

# The Ethics of AI-Driven Marketing: Challenges and Opportunities

1<sup>st</sup> Raj Saha  
Management Trainee-International  
Logistics  
PCBL Chemical Limited  
Kolkata, India  
[rajsaha2015@gmail.com](mailto:rajsaha2015@gmail.com)

2<sup>nd</sup> Sahil Singh Jasrotia  
Department of Marketing  
IMI Kolkata  
Kolkata, India  
[sahiljasrotia93@gmail.com](mailto:sahiljasrotia93@gmail.com), ORCID:  
0000-0002-6775-4486

3<sup>rd</sup> Manoj Kumar Kamila  
Research Fellow  
Jaipuria Institute of Management  
Indore  
Indore, India  
[manojkumarkamila@gmail.com](mailto:manojkumarkamila@gmail.com),  
ORCID: 0000-0001-8456-5778

**Abstract**— This study explores the ethical challenges involved in using artificial intelligence (AI) in marketing, with a focus on issues like privacy, transparency, and algorithmic bias. It aims to identify responsible practices that support innovation while maintaining consumer trust and aligning with societal values. Using a structured survey, data was collected from 215 respondents and analyzed through SMART PLS to examine the relationships among Transparency, Privacy, Ethics, Adaptability, Cooperation, and Consumer Trust. The findings show that Transparency and Privacy significantly influence consumer trust in AI-driven marketing. However, Adaptability, Cooperation, and Ethical AI practices did not show significance, indicating a gap between ethical efforts and consumer awareness. These results emphasize the need for better communication and education about ethical AI. While limited by its sample and reliance on self-reported data, the study offers valuable insights and practical recommendations for marketers to adopt more transparent and privacy-focused AI strategies.

**Keywords**— AI; Ethics; Privacy; Marketing Transformation

## I. INTRODUCTION

The integration of Artificial Intelligence (AI) has revolutionized modern marketing, enabling organizations to achieve unprecedented levels of personalization, optimized outreach, and continuous consumer engagement. Technologies such as machine learning, predictive analytics, and natural language processing now allow marketers to analyze vast datasets, extract insights, and tailor strategies to individual preferences. As a result, marketing has evolved from a largely intuitive process to one grounded in data-driven precision, offering businesses a competitive advantage in today's digital environment (Kamila & Jasrotia, 2023).

However, with these advancements come significant ethical concerns, particularly related to how consumer data is collected, processed, and used. In many cases, marketing strategies involve extensive behavioral tracking and predictive profiling without explicit consumer consent, raising questions about transparency and consumer autonomy. As Gu et al., (2024) note, the lack of informed consent and insufficient communication regarding data usage can reduce consumer trust and damage brand credibility. Organizations now face the challenge of balancing AI's potential with ethical responsibility.

A key concern in AI marketing is algorithmic bias. When AI systems rely on historical data, they often reproduce existing social biases, resulting in marketing practices that may unintentionally marginalize or stereotype certain demographic groups. Such outcomes can perpetuate inequality, highlighting the need for deliberate efforts to identify and reduce bias in AI tools (Aker et al., 2022). Beyond fairness, AI's increasing role in marketing also affects employment dynamics. As more decisions are automated, the space for human judgment and creativity may

shrink. Nguyen et al. (2023) emphasize that excessive reliance on AI without human oversight can reduce accountability and potentially sideline marketing professionals.

Despite these ethical challenges, AI also offers an opportunity to promote more inclusive and responsible marketing. As Du and Xie (2021) argue, companies that implement AI ethically—based on principles of fairness, transparency, and accountability—can build stronger trust with consumers. Aligning AI strategies with societal values not only mitigates ethical risks but also helps businesses differentiate themselves in a crowded market.

This paper examines both the opportunities and challenges of utilising AI in marketing from an ethical perspective. It examines key issues such as data privacy, algorithmic bias, informed consent, and the interplay between AI and human decision-making. By offering evidence-based insights and actionable guidelines, this study aims to contribute to the ongoing discourse on responsible AI adoption—supporting a balanced approach that fosters innovation while upholding consumer rights and societal well-being.

