

Case Report

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# Conceptualizing Ethical AI-Enabled Marketing: Current State and Agenda for Future Research

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Case Report

# Conceptualizing Ethical AI-Enabled Marketing: Current State and Agenda for Future Research

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Abstract: This paper addresses the conceptual exploration of various issues that form an integral part of the ethical dimensions surrounding the use of artificial intelligence (AI) in the field of marketing. We critically review some of the main ethical challenges AI poses to humanity: privacy, data security, bias, transparency, and accountability. Therefore, we will discuss the delicate balance between exploiting the transformation potential of AI for personally designed marketing strategies and ethical imperatives to safeguard the rights of consumers to retain trust. Then, the present regulatory landscape responding to these ethical challenges will be assessed by building on effective regulation, like the GDPR, existing proposed legislative frameworks, and industry guidelines. To underscore the role of an ongoing dialogue between marketers, technologists, ethicists, and regulators for developing a responsible AI ecosystem in marketing. Further, strategic recommendations for implementing company-based ethical AI marketing practices. The further strong guidelines provide enhancement transparency to consumers and investment in research to remove biases from algorithms. It also underscores principal scopes of further research and development, focusing on the need for new-age solutions to guide the ethical quagmires that AI-led marketing throws up. We suggest that integration should be done proactively and collaboratively. Thus, if attention is paid more to ethics and multidisciplinary dialogue, only such hyperbolic promises can be realized by AI-driven marketing. There are such promises through which AI-driven marketing will meet business goals and be huge at societies' values.

**Keywords:** artificial intelligence (AI); AI ethics; marketing; privacy; data security; bias; transparency; accountability; trust; Regulatory Frameworks for AI

### 1. Introduction

At the forefront of this technological revolution, Artificial Intelligence (AI) emerges as a revolutionary force in marketing that reshapes classical customer engagement and data analysis paradigms. Artificial intelligence (AI) in marketing holds a new turn in which advanced algorithms and an extensive data set play to usher in competitive personalization and efficiency [1]. This, however, faces a myriad of ethical questions, which need to balance a tightrope between AI potential and ethical marketing; key issues among them are privacy, data security, and algorithmic bias [1].

The ethical landscape of AI in marketing is said to form an almost thicket complex web of concerns that range far beyond any immediate benefits presented by AI applications. In this specific context, the authors identified the relevance of addressing ethical issues with AI-based predictive marketing. In fact, as it has been described by [2] it represents far-reaching ethical directives, which shall represent a broad array of issues. On the other hand, [3] opines on this necessity of ethical

alertness and gives reference to its complexities concerning organizational AI ethical programs. Therefore, the use of AI in marketing requires high technology development, coupled with great dedication to the guidelines of morality, which, at the end of it all, will secure the interests of the consumer, and be assured of fairness [3–5].

Such an environment would, therefore, warrant a critical look at the ethical underpinning of the rapidly adopted AI in the various marketing strategies. As AI systems become more autonomous in decision-making, the responsibility for such decisions is often greyed out, especially in contexts where such decisions can affect the privacy and consent of consumers. Therefore, this growing reliance on algorithmic processes creates concern concerning the level of transparency and explain ability in AI decision-making that may, in reality, result in a deficit of trust between consumers and brands [6]. Therefore, to guarantee the main two points: data privacy and greater usage of AI in marketing for individual support, there should be a balance between ethics and innovation [7]. In this complicated view, using AI in marketing should respond to ethical standards to answer questions related to the usage of AI technologies by developing an ethical framework, which considers both social responsibility and ethical standards for all stakeholders [8].

In marketing and advertising campaigns there are many issues related to social and ethical issues, which create ethical dilemmas related to data security, privacy, transparency, and bias, which may exist in current society. The newest studies, however, reflect the same pressing question that [9] has raised, calling for total transparency, fairness, and non-discrimination concerning the data and AI models to assure companies that they include diverse data sources and make regular audits. Moreover, the concept of consumer confidence has become one of the fundamental notions to be handled by AI marketing strategies, and it needs to balance high personalization with due respect for consumers' privacy [9,10].

They are responding to some of the challenges with new ideas, such as an independent certification program of an AI-enabled marketing system for organizations. The program aims to develop such practices to compare the marketing systems with set ethical standards, thus building consumer confidence for the equal playing field for companies, irrespective of their size. Such a certification program will give attention to the need for AI marketing practices with the corresponding ethical consideration to make sure that the implementation of technology should proceed for the betterment of the marketing field but not by letting the corresponding ethical consideration of the same be its causality [11].

If AI-driven pace can only remodel marketing contours, then the increasing prominence of this discourse on ethical consideration underlines the necessity for scholars, practitioners, and policymakers to continue the dialogue. This paper, therefore, draws from insights by [1,2] among many others, to surface the ethical dimensions of AI-enabled marketing, including the challenges, opportunities, and directions toward which the discipline is bound to transform. To this end, therefore, the paper attempts to contribute toward the nascent but fast-maturing body of literature on AI ethics in marketing with a nuanced perspective of how the industry should calibrate its interests vs. that of customers and society in general, based on intensive analysis and discussions.

#### 2. Materials and Methods

This study paper is a qualitative research paper including both a literature review and a case study. A case study is a widely used methodology for social research [12]. The qualitative case study approach is used to study complex phenomena within a normal environment using various data sources and different data collection methods, it is widely used in social science, and business studies it includes research design, data collection, analysis, results, and conclusions [13]. After an in-depth literature review about ethical dilemmas when using AI in marketing, which may have a negative impact on business, three Cases of Facebook's Ad Delivery Algorithm, YouTube's Recommendation Algorithm, and Amazon's AI Recruitment Tool have been presented and discussed as examples of ethical dilemmas. The cases show how the companies respond to such ethical delimmas by innovative solutions to reach best practices. Then after discussing these cases the conclusion and recommendations were presented.

# 3. Literature Review

# 3.1. AI Marketing Technologies

With so many AI marketing technologies requiring a deep review, we aim to look into how data analytics, machine learning (ML), and natural language processing (NLP) revolutionize the marketing domain. The overview looks towards the understanding and provides application supported by relevant academic and industry insight towards informed understanding and the latest ethical considerations.

# 3.1.1. Data Analytics in Marketing

Data analytics provides a base for marketing strategies through which business organizations can avail of meaningful insight from big data. Companies customize marketing to fit the unique needs of a target group through the behavior of consumers, the pattern of purchase, and the interaction of social media. For example, it has been explained that data analytics enables better insight into the customer journey, improves customer engagement, and optimizes marketing spend [14]. Further integration with advanced analytics, such as predictive analytics, will, in turn, allow the marketer to forecast future consumer behaviors, making it an even better decision-enhancing tool [15].

Concerning data analytics in consumer behavior, modern data analytics has changed the ballgame through which marketers previously understood and forecasted consumer behavior. Modern data analysis techniques enable these marketers to predict future purchase behaviors better and uncover more patterns in consumer engagements than traditional methods. The authors believe that the best highlights are those showing the importance of customer data when a company considers developing effective marketing strategies. This points out how the correct analysis of transaction data will ignite more successful efforts in marketing. On the same line, [16] adds that big data can go further down to a micro-segmentation level and fulfill customized, personalized marketing based on individual-level consumer behavior and preference insights.

# 3.1.2. Machine Learning in Marketing

Therefore, with machine learning—one of the subset tools of AI—such predictive and decision-making analytics can further rise to the level of marketing strategies. ML algorithms process data and can identify patterns and insights that would be practically impossible for the human mind to comprehend at the scale of the process. This study thus vividly shows that applying ML algorithms to customer segmentation, targeting, and personalization greatly enhances campaign effectiveness [17]. Further, ML-driven models help optimize pricing strategy and cross-selling or up-selling products through efficient recommendation systems to maximize revenue and customer satisfaction [18]

Concerning Machine Learning in Personalised Marketing, due to machine learning's capability of processing and learning from enormous data sets, personal marketing uses it heavily. ML can predict an individual's preferences according to past consumer behavior. Thus, the predictive model can tailor the marketing message. [19] argue that ML facilitates real-time personalization, which may increase involvement and customer satisfaction. Lastly, ML predictive power ensures that marketing strategies are dynamically adjusted in time to keep the relevance of marketing messages on each consumer's changing preferences and needs [20].

# 3.1.3. Natural Language Processing (NLP) in Marketing

Such technology supports understanding, interpretation, and authoring in natural human language, making the interaction thus not only engaging but also personal for the customer. This includes using chatbots and virtual assistants to provide customers with 24/7 support in areas [21] and sentiment analysis tools used to determine public feelings and opinions from social media data on brand sentiment [22]. These applications enhance the level of customer experience and, at the same

time, enable the delivery of essential insights to the marketer concerning the customers' preferences and concerns in forming strategies for developing content.

