Chapter 13
AI-Powered Personalization: Boosting User Engagement and Customer Experience

Stavros Kaperonis
https://orcid.org/0000-0002-2130-6514
Panteion University of Social and Political Sciences, Greece

ABSTRACT

Marketing landscape experiencing a drastic change, driven by the growth of artificial intelligence (AI) and personalization, replacing "one-size-fits-all" marketing approach by more personalized marketing strategies, like machine learning and predictive analysis. This will allow organisations to engage with users in a dynamic, user-specific design, thus enhancing user engagement and satisfaction. Platforms such as Netflix, Amazon, and Spotify, already use artificial intelligence to tailor content and recommendations based on user behaviour patterns, ensuring user retention and high loyalty. The actual implementation process demands meticulous handling of data, foresight and adherence to transparency and ethical practice. Newer technologies such as edge computing and AR/VR integration will transform real-time personalization, giving each user a unique immersive and personalized experience.

INTRODUCTION

The field of marketing and advertising is undergoing a major change in the 2020's. This shift is marked by a movement away from mass, general marketing to more targeted and personalized appeals. More and more companies are realizing the importance of personalization in their communications, and this is because consumers want to feel special, they want things that are made especially for them that cater to their individual needs and wants (Chandra et al., 2019). Businesses are using artificial intelligence (AI) to do this, because it can manage millions of interactions while tailoring each one to the individual (Kaptein & Parvinen, 2015). This tactical change is not some passing fad, but is instead a symptom of a more fundamental, architectural change in relationships between brands and consumers, as brought about

DOI: 10.4018/979-8-3693-3799-8.ch013

by the proliferation and growing sophistication of data analytics and artificial intelligence technologies (Rana et al., 2022; Kaperonis, 2024).

AI-based personalization could completely change the game for companies in designing experiences that really hit home for their consumers. Unlike traditional marketing strategies, which often depend on broad demographic characteristics and static customer profiles, artificial intelligence (AI) methodologies offer a more dynamic and adaptable approach (Davenport & Ronanki, 2018). These systems learn constantly from user interactions, so the process of personalization is constantly being refined (Bawack, et al., 2022). This on-the-fly malleability is completely revolutionizing the way companies interpret and react to consumer desires, allowing a type of interaction that was previously thought impossible.

With all this competition in today's world, AI personalization is the only way to provide the consumer with any real value. In a world where information is abundant and choices are plentiful, giving the consumer information that is relevant, current, and makes sense is the key to acquiring the consumer's attention and loyalty (Khrais, 2020).). McKinsey Company (2020) found that top performing companies that personalize have 40% more revenue from those efforts than their competition, so it really does pay to have good personalization.

But then again, AI-based experiences pose great threats to businesses as well. Integrating artificial intelligence into existing systems presents obstacles, including addressing privacy concerns, navigating ethical considerations, and managing technological complexities (Pew Research Center, 2019). That balance between customization and privacy is especially important. On one hand, consumers want that personal touch, but on the other hand, they are becoming more and more leery of, and fearful of, the use of their data (Du & Xie 2021). According to a 2019 survey by the Pew Research Center, 79% of Americans are uncomfortable with the way companies use their data, and it is easy to see why this is such an issue when dealing with AI-driven personalization.

Recent research by Kennedy et al (2023) highlights the importance of strong data encryption and real-time monitoring to mitigate user privacy concerns. These methods not only address potential breaches but also improve user trust. In addition, Amal Chandra (2024) highlights the role of fair AI design in reducing systemic inequalities in access to AI-based personalization.

In this changing world to prosper organizations will have to take a comprehensive approach, utilizing AI, but also understanding that there will have to be adherence to ethical standards, user consent, and clarity of communication. If companies are going to integrate AI into their strategies, they need to keep user-centered design in the forefront and really consider the ethical issues surrounding AI use (Davenport & Ronanki, 2018). That supports the theory of Davenport and Ronanki (2018) that AI systems should be designed in line with users' values and preferences in a way that build trust, not degrade it.

This chapter has two main goals: the first goal is to examine how personalization and artificial intelligence (AI) are shaping user experience and optimise marketing techniques and second goal is to investigate ethical and legal issues. The chapter use a mixed-methods approach that it combines, a literature review with an analysis in personalization and ethical issues of AI, (like transparency, bias, and privacy) and case studies were examining the implementation of AI and its impact on users (ex. Netflix, Amazon, Spotify, Starbucks, Google ads). Moreover, the chapter delves into regulatory frameworks, such as the GDPR, to offer a detailed assessment of AI-driven personalization and in which way the regulations affect use behavior. In this content the revolution of emerging technologies transforming personalization and user engagement, showcasing how businesses should interact with their customers. Kaperonis (2024) highlights the importance of personalization in digital marketing as it contributes to the development of a distinctive user experience. This chapter integrates theoretical and practical insights and evaluates the