## II. LITERATURE REVIEW

### A. The Role of AI in Marketing Transformation

Artificial Intelligence (AI) has emerged as a transformative force in marketing, enabling businesses to utilize advanced algorithms for predictive analytics, personalized engagement, and automation. These innovations are rapidly reshaping marketing by enhancing firms' capabilities to understand consumer needs, improve campaign effectiveness, and support data-driven decision-making (Kamila & Jasrotia, 2025). AI's ability to process large datasets allows marketers to target audiences with higher precision and deliver personalized content aligned with individual preferences (Nguyen et al., 2023).

### B. Ethical Concerns in AI-Driven Marketing

The increasing reliance on consumer data raises concerns regarding transparency, consent, and data ownership (Wu, 2024). Traditional consent mechanisms—such as lengthy terms and conditions—often fail to inform consumers meaningfully. Kamila and Jasrotia (2025) emphasize the need for real-time and interactive consent models to ensure informed user participation. Gu et al., (2024) further note that many consumers are unaware of how their data is collected, stored, and used, leading to ethical complexities around informed consent. AI enables hyper-personalized marketing but also introduces risks of manipulating consumer behavior.

### C. Algorithmic Bias and Fairness

AI trained on old records may sometimes perpetuate biases, making marketing efforts biased in their approach (Wu, 2024). For example, some targeting may occur because algorithms tend to prioritise specific demographic groups over others. According to Gu et al., (2024), periodic testing of algorithms is important and Du and Xie (2021) suggest using several kinds of training data to ensure everyone is treated equally. Clearly tracking and handling of data is very important for spotting and solving unexpected differences in health outcomes. There is a risk that bias can negatively impact how well consumers perceive a business and harm the company's reputation. In their 2023 review, Kamila and Jasrotia emphasise the importance of marketing being always ethical, fair, and inclusive.

### D. Personalization vs. Privacy

Personalization based on AI improves how pleased consumers are, but it may also make them worried about privacy. Sometimes, unlimited personalization can cause consumers to lose their personal freedom as AI tries to shape their actions more than they may want (Kamila & Jasrotia, 2025). According to Du and Xie (2021), users should be given options to personalize their online experiences and notice how things like recommendations are generated. Using personalized data must go alongside strong privacy steps to prevent misuse (Nguyen et al., 2023).

### E. Transparency in AI Decision-Making

Using AI ethically requires everything to be transparent. It appears that many companies do not tell consumers how AI affects their dealings (Wu, 2024). The authors recommend using Explainable AI (XAI) as a transparency protocol to help explain how Artificial Intelligence (AI) works. As a result, people can trust the internet more and see why ads are given to them.

### F. Accountability in AI Systems

Well-defined rules for holding individuals responsible play a crucial role in the ethical use of AI. Du and Xie (2021) assert that companies need to name individuals in charge of solving errors, bias or misuse of data in algorithms. They allow companies to follow regulations more strongly and promote ethical behavior. The authors, Kamila and Jasrotia (2023), state that accountability helps reduce dangers and increases trust in AI technology among consumers.

### G. Human Oversight and Hybrid Models

AI helps in many ways, but marketing still needs human input. The ability to follow context and have empathy is missing in AI (Nguyen et al., 2023). As AI improves click-through rates, it may not pay enough attention to how a campaign influences people's social or cultural lives (Wu, 2024). When AI is supported by human decision-making, the outcome is responsible and creative marketing (Du and Xie, 2021).

### H. Building Ethical Frameworks

Employing transparent, fair, accountable, and trustworthy moral frameworks can effectively address ethical issues (Wu, 2024). Wu (2024) argues for the use of ethics and laws, such as GDPR, in tandem. The study suggests that industry-based projects be established, including regular reviews for bias and frequent checks of algorithms and systems to gather feedback from consumers. Du and Xie (2021) argue that for ethical rules to be useful, technologists, marketers, ethicists and regulators need to work together. Such systems both limit risks and help organizations take the lead in responsible innovation.