Natural Language Processing (NLP) in Automated Customer Service: NLP has significantly changed automated customer service to produce a more fluid and efficient interaction of the AI systems with the consumers. Examples include immediately answering customers' questions to render support and help to customers in real time through chatbots and virtual assistants utilizing NLP. [23] bring forth the roadmap for developing conversational agents capable of participating in meaningful dialogues with customers, thereby enhancing the customers' service experience. This would improve customer satisfaction and free human customer service representatives from particular routine and repetitive tasks, thus providing time and resources that could be applied to issues of a higher order of complexity.

# 3.2. Integrating Data Analytics

With data analytics, machine learning, and natural language processing, marketers can develop holistic strategies that aim to cover every field of consumer engagement. The approach reflects a holistic yet personalized view wherein every touchpoint must be optimized for maximum effectiveness, from understanding consumer behavior and personalizing marketing messages to automating customer service. Thus, [24] argues that in this synergy of technologies, market innovations can be attainable for the solutions that offer a competitive edge. Using technologies concerning ethics, respecting consumer privacy, and avoiding bias are the most important ways people can have trust and credibility in technologies [25]. Leveraging the power of data analytics, machine learning, and natural language processing, it seeks to help marketers get deeper insights into consumer behaviors even better to personalize their marketing and customer service experiences. Indeed, if used ethically and with the utmost ethical and thoughtful behavior, it would hold great promise for transforming marketing practices into more meaningful connections with consumers.

Related to Integration and Ethical Considerations, combining data analytics, ML, and NLP in marketing is a source of efficiency, and effectiveness, and raises equally critical ethical considerations. The other one encompasses the privacy challenges that arise from big data analytics and should, therefore, demand strict data governance. Compliance should also be followed up on regarding privacy regulations [26]. The potential for bias in these algorithms, in turn, represents the need for transparent and fair data practices so that marketing strategies do not underlie discrimination against any particular class of groups [27]. The ultimate effect is that AI technologies, especially data analytics, machine learning, and natural language processing, have and will continue revolutionizing marketing with more personalized, efficient, data-driven strategies. These technological leaps are, however, being accompanied by increases in the need to consider ethical issues regarding privacy, data security, and algorithmic bias. It would mean, then, that marketers could responsibly use AI to meet the ethics standard, thus earning the trust of an audience.

# 3.3. Emerging Dilemmas

The focus of this importance has meant areas that underscore honesty, integrity, and fairness in dealing with consumers. The traditional focus of ethical marketing has been on issues related to truth in advertising, consumer privacy, and manipulative sales practices. Formal regulations, such as those emanating from the Federal Trade Commission (FTC) in the United States, are self-regulated by industries through codes of ethics [28]. The development of marketing ethics has been a parallel process to social changes and, therefore, reflects increasing consumer awareness and perception of its more significant demand for corporate social responsibility. The modern advent of AI technologies has opened the door to a series of new ethical dilemmas that conflict with traditional marketing ethical frameworks. As AI helps to sift through giant sets of data, it also predicts consumer behavior, and thus, it facilitates efforts at the personal level in marketing, giving rise to new complex issues related to privacy, security, and consent of the data. For example, the vast data collection practices that AI algorithms need to operate correctly raise the question of consumer surveillance and data

protection, thus demanding stricter requirements for data protection [25]. Using AI in personalized marketing further raises questions of where to draw the line on personalization and manipulation because the algorithms might strive to exploit individuals' psychological vulnerabilities in influencing consumers' choices [29]. Another critical issue related to AI technologies in marketing is algorithmic bias. The AI systems are as biased as the data on which they are trained. If not treated properly, there is a high possibility that they will perpetuate and amplify historical biases. This will, in essence, lead to discriminatory marketing practices based on prejudiced data, targeting, or exclusion from certain groups of consumers [30]. Meeting these challenges calls for technological solutions and an ethical framework within which there is a keen sense of fair, transparent, and accountable development and deployment of AI.

Further, the use of algorithms in AI, often called a "black box," thwarts transparency and thus questions the ability of consumers and regulators to rationalize how these decisions are reached. This non-transparency leads to a lack of trust and, therefore, calls for the establishment of ethical standards to ensure explainability and accountability in AI-driven marketing practices. Pasquale, as such, all of these have supported the argument that several different ethical AI frameworks need to be built around principles of informed consent, protection of privacy, fairness, and transparency at the core [31]. The frameworks guide the responsible manner in which AI should be utilized in marketing to guarantee that its application of technological developments ensures improvement in the consumer experience and meets ethical standards. With that said, introducing AI technologies in marketing carries another set of new ethical dilemmas in the traditional existing ethical frameworks. This brings about a multidimensional challenge that demands, among other things, technological innovations, guiding principles for the development of ethical principles, and regulatory surveillance. Marketers adopting ethical AI practices will navigate the digital age's complexities, building trust and garnering long-term relationships with their consumers.

# 3.4. Ethical Implications of AI in Marketing

Implementing Artificial Intelligence (AI) in marketing and other planks has brought forward improved operational efficiency, customer intelligence, and personalized services in a big way. AI's training and decision-making process depends entirely on vast datasets, raising a deep concern concerning privacy, data collection practices, and the safety of consumers' information. These are technical and ethical concerns that will require an appropriate understanding of comprehensive strategies to be put in place.

# 3.4.1. Privacy and Data Collection Concerns

These AI systems widely used in marketing rely on thorough Big Data analysis of consumer behavior to predict their activity, preferences, and possible future activity. This involves collecting vast personal information, from basic demographic details to the most sensitive data, such as location, financial transactions, and even biometric data. Therefore, [32] purport that this practice may, in one way, interfere with individual privacy and create a surveillance ecosystem whereby the consumers are under observation all along. Most such data collections are very granular, going way above the level to be able to provide a legitimate service and becoming overreaching into the individual lives that risk being misused in the future [25]. More so, the data collection methods are mostly hazy; thus, the consumers have no idea to what extent the information they provide will be collected and for what use. They are unclear about the level of consumer knowledge required for and related to the consent for data collection. Given this, the principle of informed consent is difficult to observe [26].

Security of Consumer Information: The increase in volumes of big data collected by AI systems comes with enormous data security challenges. The more data are collected, the more likely they become a target for any bad actor trying to exploit personal information for identity theft, financial fraud, and even blackmail. On the other hand, according to [33] data breaches have taken a much more severe turn on consumer trust and corporate reputation, which have now become more pervasive. Therefore, the protection of such consumer information should rely on solid cybersecurity, continuous surveillance, and fast correction of detected possible breaches.

# 3.4.2. Mitigating Privacy and Security Concerns:

Various ways would help mitigate privacy and data security in AI-based marketing. In this light, the principle of data minimization can, largely, be adopted. This will help lower the risk of privacy [34]. Furthermore, transparency with data collection practices and meaningful obtaining of consent from the consumer are necessary steps toward respecting consumers' privacy. Advanced encryption techniques in data security can technically reduce the risk largely. Because of technology, advanced data encryption and access control mechanisms for storage solutions, from a technical view, can significantly reduce risks. In addition, the present integration should be implemented to allow AI algorithms to analyze consumer data without compromising individual privacy [35,36]. Regulatory frameworks also play a crucial role in safeguarding privacy and data security. The European Union General Data Protection Regulation (GDPR) and the United States California Consumer Privacy Act (CCPA) enshrine considerable legislative efforts for consumer privacy and data security in the digital era. It enforces the strict protection of the data on the one side and, on the other, makes consumers even more empowered holders of their personal information [37].

Thus, AI technologies offer excellent opportunities to improve marketing strategies while bringing out evident privacy and security challenges. This can only be confronted with ethical practices, robust security, and transparent data collection and handling, bearing regulation observance in mind. Care in solving these dilemmas would allow companies to harvest the benefits of AI in marketing while keeping consumers' trust and privacy as part of their core. It might not be wrong to say that artificial intelligence (AI) has revolutionized nearly all sectors and rectified the ageold issues many industries face. However, with its advancement, a few issues did arise concerning data privacy and its misuse. Instances of such problems created by AI show the delicate balance between the potential of AI and data privacy and security.

