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Tourism Logistic System - Conceptual Considerations

Abstract: *There is only a small volume of research that specifically targets the issue of logistics system in tourism, thus the availability of data and results is very limited. Bearing in mind aforementioned facts, the author of this paper decided to systematically analyze and quote the results from other authors, aiming to select those results that suggest general, i.e. conceptual conclusions. The author has adopted such approach in order to have an insight into main flows (information, people, materials and energy), to determine their direction and course, as well as to present a global logistic tourism model, i.e. interdependence of logistic subsystems. The paper outlines slightly modified relations between tourism characteristics and logistic issues presented by other authors. Furthermore, basic parameters of logistics management in tourism are also presented in this paper.*

Keywords: *Logistics, tourism, system, characteristics, management*

1. INTRODUCTION

During the last two decades, the tourism industry has evolved and modernized considerably. There are two main distinctive characteristics of the tourism industry. Firstly, on the supply side, tourism is not a pure manufacturing or a pure service industry. It is a mixture of products combining services and goods. Tourism is a very complex industry. Secondly, on the demand side, tourism demand has been recognised as a complication. The highly competitive environment of the tourism industry has forced tourism firms to look for ways to enhance their competitive advantage. One of the strategies that tourism firms could adopt to increase their competitiveness is effective tourism logistics. Tourism products are often viewed by consumers as a value-added chain of different service components, forming a service network. Therefore, identifying ways to manage this logistic network is vital, especially for touristic destinations and in their frame for large tourism firms that are keen to

maintain a competitive advantage over their equally efficient rivals [1].

Logistics is the management of the flow of goods, information and other resources, including energy and people, between the point of origin and the point of consumption in order to meet the requirements of consumers (frequently, and originally, military organizations). Logistics involves the integration of information, transportation, inventory, warehousing, material-handling, and packaging, and occasionally security. Logistics is a channel of the supply chain which adds the value of time and place utility.

Several ways to view logistics: input/output view, supply chain view, geographic view, regional economy view. The Council of Supply Chain Management Professionals (CSCMP) definition: Logistics plans, implements, and controls the efficient, effective forward and reverse flow and storage of goods, services, and related information between the point of origin and the point of consumption in

order to meet customer's requirements [2]. That definition is presented in Figure 1.

Inbound logistics is one of the primary processes and it is concerned with purchasing and arranging inbound movement of materials, parts and/or finished inventory from suppliers to manufacturing or assembly plants, warehouses or retail stores. Nevertheless, there is no uniform definition of inbound logistics. Some logisticians define inbound logistics as rather limited function that includes activities related to receiving, storing and distributing inputs to the product, such as materials handling,

warehousing, inventory control, vehicle scheduling and returns to suppliers [3].

According to universal definition of logistics, tourism logistics represents the space and time-related transformation of material, people, information, energy, waste, knowledge and capital aimed at providing quality tourism services at the lowest possible costs.

Reverse Logistics is „the process of planing, implementing and controlling the flows of raw materials in process inventory, and finished goods, from a manufacturing, distribution or usage point to a point of proper disposal“ [4].

