Chapter 10
An Overview of Tourism Supply Chains Management and Optimization Models (TSCM – OM)

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ABSTRACT

Around the world tourism industry represents economic benefits to the countries in where the tourist attractions are located. The purpose of this chapter is to search and review recent researches related to the area of tourism under supply chain management and optimization models perspectives. The main aim of this chapter is to identify and discuss how the tourism supply chain is studied when it is subject to different economic, market, and optimization strategies. Considering the period of 2005 to 2016, a systematic review was performed using research studies in the area of tourism supply chain management. The results show that game theory is used as a theoretical base in the majority of the cases, but several novel approaches are also incorporated to the analysis. This review can be used as a complement of the previous works and a valuable information source for the decision makers involved in the tourism area.

INTRODUCTION

Talking about tourism implies an intensive management of several activities including planning, evaluation of tourism services, promotional and discounts tracking, and the different offers to attract new...
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Figure 1. Example of tourism flow routes and stakeholders

customers to the destiny. This idea leads us to think that it is necessary to develop an analysis of the cost-benefit relation applied to all the stakeholders involved in this field.

From the customer’s perspective, tourism is used to satisfy the human desire for fun, recreation, and the undefined motive to seek and explore the unknown and unseen (Tisdell, 2013). It includes activities of people travelling to and staying in places outside their conventional environments. Another concept given by Franklin (2003) associates the tourism with modernity, where the society experiences novel changes and ways of communication, thus the outcome is an extension of the spatial range from the home to outer space.

On the other hand, economically speaking, tourism is a fast-growing economic activity in many countries, benefiting the development of nations due to the employment generation, stimulation of investment, infrastructure development, and foreign exchange earnings. In this direction, some previous studies have reported an increase interest in the tourism industry. Literally, there are thousands of papers related to tourism. In fact, worldwide, tourism is considered as one of the fundamental economic activities, that contributes in the progress of the economy. It is important to remark that the success of the tourism industry relies in the optimal use of all the factors belonging to the productive tourism chain. Some of them are the tourism resources, tourism services, public services, social and cultural activities, among other offerings. Figure 1 shows an example of how the tourism flow is linked and how the stakeholders are related.

However, the competitive environment forces the tourism industry to create a synergy enhancing its components in order to generate value to tourists. It is here, when a problem arises, due to the fact that there is a high number of variables associated with the tourism chain; making hard to optimizing it. For