# 3.4.3. Privacy Breaches through AI

An excellent example in terms of context would be the use of AI in social media through personal advertisement. However, as much as it has allowed targeted marketing, it has called for questions about the amount of data collected and profiling the users. [37] demonstrated that private attributes can be reliably inferred from digital behavior records. For example, it indicates the potential for breaches of privacy where personal data can be inferred even without explicit consent. Another example is the creation of facial recognition technologies. Such AI systems can recognize people in the public space, which is exactly what some researchers and critics outline as a reason for the appearance of surveillance and privacy concerns. On the other hand, "the problem of such technologies," as [38] warns, "is the risk of creating a 'surveillance state,' where people are monitored without end, unbeknownst to them, and without their consent.

### 3.4.4. Misuse of Data through AI

Misuse of AI would go beyond privacy issues to result in situations where the data collected is put to use for purposes that were not agreed upon by the subject of the data in the first place. The highest-profile example is the Cambridge Analytical data scandal, in which 87 million Facebook users' data were misused to guide voter behavior [39]. Therefore, this incident brought out the misuse potential of AI-driven analytics in manipulating public opinion and laid bare the lack of robust mechanisms to prevent unauthorized data exploitation. There has been an incredible focus on the application of AI in the health analysis of patients' data to improve the diagnosis and treatment plan. However, some grave concerns have emanated from the security of susceptible health information and possible access to its use in an unauthorized manner. According to [40] integrating AI with ethics in health requires rigid security measures so that the data of the patients is not breached or misused.

Mitigating Risks: Technological and regulatory measures should be taken to respond to these challenges within these broad frameworks. Encryption of data, how to give access securely, and periodic audits will need to be done to the AI system to prevent data breaches [41]. The development of ethical frameworks for transparent, consensual, and privacy rights-based AI has also been

suggested to serve as a proper guide for the responsible use of AI [31]. Legislation can be significant in eliminating many potential risks AI poses. The European Union has the General Data Protection Regulation and other such legislations the world over to guard any person's privacy and control of data. These require organizations to conform to principles of minimization of data, limitation of purpose, and ensure that the subject consents to processing. In research, data protection focuses on ensuring that human data needed for research is not obtained by unauthorized people (Voigt). In other words, even though AI brings great potential to drive transformation across the sectors, its deployment points to immense privacy and data security concerns. Cases of privacy intrusion and data abuse bring out the necessity for a well-measured, balanced approach whereby AI benefits are reaped while guarding against the risks. This will limit the harmful impacts of artificial intelligence on privacy and data security by adhering to the implementation of solid security measures and ethical principles of AI following privacy legislation.

# 3.4.5. Consent and Transparency

In AI-guided marketing practices, consent and transparency are some of the basic but highly complicated issues due to the sophistication of technologies involved, including ways through which it collects data and its analysis methods. The great majority of these technologies work in ways that, quite simply, the average consumer can barely understand. Thus, there is a big issue in ensuring informed consent and that the consumer knows how his or her data is being used.

Informed Consent in AI-driven Marketing: Informed consent—a fundamental principle in ethics and law—requires information about what and how personal information is collected, used, and shared. However, imagining how there could ever be "truly" informed consent within AI-driven marketing is challenging. General AI algorithm opaqueness and complexity of the data ecosystems make it nearly impossible for customers to understand the implications and dimensions of using their data. [42] argues that traditional consent models hardly appreciate the added subtleties of AI technologies and data use, which have not been appropriated in expected ways but for entirely new applications that may well stretch the boundaries of any initially given.

Transparency and AI: Transparency is associated with the problem of consent, involving the disclosure of the functioning of the AI systems, the data those systems involve, and for which these data are used. However, several AI systems' "black box" nature, which conceals how inputs change into outputs, is an excellent barrier toward transparency [43]. Most importantly, since consumers do not have proper insight into the modus operandi of AI algorithms, they do not know how to put their private information to use in AI, from personalized advertisements to content recommendations. The General Data Protection Regulation (GDPSR) of the European Union aims to provide these needs with stricter regulations that require more transparency, which is apparent to the user, and a solid means of consent. According to GDPR, any processing carried out should be based on informed and voluntary consent, while an organization has to provide easily accessible, accurate, and intelligible information on its part for the use of personal data. On the other hand, the straightforward, pragmatic implementation of transparency and consent in AI-driven marketing continued to face challenging hurdles, making the chasm between regulatory ideals and practical on-the-ground realities much deeper.

Navigating Consent and Transparency: Some scholars and practitioners grapple with the thorny issues of consent and transparency in AI marketing. For example, improving the interfaces to facilitate more intuitive and interactive consent mechanisms could empower consumers to make more informed choices in their data [44]. Similarly, the development of AI systems with the capability to make and provide explanations of their decisions in a human-understandable form could assist in bringing in transparency and, to some extent, ease of comprehension and handling by consumers of the implications of the use of data [45]. In short, the informed consent and transparency issues in AI-driven marketing practice cumulatively present a challenge; the complexity of AI technologies and the intricate intertwining of data pose serious problems. Valid informed consent, obtained in significant transparency, will take a partnership of regulators with technologists and marketers to design and deploy solutions that put consumer understanding and control first. From a consumer

perspective, the marketing industry could build trust by nurturing an environment in which genuinely informed consent and transparent operations of AI are part of dealing with the ethical morass of data use today. Consumers' demand for transparency from companies that use AI in marketing is nothing less than a basic necessity for maintaining trust, ethical integrity, and regulatory compliance. The openness will help demystify to the public how their consumer data is being used and measures taken to protect its fairness and privacy. It is necessary for several reasons: the complexity of AI systems, possible data misuse, and the societal problems that algorithmic decision-making may create.

# 3.4.6. Complexity and Misunderstanding of AI Systems

Consumers often misinterpret the processing and use of their data for marketing because the systems are innately complex. [46] highlights that the opacity, in this case of the machine learning algorithms in the data-processing mechanisms, effectively disallows individuals' capacity to make sense of the implications of their data being used. It can be stated that transparency is the bridge showing how decisions are made within artificial intelligence, giving consumers trust and acceptance of the product [47].

Data Misuse and Privacy Concerns: As AI technology advances toward its ability to profile and predict consumer behavior, raising some valid concerns about the misuse of data and privacy is nothing short of plausible. These companies that use AI for targeted advertising or content customization have to relay what data is collected, the extent of that data, the purpose it serves, and the different kinds of protection assured to maintain privacy in the hands of the consumer. [42] indicates that transparency in the wake of some data breaches and rampant misuse of information cannot be overstressed, and it is essential to create trust among consumers.

# 3.4.7. Ethical and Societal Implications

Thus, the very use of AI in marketing is also arousing several societal and ethical questions, especially regarding bias, discrimination, and its repercussions on consumer autonomy. Therefore, the process will be transparent on the issues to be handled. Scrutiny of the entire AI system for possible bias and ethical malpractice would be open [48]. An open discussion of all ethical considerations and the measures that should be taken to alleviate their negative impacts would assist companies in depicting these issues and genuinely considering responsible AI.

Regulatory Compliance and Industry Standards: Most jurisdictions are strident in the need for transparency in AI applications, requiring explicit communication on data collection, processing, and sharing practices. Those would be a part of the broadest social calls towards responsibility for practice in digital marketing, making firms shift towards transparent practices for compliance and as an even competitive edge [37].

Navigating Transparency Challenges: It has been anything but easy to strike that balance, where it lets out enough information for its meaningful understanding and, at the same time, guards the proprietary technologies and competitive advantages. In addition, firms are challenged to develop the technical solution of making AI systems interpretable to non-experts through simplified verbal explanations, visual aids, or interactive tools [45].

Therefore, companies must be open to using AI in their marketing efforts. It builds trust, ensures one is ethically correct, ensures regulatory compliance, and empowers an informed customer base. These will, therefore, be hallmarks of the commitment to transparency as the advent of AI in marketing continues to develop deeper integrations into the companies' success in the digital economy, and these will be done ethically and sustainably.

# 3.4.8. Manipulation and Bias

Artificial Intelligence (AI) has been changing the mode of dealing with consumers for companies, enabling the personalization of marketing activities to a new level that could never have

been imaginable in the past. With this advance, however, ethical considerations identify a potential for manipulation and introduction of biases into the consumer decision processes.

Manipulation through Personalized Marketing: On the other hand, AI-driven personalized marketing makes appropriate use of consumer data by tailoring messages, advertisements, and, most preferably, the product that best suits individual consumers. While personalization might help customers have a better shopping experience, it became a warning sign when personalization turned into manipulation, playing on people's psychological vulnerabilities or nudging consumers in ways that could not be in the consumer's interest. This was brought out by [49] who wrote: "The application of big data and AI technologies is premised on the possibility of hyper nudging: the idea that they may affect behavior at a level that vastly exceeds the conventionally understood capacities of nudging techniques, thereby in effect eroding consumer autonomy". [50] postulate that using predictive analytics, the dawn of AI introduces a personalized advertisement, which conceptually may amount to another version of manipulation in the sense that the consumer is somehow guided to make decisions based on the fact that their data have been used without explicit knowledge by them. This manipulation challenges not only the ethics with which marketing practices are carried out but also the freedom and self-integrity regarding the choices of its consumers.

