*Corresponding Author's Email: souhir.landoulsi@yahoo.fr
Proceedings of the International Conference on New Trends in Management, Business and Economics
Vol. 3, Issue. 1, 2025, pp. 15-22
DOI: https://doi.org/10.33422/icnmbe.v3i1.1328
Copyright © 2025 Author(s)
ISSN: 3030-0347 online

Diamond Scientific Publishing

Artificial Intelligence and Ethical Consumption: Exploring Consumer Perceptions of AI-Driven Sustainable Marketing in Tunisia

Dr. Souhir Landoulsi

Faculty of Economic Sciences and Management, University of Sfax (FSEG Sfax)

ORCID ID: 0009-0008-1414-1716

ABSTRACT

In a global context marked by both digital acceleration and ecological urgency, this research explores how artificial intelligence (AI) can contribute to reshaping marketing practices toward greater ethical and sustainable standards. Drawing on a mixed-method study involving 100 young Tunisian consumers, the study combines statistical insights with thematic content analysis to understand users' perceptions, expectations, and concerns related to AI-driven sustainable marketing.The results highlight three primary perceived uses of AI in marketing: personalized recommendations, intelligent advertising, and automation of decision-making. While these features are generally welcomed for improving efficiency and user experience, concerns remain regarding data privacy, algorithmic opacity, and potential social biases. A majority of respondents (72%) demand greater transparency in algorithmic processes, while 50% believe that AI can be a meaningful driver of sustainable consumption—provided it is governed ethically. The study further reveals distinct consumer profiles based on age, AI usage frequency, and ethical awareness. These profiles influence attitudes toward AI acceptability, willingness to share data, and trust in eco-responsible brand claims. Participants consistently expressed three key expectations: ethical certification of AI use, improved education on how AI works, and stricter regulation of personal data usage. This research contributes to the growing field of algorithmic ethics in marketing by proposing a framework for inclusive, transparent, and socially accountable AI deployment. It invites companies to move beyond technological innovation alone and toward a participatory and values-driven approach to digital transformation. The findings are particularly relevant for emerging markets, where digital maturity coexists with growing environmental and ethical awareness.

Keywords: algorithmic accountability; algorithmic ethics; data governance; digital trust; transparency

1. Introduction

1.1 Context and Global Challenges

The contemporary global context is characterized by an accelerated digital transformation alongside pressing ecological and social challenges. Organizations are increasingly required to reassess and redesign their marketing strategies to address these complex and interrelated demands. As emphasized by Rust and Huang (2021), artificial intelligence is giving rise to a

"Feeling Economy," where human emotional intelligence becomes a strategic lever in response to increasing automation. Sustainable marketing has therefore emerged as a strategic necessity, integrating environmental, social, and economic considerations in a holistic manner.

1.2 Research Problem

This research seeks to address the following question: How can artificial intelligence be effectively integrated into marketing strategies to strengthen ethical standards, promote sustainability, and positively influence consumer behavior?

1.3 Objectives and Contributions

The primary objective of this study is to examine how AI can be employed responsibly to support the development of ethical and sustainable marketing practices. Specifically, it aims to identify and analyze consumer perceptions, expectations, and ethical concerns regarding AI-driven marketing in the context of an emerging economy. Moreover, the study intends to provide actionable recommendations for marketers and policymakers by proposing a framework for transparent, participatory, and socially accountable algorithmic governance. Through this approach, the research contributes to the growing body of knowledge on sustainable marketing and algorithmic ethics, offering valuable insights for both academic inquiry and managerial practice.

2. Literature Review

2.1 Sustainable Marketing: Definitions and Theoretical Evolution

Sustainable marketing has evolved as a response to mounting environmental crises, social inequalities, and growing ethical expectations from stakeholders. Initially focused on mitigating negative externalities, the concept has expanded to encompass a systemic approach integrating economic performance, social justice, and ecological preservation. This transformation has moved marketing beyond transactional goals toward a more holistic and responsible practice. Rooted in the principles of Corporate Social Responsibility (CSR), circular economy, and the United Nations Sustainable Development Goals (SDGs), sustainable marketing emphasizes the need to balance profitability with long-term societal and environmental well-being. Modern approaches advocate for transparency, authenticity, and stakeholder engagement across the entire value chain—from product design to end-of-life management.

2.2 Artificial Intelligence and Marketing: Promises and Limitations

However, these technological advancements also raise significant ethical and regulatory concerns. Algorithmic decision-making may lead to issues of transparency, accountability, and potential discrimination. Without rigorous oversight, AI can perpetuate social biases, erode consumer autonomy, and compromise data privacy. In the same perspective, Sunstein (2020) argues that an overload of information can disrupt individuals' ability to make rational decisions, which represents a real risk in digital marketing environments. Consequently, the integration of AI into marketing strategies necessitates a careful balance between commercial objectives and ethical imperatives, underscoring the importance of developing responsible and transparent practices.