## III. OBJECTIVES

This study aims to investigate the ethical challenges posed by the integration of Artificial Intelligence (AI) in marketing. The core objectives are:

- To examine how AI impacts ethical values in marketing, such as privacy, transparency, fairness, and consumer autonomy.
- To assess the role of these ethical factors in shaping consumer trust.
- To explore the balance between personalization and ethical responsibility in AI-driven marketing strategies.
- To contribute to the development of ethical guidelines for responsible AI use in marketing.

## IV. METHODOLOGY

### A. Measurement Scales

The survey questionnaire had three sections covering demographic information (A), uses of AI (B) and items taken from current studies (C). Questions for the Ethics scale were adapted from Kumar et al. (2023), while the scales for Transparency, Cooperation and Adaptability came from Fox (2020) and the scales for Privacy and Consumer Trust were adapted from Raj et al., (2023). The scale used for this study ran from "Strongly Agree" (1) at one end to "Strongly Disagree" (5) at the other. The study's conceptual model can be seen in Figure 1.

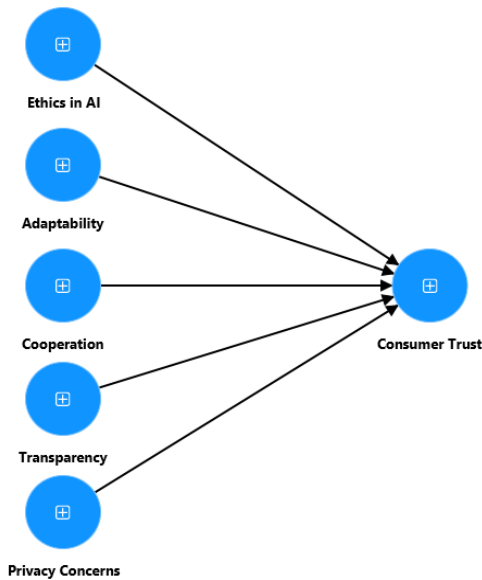


Figure 1: Conceptual Model; Source: Author(s) own work

- H<sub>01</sub>: Ethics in AI has a positive relationship with Consumer Trust
- H<sub>02</sub>: Adaptability has a positive relationship with Consumer Trust.
- H<sub>03</sub>: Cooperation has a positive relationship with Consumer Trust.
- H<sub>04</sub>: Transparency has a positive relationship with Consumer Trust.
- H<sub>05</sub>: Privacy Concerns have a positive relationship with Consumer Trust.

The study offers five hypotheses to study the ways in which AI's ethical traits affect consumer trust. H<sub>01</sub> states that having ethical AI helps to build trust with consumers. H<sub>02</sub> argues that an AI system trustworthy by consumers will respond to new developments in consumer needs and concerns. It is argued by H<sub>03</sub> that when stakeholders cooperate in AI development, they help form trust by holding equal responsibility. H<sub>04</sub> asserts that transparency in AI processes builds trust by reducing skepticism and increasing perceived control. H<sub>05</sub> indicates that strong privacy safeguards positively impact consumer trust by addressing concerns over data protection and consent.

#### B. Sample and Data Collection

The study targeted marketing professionals, AI researchers, and consumers familiar with AI-driven marketing. Data was collected through an online survey designed on Microsoft Forms and shared via email, LinkedIn, and professional networks. A filter question ensured only respondents with AI marketing experience participated. Over 30 days, 250 responses were received, with 215 complete responses retained for analysis.

#### C. Analysis

The demographic table shows a diverse respondent profile across gender, age, education, industry, occupation, and income. Gender distribution is balanced with 117 men and 98 women. Most respondents (84) are aged 18-35, with 36

over 55, and 27 undisclosed. Educational qualifications vary: 34 hold bachelor's degrees, 39 master's, 28 doctorates, 32 high school, 38 other, and 44 undisclosed. Industry representation is broad, led by government (41), financial (31), manufacturing (30), education (28), and IT (26). Occupations include engineers (32), teachers (25), government officers (23), researchers (19), plus managers, consultants, entrepreneurs, students (28), and freelancers (10). Income ranges are balanced, with 82 earning ₹10-30 lakh, 34 above ₹40 lakh, 37 below ₹10 lakh, and 33 undisclosed. The detailed description of respondents profile can be seen in Table I.

