

## **ABSTRACT**

*The tourism sector plays an important role in the Indonesian economy, as one of the country's main sources of foreign exchange. However, the industry has experienced a decline in tourist visits, which affects the country's GDP (Gross Domestic Product). Especially the Banyuwangi Regency area has experienced a decline in tourism, with tourist attractions currently in a stagnant phase. Therefore, it is very important to make improvements to increase the number of tourists.*

*This research uses an Agent-Based Modeling (ABM) approach to simulate a strategy to increase tourism in Banyuwangi. Starting with an analysis of the tourism life cycle based on the Butler Model, which includes the phases of exploration, engagement, development, consolidation, stagnation, rejuvenation, and decline, this research evaluates existing policies and infrastructure. ABM allows the simulation of the interaction of various agents in the tourism ecosystem as well as the influence of different policies.*

*The resulting model shows patterns of tourist visits that can be implemented by the Banyuwangi Culture and Tourism Office. The findings suggest a more efficient allocation of resources and the development of tourist facilities that can increase the attractiveness of the destination. Suggested policies include improving the quality of infrastructure, developing new tourist attractions, and more effective digital promotion campaigns.*

*The results of this study are expected to provide a solution to the declining number of tourists in Banyuwangi and improve the competitiveness of local tourism. In addition, this research opens up opportunities for further studies on the long-term impact of the strategies implemented, as well as how the tourism sector can contribute more significantly to the local economy through sustainability and innovation in destination management.*

***Keywords - Sustainable tourism, Tourism life cycle, Agent-based model***