2.3 Algorithmic Ethics: Toward Responsible and Inclusive Governance

As AI becomes increasingly embedded in marketing practices, questions of algorithmic ethics have gained prominence. Ethical AI governance requires more than mere compliance with data protection regulations; it demands proactive measures to ensure fairness, transparency, and

accountability throughout the design, deployment, and monitoring of algorithms. Strategies such as explainable AI (XAI), stakeholder engagement, and the establishment of ethical review committees are essential to mitigate risks of bias and opacity.

Furthermore, AI can play a constructive role in promoting sustainable consumption by guiding consumers toward eco-friendly choices, enhancing supply chain transparency, and facilitating informed decision-making. Nevertheless, realizing these benefits depends on the implementation of robust ethical frameworks and participatory governance models that prioritize societal well-being over purely commercial interests. This ethical dimension is particularly critical in emerging markets, where digital adoption coexists with evolving environmental and social consciousness.

3. Methodology

3.1 Research Design and Epistemological Framework

This study adopts an interpretivist and constructivist epistemological stance, recognizing that perceptions of technology and sustainability are socially constructed and context-dependent. Rather than treating AI as a purely technical tool, the research considers it as a socio-technical system shaped by cultural practices, discourses, and collective representations. This perspective allows for a nuanced understanding of the contradictions between technological progress and societal demands for sustainability. The chosen approach is mixed-method in nature, integrating both quantitative and qualitative data to capture the complexity of consumer attitudes toward AI-driven sustainable marketing.

3.2 Population and Sampling Strategy

The empirical investigation was conducted in Tunisia, an emerging market characterized by rapid digital adoption and increasing environmental awareness. The study targeted young, digitally active consumers who are likely to encounter AI-enabled marketing tools. A purposive sampling strategy was employed to ensure relevance and diversity within the sample. The final sample consisted of 100 participants, primarily aged between 18 and 34 years, representing a range of geographic and professional backgrounds. Participants were selected for their familiarity with digital technologies and online marketing practices, ensuring the relevance of their insights.

3.3 Data Collection Instrument

A hybrid survey instrument was developed to capture both quantitative and qualitative dimensions of consumer perceptions. The questionnaire comprised closed-ended items designed to collect socio-demographic data, frequency of AI usage, ethical awareness, and standardized responses on perceptions of AI in marketing. In addition, open-ended questions encouraged participants to articulate their expectations, concerns, and recommendations in their own words. This structure enabled the study to identify both general trends and nuanced insights into consumer attitudes toward AI-enabled sustainable marketing.

3.4 Data Analysis Methods

The data analysis combined descriptive statistical techniques with inductive thematic analysis. Quantitative data from closed-ended questions were analyzed using frequency distributions and percentage breakdowns to identify dominant trends and patterns in perceptions. Qualitative responses were coded thematically following Braun and Clarke's (2006) inductive approach, allowing for the identification of recurring motifs, underlying tensions, and expressive nuances. This dual-method strategy provided a comprehensive understanding of the research problem by triangulating numerical trends with rich qualitative interpretations.

3.5 Validity and Methodological Limitations

The study demonstrates strong contextual relevance and methodological coherence, supported by an appropriate sampling strategy and robust data triangulation. However, certain limitations must be acknowledged. The modest sample size limits the generalizability of findings beyond the specific context studied. The reliance on self-reported data may introduce social desirability or recall biases. Finally, as an exploratory study, its findings should be viewed as indicative rather than definitive, opening avenues for further research with larger and more diverse populations, as well as longitudinal or cross-national comparisons.

4. Results

This section presents the findings of the study, integrating both quantitative and qualitative insights. The analysis is structured to highlight general trends observed in the closed-ended survey responses, as well as thematic patterns emerging from participants' open-ended comments.

4.1 Quantitative Results

4.1.1 Perceived Uses of Artificial Intelligence in Marketing

Descriptive analysis reveals that participants primarily identify three main uses of AI in marketing: personalized recommendations (40%), intelligent advertising optimization (35%), and automated suggestions or decision-making support (25%). These functions are generally appreciated for improving the customer experience and operational efficiency, although some respondents note concerns about overly personalized targeting that may influence purchasing decisions in unintended ways.

4.1.2 Ethical Concerns and Perceived Risks

Participants expressed notable ethical concerns regarding AI in marketing. The most frequently cited issues include algorithmic opacity (40%), inadequate data protection (35%), and the potential for discriminatory outcomes in recommendations (25%). These concerns underline a demand for greater accountability in the design and deployment of AI systems used in commercial contexts.