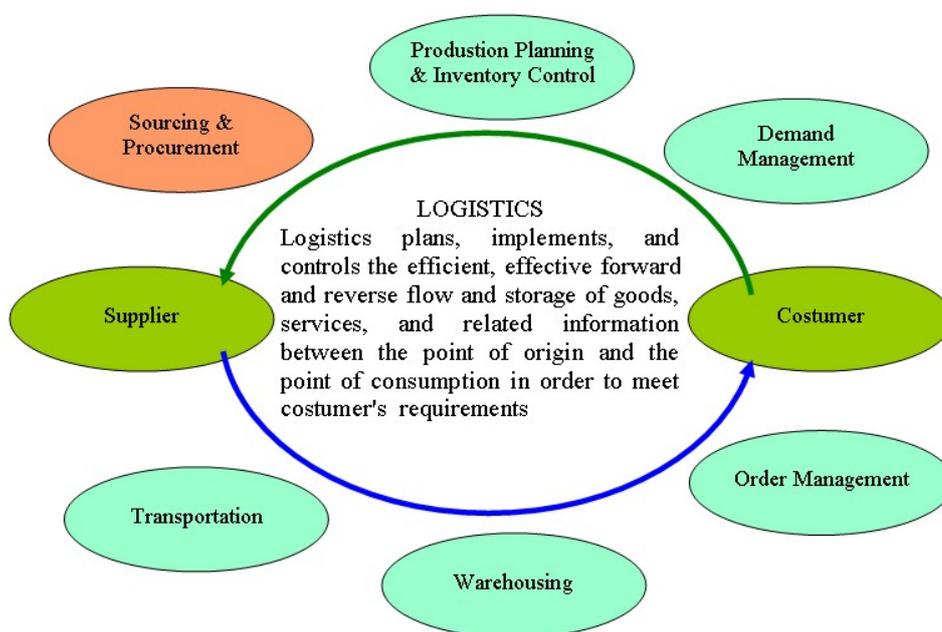


Figure 1 – What is Logistics [2]

2. RELATIONS BETWEEN TOURISM CHARACTERISTICS AND LOGISTIC ISSUES

As Xinyan Zhang and Haiyan Song wrote in „Tourism Supply Chain Management: A New Research Agenda“ [1] that: to understand the key challenges faced by the successful management of

Tourism Supply Chain (TSC), the characteristics of tourism products and the tourism industry are of central importance. As part of the services sector of the global economy, tourism possesses a number of distinguished characteristics that are different from the manufacturing and primary sectors. As having been discussed in the following, six characteristics of tourism can be observed.

Some of relations between tourism characteristics and logistic issues are presented in Figure 2 (which is adopted in cause of logistics). Tourism is a coordination-intensive industry where different products/services (transportation, accommodation, and so on) are bundled together to form a final tourism product. Because service cannot be stored for future use, tourism product is perishable. Tourists need to travel to the destinations where tourism products are produced to consume these products. Tourism products cannot normally be examined prior to their purchase, which means that the sale of tourism

Therefore, the tourism industry is a very information-intensive or information-dependent industry. Fourthly, tourism products are complex in nature. Normally, tourism products are heterogeneous and compound, consisting of many different service components such as accommodation, transportation, sightseeing, dining, and shopping. Finally,

the tourism industry often faces higher demand uncertainty and more complex dynamics than its counterparts because of intensive competition among service providers.

Many factors contribute to market uncertainty in terms of the demand for tourism products. For example, effective advertising can attract more tourists whereas negative word-of-mouth effect can lead to a fall in demand. The economic conditions in tourist generating countries and regions often serve as a push factor, influencing the demand for tourism products in a particular destination. Based on these characteristics of the tourism industry, the following seven key management logistics and in same time supply chain management identified: demand management, two-party relationships, supply management, inventory management, product development, logistic coordination, and information technology [1].

