

Exploring Consumer Perceptions of AI-Generated Eco-Recommendations: A Qualitative Comparison Between the UK and China

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ABSTRACT

As artificial intelligence (AI) becomes increasingly integrated into consumer decision-making processes, its potential to promote sustainable behaviours has attracted a lot of attention across industries and academia. AI-generated eco-recommendations offer a promising avenue for promoting environmentally friendly consumption choices. However, little is known about how consumers perceive these recommendations, especially in different cultural contexts (e.g., individualism vs. collectivism). While previous studies have examined AI's role in changing consumer behaviour and driving sustainability, few studies have been conducted to understand the intersection of AI-driven sustainability efforts and cross-cultural consumer perceptions. This study aims to address this gap by exploring how consumers in the UK and China perceive AI-generated eco-recommendations. Specifically, it focuses on factors such as trust in AI, perceived alignment of recommendations with personal and societal values, and willingness to adopt environmentally friendly behaviours recommended by AI. We adopt a qualitative approach and conduct 15 semi-structured in-depth interviews with consumers in each country to analyse these factors. The findings will offer insights into both shared and divergent attitudes towards AI in sustainability contexts. These insights are expected to inform the design of culturally adaptive AI tools that enhance trust and engagement, support government and policymakers in promoting responsible AI use for environmental goals, and help marketers tailor eco-recommendation strategies to diverse consumer markets. This research will contribute to a deeper understanding of AI's role in promoting global sustainability efforts while respecting cultural differences.

Keywords: Consumer Perceptions, Artificial Intelligence, Eco-Recommendations.