TABLE I. DEMOGRAPHIC PROFILING OF RESPONDENTS

Category	Value	Count
Gender	Man	117
	Woman	98
Age	< 18	15
	18 – 25	37
	26 – 35	47
	36 – 45	30
	46 – 55	23
	> 55	36
	Prefer not to say	27
Education	High school	32
	Bachelor's degree	34
	Master's degree	39
	Doctorate degree	28
	Other	38
	Prefer not to say	44
Industry	Government	41
	Financial	31
	Manufacturing	30
	Education	28
	IT (Information Technology)	26
	Public service	21
	Other	35
	Student	1
	Consulting	1
	Retail	1
Occupation	Engineer	32
	Teacher	25
	Government Officer	23
	Researcher	19
	Manager	16
	Consultant	16
	Entrepreneur	12
	Freelancer	10
	Student	28

	Intern	2
	Other	25
Annual Income	Below 10,00,000	37
	10,00,000 - 20,00,000	45
	20,00,000 - 30,00,000	37
	30,00,000 - 40,00,000	29
	Above 40,00,000	34
	Prefer not to say	33

The demographic table shows a diverse respondent profile across gender, age, education, industry, occupation, and income. The sample includes 117 men and 98 women. Most respondents are aged 18-35 (84), with 36 over 55, and 27 undisclosed. Educational levels vary: 34 bachelor's, 39 master's, 28 doctorate, 32 high school, 38 other, and 44 undisclosed. Key industries represented are government (41), financial (31), manufacturing (30), education (28), and IT (26). Occupations mainly include engineers (32), teachers (25), government officers (23), researchers (19), students (28), and freelancers (10). Income is fairly balanced, with 82 earning ₹10-30 lakh, 34 above ₹40 lakh, 37 below ₹10 lakh, and 33 undisclosed.

TABLE II. AI USAGE PATTERN

Item	Value	Count
What is your frequency of AI Usage	Occasionally (A few times a month)	59
	Frequently (Daily)	56
	Regularly (A few times a week)	52
	Rarely (Once a month or less)	48
How knowledgeable are you about AI technologies?	Very knowledgeable	52
	Somewhat knowledgeable	47
	Slightly knowledgeable	46
	Expert	36
	Not knowledgeable at all	34
Have you ever had a negative experience with an AI system?	Maybe	80
	No	80
	Yes	55

The AI usage as depicted in table II reveals key insights into user engagement, knowledge, and experiences. Usage frequency is fairly balanced, with 59 respondents using AI occasionally, 56 daily, and 52 regularly, showing AI's growing role in daily life. Self-reported AI knowledge varies: 52 are very knowledgeable, 47 somewhat knowledgeable, 46 slightly knowledgeable, 34 not knowledgeable, and 36 experts, indicating a broad spectrum of understanding. Regarding negative experiences, 80 respondents answered "Maybe," reflecting uncertainty or mixed feelings, while 80 reported no negative experiences, and 55 acknowledged negative interactions. This suggests generally positive perceptions but highlights areas for improvement in AI reliability and user-friendliness. Overall, AI engagement is rising, with varied knowledge levels and mixed experiences shaping user trust and challenges.