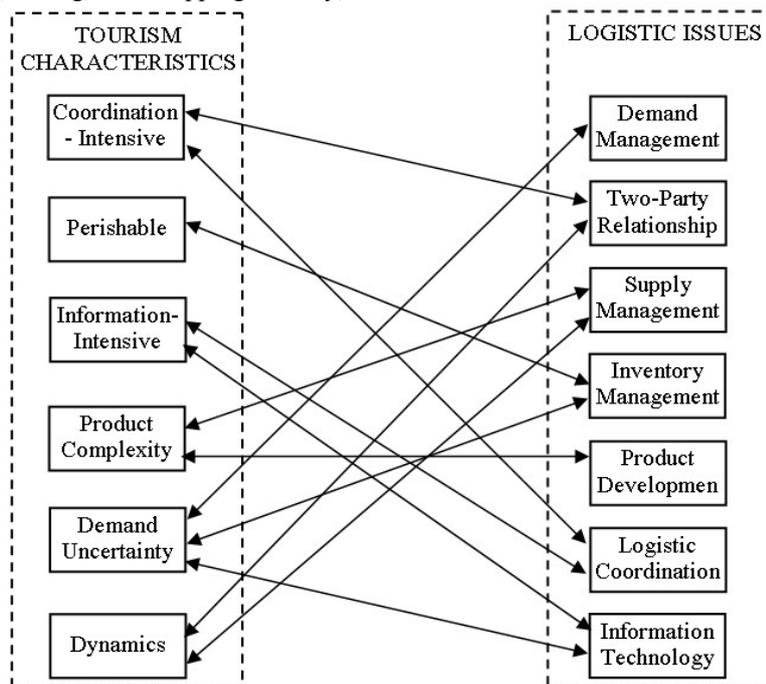


Figure 2 - Tourism characteristics and related logistic issues (adapted from [E])

3. TOURISM LOGISTICS SYSTEM

Tourism logistics represents the space - and time-related transformation of material, people, information, energy, waste, knowledge and capital aimed at providing quality tourism services at the lowest possible costs. Tourism logistics systems are highly complex and dynamic phenomena, of varying spatial coverage and displaying a pronounced openness towards the environment.

A tourism logistics system consists of several groups of activities that interact in complex ways to produce a tourism product acceptable to the tourism market. These subsystems include the hospitality subsystem, the tourist agency subsystem, the transportation subsystem, and the subsystem of tourist attractions [1].

Scheme of generic tourism logistics system is presented in Figure 3. Different logistic subsystems are linked by information flows, people flows, materials flows, and energy flows.

Agency logistics subsystems seek to optimise the flow of information in a specific area. These subsystems capture information regarding the supply of and demand for tourism services, transmit this information through specific channels, and bring supply and demand together, for an agency fee (commission) [1]. They can also bring together different forms of the tourism offering and shape them into a singular product (trip) to be offered on the tourism market, as a source of increasing an agency's earnings. Tourist agencies have great potential in directing tourism- logistics flows along specific lines – channels, which can enable them to act as logistics nodes for collecting and distributing flows within logistics networks.

Transportation logistics systems represent the space- and time-related transformation of flows of goods, people, information and waste for the purpose of

producing a tourism product. Optimum flows of goods are achieved in collaboration with hospitality and commercial subsystems. These flows impact heavily on the attributes of a tourism destination by determining its level of supply. Optimum flows of people – visitors contribute to creating a sense of pleasure or displeasure and are perceived as either well-organised or poorly organised transportation services. As such, they exert considerable influence on the quality of a destination's entire product [5].

Hospitality-logistics subsystem primarily involves optimising the flows of goods, information and people, and its products include food and beverage services and accommodation services. How high the quality and how low the price of the food and beverage service will be depends on the extent to which the logistics system is capable of optimising the flow of material, semi-products and finished products needed for the end product. Mostly, this refers to physical flows from a supplier, across production (preparing food) to a consumer (tourist) [5]. Tourist attraction subsystems represent the optimisation of logistics flows for the purpose of offering a destination's attractions to visitors in the most efficient way possible. Tourist attractions include national parks, nature parks or other protected areas, museums, cultural and historical monuments, shopping centres, entertainment, cultural and other events, etc. In other words, a tourist attraction is anything that can attract potential visitors and motivate them to travel to a destination. The offering, presentation, promotion and sales of tourist attractions should be designed beforehand and organised in such a way that makes visitors feel they are getting value for their money [5].

Reverse logistics is the continuous logistic process through which shipped products move from the consumer back to

the producer for possible reuse, recycling, remanufacturing or disposal. The European Working Group on Reverse Logistics describes reverse logistics as „the process of planing, implementing and controlling the flows of raw materials in process inventory, and finished goods,

from a manufacturing, distribution or usage point to a point of proper disposal“. The purpose of a reverse logistics process is to regain the value of returned materials or provide the means for proper disposal [4].

