consumers experience them (Uysal et al., 2022). Such sensitive data, including but not limited to browsing, location history, and even voice or facial recognition data, can be used to construct hyper-targeted campaigns, and sometimes such efforts fall over ethical boundaries. The marketing of personal data as a commodity has also brought into debate the aspect of exploitation especially among the vulnerable groups who might be unfamiliar with digital literacy or unaware of their rights in handling their data (Nguyen et al., 2023). AI marketing systems that experience trust breaches will cause irrevocable reputational harm to brands and impose a chilling effect on users.

Table 3: Ethical Issues vs. Legal and Regulatory Responses in AI Marketing

| Ethical Issue | Description | Current Legal/Regulatory Response |
|----------------------------|---|---|
| Lack of Transparency | Opaque AI systems manipulate without clear explanation. | EU AI Act mandates transparency for high-risk AI but excludes most marketing use cases. |
| Data Privacy Violations | Unauthorized or excessive collection of personal data. | GDPR offers protection, but enforcement varies; lacks marketing specificity. |
| Psychological Manipulation | Emotional and cognitive exploitation via personalization. | Few direct regulations; mostly governed by advertising ethics codes. |
| Lack of Informed Consent | Users often unknowingly opt in to data sharing and profiling. | Consent frameworks exist (e.g., GDPR), but dark patterns undermine effectiveness. |
| Algorithmic Discrimination | Biased targeting may reinforce social inequalities. | AI Act promotes fairness, but real-time advertising bias is hard to audit or control. |

i. Laws and Legislative Vacuums

Regulatory institutions are starting to act to mitigate the ethical dilemma raised by AI. The European Union is also planning to implement the AI Act, which also offers a risk-based approach to categorizing AI systems and plans regarding the requirement of transparency, human dominance, and control over data (European Commission, 2021).

But marketing-wise use cases tend to get into grey areas, and thus they are not bound under proper regulation. Laws like the GDPR to protect data are present in many countries, yet they are insufficient to cover in great detail the intricacies of real-time behavioral profiling and automatized decision-making when it comes to marketing (Grewal et al., 2020). The absence of international standardised laws give rise to a system of regulatory disunity, and this provides room to unscrupulous companies to slip through the loopholes.

6. STEPS TOWARD RESPONSIBLE AI IN MARKETING

As AI becomes more deeply embedded in marketing, a **responsible framework** is crucial to ensure that innovation does not compromise consumer well-being or autonomy. This section outlines a practical and ethical approach to aligning marketing goals with **consumer rights and societal values**.

- Proposed Framework to Balance Personalization and Ethics

The ideal path forward involves designing AI systems that maximize **value-driven personalization** while respecting consumer boundaries. This requires a **hybrid framework** with three pillars:

1. **Ethical Data Use** – Marketers must collect data transparently, minimizing surveillance and ensuring consent (Nguyen et al., 2023).
2. **Explainable AI (XAI)** – AI models should offer interpretable outcomes, enabling users to understand how and why decisions were made (Campbell et al., 2022).
3. **Value-Sensitive Design (VSD)** – Systems should be built with embedded ethical considerations, such as fairness, accountability, and inclusiveness (Letheren et al., 2021).

Such a framework ensures that AI-driven personalization enhances engagement without veering into manipulation.

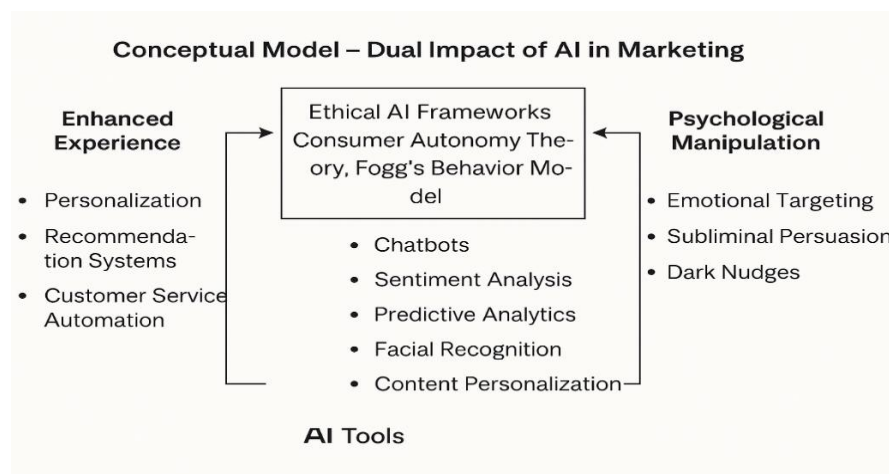


Figure 3: Conceptual Model Dual Impact of AI in Marketing

- Consumer Protection Guidelines

To guard against exploitation, clear **consumer protection standards** are essential:

- **Opt-in, not opt-out** models: Users should actively choose to engage with AI personalization rather than being defaulted into it.
- **Right to explanation**: Consumers must be informed when AI influences their decisions and why certain content is shown (Uysal et al., 2022).
- **Ethical audits**: Regular third-party assessments of AI tools can identify biases, hidden persuasion tactics, or breaches in data handling.

These measures empower users to remain **active participants** in digital environments rather than passive targets of algorithmic influence.

- Transparent Algorithmic Design and Accountability

Transparency is both a **technical** and **institutional** responsibility. Developers and marketers must move beyond vague disclosures and embed **clear documentation** of how AI systems function, their training data sources, and potential limitations (Grewal et al., 2020).

Moreover, accountability must be enforced through:

- **Designated oversight roles** within organizations.
- **Whistleblower protections** for reporting unethical AI use.
- **Public algorithm registries** for high-impact marketing systems, especially in vulnerable sectors like healthcare or finance.

Responsible marketing AI requires a **cross-disciplinary alliance** among technologists, marketers, ethicists, and regulators to ensure that consumer rights evolve alongside technology.

7. CONCLUSION

Artificial intelligence in marketing introduces a severe paradox as much as it gives the brand the power to provide hyper-personalized experiences, it also brings about dire ethical and psychological concerns. There has been an examination of the duality of AI in marketing in this paper with a focus on the conflict between increased consumer satisfaction and implicit manipulation of the consumer in rather subtle, hard to detect ways, without necessarily their knowledge or consent. On the one hand, AI has also made it possible to achieve radical innovations in the sphere of recommending systems, emotional interaction and customer service. The data-driven insights enable brands to predict, act on a real-time basis, and build loyalty. Such advancements become of value to both the consumer and the marketer when engaged in responsibly. Conversely, the growing set of absolute opportunities to predict behavior, emotional profiling, and hyper-personalization present a threat to autonomy, privacy, and trust with AI.

The use of such methods as deepfakes and dark nudges without a certain level of transparency can amount to a crossing of ethical lines along with knouting in the weaknesses and flaws of individuals who are consumers.

The future pathway will be to develop responsible AI governance that incorporates a significant degree of transparency, accountability, and equity. Value-sensitive approach as suggested in this paper can foster sustainable implementations of the marketers, the developers as well as the policymakers that will safeguard the interests of consumers without compromising innovativeness. With the emergence of laws such as the EU AI Act, the demand and awareness of consumers keep growing, and marketing industries face a pivot point. It is up to today and how people choose, whether to use AI as an empowerment tool or a manipulative one. After all is said and done, it is important that marketers pose a question not of what AI can do, but what it should do.