TABLE III. STRUCTURAL MODEL ANALYSIS

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	Tstatistics ( O /STDEV)	P values	Decision
Adaptability->Consumer Trust	-0.014	-0.001	0.071	0.199	0.842	Not supported
Cooperation->Consumer Trust	0.105	0.108	0.066	1.582	0.114	Not supported
Ethics in AI->Consumer Trust	0.089	0.101	0.072	1.240	0.215	Not Supported
Privacy Concerns->Consumer Trust	0.139	0.148	0.065	2.126	0.034	Supported
Transparency->Consumer Trust	0.448	0.439	0.071	6.318	0.000	Supported

The structural model analysis (See Table III) shows mixed results regarding factors influencing Consumer Trust. Privacy Concerns ( $\beta = 0.139$ ,  $p = 0.034$ ) and Transparency ( $\beta = 0.448$ ,  $p = 0.000$ ) significantly and positively affect Consumer Trust, highlighting their key roles in building confidence in AI-driven marketing. Transparency's strong effect suggests that clear, understandable AI practices enhance trust, while addressing privacy anxieties also fosters consumer confidence.

Conversely, Adaptability ( $\beta = -0.014$ ,  $p = 0.842$ ), Cooperation ( $\beta = 0.105$ ,  $p = 0.114$ ), and Ethics in AI ( $\beta = 0.089$ ,  $p = 0.215$ ) showed no significant impact. Adaptability's negative, insignificant effect may reflect consumer concerns about unpredictable or unstable AI behavior. Cooperation might be less relevant to consumers, who prioritize transparency and privacy over collaborative AI features. Ethics in AI, although important, may not influence trust directly without visible or tangible proof of ethical implementation, as consumers might remain unaware or skeptical of ethical claims in AI marketing.

TABLE IV. RELIABILITY & VITALITY STATISTICS

	Outer Loading matrix	Cronbach's alpha	Composite reliability	Composite reliability	Average variance extracted (AVE)
Adaptability		0.827	1.178	0.864	0.616
AD1: AI models should quickly reconfigure themselves when changes arise.	0.700				
AD2: AI should stop processing when unintended harm occurs.	0.788				
AD3: AI systems should adapt efficiently to new conditions and requirements.	0.912				
AD4: AI systems should have the ability to recover from malfunctions.	0.722				
Consumer Trust		0.941	0.944	0.958	0.850
CT1: AI companies keep the best interests of users in mind.	0.939				
CT2: I believe AI service providers are reliable.	0.938				
CT3: I feel confident in using AI-powered products and services.	0.889				
CT4: I trust that AI service providers keep their promises and commitments.	0.931				
Cooperation		0.845	0.848	0.906	0.763
CO1: AI companies should work with partners in a cooperative environment.	0.891				
CO2: AI development should involve thorough collaboration among experts.	0.859				
CO3: Cooperation in AI Development: Industry-wide collective action should be taken to ensure responsible AI development.	0.870				
Ethics in AI		0.910	0.919	0.928	0.647
ET1: AI companies should make it clear who is responsible for AI-generated decisions.	0.819				
ET2: AI developers should conduct impact assessments to minimize potential harm.	0.769				
ET3: AI should be developed only after ensuring a clear understanding of its purpose.	0.817				
ET4: AI should operate in ways that do not violate consumer trust.	0.835				
ET5: AI systems should be designed to be impartial and avoid unfair discrimination.	0.720				
ET6: AI systems should respect individual autonomy in decision-making.	0.817				
ET7: AI-driven decisions should be fair and unbiased.	0.846				
Privacy Concerns		0.770	1.220	0.849	0.655
PC1: I am worried that using AI services may allow unauthorized access to my data.	0.948				
PC2: I believe disclosing personal information to an AI service provider is risky.	0.689				
PC3: Privacy Concerns in AI: There is a high potential loss associated with sharing personal information with AI-driven platforms.	0.770				
Transparency		0.890	0.891	0.931	0.819
TA1: AI companies should ensure that users understand how AI systems make decisions.	0.906				
TA2: AI decision-making processes should be transparent to all stakeholders.	0.888				
TA3: All AI-related entities should uphold obligations to procedural fairness.	0.921				

The measurement model (See Table IV) demonstrates strong reliability and validity. Most outer loadings exceed 0.7, confirming indicator reliability, though PC2 (0.689), AD1 (0.700), and ET5 (0.720) are marginal and may require



refinement. Cronbach's Alpha values are all above 0.7, indicating good internal consistency, with Consumer Trust (0.941) being the highest and Privacy Concerns (0.770) the lowest. Composite Reliability values also exceed 0.84 across constructs, reinforcing consistency. AVE values are above 0.6, confirming convergent validity—strongest for Consumer Trust (0.850) and Transparency (0.819). Transparency and Consumer Trust emerge as the most robust constructs. Low-loading items (PC2, AD1, ET5) should be reviewed to enhance measurement precision.