# 3.4.9. Bias in AI and Its Impact

Another ethical issue discussed is that AI systems are biased; their algorithms may generate unintentional effects in support of social stereotyping and even strengthen social stereotypes and their inequalities. The training data could have underlying biases, a history of inequality, or prejudices in collecting and curating the data. As [30] further states, such embedded biases can affect things ranging from the personalization of content to creditworthiness assessments that result in discriminatory outcomes in many ways. All these imply that the effects of biased AI in marketing would be huge, varied, and span from concretizing some of the most harmful stereotypes to building echo chambers of human minds and societies limited in exposure to alternative perspectives. [51] illustrate how biased algorithms can filter content in a way that exposes users to a distorted reality, which influences their perceptions and decisions. Such biases do not harm the individual alone; they impact society. This challenges the very principles of fairness and equality that any ethical marketing practice needs to have.

Addressing Manipulation and Bias: A multidimensional way of tackling manipulation and biases in AI-driven marketing must be applied. First, transparency and accountability are vital pillars, whereby the firms must disclose to consumers how AI systems arrived at that decision and use their data. This allows for customer understanding, thereby offering criticism regarding the nature of the personalized content they are likely to receive, and thus making an informed decision. Regulatory frameworks also act as guards from such manipulation and bias. Legal mandates for the use of ethical AI and those requiring transparency of algorithms and fairness audits ensure that the system does not exploit but excludes certain portions of the users caused by AI use [52]. More importantly, these diverse perspectives are necessary to develop AI models and training, so this perspective overcomes biases. The broadest possible variety of data and perspectives adopted by the company will not fall into the risk of deepening the existing inequalities through AI-driven marketing, and it will ensure justice for all its consumers.

Thus, while AI could disrupt marketing into personalization, it also raises severe ethical issues of manipulation and bias. In other words, these are the needs to which one must be prepared for transparency, accountability, and diversity to ensure that marketing practices powered by AI are respectful to consumer autonomy and foster fairness. Navigating these ethical challenges will enable companies to harness the benefits of AI in marketing even as they still meet ethics standards that must be maintained to foster trust with their consumers.

Nature and Origins of Bias in AI: For AI, bias may arise from training data, from the very nature of the designed algorithm, or even derived from societal biases ingested by the developers who write them, explicitly or implicitly. [53] model data bias as biased data fed into AI systems and has roots in historical biases, representation problems, or measurement inaccuracies; all of these either perpetuate

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or amplify discrimination. Developers may also introduce biases in the outputs of AI by way of subjective decisions when designing the algorithm. This can also lead to biased decisions in outputs from AI [54].

Impact on Marketing Practices: Most often, some AI implemented in the marketing process may cause biases that reflect unfairness and non-inclusiveness in the marketing strategies. For example, biased algorithms may produce systematically discriminating targeted advertisements that lock out certain groups from even accessing information about valuable services or, for that matter, job opportunity features [55]. This limits opportunities for not only those demographics but also reinforces stereotypical and unequal societies. Such personalization algorithms could have the unintended consequence of trapping users in "filter bubbles" insulating individuals from various perspectives [56]. The isolation becomes more injurious when, through this shaping, there is a disproportionate impact on some demographics in such a manner that it keeps the existing disparities in information and social access.

Discriminatory Outcomes and Examples: Discriminatory outcomes in marketing practices have been documented across various sectors. An example is pricing discrimination: algorithmic decisions would lead to prices that contradict consumer data, charging different demographic groups more money for the same product or service [57]. Regarding the advertisement of credits and financial services, for example, one instance where algorithms present biases may be systematic exclusion in seeing, for instance, the advertisement for credit opportunities for certain sections of the population. In this case, the flawed assumptions revolve around biased data sets [58].

Mitigating AI Bias in Marketing: These data sets will be monitored by frameworks for AI algorithms that contain and mitigate biases. Test techniques aimed at ensuring appropriate training data for AI algorithms may involve rigorous testing of the algorithms for biases at the deployment stage [59]. [30] further proposes that with the development of AI, multidisciplinary teams should be involved at each step of the way to bring varied perspectives and expertise to issues that might otherwise be left out if the development team is homogeneously tech. In addition, regulatory oversight and guidelines in AI-related ethics can ensure another level of fairness and non-discriminatory practices. Transparency in the way the algorithms make decisions and the provisions available to the users to report the perceived bias and get a response to fix the errors may be another application that may help foster trust and accountability with AI-based marketing practice. In other words, as much as AI has the potential to change the landscape of practice with advanced analytics and personalization in marketing, the ethical issues involved with algorithm biases remain a top priority. Indeed, recognition and reflection of the biases themselves assist firms in ensuring that their marketing is fair, inclusive, and duly respectful to all demographic groups.

# 3.4.10. Accountability and Control

It remains a significant challenge to establish who should be liable for the decisions reached by AI systems in marketing, chiefly due to the independent nature of such technologies and the data processes involved. The main problem is difficulty tracing and understanding algorithmic outcomes' rationale. Fixing responsibility becomes a critical problem when the decisions so arrived at lead to adverse effects.

Challenges of Accountability in AI-Driven Marketing: Most of the issues raised in setting up accountability for AI decisions point to the very complexity and opacity characterizing, in general, machine learning models, usually described by the "black box" problem [43]. It is, therefore, also not easy to understand how the inputs (data) process brings out the output (decisions) to trace back decisions to particular points of data or processes of algorithms. Further, the dynamic learning capability of AI systems, in which algorithms change with new data, puts another layer of complexity in pinpointing responsibility in specific decisions [60]. It is also worthy to note that development and deployment in AI are distributed in nature and hence comprise multiple stakeholders: on the one hand, data providers, and on the other hand, the algorithm developers and marketing practitioners, hence forming a weak link in the responsibility. Where AI-driven decision marketing leads to a bad outcome, like discriminating advertisements or privacy leaks, liability is thorny. If anything goes

11

south, liability would involve either the source of biased data, the developers of the discriminating algorithm, or the marketer who implemented the AI [61].

Legal and Ethical Frameworks for Accountability: The challenges, therefore, of setting accountability within AI-driven marketing would mean that there are, in the meantime, calls for more precise legal and ethical frameworks that would most likely take care to delimit the responsibilities among the parties involved carefully. There, the General Data Protection Regulation (GDPR) of the European Union enters the scene as a great leap, where the principles of transparency, fairness, and accountability are implemented in automated processes of decision-making [37]. According to GDPR, organizations must explain to a person and allow them to contest decisions made by AI systems. According to the legal compulsion, all organizational companies give full accountability in their AI marketing transactions.

Technological and Organisational Measures for Enhancing Accountability: This also relates to the accountability problem regarding the use of technology and organization. The Explainable AI (XAI) project aims to understand the processes of AI decisions, thereby allowing MS to be an ecosystem. Thus, using XAI, the origin of AI decisions can be traced much more quickly. Then, at least some person can find biases or errors in the algorithms and set them up. The organization should also adopt measures like straightforward design and deployment guidelines for AI, routine auditing of AI systems, and ensuring multidisciplinary teams are formed for better monitoring of AI ethics for effectiveness in accountability [42]. Ensure such ethical considerations are taken from the outset to deployment through all the AI lifecycles and distribute clear responsibility among the partners. These moral, legal, and operational considerations make it imperative that accountability for decisions by AI systems within marketing be identified. Gigantic, though it is, a proactive AI ecosystem based on accountability and transparency may be realized through judicious leveraging of these three legal frameworks and technological solutions such as XAI and organizational measures. As AI can reshape all marketing practices, it will be indispensable for enforcement purposes so that public trust, regulatory requirements, and all ethical marketing practices are well taken care of.

The controversy surrounding human oversight of AI-driven marketing initiatives lies at its core in a broader debate about the role of artificial intelligence within society. This conversation encapsulates concerns going from autonomy to trust, ethics, and what the advent of AI means in altering the marketing landscape. "Human in the loop" is an ethical imperative in the debate on AI, for it alone can maintain the ethical integrity, accountability, biases, and errors that AI systems might perpetrate or introduce.