References

- 1) Bhardwaj, S., Jain, V., Mahapatra, D., & Sindhvani, R. (2025). Exploring the dark side of AI and its influence on consumer emotion. *Journal of Consumer Behaviour*, 24(2), 529-544. <https://doi.org/10.1002/cb.2431>
- 2) Barari, M., Casper Ferm, L. E., Quach, S., Thaichon, P., & Ngo, L. (2024). The dark side of artificial intelligence in marketing: meta-analytics review. *Marketing Intelligence & Planning*, 42(7), 1234-1256. <https://doi.org/10.1108/MIP-09-2023-0494>
- 3) Belanche, D., Belk, R. W., Casaló, L. V., & Flavián, C. (2024). The dark side of artificial intelligence in services. *The Service Industries Journal*, 44(3-4), 149-172. <https://doi.org/10.1080/02642069.2024.2305451>
- 4) Liu-Thompkins, Y., Okazaki, S., & Li, H. (2022). Artificial empathy in marketing interactions: Bridging the human-AI gap in affective and social customer experience. *Journal of the Academy of Marketing Science*, 50(6), 1198-1218. <https://doi.org/10.1007/s11747-022-00892-5>
- 5) De Bruyn, A., Viswanathan, V., Beh, Y. S., Brock, J. K. U., & Von Wangenheim, F. (2020). Artificial intelligence and marketing: Pitfalls and opportunities. *Journal of Interactive Marketing*, 51(1), 91-105. <https://doi.org/10.1016/j.intmar.2020.04.007>
- 6) Grewal, D., Kroschke, M., Mende, M., Roggeveen, A. L., & Scott, M. L. (2020). Frontline cyborgs at your service: How human enhancement technologies affect customer experiences in retail, sales, and service settings. *Journal of Interactive Marketing*, 51(1), 9-25. <https://doi.org/10.1016/j.intmar.2020.03.001>
- 7) Kim, T., Lee, H., Kim, M. Y., Kim, S., & Duhachek, A. (2023). AI increases unethical consumer behavior due to reduced anticipatory guilt. *Journal of the Academy of Marketing Science*, 51(4), 785-801. <https://doi.org/10.1007/s11747-021-00832-9>
- 8) André, Q., Carmon, Z., Wertenbroch, K., Crum, A., Frank, D., Goldstein, W., ... & Yang, H. (2018). Consumer choice and autonomy in the age of artificial intelligence and big data. *Customer needs and solutions*, 5(1), 28-37. <https://doi.org/10.1007/s40547-017-0085-8>
- 9) Dadwal, S. S., Bowen, G., Jahankhani, H., Nadda, V., & Kumar, P. (2024). Market Grooming: Grooming Customers Using Artificial Intelligence. In *Market Grooming: The Dark Side of AI Marketing* (pp. 1-35). Emerald Publishing Limited. <https://doi.org/10.1108/978-1-83549-001-320241001>

- 10) Hoyer, W. D., Kroschke, M., Schmitt, B., Kraume, K., & Shankar, V. (2020). Transforming the customer experience through new technologies. *Journal of interactive marketing*, 51(1), 57-71. <https://doi.org/10.1016/j.intmar.2020.04.001>
- 11) Aimen, T. (2025, January). Cognitive freedom and legal accountability: Rethinking the EU AI act's theoretical approach to manipulative AI as unacceptable risk. In *Cambridge Forum on AI: Law and Governance* (Vol. 1, p. e20). Cambridge University Press. doi:10.1017/cfl.2025.4
- 12) Sun, Y., Li, S., & Yu, L. (2022). The dark sides of AI personal assistant: effects of service failure on user continuance intention. *Electronic Markets*, 32(1), 17-39. <https://doi.org/10.1007/s12525-021-00483-2>
- 13) Pavone, G., Meyer-Waarden, L., & Munzel, A. (2023). Rage against the machine: experimental insights into customers' negative emotional responses, attributions of responsibility, and coping strategies in artificial intelligence-based service failures. *Journal of Interactive Marketing*, 58(1), 52-71. <https://doi.org/10.1177/10949968221134492>
- 14) Thomaz, F., Salge, C., Karahanna, E., & Hulland, J. (2020). Learning from the Dark Web: leveraging conversational agents in the era of hyper-privacy to enhance marketing. *Journal of the Academy of Marketing Science*, 48(1), 43-63. <https://doi.org/10.1007/s11747-019-00704-3>
- 15) Hermann, E. (2022). Leveraging artificial intelligence in marketing for social good—An ethical perspective. *Journal of Business Ethics*, 179(1), 43-61. <https://doi.org/10.1007/s10551-021-04843-y>
- 16) Uysal, E., Alavi, S., & Bezençon, V. (2022). Trojan horse or useful helper? A relationship perspective on artificial intelligence assistants with humanlike features. *Journal of the Academy of Marketing Science*, 50(6), 1153-1175. <https://doi.org/10.1007/s11747-022-00856-9>
- 17) Dwivedi, Y. K., Kshetri, N., Hughes, L., Rana, N. P., Baabdullah, A. M., Kar, A. K., ... & Yan, M. (2023). Exploring the darkverse: A multi-perspective analysis of the negative societal impacts of the metaverse. *Information systems frontiers*, 25(5), 2071-2114. <https://doi.org/10.1007/s10796-023-10400-x>
- 18) Campbell, C., Plangger, K., Sands, S., & Kietzmann, J. (2022). Preparing for an era of deepfakes and AI-generated ads: A framework for understanding responses to manipulated advertising. *Journal of Advertising*, 51(1), 22-38. <https://doi.org/10.1007/s10796-023-10400-x>
- 19) Lv, L., Chen, S., Liu, G. G., & Benckendorff, P. (2024). Enhancing customers' life satisfaction through AI-powered personalized luxury recommendations in luxury tourism marketing. *International Journal of Hospitality Management*, 123, 103914. <https://doi.org/10.1016/j.ijhm.2024.103914>
- 20) Kumar, D., & Suthar, N. (2024). Ethical and legal challenges of AI in marketing: an exploration of solutions. *Journal of Information, Communication and Ethics in Society*, 22(1), 124-144. <https://doi.org/10.1108/JICES-05-2023-0068>
- 21) El Bakkouri, B., Raki, S., & Belgnaoui, T. (2022). The role of chatbots in enhancing customer experience: literature review. *Procedia Computer Science*, 203, 432-437. <https://doi.org/10.1016/j.procs.2022.07.057>
- 22) Youn, S., & Jin, S. V. (2021). In AI we trust?" The effects of parasocial interaction and technopian versus luddite ideological views on chatbot-based customer relationship management in the emerging "feeling economy. *Computers in Human Behavior*, 119, 106721. <https://doi.org/10.1016/j.chb.2021.106721>
- 23) Nguyen, M., Casper Ferm, L. E., Quach, S., Pontes, N., & Thaichon, P. (2023). Chatbots in frontline services and customer experience: An anthropomorphism perspective. *Psychology & Marketing*, 40(11), 2201-2225. <https://doi.org/10.1002/mar.21882>

