Chapter 14 Beyond Traditional Analytics: Al's Transformative Role in Marketing Intelligence and Customer Experience Optimization

Swetha Appaji Parivara

https://orcid.org/0009-0008-1215-154X Presidency College, Bangalore, India

Prathima Shivakumar Pattada https://orcid.org/0009-0006-8015-780X Arkansas State University, USA

Anasuya Sengupta https://orcid.org/0009-0003-4206-3640 University of Engineering and Management, Kolkata, India

ABSTRACT

In today's experience-driven economy, traditional marketing analytics no longer suffice as businesses seek deeper customer insights and more personalized engagement strategies. This paper examines how Artificial Intelligence (AI) transcends conventional analytics approaches, fundamentally transforming marketing intelligence and customer experience optimization. By analyzing AI's advanced capabilities in data processing, pattern recognition, and predictive modeling, we demonstrate how these technologies enable marketers to move beyond retrospective analysis toward proactive, real-time decision-making. The research explores how AI-powered systems leverage diverse data streams to generate actionable intelligence, forecast consumer behavior with unprecedented accuracy, and optimize customer journeys across multiple touchpoints. We conclude by proposing a strategic framework for organizations to effectively integrate AI into their marketing intelligence operations, ensuring both technological innovation and responsible practice in customer experience optimization.

DOI: 10.4018/979-8-3693-9561-5.ch014

INTRODUCTION

In today's experience-driven economy, consumer expectations have fundamentally shifted from transactional interactions to deeply personalized engagements that resonate with individual preferences and needs. This paradigm shift has created both unprecedented challenges and opportunities for businesses seeking competitive advantage through customer experience optimization (Ragul & Dulloo, 2023). Artificial Intelligence (AI) has emerged as the critical differentiator in this landscape, revolutionizing how organizations collect, analyze, and operationalize consumer insights.

The limitations of traditional marketing analytics—retrospective analysis, siloed data approaches, and demographic-based segmentation—have become increasingly apparent as consumers demand hyperpersonalized experiences across an expanding ecosystem of touchpoints (Dulloo, 2018). AI transcends these constraints through its capacity to process vast, heterogeneous datasets at scale, identify complex behavioral patterns, and generate predictive models that anticipate individual customer needs with remarkable precision.

This research examines the transformative capabilities AI brings to marketing intelligence frameworks, enabling the shift from reactive to proactive engagement strategies (Darshini & Dulloo, 2023). By integrating advanced machine learning algorithms, natural language processing, and real-time analytics, businesses can now orchestrate cohesive customer journeys that adapt dynamically to behavioral signals and contextual factors. These AI-powered systems continuously learn from interactions, creating virtuous feedback loops that progressively enhance personalization while optimizing resource allocation (Abinesh & Dulloo, 2024).

Our investigation reveals how leading organizations leverage AI to synthesize insights from diverse data streams—including social media sentiment, browsing behavior, purchase history, and contextual signals—creating unified customer profiles that drive meaningful engagement at each stage of the journey (Dulloo, 2022). Furthermore, we explore how predictive modeling capabilities enable marketers to forecast individual preferences and behaviors with unprecedented accuracy, facilitating proactive decision-making that anticipates customer needs before they are explicitly expressed.

The chapter presents a comprehensive framework for organizations to strategically integrate AI into their marketing intelligence operations, balancing technological innovation with ethical considerations around data privacy and algorithmic transparency (Dulloo, 2024). This approach ensures that businesses can harness AI's transformative potential while maintaining customer trust—the foundation of sustainable relationships in the experience economy.

Chapter Organization

This chapter begins with an introduction that sets the context for AI-powered marketing in the experiencedriven economy, emphasizing the shift toward personalization and data-driven decision-making. The section on AI-powered data analytics and insights highlights AI's role in extracting meaningful insights from vast datasets, enhancing strategic decisions. Predictive Modelling in Marketing Analytics delves into AI's application in forecasting trends, segmenting customers, and predicting customer lifetime value 30 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/beyond-traditional-analytics/376264

Related Content

Profile of Top Companies Compared to the Most Valued Companies for Professional Performance in Spain

Francisco J. Ferreiro Seoane (2019). *Global Campaigning Initiatives for Socio-Economic Development (pp. 33-50).*

www.irma-international.org/chapter/profile-of-top-companies-compared-to-the-most-valued-companies-for-professionalperformance-in-spain/227871

A Framework Development of Food Wastage and Its Prevention Strategies in the Hospitality Industry of Pakistan

Sajid Nazir (2022). International Journal of Circular Economy and Waste Management (pp. 1-19). www.irma-international.org/article/a-framework-development-of-food-wastage-and-its-prevention-strategies-in-thehospitality-industry-of-pakistan/302206

Sharing Economy: Conceptualization, Motivators and Barriers, and Avenues for Research in Bangladesh

Md. Oliur Rahman Tarek, Sajid Amitand Abdulla- Al Kafy (2022). *Redefining Global Economic Thinking for the Welfare of Society (pp. 57-74).*

www.irma-international.org/chapter/sharing-economy/294662

Technical Analysis

(2019). Planning and Analyzing Foreign Direct Investment Projects: Emerging Research and Opportunities (pp. 110-151).

www.irma-international.org/chapter/technical-analysis/218503

Hazardous E-Waste Recycling Practices Affecting Informal Recycler Health in India: A Case Study

Zofail Hassanand Devendra Kumar Dhusia (2022). International Journal of Circular Economy and Waste Management (pp. 1-25).

www.irma-international.org/article/hazardous-e-waste-recycling-practices-affecting-informal-recycler-health-inindia/302205