Ethical Integrity and Accountability: Human oversight is one of the main ideas behind using AIdriven marketing, which is purposed to keep the ethical level. Since AI systems will, through decision-making, influence consumer choice and perception, leaving them either intentionally or unintentionally will pose a great danger in the sense that it might fuel the growth of unethical practices. In human oversight, marketing initiatives align with ethical guidelines and society's values; that becomes a checkpoint against exploitative character toward vulnerable consumers or the misleading information that may be targeted to them. The human factor is the factor of accountability, which is precisely the person who should take responsibility for their actions. Safeguarding against Bias AI algorithms can reflect the data they are trained on and sometimes even inherit and amplify biases. Against this background, therefore, lies the suggestion of human oversight in AI-driven marketing. This means that it will be able to scrutinize AI decisions, and, hence, humans will find it something to reassure them of its fairness and inclusiveness to the extent that no segment of consumers is discriminated against. This is a significant oversight, particularly in areas to do with targeted advertising, for instance, the algorithms might make advertisers perpetuate stereotypes unwittingly or exclude discriminated against demographics from benefiting from opportunities [30]. Finally, Balancing Efficiency and Control Critics of strict human oversight argue that the significant benefit of AI in marketing is its ability to process big sets of data and make decisions much quicker and in volumes, which is impossible for human beings. They claim that otherwise, the number of human interventions could be way too high, up to a limit from which a compromise may jeopardize Al's promised efficiency gains. This does not obviate oversight but proves that a balancing act is in order. Effective human oversight may only add value to AI initiatives and the strategic direction if it includes the ethical boundaries of the initiatives without unduly hamstringing the system's operational efficiency [43].

#### 3.4.11. Towards a Collaborative

In the future, the way forward would be in such a collaboration model that AI works in tandem with humans. This will give AI the best of its analytic capability and swiftness while ensuring that human values, ethics, and accountability are enshrined in the marketing strategies. Transparent AI systems that explain their reasoning can help in this partnership, ensuring human overseers can understand what is being done by the AI and thus direct AI decisions [45]. Human oversight of AI-driven marketing initiatives is, therefore, strategic—far beyond regulation limits or ethical requirements. It reflects both commitment to responsible stewardship in the context of AI's potential and, at the same time, the need to ensure that marketing innovations work toward the common good and with respect for individual rights and societal values.

### 4. Case Studies

Real-world case studies showing AI in marketing as a source of ethical dilemmas provide potent insights into the negative impacts in many cases, responses by companies, and finally, best practices and innovation for an effective way through.

#### 4.1. Case Study 1: Facebook's Ad Delivery Algorithm

This is perfectly exemplified by the ad delivery algorithm used by Facebook, which has even come under fire for incurring bias in how job and housing ads reach varied demographic groups. In so doing, the result showed that the algorithm would be unfairly skewed in ad delivery based on both race and gender, irrespective of the intentions of the advertisers, and pointed out potential results of discrimination and exclusion [55]. Facebook responded to this by updating its ad delivery system, including discontinuing age, gender, and zip code targeting for ads related to housing, employment, and credit, taking some measures that would guide them toward more transparency and fairness in ad delivery.

Best Practice: Enhanced Algorithmic Transparency: Such thorny problems have, in turn, signaled for Facebook and other platforms to adopt increased transparency of their algorithmic machinations and fairness measures. However, to ensure the platforms do not, in turn, maintain bias or discrimination, these corporations work towards opening their algorithms to third-party audits and making public what criteria there are for ad targeting to both the advertiser and the users.

# 4.2. Case Study 2: YouTube's Recommendation Algorithm

Indeed, the recommendation algorithm of YouTube was criticized for debating whether it has led users to extremist "rabbit holes" and thus referred to ethical concerns for radicalization and misinformation. The service has even updated its recommendation algorithm to make it less likely that harmful content is exposed to provide users with a much better recommendation quality [62]. They said their approach includes increasing transparency in making recommendations and giving users more power over the content they see, like excluding recommendations from a selected channel.

Best Practice: User Empowerment and Content Moderation: This ethical dilemma from the recommendation algorithm led YouTube to consider empowering its users or cracking down on its content moderation. Balancing such creeping over-personalization with the expectations of ethical responsibility toward reducing the spread of potentially harmful content, YouTube uses artificial intelligence and human reviewers while trying to provide users with tools to tailor their viewing experience more effectively.

# 4.3. Case Study 3: Amazon's AI Recruitment Tool

The last example was Amazon, which had built an AI recruiting tool for vetting job applications. However, the tool was found to have been gender-biased against women. Most of the time, the historical hiring data used in training the model was dominated by men. Amazon has since stopped that program upon realizing bias in recognition and upon realizing that the AI programs are too complex to police in a manner they do not propagate established inequalities [63].

Best Practice: Bias Mitigation in AI Development: Thus, Amazon and other companies in such positions undertook underscoring steps to mitigate bias in developing AI after their recruiting tool was found to be biased. This included data training to diversify the same, fairness checks throughout AI development, and multidisciplinary teams reviewing AI systems from many ethical perspectives.

This distinguishes various scenarios where AI in marketing is termed to be ethical, as well as the diversity of the strategies through which companies face such a situation. The transparency and fairness improved are that users will empower themselves in ways of mitigating bias while including techniques that bring about continuous changes to align the technologies of AI with principled ethics and societal values.

### 4. Discussion

This solid ethical underpinning foundation on the part of AI, in consideration of privacy, data security, consent, transparency, manipulation, and bias in marketing, goes a long way in affecting deeply consumer trust and brand reputation. In more detail, these ethical dilemmas have implications for the consumer-brand relationship and consequences for long-term business success and, therefore, societal trust in digital technologies.

Impact on Consumer Trust: Consumer trust forms the underlying base of any marketing strategy that is likely to bear fruits and sustain long-term business relationships. However, this trust can be broken through ethical lapses, and AI is no exception. For example, when consumers are informed that their personal data are being used without proper consent or for those they disagreed with, it might be perceived that the brand has betrayed the customers. [42] emphasizes that in the present-day world, transparency and consent are the centerpiece of keeping consumer trust since most data breaches and information misuse are soaring. Moreover, AI-driven, overly personalized marketing can further manipulate consumer decisions and result in reduced trust. Such algorithms might also leave consumers with a sense of their compromised autonomy and psychological vulnerabilities [50]. This felt like a sense of manipulation could be the turn on these brands, as consumers would look out for those who respect their autonomous and ethically defined boundaries.

Brand Reputation and Market Position: Brand reputation is directly proportional to how the ethical issues related to AI are handled. For instance, biases in their AI algorithms could be reason enough for public criticism and legal battles, affecting brand image and market standing. [30] highlights these social implications of algorithmic biases, showing the potential of brands to inadvertently perpetuate discrimination that can have long-term negative implications on brands. On the other hand, companies that confront the ethical issue and best practices of transparency, fairness, and accountability head-on would do more than stop the risk. Ethical demonstration of AI use ensures risk preclusion and predicates brands as industry pace-setters within the responsible innovation category [48].

Consumer Behavior and Brand Loyalty: Ethical considerations in AI will also affect consumer behavior and brand loyalty. In a world where, with each passing year, consumers are more in tune with and aware of privacy and data security concerns, those brands that take these issues to heart find that it most often provides more loyalty. [64] hypothesized that consumers' willingness to provide personal information simultaneously is directly related to trust in the brand's privacy practices. Therefore, ethical handling of consumer data may result in it developing into a competitive advantage for the company, as satisfied customers would return and recommend the business to others

Navigating Ethical Challenges: Best Practices: Companies are increasingly implementing some best practices that would help to alleviate the adverse effects of these AI ethical considerations on

consumer trust and brand reputation. Among these measures are clear privacy policies in deployment, transparency in the use of data, and active measures toward avoiding biases in AI algorithms. All these will require getting consumers to be part of decisions that affect how their data are used [45]. Compliance with the presented practices shows compliance not only with laws but also the seriousness of acting in the direction of ethical principles and helps to increase consumer trust and loyalty. These are serious ethical considerations around AI in marketing with far-reaching implications for consumer trust and brand reputation. When dealing with transparency, fairness, and accountability, those concerns return a more significant result for the company in maintaining positive consumer relations and using AI to further their use in marketing. Some scholars have noted that AI's ethical challenges in marketing, including privacy, security, data manipulation, bias, and data accountability, have elicited different regulatory responses. These would include laws in force, proposed legislation, and guidelines developed to guide the complex frontier of AI ethics for consumer protection. The frame is designed to promote technological innovation and, at the same time, guard it against possible ethical pitfalls.