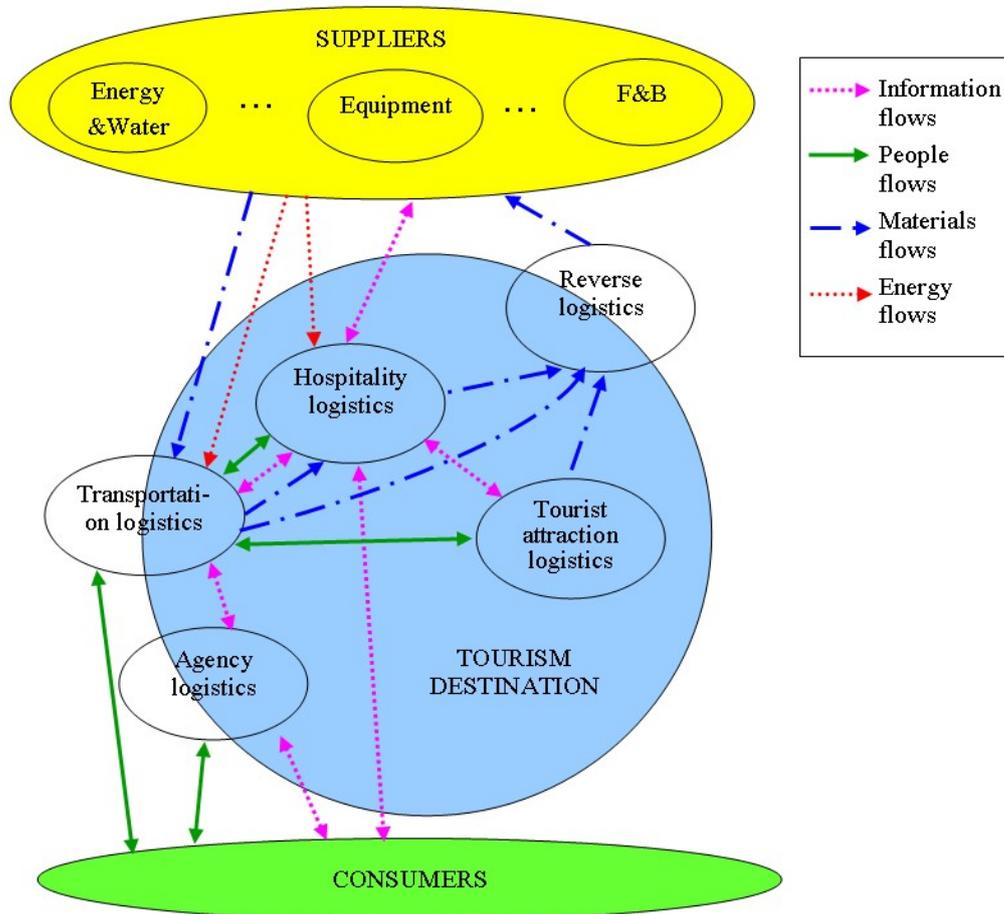


Figure 3 - Basic tourism logistics system

Reverse logistics systems for recycling begin with the consumer and finishes with the end market. These systems can be more or less complex depending on whether they possess intermediate levels, such as, the collection level, the transver level and the processing level. Consumers (in case of tourist

destination consumers are hotels and other tourist subjects), have a particularly important role in this reverse logistics system since they are the first link in the overall logistics chain. Without consumer participation (trough the sorting and disposing of recyclable materials), this system would not be possible [4].

7. CONCLUSION

Tourism logistics represents the space - and time-related transformation of material, people, information, energy, waste, knowledge and capital aimed at providing quality tourism services at the lowest possible costs. Tourism logistics systems are highly complex and dynamic phenomena, of varying spatial coverage and displaying a pronounced openness towards the environment.

There are some of relations between tourism characteristics and logistic issues,

such as demand management, supply management, inventory, management, product development, logistic coordination, and related characteristics, for example: coordination, perishable, information, product complexity, demand etc.

In the global signification, the logistics management implements, and controls the efficient, effective, forward, and reverse flow and storage of goods, services, and related information between the point of origin and the point of consumption in order to meet customers' requirements.

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