- 24) Carroll, M., Chan, A., Ashton, H., & Krueger, D. (2023, October). Characterizing manipulation from AI systems. In Proceedings of the 3rd ACM Conference on Equity and Access in Algorithms, Mechanisms, and Optimization (pp. 1-13). <https://doi.org/10.1145/3617694.3623226>
- 25) Golf-Papez, M., Heller, J., Hilken, T., Chylinski, M., de Ruyter, K., Keeling, D. I., & Mahr, D. (2022). Embracing falsity through the metaverse: The case of synthetic customer experiences. *Business Horizons*, 65(6), 739-749. <https://doi.org/10.1016/j.bushor.2022.07.007>
- 26) Xu, Y. W., Cai, R. R., & Gursoy, D. (2024). When disclosing the artificial intelligence (AI) technology integration into service delivery backfires: Roles of fear of AI, identity threat and existential threat. *International Journal of Hospitality Management*, 122, 103829. <https://doi.org/10.1016/j.ijhm.2024.103829>
- 27) Tsai, W. H. S., Lun, D., Carcioppolo, N., & Chuan, C. H. (2021). Human versus chatbot: Understanding the role of emotion in health marketing communication for vaccines. *Psychology & marketing*, 38(12), 2377-2392. <https://doi.org/10.1002/mar.21556>
- 28) Khogali, H. O., & Mekid, S. (2023). The blended future of automation and AI: Examining some long-term societal and ethical impact features. *Technology in Society*, 73, 102232. <https://doi.org/10.1016/j.techsoc.2023.102232>
- 29) Kar, A. K., Varsha, P. S., & Rajan, S. (2023). Unravelling the impact of generative artificial intelligence (GAI) in industrial applications: A review of scientific and grey literature. *Global Journal of Flexible Systems Management*, 24(4), 659-689. <https://doi.org/10.1007/s40171-023-00356-x>
- 30) Letheren, K., Jetten, J., Roberts, J., & Donovan, J. (2021). Robots should be seen and not heard... sometimes: Anthropomorphism and AI service robot interactions. *Psychology & Marketing*, 38(12), 2393-2406. <https://doi.org/10.1002/mar.21575>