Existing Laws and Regulations: The example shines through the General Data Protection Regulation (GDPR) of the European Union, which casts a holistic legislative framework towards the protection of personal data and, in essence, embraces almost all ethical considerations regarding AI for marketing. There are strict rules for the protection of data and privacy according to the GDPR, prescribing transparency in processing data, consent, and the right to forget. It introduces the idea of data protection by design and default so as to enforce data protection laws in a manner that AI systems under development take into consideration privacy [37]. For example, The California Consumer Privacy Act (CCPA) is one of the most relevant legislative acts in the USA that seeks to ensure consumers have more control over their personal information in modern digital conditions. In some ways, the CCPA is a framework for future AI-centric regulation that has to be transparent, accountable, and centered on consumer rights.

#### **Proposed Legislation**

The AI Act represents an ambitious attempt to create harmonized EU regulation of AI, as proposed by the European Commission. The first one classifies AI systems into three categories: (1) high-risk applications, which means they are subjected to very stringent requirements for transparency and data quality and also have human oversight [65]. It showed that the United States Algorithmic Accountability Act would require companies to assess their automated decision systems' biases, impacts, and privacy impacts. This strengthens that there should be mechanisms with oversight and verification features that ensure the AI systems do not discriminate or even conspire to cause harm to the welfare of consumers [66]. The design of autonomous and intelligent systems should be respectful and ethical and include human rights and well-being, data agency, and transparency, following the subsequent recommendations proposed by the IEEE Global Initiative on Ethics of Autonomous and Intelligent Systems [67]. In addition, the Partnership on AI—formed by a number of technology companies, academic institutions, and civil society organizations—develops guidelines for the responsible development and deployment of AI technologies. This compels an organization to self-regulate, putting ethical standards above what the law prescribes [68].

The other ethical implication brought by AI in marketing, therefore, portrays the aspect of recognition and agreement that its impacts need to be adequately managed. While GDPR and CCPA set a high bar for privacy and data protection, proposed legislation and industry guidelines cover a much more comprehensive array of ethical challenges—ranging from bias to manipulation, accountability, and transparency. This is further consolidated by the evolution of AI technologies, where the regulatory environment has to pace up, demanding dialogue, adaptation, and collaboration to allow innovative marketing practices while safeguarding ethical soundness.

# Legislation in Jordan

Jordan has been proactively developing the ethical dimension of artificial intelligence (AI) for the country's digital economy and, therefore, has shown a first-mover attitude toward the responsible development and deployment of AI technologies. In this regard, a comprehensive AI Strategy and an Implementation Roadmap for 2023-2027 were prepared after rigorous deliberations with relevant

quarters in the country's public and private sectors and academia were launched. All these shall serve as a booster for further developing the AI ecosystem within Jordan across multiple domains, such as capacity building, investment, and scientific research. The same will improve legislative environments, allowing safe use of AI. This clearly points to the need for national development of the skills base in AI, research, development, and usage of AI tools for improved service delivery and public sector effectiveness. This roadmap has the ambition to prepare the ground for an increase in economic growth, attraction of foreign investment, and promotion of innovation and entrepreneurship in the Hashemite Kingdom of Jordan (UNIDO).

Jordan further moots a 'National Charter of Ethics for Artificial Intelligence' in an attempt to develop a framework for the right deployment of AI technologies. This Charter seeks to base AI deployment on the shared ethical foundation of the customs and traditions of society, along with religious and human values. Some of the AI ethical principles include accountability, transparency, respect for the individual's privacy, and underscore recognition of Jordan's commitment to amalgamating AI into the ethical and responsible principled digital landscape of the country [69]. This approach explains Jordan's general, comprehensive strategy for dealing with the ethical challenges of AI through innovation and ethical dimensions. A clear definition of strategic directions and ethical guidelines empowers Jordan to harness the considerable potential of AI technologies simultaneously, ensuring that these serve the broader interests of society and respect individual rights.

The Ministry of Digital Economy and Entrepreneurship in Jordan has officially announced the Artificial Intelligence (AI) Strategy and its Implementation Roadmap until 2023-2027 during the ninth MENA ICT Forum 2022. Within this strategy, three main prongs have been announced, including capacity-building, scientific research, and legislative initiatives to advance the ethical usage of AI technologies [70]. As part of it, Jordan has developed a 'National Charter for Artificial Intelligence Ethics,' approved by the cabinet from Jordan's Ministry of Digital Economy and Entrepreneurship. This charter will scaffold the deployment of ethical AI technologies, focusing on transparent accountabilities and respect for individual privacy, reflecting Jordan's commitment to ethical considerations in the digital space [69].

#### 5. Conclusions

This leads to quite a significant paradigm shift in the way that companies involved in marketing strategies, including Artificial Intelligence (AI); interact with their consumers through personal experiences, practical data analysis, and innovative engagement. However, it brings substantial ethical challenges like privacy, data security, bias, transparency, and accountability. These challenges highlight the intricate relationship between technological innovation and ethical responsibility.

The discussion in our meeting particularly emphasized that strict ethical standards, transparency, objective investment in AI research, and sensitive efforts toward obviating biases in AI algorithms are essential. Therefore, these practices are very important to be followed to gain the maximum advantage of AI in marketing and be cautious about the ethical hurdles that it potentially brings. Further, the regulatory response is developing with the GDPR and proposed AI-specific legislation points to an increasing acknowledgment of the importance of thoughtfully and proactively managing AI's impact.

Therefore, the future of AI in marketing demands a balanced approach that capitalizes on the transformational potential of AI while facing off the meeting of ethical considerations head-on. This balance will shift with technology and changing norms of society; hence, there should be continuous dialogues among the stakeholders: marketers, technologists, ethicists, and regulators. These are the talks that seek to make sure the role played by AI in marketing is diverse from different perspectives, further creating an environment wherein innovativeness goes hand in hand with ethical integrity and respect for consumer rights.

In short, the journey to responsible and ethical AI in marketing is often charted with a collective eye from all the parties involved. This would help firms turn into more consumer-trustable entities, whereby they create stronger brand reputations and, most importantly, a responsible leading

16

example in the digital future of marketing. Collaboration in pursuit of these AI practices will reduce the risk of ethical infractions and open new opportunities for innovations and marketing engagements.

### Recommendations

Ethics in AI marketing and handling the dynamics involved in AI-enabled marketing practices need an imperative approach from the company through several methodologies. This included guidelines about the ethical use of AI, increased transparency, investment in independent AI research, and pointing out the potential areas that need further research and development.

Developing Ethical Guidelines for AI Use: Companies should set up sophisticated ethical guidelines on what actually responsible AI will be used for in the marketing practice. The guideline should include regulations with respect to the collection of data, privacy, consent, and the way to avoid biased results. Therefore, [31] stated that these should be solidly based on broadly accepted ethical considerations, notably fairness, responsibility, and transparency. This is so that AI systems are developed and implemented, thereby ensuring that individual rights are upheld in the course of their use and contribute to the common good for all in society.

Enhancing Transparency with Consumers: Any action is done without being transparent about the lack of an essential bond of trust between the firm and the consumers. In this case, the firms have to explain how AI is applied in their marketing, the ways of data collection and processing, and how the decision has been made. Respectively, transparency under the General Data Protection Regulation (GDPR) respects the data subject's right to be informed about the logic involved in automated decisions affecting him or her [37]. Such a transparent move would be in compliance not just with regulatory requirements but also as a necessity for good relationships with consumers.

Investing in Unbiased AI Research: Companies should guide research investment in identifying, understanding, and possibly mitigating algorithmic biases through the diversification of algorithms and datasets that would enable companies to detect and eliminate them. This includes diversifying the algorithm and dataset for bias detection and elimination and forming multidisciplinary teams of ethicists, sociologists, cultural experts, and data scientists [30]. By addressing biases, companies can ensure that their AI marketing strategies are inclusive and equitable.

Suggesting Areas for Further Research and Development: Explainable AI (XAI): XAI describes an area of research that tries to develop AI systems coming to decisions in increased human-like, humanly comprehensible, and interpretable ways, thus assuring more scrutiny and trust over decisions made by AI-based systems [45]. Further advances will help streamline AI functions for both marketers and consumers.

Consumer Autonomy and Control: Research should look into mechanisms that empower consumers to have some level of control over their data, including options for opting out of inclusion in data collection or change in targeting by personalization algorithms.

Impact Assessment Tools: The development of tool kits on how to carry out an impact assessment of AI marketing strategies on society and ethics may enable the organization to make ethically sound decisions before deployment.

Cross-cultural Ethical Standards: Due to the multi-jurisdictional nature of the operations, some research across cultures may be required. It may help ensure that marketing practices are maintained respectfully and contextually acceptable by the marketing societies.

