

Impact of Ethics and Data Privacy on Consumer Trust in AI – Based Marketing

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Abstract:

This research paper will discuss how ethics and data privacy affect consumer confidence in AI-based marketing. As Artificial Intelligence is increasingly used in personalized advertising, suggestions, and automated customer contact, issues of data privacy, transparency, fairness, and ethical use of consumer data have become more prominent. The consumers do not have a clear understanding of how their personal information is gathered, processed, and transmitted and this may adversely impact their trust. The studies involve primary data gathered via questionnaires on 100 participants and statistical methods, including percentage analysis, Friedman ranking analysis, and average score analysis. The results indicate that the most significant aspects of creating consumer trust are data privacy, AI decision transparency, and ethical consumer data usage. The research concludes that transparent and ethical AI marketing is a key to increasing consumer confidence and promoting long-term brand relationships.

keywords: Artificial Intelligence (AI), Ethics in AI, Data Privacy, Consumer Trust, AI-Based Marketing, Transparency.

Introduction

The use of Artificial Intelligence (AI) has entered the field of modern marketing as a crucial tool that allows providing customers with personalized advertising, smart system of recommendations, automated customer service, and predictive analysis. The rise of AI-based marketing in organizations has increased in popularity as organizations aim to use big data of consumer data to offer personalized experiences that result in consumer involvement and business success. However, the rise of dependence on personal information has raised grave ethical and privacy concerns about data. Consumers are becoming more aware of how their personal information is collected, analyzed and distributed using AI-driven marketing services. Lack of transparency, low-quality consent, algorithmic bias, and misuse of data have become issues that have generated consumer mistrust. Ethics in AI-based marketing revolves around fairness, accountability, transparency and responsible use of data, and data privacy revolves around consumer privacy. The role of consumer trust is essential to identify whether AI-driven marketing strategies are accepted and effective or not. Thus, the influence of ethics and data privacy

on consumer trust will be necessary to establish responsible, transparent, and trustful AI-based marketing activities.

Review of Literature

Asadollahi and Akbari Asl (2025)¹ Examined the effect of data privacy awareness on the consumer confidence in AI-personalized marketing. They found that AI personalization has a positive effect on engagement, satisfaction, and purchase intention but that raising privacy awareness undermines consumer trust when data usage is seen as an intrusion. Trust was also found as one of the mediating variables that relates to personalization and consumer behavior. The findings point to the necessity of conducting ethical and transparent data collection, responsible use of AI, and practices to promote consumer confidence. This paper finds that companies should strike a precise balance between the personalization advantages and high levels of privacy to provide the AI-based marketing with sustainable trust.

Esa, Abdul Rahman, and Ahmad (2025)² Reviewed how ethical transparency can be used in marketing based on AI and how it affects consumer

trust. The paper has identified that consumer confidence is greatly boosted through transparency in AI use, data practice disclosure and algorithmic fairness. The research also emphasized how transparency in the use of AI, information disclosures of data practices and algorithmic fairness can greatly increase consumer faith. The authors highlighted that consumers would have more confidence in brands that explain the way AI systems work. Other challenges found in the study include the complexity of the algorithms as well as bias in realizing transparency. On the whole, the results indicate that ethical disclosure enhances consumer confidence, provides better brand loyalty, as well as leads to positive brand perception in marketing environments that utilize AI.

Obieguo (2025)³ Investigated the ethical consideration of AI-driven marketing in terms of consumer trust by conducting an empirical study. The analysis showed that ethical AI practices are strongly associated with the level of consumer trust. Major issues were privacy invasion of data, absence of transparency, and misleading marketing practices. The results indicated that consumers are more likely to gain more trust in cases where organizations embrace responsible management of data, fairness, and responsibility in AI marketing frameworks. The paper has concluded that ethical AI frameworks and compliance with regulations will have to be implemented to preserve the rights of consumers and develop long-term trust in the use of AI-based marketing practices.

Sultana et al. (2025)⁴ Evaluated the problem of ethics, privacy, and trust in AI analytics in various sectors. The researchers identified that user trust is adversely impacted by the presence of algorithmic bias, absence of explainability, and the inadequate data protection practices. In cases that opaque AI systems were used, consumers felt that they were unreliable, especially in the context of personal data. The authors have highlighted that ethical-by-design AI, transparency, and privacy-preserving methods are significant in building trust. The results provide that ethical principles and accountability structures need to be integrated into AI systems to maximize user acceptance and trust in AI-driven applications, such as marketing analytics.

Oluwafemi et al. (2021)⁵ Conducted an evaluation of ethical considerations in AI-based marketing analytics, with regard to privacy, transparency and consumer trust. In the review, it was noted that over-data gathering, lack of transparency in black-box algorithms and inadequate consumer knowledge lowers the confidence in AI marketing systems. The authors emphasized that adherence to data protection laws and open AI practices are a great way to enhance consumer trust. The paper has concluded that the implementation of AI ethically is important to balance between the efficacy of data-driven marketing and consumer rights. The results can be utilized by organizations that aim to develop sustainable trust by marketing AI responsibly.

