Chapter 10
A Roadmap to a Sustainable Future:
Empowering Businesses and Consumers Through AI-Driven Green Marketing

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ABSTRACT

AI is transforming green marketing by enhancing sustainable business practices and driving consumer engagement toward eco-friendliness. AI-powered tools analyze consumer behavior, predict market trends, and create personalized green campaigns to attract eco-conscious buyers. Machine learning and predictive analytics optimize

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supply chains, reduce waste, and improve energy efficiency while ensuring profitability. AI-driven recommendation engines help consumers make informed sustainable choices by providing insights into product origins, carbon footprints, and ethical sourcing. Chatbots and virtual assistants foster trust by answering sustainability-related queries in real time. This chapter explores AI's role in sustainability, including AI-driven climate modeling, blockchain-based green verification, and circular economy solutions. By adopting AI-driven green marketing, businesses can enhance their competitive edge while contributing to a more sustainable future.

INTRODUCTION

In an age of soaring environmental consciousness and corporate responsibility, every sale is being pressed by stakeholders to conduct business sustainably while still being competitive. Green marketing aided by AI has emerged to be a panacea of relief to various aspects. It symbolizes how companies are actively optimizing their sustainability efforts, marketing toward consumers, and driving profitability. AI-powered tools help companies within traveling around smarter decisions, less waste, and implementing energy-efficient solutions, enabling sustainability on the company level while increasing brand image. Also, AI allows businesses to develop a stronger bond with eco-friendly customers. Since most campaigns have developed to align with value sets relating to sustainability, this will, in turn, improve the level of engagement with brands, customer brand loyalty, and orientation toward purchasing green alternative products.

The convergence of AI and sustainability is uniquely positioned to provide a mechanism whereby businesses can build stronger and more successful aspects of profitability with environmental protectionism. Future trends, benefits, and practical applications of the multi-faceted role played by AI in green marketing are explored in this chapter (Varghese, 2022). It is a pragmatic journey-mapping approach for them in building their business case in setting an AI-driven sustainability agenda, with their operations, into the greener future and farther to responsibly embrace. As AI continues to evolve, the marketing landscape post-transformation looks boundless while contributing to an economy that supports sustainability.

Overview of AI's Impact on Green Marketing

The following AI uses innovative ways to market sustainability while adding efficiency and profitability to green marketing are machine learning, predictive analytics, and automation. AI tools help organizations to optimize their supply chains, minimize waste, and launch highly personalized marketing campaigns. The