

Abstract

This thesis focuses on the design and validation of a dynamic hyper-personalization advertising system in physical retail environments using generative artificial intelligence. The theoretical part summarizes the development of marketing personalization, its psychological mechanisms, and maps relevant AI technologies. The practical part concentrates on the design of a system architecture combining perceptual, inferential, and generative layers, and its deployment within a field experiment conducted in four cosmetic stores. The results of the field experiment showed that hyper-personalized advertising increases customer engagement time, while the effect on purchase probability was not confirmed. The thesis contributes to the empirical understanding of AI-driven personalization in offline environments and proposes directions for future research.