


# Chapter 6


## The Impact of AI on Disintermediation Processes in the Tourism Industry

**Jovanka Damoska Sekuloska**

 <https://orcid.org/0000-0003-3466-9223>

*University of Information Science and Technology “St. Paul the Apostle”, Ohrid, Macedonia*

**Aleksandar Erceg**

 <https://orcid.org/0000-0002-1141-1919>

*Faculty of Economics in Osijek, J. J. Strossmayer University of Osijek, Croatia*

### ABSTRACT

*As an innovative technology, artificial intelligence (AI) leads to disruption and automation of almost every process and business model in almost any industry today. AI contributes to the process of disintermediation of value chains resulting in shrinking the producer-customer links. The chapter examines the influence of AI on disintermediation in the tourism industry. It investigates the changes and transformation of the value creation process and marketing in the tourism industry affected by AI technology. AI could transform and revolutionize every segment of the tourism industry. Thus, it can make tourism more efficient, with new value-added customer services. AI is considered an enabling tool for the creation of the so-called “smart tourism” as a new age of tourism development. As a digital tool, AI enables the tourism industry to get insight into the customer, understand tourist profiles and provide consumers with personalized and niche travel experiences.*

### INTRODUCTION

Today, companies are increasingly developing in the direction of algorithmic enterprises in the digital environment. This does not refer to technical aspects only, but it is about the creation and optimization of the digital and analytical value-added chain to achieve sustainable competitive advantages (Gentsch, 2019). Some online publications use artificial intelligence to write summaries or sports recaps, while in

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some company's artificial intelligence decides which sales opportunities are worthy of further activities and which are not. Artificial intelligence is transforming the method companies modernize and present their products, services, and processes (Panetta, 2017).

The total value which resulted from artificial intelligence on the global level in 2018 was projected to reach 1.2 trillion USD, which represents an almost 70% increase in relation to 2017 (Gartner, 2018). This amount is forecasted to reach 3.9 trillion USD in 2022. Thus, artificial intelligence technology opens new approaches to markets and consumers, raising the analytical value of data to a new level of quality. One of the sectors in the industry which will benefit from artificial intelligence is tourism. But this research is a challenge since the digital sales of tourism products are predicted to exceed 800 billion USD by 2020.

Hence, artificial intelligence will exercise a dominant role in the creation of the full-service experience of tourism product consumers/users, who particularly feel a desire to personalize their travel experience. By using artificial intelligence, tourism companies can not only utilize productivity and efficiency potentials but also offer better service to travelers, creating at the same time added value. Artificial intelligence technology will lead to a personalized and customized product with the personalized price for every consumer (traveler).

The main aim of the chapter is to explore the influence of artificial intelligence on disintermediation processes in the tourism industry. In the first part of the chapter, a theoretical aspect of artificial intelligence will be presented together with artificial intelligence as a digital marketing tool for enhancing competitive advantages of the companies. In the second part, the chapter will cover enabling tools of the artificial intelligence framework, especially algorithmic marketing as one of the business layers of the artificial intelligence business framework and its application in the tourism industry. This will show how artificial intelligence technology can change the approach to working and disintermediation in the creation and provision of tourism products in the tourism industry. In the third part, the chapter will examine how artificial intelligence technology contributes to disintermediation of the marketing process in the tourism industry and it will be focused on the application of artificial intelligence technology to the concept of the four Ps, i.e., product, price, promotion, and place in the tourism industry. Through the application of artificial intelligence technology, the four Ps concept obtains additional value, transforming it into a more efficient and smarter tool for communication with potential consumers/tourists. In the next part, a model explaining the new value chain in the tourism industry influenced by artificial intelligence technology will be presented. This model will make the process of disintermediation of value creation in the tourism industry visible. Thus, it will be shown that artificial intelligence technology can transform the way of gaining insight into consumers, as well as the creation and provision of tourism products to potential user segments. In the conclusion part, research results will be presented and the proposals for future research will be given.

## **THEORETICAL BACKGROUND**

### **Artificial Intelligence**

Artificial intelligence enters our lives in the form of many delicate and not-so-delicate methods, completing tasks that, until lately, could have only been completed by a person with specific knowledge, costly training, or a government-issued license (Scherer, 2016). It has emerged after the first computers were

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