

Immersive Tourism: Implementation Augmented Reality to Increase Tourist Confidence in Booking Tourist Destinations

Aulia Indriawati¹, Vina Maulidina², Hanif Ahmad Robbani³

¹University 17 August 1945 Semarang, auliaindriawati08@gmail.com

²University 17 August 1945 Semarang, vinaaprileamaulidina@gmail.com

³University 17 August 1945 Semarang, hanifahmadrobbani@gmail.com

Abstract

This study aims to describe the concept of Immersive Tourism based on Augmented Reality (AR) in increasing tourist confidence in online booking and to design a conceptual prototype framework for an AR Tourism system with a clear technical flow. The primary issue identified is tourist hesitation in booking due to limited visualization relying solely on 2D photos, causing uncertainty about the real ambiance, size, or quality of the destination/accommodation. The research method uses a comprehensive literature study and a needs analysis focusing on tourist problems and business opportunities in the travel sector. The results generated a conceptual framework that includes an integrated system architecture (AR visualization engine, 3D asset management) and a systematic user flow design from the discovery to the decision phase. Based on simulations using literature data, the designed framework has the potential to increase customer engagement by up to 169%, conversion rates up to 11 times, and reduce booking complaints or cancellations by up to 50%. This conceptual prototype provides a foundation for digital innovation and building social trust in the e-tourism ecosystem.

Keywords: Artificial Intelligence, Emerging Market Economies, Total Factor Productivity, Economic Growth