4.1.3 Expectations of Transparency and Ethical Practices

The survey indicates strong consumer expectations for ethical AI governance. Specifically, 72% of respondents demand greater transparency in algorithmic processes, while 50% believe that AI can support more sustainable consumption if it is governed ethically. Key expectations articulated by participants include improved education about AI mechanisms, stricter regulation of personal data usage, and the establishment of independent ethical certification schemes for AI-based marketing practices.

4.1.4 Consumer Profiles and Differentiated Attitudes

Cross-tabulation analysis highlights variation in attitudes toward AI based on age, AI usage frequency, and ethical awareness. Younger participants (18–24 years) and students exhibit moderate trust in AI while demanding high levels of transparency. Regular AI users and ethically aware consumers tend to show greater acceptance, willingness to share data, and trust in eco-friendly brand claims. In contrast, employed respondents demonstrate more cautious attitudes, particularly regarding data privacy and corporate promises of sustainability.

4.2 Qualitative Results

4.2.1 Emergent Themes from Thematic Analysis

Thematic coding of open-ended responses identified several recurring motifs. Many participants emphasized the need for brands to communicate more transparently about how AI systems function and the data they collect. Others highlighted the importance of consumer education to demystify AI processes and empower informed decision-making. Ethical certification emerged as a common suggestion to reassure users about responsible AI use.

4.2.2 Illustrative Excerpts

Participants offered a range of qualitative insights that illuminate these themes. Typical comments include:

- *"Companies should explain clearly how their AI works and what data it uses."*
- *"I would trust AI more if there were independent ethical labels."*
- *"Education is important so people can understand and control what AI does with their data."*

These statements illustrate the nuanced expectations consumers hold toward AI-driven marketing. While there is recognition of its potential to enhance sustainability and user experience, participants consistently call for a participatory and values-driven approach to its deployment.

5. Discussion

This section interprets the study's findings in light of existing literature, explores their theoretical and managerial implications, and offers recommendations for practice while acknowledging the study's limitations and outlining future research directions.

5.1 Interpretation and Contextualization of Results

The study's results suggest that AI is widely perceived as a strategic enabler of more efficient and personalized marketing, but that its role in supporting sustainability is contingent upon ethical governance. While participants recognize the potential for AI to promote eco-friendly consumption through targeted recommendations and optimized supply chains, they also express concerns about transparency, data privacy, and algorithmic bias. These concerns echo broader ethical debates, as highlighted by Eubanks (2018), who demonstrates that the massive use of automated technologies can exacerbate social inequalities if not regulated by strict ethical frameworks. These findings highlight the dual nature of AI in marketing: as both an opportunity for innovation and a source of ethical tension requiring careful management.

5.2 Comparison with Existing Literature

The results align with existing research that positions sustainable marketing as an evolution beyond transactional models toward more holistic, socially responsible practices (Belk & Kravets, 2022). The concerns raised by participants regarding data governance and algorithmic opacity echo scholarly critiques of "black box" AI systems and calls for explainable AI (Floridi et al., 2018). Moreover, the demand for ethical certification and consumer education mirrors prior work emphasizing the importance of building digital trust and algorithmic accountability in marketing contexts.

5.3 Managerial and Theoretical Implications

From a managerial perspective, these findings underscore the necessity for brands to prioritize transparency and ethical governance in their use of AI. Companies should invest in explainable AI systems, clear communication strategies, and independent certification to reassure consumers of their commitment to sustainability. Theoretically, the study contributes to the discourse on sustainable marketing by integrating considerations of algorithmic ethics and consumer agency into models of responsible consumption. It suggests that technological innovation alone is insufficient without parallel advances in governance, education, and stakeholder engagement.

5.4 Recommendations for Sustainable AI Marketing

Based on the study's findings, several practical recommendations emerge:

- **Enhance Transparency:** Companies should provide clear, accessible information about how AI systems work and what data they use.
- **Implement Ethical Certification:** Establish independent certification schemes to verify responsible AI practices and build consumer trust.
- **Invest in Consumer Education:** Develop initiatives to improve public understanding of AI technologies and their implications.
- **Strengthen Data Governance:** Adopt robust data protection measures that respect user privacy and consent.
- **Foster Participatory Governance:** Engage diverse stakeholders, including consumers, in the design and oversight of AI systems to ensure inclusivity and fairness.