Statement of the problem

Artificial Intelligence (AI) refers to a use of AI in the context of marketing and offers personalized advertisements, predictive offers and automated communication with customers. Even though AI-based marketing can enhance efficiency and customer engagement, it is very worrying with regard to ethicality and privacy of data. Regularly, consumers do not understand how their personal information is being gathered, stored, and processed by AI-based marketing systems. A lack of transparency, misuse of data and algorithmic bias are issues that affect consumer trust negatively. AI-based marketing strategies cannot be successful without trust that will influence consumer acceptance and purchase decisions. However, limited studies exist to examine the intersections between ethics and data privacy regarding consumer trust in AI-based marketing, which is why this research is needed.

Objectives:

1. To investigate the effects of the awareness of data privacy and the protection of personal data on consumer trust in AI-driven marketing.
2. To define the main ethical factors affecting the consumer trust towards AI-based marketing.
3. To analyze a impact of ethical AI practices on consumer trust in AI-based marketing.

Research Methodology:

1) Source of data

The research is founded on the primary and secondary data.

2) Data Collection Method

● **Primary data:**

A structured questionnaire was used to gather primary data. The questionnaire was administered online using websites like Google Forms.

● **Secondary data:**

The secondary data were gathered through published and unpublished sources. These consist of research journals, scholarly articles, books, conference papers, Web sites, and reports concerning artificial intelligence, ethics, data privacy, and consumer trust.

3) Area of the study

The study is restricted in terms of its area to consumers utilizing digital platforms where AI-based marketing practices are most frequently implemented. The research targets the respondents in a smaller geographical region because of time and accessibility factors.

4) Sampling Technique and Sample Size:

Sampling Technique - The study strategy is convenient sampling. The respondents were selected according to the availability and willingness to take part in the survey.

Sample Size - The sample size used in the research was 100 respondents.

5) Period of the study

November 2025 to January 2026

6) Statistical tools of the study

- Percentage Analysis
- Average score
- Friedman Ranking Analysis

Limitations of the study:

- The research also has a small sample size, which might not be representative of the whole population.
- The answers depend on individual feelings of the respondent and are subject to bias.
- The research concentrates merely on the chosen components of ethics and privacy in AI-based marketing.

Data Analysis & Interpretation:

TABLE NO :1
Personal outline of the respondents

| Personal Profile | Particulars | No of Respondents | Percentage (%) |
|---------------------------|---------------------|-------------------|----------------|
| Gender | Male | 55 | 55 |
| | Female | 45 | 45 |
| Age Group | Below 20 | 12 | 12 |
| | 21-30 | 48 | 48 |
| | 31-40 | 28 | 28 |
| | Above 40 | 12 | 12 |
| Educational Qualification | Undergraduate | 40 | 40 |
| | Postgraduate | 30 | 30 |
| | Professional | 20 | 20 |
| | Others | 10 | 10 |
| Occupation | Student | 32 | 32 |
| | Private Employee | 34 | 34 |
| | Government Employee | 14 | 14 |
| | Business | 10 | 10 |

| | | | |
|----------------|-------------|----|----|
| | Homemaker | 6 | 6 |
| | Other | 4 | 4 |
| Monthly Income | Below 20000 | 22 | 22 |
| | 20001-40000 | 36 | 36 |
| | 40001-60000 | 24 | 24 |
| | Above 60000 | 18 | 18 |

Source: Primary Data

Interpretation:

The table indicates that the majority of the respondents are males (55) and 45 percent female. Most of the respondents are between 21 and 30 (48%), meaning that the youths make up the greatest percentage. In terms of education, 40% are undergraduates, with postgraduates coming next (30%), which reflects a moderately educated

sample. Occupation-wise, the largest groups are private employees (34%) and students (32%). In regards to income, most of them earn between 20,001 to 40,000 (36%), which depict a middle-income group. The profile, generally, indicates a youthful, educated, and working-class respondent group, which is appropriate in the research of consumer perception of AI-based marketing.