These will offer the industry practitioner great assistance in steering through the moral issues of AI-enabled marketing. Such strategies and future lines of research and development will prove very useful for industry practitioners to steer successfully between the Scylla and Charybdis of ethical dilemmas surrounding AI-enabled marketing. The initiative is proactive, not against the risk, but in harnessing the transformational power of AI to put into practice more engaging, just, and respectful marketing.

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17

# References

- 1. Hemalatha, A. AI-Driven Marketing: Leveraging Artificial Intelligence for Enhanced Customer Engagement; Consortium, J.P., Ed.; First Edit.; Chennai, India, 2023; ISBN 9789391303617.
- Naz, H.; Kashif, M. Artificial Intelligence and Predictive Marketing: An Ethical Framework from Managers' Perspective. Spanish J. Mark. - ESIC 2024, ahead-of-print No. ahead-of-print.. https://doi.org/10.1108/SJME-06-2023-0154.
- 3. Benlian, A.; Wiener, M.; Cram, W.A.; Krasnova, H.; Maedche, A.; Möhlmann, M.; Recker, J.; Remus, U. Algorithmic Management: Bright and Dark Sides, Practical Implications, and Research Opportunities. *Bus. Inf. Syst. Eng.* **2022**, *64*, 825–839. https://doi.org/10.1007/s12599-022-00764-w.
- 4. Flink, C.; Gross, L.; Pasmore, W. Why Human-Centered Digital Transformation Leadership Matters. In *Digital Transformation: Accelerating Organizational IntelligenceDoing Well and Doing Good*; World Scientific, 2023; Vol. 3, pp. 1–15.
- Díaz-Rodríguez, N.; Del Ser, J.; Coeckelbergh, M.; López de Prado, M.; Herrera-Viedma, E.; Herrera, F. Connecting the Dots in Trustworthy Artificial Intelligence: From AI Principles, Ethics, and Key Requirements to Responsible AI Systems and Regulation. *Inf. Fusion* 2023, 99, 101896. https://doi.org/10.1016/j.inffus.2023.101896.
- 6. Ehsan, U.; Liao, Q.V.; Muller, M.; Riedl, M.O.; Weisz, J.D. Expanding Explainability: Towards Social Transparency in AI Systems. In Proceedings of the Conference on Human Factors in Computing Systems Proceedings; 2021; pp. 1–19.
- 7. Aguirre, E.; Roggeveen, A.L.; Grewal, D.; Wetzels, M. The Personalization-Privacy Paradox: Implications for New Media. *J. Consum. Mark.* **2016**, *33*, 98–110. https://doi.org/10.1108/JCM-06-2015-1458.
- 8. Hermann, E. Leveraging Artificial Intelligence in Marketing for Social Good—An Ethical Perspective. *J. Bus. Ethics* **2022**, *179*, 43–61. https://doi.org/10.1007/s10551-021-04843-y.
- 9. Voeneky, S.; Kellmeyer, P.; Mueller, O.; Burgard, W. Part IV Fairness and Nondiscrimination in AI Systems. In *The Cambridge Handbook of Responsible Artificial Intelligence Interdisciplinary Perspectives*; Cambridge University Press Print publication, 2022; pp. 227–278.
- 10. Ameen, N.; Tarhini, A.; Reppel, A.; Anand, A. Customer Experiences in the Age of Artificial Intelligence. *Comput. Human Behav.* **2021**, *114*, 1–15. https://doi.org/10.1016/j.chb.2020.106548.
- 11. Blösser, M.; Weihrauch, A. A Consumer Perspective of AI Certification the Current Certification Landscape, Consumer Approval and Directions for Future Research. *Eur. J. Mark.* **2024**, *58*, 441–470. https://doi.org/10.1108/EJM-01-2023-0009.
- 12. Priya, A. Case Study Methodology of Qualitative Research: Key Attributes and Navigating the Conundrums in Its Application. *Sociol. Bull.* **2021**, *70*, 94–110. https://doi.org/10.1177/0038022920970318.
- 13. Vries, K. de Case Study Methodology. In *Critical Qualitative Health Research*; Routledge: London, 2020; p. 12.
- 14. Kumar, V. Transformative Marketing: The Next 20 Years. *J. Mark.* **2018**, *82*, 1–12. https://doi.org/10.1509/jm.82.41.
- 15. Davenport, T.; Guha, A.; Grewal, D.; Bressgott, T. How Artificial Intelligence Will Change the Future of Marketing. *J. Acad. Mark. Sci.* **2020**, *48*, 24–42. https://doi.org/10.1007/s11747-019-00696-0.
- 16. Wedel, M.; Kannan, P.K. Marketing Analytics for Data-Rich Environments. J. Mark. 2016, 80, 97–121. https://doi.org/10.1509/jm.15.0413.
- 17. Herhausen, D.; Bernritter, S.F.; Ngai, E.W.T.; Kumar, A.; Delen, D. Editorial for the Special Issue "Machine Learning in Marketing." *J. Bus. Res.* **2024**, *170*, 1–11. https://doi.org/10.1016/j.jbusres.2023.114254.
- 18. Choi, Y.; Kim, Y.; Rhu, M. Lazy Batching: An SLA-Aware Batching System for Cloud Machine Learning Inference. In Proceedings of the Proceedings International Symposium on High-Performance Computer Architecture; 2021; pp. 493–506.
- 19. Kaplan, A.; Haenlein, M. Siri, Siri, in My Hand: Who's the Fairest in the Land? On the Interpretations, Illustrations, and Implications of Artificial Intelligence. *Bus. Horiz.* **2019**, *62*, 15–25. https://doi.org/10.1016/j.bushor.2018.08.004.
- 20. Huang, M.-H.; Rust, R.T. A Strategic Framework for Artificial Intelligence in Marketing. *J. Acad. Mark. Sci.* **2021**, *49*, 30–50.
- 21. Jain, M.; Kumar, P.; Kota, R.; Patel, S.N. Evaluating and Informing the Design of Chatbots. In Proceedings of the DIS 2018 Proceedings of the 2018 Designing Interactive Systems Conference 9-13, 2018, Hong Kong; 2018; pp. 895–906.
- 22. Liu, B. Synthesis Lectures on Human Language Technologies (SLHLT). In *Sentiment Analysis and Opinion Mining*; Springer Cham, 2022; pp. XIV, 167.
- 23. McTear, M.F.; Callejas, Z.; Griol, D. The Conversational Interface; Springer Cham, 2016; Vol. 6;.
- 24. Li, X. Harnessing the Synergy between Neural and Probabilistic Machine Learning: Data Representations and Model Structures, Hong Kong University of Science and Technology, 2019.
- 25. Zuboff, S. *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power;* Profile Book, 2019;