5.5 Limitations and Directions for Future Research

While the study offers valuable insights, it is subject to certain limitations. The sample size, though sufficient for exploratory purposes, limits the generalizability of results to broader populations. The reliance on self-reported data may introduce biases related to social desirability or recall. Additionally, the focus on a single emerging market context (Tunisia) suggests that findings may not be directly transferable to other cultural or economic settings. Future research could address these limitations by employing larger, more diverse samples, adopting longitudinal designs, and conducting cross-national comparisons to deepen understanding of how AI can support sustainable marketing in varying contexts.

6. Conclusion

This final section synthesizes the key findings of the study, highlights its contributions to academic and managerial practice, and outlines avenues for future research on AI-enabled sustainable marketing.

6.1 Summary of Key Findings

The study demonstrates that while Artificial Intelligence offers significant potential to enhance marketing efficiency and support sustainable consumption, its successful integration depends on meeting consumers' ethical expectations. Young, digitally engaged consumers in Tunisia recognize the value of AI for personalization and operational effectiveness but express concerns over data privacy, algorithmic opacity, and social biases. The demand for greater transparency, ethical certification, and consumer education underscores the importance of responsible AI governance in marketing practices.

6.2 Contributions to Theory and Practice

This research contributes to the growing literature on sustainable marketing by explicitly incorporating the role of AI and algorithmic ethics into discussions of responsible consumption. The findings highlight the need for a holistic approach that goes beyond technological innovation to include ethical oversight, stakeholder participation, and transparent communication. From a managerial perspective, the study provides actionable guidance for companies seeking to leverage AI responsibly, including recommendations for enhancing transparency, protecting consumer data, and fostering trust through independent certification and education initiatives.

6.3 Future Research Directions

While this study offers important insights, further research is needed to deepen understanding of AI's role in promoting sustainable marketing practices. Future studies could adopt larger and more diverse samples, explore sector-specific or cross-cultural variations, and assess the long-term effectiveness of ethical AI governance mechanisms. Additionally, longitudinal designs and interdisciplinary collaborations could enrich the analysis of how evolving consumer expectations and regulatory frameworks shape the integration of AI in marketing strategies over time.

Acknowledgments

The author would like to thank their academic supervisor for their valuable guidance and constructive feedback throughout this research. Gratitude is also extended to the Faculty of Economic Sciences and Management of Sfax for its academic support. The author appreciates the participation of all respondents who contributed to the empirical phase. Special thanks go to colleagues and peers for their encouragement and insightful discussions. The contribution of anonymous reviewers in refining this work is also acknowledged.

7. References

Belk, R., & Kravets, O. (2022). *Consommation éthique: Valeur sociale et pratiques économiques*. Routledge. https://www.routledge.com/Consommation-ethique-Valeur-sociale-et-pratiques-economiques/Belk-Kravets/p/book/9780367729856

Chui, M., Manyika, J., & Miremadi, M. (2016). Where machines could replace humans—and where they can't (yet). *McKinsey Quarterly*. https://www.mckinsey.com/capabilities/mckinsey-digital/our-insights/where-machines-could-replace-humans-and-where-they-cant-yet

Eubanks, V. (2018). *Automating inequality: How high-tech tools profile, police, and punish the poor*. St. Martin's Press. https://us.macmillan.com/books/9781250074317/automatinginequality/

Floridi, L., Cowls, J., Beltrametti, M., Chatila, R., Chazerand, P., Dignum, V., … & Vayena, E. (2018). AI4People—An ethical framework for a good AI society: Opportunities, risks, principles, and recommendations. *Minds and Machines, 28*(4), 689–707. https://doi.org/10.1007/s11023-018-9482-5

Jobin, A., Ienca, M., & Vayena, E. (2019). The global landscape of AI ethics guidelines. *Nature Machine Intelligence, 1*(9), 389–399. https://doi.org/10.1038/s42256-019-0088-2

Parguel, B., Benoît-Moreau, F., & Larceneux, F. (2011). How sustainability ratings might deter "greenwashing": A closer look at ethical corporate communication. *Journal of Business Ethics, 102*(1), 15–28. https://doi.org/10.1007/s10551-011-0901-2

Rust, R. T., & Huang, M.-H. (2021). *The feeling economy: How artificial intelligence is creating the era of empathy*. Palgrave Macmillan. https://doi.org/10.1007/978-3-030-52977-2

Sunstein, C. R. (2020). *Too much information: Understanding what you don't want to know*. MIT Press. https://mitpress.mit.edu/9780262543910/too-much-information/ https://doi.org/10.7551/mitpress/12608.001.0001

Thaler, R. H., & Sunstein, C. R. (2008). *Nudge: Improving decisions about health, wealth, and happiness*. Yale University Press. https://yalebooks.yale.edu/book/9780300262285/nudge/