CHART NO:1
MONTHLY INCOME OF RESPONDENTS

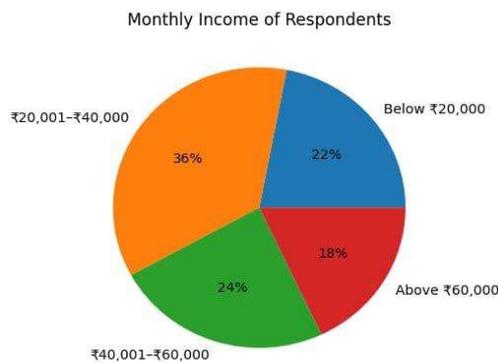


TABLE NO: 2
Factors Contributing to Consumer Trust in AI-Based Marketing

| S NO | Factors | SA | A | N | D | SD | Total | Mean |
|------|-------------------------------------|-----|-----|----|----|----|-------|------|
| 1 | Data privacy and protection | 42 | 38 | 12 | 5 | 3 | 100 | 4.11 |
| | | 210 | 152 | 36 | 10 | 3 | 411 | |
| 2 | Transparency in AI decisions | 40 | 36 | 15 | 6 | 3 | 100 | 4.04 |
| | | 200 | 144 | 45 | 12 | 3 | 404 | |
| 3 | Ethical use of consumer data | 38 | 35 | 18 | 6 | 3 | 100 | 3.99 |
| | | 190 | 140 | 54 | 12 | 3 | 399 | |
| 4 | Fairness in AI systems | 35 | 34 | 20 | 7 | 4 | 100 | 3.89 |
| | | 175 | 136 | 60 | 14 | 4 | 389 | |
| 5 | Accountability of companies | 33 | 32 | 22 | 8 | 5 | 100 | 3.8 |
| | | 165 | 128 | 66 | 16 | 5 | 380 | |
| 6 | Legal compliance | 30 | 35 | 20 | 10 | 5 | 100 | 3.75 |
| | | 150 | 140 | 60 | 20 | 5 | 375 | |
| 7 | Compliance with data protection law | 28 | 30 | 25 | 12 | 5 | 100 | 3.64 |
| | | 140 | 120 | 75 | 24 | 5 | 364 | |
| 8 | Consumer control over personal data | 25 | 28 | 27 | 13 | 7 | 100 | 3.51 |
| | | 125 | 112 | 81 | 26 | 7 | 351 | |

Source: Primary Data

(SA - Strongly Agree, A - Agree, N - Neutral, D - Disagree, SD - Strongly Disagree)

Interpretation:

The mean score of data privacy and protection was the highest (4.11), which means that it is the most significant variable in the consumer trust in AI-based marketing. Strong influence is also exhibited in transparency in AI decisions (4.04) and ethical

use of consumer data (3.99). Moderately impactful are fairness in AI systems and company accountability. The lower position of legal compliance and consumer control over personal data indicated a relatively lesser impact on consumer trust.

TABLE NO: 3
Friedman Ranking Analysis

Impact of Ethical AI and Data Privacy Factors on Consumer Trust in AI-Based Marketing

| S NO | Factor | Mean Rank | Rank |
|------|--|-----------|------|
| 1 | Compliance with data protection laws and regulations | 4.10 | 2 |
| 2 | Transparency in AI decision-making | 4.66 | 7 |
| 3 | Accountability of companies using AI | 4.34 | 4 |
| 4 | Fairness and bias-free AI algorithms | 4.47 | 5 |
| 5 | Consumer awareness of AI marketing practices | 4.21 | 3 |
| 6 | Ethical use of consumer data | 4.58 | 6 |
| 7 | Control over personal data shared online | 4.02 | 1 |
| 8 | Data privacy and protection of personal information | 4.78 | 8 |

Source: Primary Data

Interpretation:

The table shows that respondents value high levels of ethical AI and data privacy factors as determinants of consumer trust in AI-based marketing. Control over personal data shared online (4.02) is of top priority, then, compliance with data protection law along with other regulations (4.10), and consumer awareness of AI marketing practices (4.21). The accountability of companies using AI (4.34) and fairness and bias-free AI algorithms (4.47) have moderate importance. Ethical use of consumer data (4.58) and transparency in AI decision-making (4.66) have a lower priority. Data privacy and personal information protection are the lowest priority factors (4.78). Comprehensively, the findings indicate that the personal data control, legal compliance, and awareness are some of the most important motivators of confidence in AI-based marketing among consumers.

Suggestions:

- The organizations have to make sure that AI decisions are transparent to make consumers aware of how their information is utilised.

- To prevent the misuse of consumer data, businesses are advised to observe ethical practices when gathering and utilizing consumer data.
- To enhance awareness and confidence, firms are advised to enlighten consumers on AI marketing practices.
- Data protection laws and regulations have to be followed precisely in order to be credible by companies.
- The use of AI systems that are fair and free of biases should be adopted by marketers to provide equal and credible consumer experiences.

Conclusion:

The paper concludes that consumers are also getting more aware of AI-based marketing practices employed by businesses. Ethics and privacy of data are the two most important issues that define consumer trust in AI-based marketing. The statistical findings show that there is a significant level of awareness of AI-based marketing and consumer trust meaning that consumers who have

awareness of the product tend to form a positive perception of a brand. This can be strengthened by effective data protection and effective communication concerning the purpose and usage of AI, which boost brand credibility and customer trust. Moreover, educating the consumers on the AI-based marketing activities can minimize uncertainty, enhance acceptance, and enhance transparency. The organizations that will adhere to the ethical norms regularly, discuss the privacy issues, and encourage responsible AI utilization will be in a better position to build customer relationships in the long term and contribute to the sustainable growth of business.

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