- 26. Richards, N.M.; King, J.H. Big Data Ethics. *Big Data Soc.* **2014**, *49*, 393–432. https://doi.org/10.1177/2053951714559253.
- 27. Zou, J.; Schiebinger, L. AI Can Be Sexist and Racist It's Time to Make It Fair. *Nature* **2018**, *559*, 324–326. https://doi.org/10.1038/d41586-018-05707-8.
- 28. Murphy, P.E.; Laczniak, G.R.; Harris, F. Ethics in Marketing International Cases and Perspectives; second.; Routledge, 2017;
- 29. Hagendorff, T. The Ethics of AI Ethics: An Evaluation of Guidelines. *Minds Mach.* **2020**, *30*, 99–120. https://doi.org/10.1007/s11023-020-09517-8.
- 30. Benjamin, R. Race after Technology: Abolitionist Tools for the New Jim Code; first Edit.; John Wiley & Sons., 2019; ISBN 978-1-509-52643-7.
- 31. Jobin, A.; Ienca, M.; Vayena, E. Artificial Intelligence: The Global Landscape of Ethics Guidelines. *Nat. Mach. Intell.* **2019**, *1*, 389–399.
- 32. Barocas, S.; Nissenbaum, H. Big Data's End Run around Anonymity and Consent. In *Privacy, Big Data, and the Public Good: Frameworks for Engagement*; Cambridge University Press, 2013; pp. 44–75 ISBN 9781107590205.
- 33. Chen, H.S.; Jai, T.M. Trust Fall: Data Breach Perceptions from Loyalty and Non-Loyalty Customers. *Serv. Ind. J.* **2021**, *41*, 947–963. https://doi.org/10.1080/02642069.2019.1603296.
- 34. Cranor, L.F.; Garfinkel., S. Security and Usability: Designing Secure Systems That People Can Use; Fist Editi.; O'Reilly Media, Inc., 2005;
- 35. Konečný, J.; McMahan, H.B.; Ramage, D.; Richtárik, P. Federated Optimization: Distributed Machine Learning for On-Device Intelligence; arXiv preprint; 2016;
- 36. Dwork, C.; Roth, A. The Algorithmic Foundations of Differential Privacy. *Found. Trends Theor. Comput. Sci.* **2013**, *9*, 211–487. https://doi.org/10.1561/0400000042.
- 37. Voigt, P.; Bussche, A. von dem *The EU General Data Protection Regulation (GDPR) A Practical Guide*; Springer Nature, 2020;
- 38. Garvie, C.; Bedoya, A.M.; Frankle, J. *The Perpetual Line-up: Unregulated Police Face Recognition in America*; Georgetown Law Center on Privacy & Technology, 2019;
- 39. Cadwalladr, C.; Graham-Harrison, E. Revealed: 50 Million Facebook Profiles Harvested for Cambridge Analytica in Major Data Breach. *Guard.* **2018**, *1*, 22.
- 40. Coiera, E.; Ash, J.; Berg, M. The Unintended Consequences of Health Information Technology Revisited. In *IMIA Yearbook of Medical Informatics* 2016; 2016; pp. 163–169.
- 41. Thapa, C.; Camtepe, S. Precision Health Data: Requirements, Challenges and Existing Techniques for Data Security and Privacy. *Comput. Biol. Med.* **2021**, *129*, 1–35. https://doi.org/10.1016/j.compbiomed.2020.104130.
- 42. Martin, K. Ethical Implications and Accountability of Algorithms. *J. Bus. Ethics* **2019**, *160*, 835–850. https://doi.org/10.1007/s10551-018-3921-3.
- 43. Pasquale, F. The Black Box Society: The Secret Algorithms That Control Money and Information; Harvard University Press, 2015;
- 44. McGuire, A.L.; Beskow, L.M. INFORMED CONSENT IN GENOMICS AND GENETIC RESEARCH. *Annu. Rev. Genomics Hum. Genet.* **2010**, *11*, 361–381. https://doi.org/10.1146/annurev-genom-082509-141711.
- 45. Gunning, D.; Stefik, M.; Choi, J.; Miller, T.; Stumpf, S.; Yang, G.Z. XAI Explainable Artificial Intelligence. *Sci. Robot.* **2019**, *4*, 1–6. https://doi.org/10.1126/scirobotics.aay7120.
- 46. Burrell, J. How the Machine 'Thinks': Understanding Opacity in Machine Learning Algorithms. *Big Data Soc.* **2016**, *3*, 1–12. https://doi.org/10.1177/2053951715622512.
- 47. Ananny, M.; Crawford, K. Seeing without Knowing: Limitations of the Transparency Ideal and Its Application to Algorithmic Accountability. *New Media Soc.* **2018**, 20, 1–17. https://doi.org/10.1177/1461444816676645.
- 48. D'Ignazio, C.; Klein, L.F. *Data Feminism*; Cambridge, Massachusetts and London, England: The MIT Press: London, England, 2020; ISBN 9780262044004.
- 49. Yeung, K. 'Hypernudge': Big Data as a Mode of Regulation by Design. *Inf. Commun. Soc.* **2017**, 20, 118–136. https://doi.org/10.1080/1369118X.2016.1186713.
- 50. Susser, D.; Roessler, B.; Nissenbaum, H. Technology, Autonomy, and Manipulation. *Internet Policy Rev.* **2019**, *8*, 1–22. https://doi.org/10.14763/2019.2.1410.
- 51. Eslami, M.; Rickman, A.; Vaccaro, K.; Aleyasen, A.; Vuong, A.; Karahalios, K.; Hamilton, K.; Sandvig, C. I Always Assumed That I Wasn't Really That Close to [Her]": Reasoning about Invisible Algorithms in News Feeds. In Proceedings of the Facebook Newsfeeds & Friendships: CHI 2015, Crossings, Seoul, Korea; 2015; Vol. 2015-April, pp. 153–162.
- 52. Kaminski, M.E.; Bertolini, A.; Brennan-Marquez, K.; Comandé, G.; Cushing, M.; Helberger, N.; Van Drunen, M.; Van Eijk, N.; Eskens, S.; Malgieri, G.; et al. The Right to Explanation, Explained The Right to Explanation, Explained Citation Information Citation Information Copyright Statement THE RIGHT TO EXPLANATION, EXPLAINED. *Berkeley Technol. Law J.* **2019**, *34*, 189.

- 54. Selbst, A.D.; Boyd, D.; Friedler, S.A.; Venkatasubramanian, S.; Vertesi, J. Fairness and Abstraction in Sociotechnical Systems. In Proceedings of the FAT 2019 Proceedings of the 2019 Conference on Fairness, Accountability, and Transparency; 2019; pp. 59–68.
- 55. Ali, M.; Sapiezynski, P.; Bogen, M.; Korolova, A.; Mislove, A.; Rieke, A. Discrimination through Optimization: How Facebook's Ad Delivery Can Lead to Biased Outcomes. *Proc. ACM Human-Computer Interact.* **2019**, *3*, 1–30. https://doi.org/10.1145/3359301.
- 56. Pariser, E.; Allen, J. The Filter Bubble: What the Internet Is Hiding From You; Penguin Press HC, UK, 2012;
- 57. Ezrachi, A.; Stucke, M.E. Virtual Competition. *J. Eur. Compet. Law Pract.* **2016**, 7, 585–586. https://doi.org/10.1093/jeclap/lpw083.
- 58. O'Neil, C. Weapons of Math Destruction: How Big Data Increases Inequality and Threatens Democracy. *Vikalpa J. Decis. Makers* **2019**, 44, 97–98. https://doi.org/10.1177/0256090919853933.
- 59. Buolamwini, J.; Gebru, T. Gender Shades: Intersectional Accuracy Disparities in Commercial Gender Classification. In Proceedings of the Proceedings of Machine Learning Research; 2018; Vol. 81, pp. 77–91.
- 60. Kroll, J.A.; Huey, J.; Barocas, S.; Felten, E.W.; Reidenberg, J.R.; Robinson, D.G.; Yu, H. Accountable Algorithms. *Univ. PA. Law Rev.* **2017**, *165*, 633–705.
- 61. Dignum, V. Responsible Artificial Intelligence: How to Develop and Use AI in a Responsible Way C; Springer Cham, 2019; Vol. 1; ISBN 978-1-492-03971-6.
- 62. Ribeiro, M.H.; Ottoni, R.; West, R.; Almeida, V.A.F.; Wagner Meira, W.M. Auditing Radicalization Pathways on YouTube Manoel. In Proceedings of the FAT\*2020 Proceedings of the 2020 Conference on Fairness, Accountability, and Transparency; 2020; pp. 131–141.
- 63. Dastin, J. Amazon Scraps Secret AI Recruiting Tool That Showed Bias against Women. In *Ethics of data and analytics*; Auerbach Publications, 2022; pp. 296–299.
- 64. CHELLAPPA, R.K.; SIN, R.G. Personalization versus Privacy: An Empirical Examination of the Online Consumer's Dilemma. *Inf. Technol. Manag.* **2005**, *6*, 181–202. https://doi.org/10.3138/cras.42.1.7.
- 65. EUROPEIA, C. *Proposal for a Regulation on a European Approach for Artificial Intelligence;* Bruxelas: Comissão Europeia, 2021;
- 66. Booker, C.; Wyden, R.; Clarke, Y. Algorithmic Accountability Act of 2019. In Proceedings of the 116TH CONGRESS, 1ST SESSION, IN THE SENATE OF THE UNITED STATES; Federal Trade Commission, 2019; p. 15.
- 67. IEEE ETHICALLY ALIGNED DESIGN: A Vision for Prioritizing Human Well-Being with Autonomous and Intelligent Systems; 2nd ed.; IEEE, 2018; ISBN 9781509062645.
- 68. PAI Partnership on AI Releases Guidance for Safe Foundation Model Deployment, Takes the Lead to Drive Positive Outcomes and Help Inform AI Governance Ahead of AI Safety Summit in UK Available online: https://partnershiponai.org/pai-model-deployment-guidance-press-release/.
- 69. IAPP Jordan Creates National Ethics Charter for AI Available online: https://iapp.org/news/a/jordan-creates-national-ethics-charter-for-ai/.
- 70. UNIDO Jordan Presents Its AI Strategy and Implementation Roadmap Available online: https://aim.unido.org/jordan-presents-its-ai-strategy-and-implementation-roadmap/.

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