TABLE V. HETROTRAIT-MONOTRAIT RATIO (HTMT)

	Adaptability	Consumer Trust	Cooperation	Ethics	Privacy Concerns	Transparency
Adaptability						
Consumer Trust	0.114					
Cooperation	0.097	0.196				
Ethics in AI	0.086	0.157	0.061			
Privacy Concerns	0.092	0.221	0.093	0.084		
Transparency	0.291	0.543	0.167	0.161	0.192	

The Fornell-Larcker criterion (See Table V) confirms discriminant validity, indicating that each construct is conceptually distinct. This is established when the square root of a construct's AVE exceeds its correlations with other constructs. The highest correlation is between Consumer Trust and Transparency (0.543), suggesting a strong relationship. However, as both constructs have AVE values above 0.543 (Consumer Trust = 0.850, Transparency = 0.819), discriminant validity is upheld. Other correlations—such as Privacy Concerns with Consumer Trust (0.221) and Ethics in AI with Consumer Trust (0.157)—are moderate and do not exceed their respective AVE square roots. Thus, all constructs—Adaptability, Consumer Trust, Cooperation, Ethics in AI, Privacy Concerns, and Transparency—maintain discriminant validity and are empirically distinct.

The Variance Inflation Factor (VIF) analysis assesses multicollinearity among constructs in AI-driven services (See Table VI). Most VIF values are below 3, indicating low collinearity. Ethical AI (ET) and Transparency (TA) show moderate VIFs (1.788–3.422), with ET7 (3.422) and TA3 (3.207) nearing concern thresholds, likely due to overlapping concepts like fairness and procedural clarity. Adaptability (AD) and Cooperation (CO) display low VIFs (1.569–2.156), indicating clear distinction. Privacy Concerns (PC) also show low VIFs (1.478–1.690), confirming minimal overlap.

TABLE VI. COLLINEARITY STATISTICS (VIF)

	VIF
ET1: AI companies should make it clear who is responsible for AI-generated decisions.	2.499
ET2: AI developers should conduct impact assessments to minimize potential harm.	2.656
ET3: AI should be developed only after ensuring a clear understanding of its purpose.	2.392
ET4: AI should operate in ways that do not violate consumer trust.	2.467
ET5: AI systems should be designed to be impartial and avoid unfair discrimination.	1.788
ET6: AI systems should respect individual autonomy in decision-making.	2.421
ET7: AI-driven decisions should be fair and unbiased.	3.422
AD1: AI models should quickly reconfigure themselves when changes arise.	1.768
AD2: AI should stop processing when unintended harm occurs.	2.093
AD3: AI systems should adapt efficiently to new conditions and requirements.	1.569
AD4: AI systems should have the ability to recover from malfunctions.	1.843
CO1: AI companies should work with partners in a cooperative environment.	2.156
CO2: AI development should involve thorough collaboration among experts.	1.961
CO3: Cooperation in AI Development. Industry-wide collective action should be taken to ensure responsible AI development.	1.987
TA1: AI companies should ensure that users understand how AI systems make decisions.	2.753
TA2: AI decision-making processes should be transparent to all stakeholders.	2.264
TA3: All AI-related entities should uphold obligations to procedural fairness.	3.207
PC1: I am worried that using AI services may allow unauthorized access to my data.	1.690
PC2: I believe disclosing personal information to an AI service provider is risky.	1.478
PC3: Privacy Concerns in AI. There is a high potential loss associated with sharing personal information with AI-driven platforms.	1.604
CT1: AI companies keep the best interests of users in mind.	4.699
CT2: I believe AI service providers are reliable.	4.324
CT3: I feel confident in using AI-powered products and services.	3.020
CT4: I trust that AI service providers keep their promises and commitments.	4.760

