

# Chapter 8

## Artificial Intelligence (AI) Opportunities and Challenges of Green Marketing Tourism

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### ABSTRACT

*Technology is experiencing a revolution that is bringing about a new era successful in changing many tasks that have been manual processes into jobs with artificial intelligence (AI) that mimic human functions in solving cognitive problems and offer the same transformative potential to replace more potential tasks and activities. Human beings in various industrial, intellectual, and social applications. This era of AI technology has surprised us with new breakthroughs in learning and decision-making and raises new challenges and opportunities for sustainable innovation in green tourism marketing. The development of AI in Indonesia is more rapid as there are many internet users. Based on the results of a survey by the Internet Service Providers Association (APJII) in the 2022-2023 period, it was recorded that there were 215.63 million people. This number increased by 2.67% compared to the previous period in 2020-2021 of 210.03 million users.*

### INTRODUCTION

Indonesia has various sources of income such as oil and gas. In addition to these two sectors that need more attention is the tourism sector. This sector has an important role in the development of the Indonesian economy. However, after going through

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the pandemic some time ago, many companies in Indonesia are facing big problems to develop their business in innovative ways to remain competitive and increase their profits, one of which is a company engaged in the tourism sector. The tourism sector has in fact made a major contribution to foreign exchange earnings. Based on data from the Ministry of Tourism and Creative Economy for 2023.

Foreign exchange earnings from the Indonesian tourism sector recorded at the Ministry of Tourism and Creative Economy reached US\$4.26 billion in 2022. This value increased by 769.39% compared to the previous year which was only US\$0.49 billion.

According to Menparekraf Sandiaga Uno, the increase in foreign exchange from the tourism sector is inseparable from the increase in foreign tourist arrivals to Indonesia after the end of the Covid-19 pandemic.

(Hall, 2011), defines that Artificial Intelligence is intelligence where a system that shows the working conditions handled by the human mind in solving problems. Artificial intelligence (AI), (Bulchand-Gidumal, 2020) is defined as a set of abilities to understand the environment and phenomena that occur and the ability to utilize past experience and knowledge to solve new challenges appropriately (Gretzel et al., 2015). The existence of artificial intelligence today is very helpful for humans in their work and can be completed quickly and efficiently. The author defines

*Table 1. Foreign exchange income from the Indonesian tourism sector (2013-2023)*



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