## V. IMPLICATIONS

The findings from this study offer several key managerial insights for organizations implementing AI-driven marketing strategies. The diverse demographic representation across gender, age, education, industry, occupation, and income highlights that AI adoption spans a broad user base. This calls for inclusive communication strategies that ensure AI services are understandable and relevant to both tech-savvy and novice users. Transparency appears to influence consumer trust more strongly ( $\beta = 0.448$ ,  $p < 0.001$ ) than privacy concerns ( $\beta = 0.139$ ,  $p = 0.034$ ), as shown in the structural model. Encouraging transparency will help if managers use interpretable AI, display data in clear dashboards and provide users with chances to better understand AI's functions. On the other hand, organizations should apply data privacy guidelines by design, provide users with options on their data and obey GDPR and CCPA rules. Alternatively, trust is not affected by adaptability ( $\beta = -0.014$ ,  $p = 0.842$ ) or cooperation ( $\beta = 0.105$ ,  $p = 0.114$ ). Although AI personalizes content and is able to join forces with other tools, it cannot guarantee people will trust it. When a website adapts too much, users may feel uncomfortable. For this reason, offering adaptable personalization and reliable delivery is very important. Cooperation between AI, humans or various systems needs to be overseen by humans in key decision-making areas like finance or healthcare. Trust did not tend to change based on approaches to ethics in AI, so it seems that ethical actions are not always recognized by consumers. The results are in line with the findings of Raj et al., (2024). To address this gap, organizations should increase transparency by producing transparency reports, inviting public audits and teaching consumers about ethical AI.

Besides, it seems that some users are knowledgeable about AI, while many assert they are expert in this field. Because of this, we can now offer different content based on users'

AI skills. Those who know the system well like to take charge, while those who are new to it will find a simple guided experience. A great many users rely on AI every day, so it is important for marketers to use this habit by engaging users in informative and suitable interactions. Some users had trouble with AI and were unhappy, though many others had no problems. When problems such as opaque results, no control over actions or weak recommendations occur, real-time updates, the ability to pause AI and ways to involve humans should be available within any AI system. CT1, CT2 and CT4 are noticeably multicollinear in VIF analysis, meaning that individuals characterize AI's trustworthiness, reliability and commitment in the same way. With this insight, managers are able to share the same trust message that points out honesty, follows ethical rules and promotes openness in their communication. In short, companies need to focus their AI marketing on becoming more open, respecting privacy, staying flexible, supporting ethical conduct, organizing customer experiences, dealing with unpleasant incidents and incorporating elements that build customers' trust into their contacting methods. Using these steps will help deploy excellent AI and foster better relationships with consumers.

## VI. CONCLUSION

Transparency and privacy are key drivers of consumer trust in AI-driven marketing, whereas adaptability, cooperation, and ethical AI show limited direct impact. To build trust, organizations must prioritize explainable AI, strong privacy measures, and clear communication of ethical practices. Enhancing user awareness and addressing concerns can further strengthen trust. Sustained consumer confidence in AI requires a balanced approach that integrates technological innovation with ethical accountability. This study, while offering valuable insights into ethical AI in marketing, is subject to several limitations. First, the sample size is limited to 215 respondents, which may restrict the generalizability of findings across broader populations and industries. Second, the reliance on self-reported data introduces the potential for social desirability and response bias, particularly on sensitive topics like ethics and trust. Third, while constructs like ethics and cooperation were found to be statistically insignificant, this may stem from a lack of consumer understanding or visibility of these practices rather than their actual absence or irrelevance. Future research should consider longitudinal designs to assess how perceptions evolve as AI systems become more integrated into marketing. Additionally, qualitative studies could deepen understanding of consumer interpretations of ethical AI, while cross-cultural comparisons may reveal how trust in AI varies across different regulatory and cultural contexts. Finally, experimental approaches could isolate the effects of specific transparency or privacy interventions on consumer trust to guide more effective implementation strategies.

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