Interdependence of Logistics and Tourism: Crafting a Novel Logistics Concept in Tourism

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Abstract

A literal gap has been identified between the concepts of tourism and logistics. Tourism Industry is a dependent industry on Transport, logistics and global supply chain. While all transport modes play an almost equal role of moving the tourists from place to place, logistics plays an indispensable role regarding supply of goods required to fulfil the hospitality needs of tourists. As far as cruise tourism is concerned the entire business model is designed through logistics. Therefore, for the tourism sector to run smoothly the efficient logistics service is required. However, the dependency of the logistics services in an active tourism industry is not explicit other than cruise tourism. This paper reveals a novel concept namely, Tourism Logistics that illustrates the interdependence of Logistics and Tourism. Desk research has been conducted to identify the interdependency of two phenomena while taking the contribution of logistics in the overall supply chain is taken to the limelight. The interdependency of transportation, procurement, delivery and warehousing have been shown via analysis of peer reviewed journal articles regarding interdependency of tourism and logistics. A conceptual model has been introduced to identify the interdependency of tourism and logistics functions, delivery, transportation, warehousing and procurement.

Keywords: tourism, shipping, logistics, supply chain

1. Introduction

1.1 Introduce the Problem

The terms travel and tourism are frequently interchanged. Each of these terms, on the other hand, has a distinct meaning. Typically, the tourism sector is concerned with individuals traveling for business or pleasure, staying at least one night at their destination, and then returning home. The tourism sector, on the other hand, has a broader reach, encompassing a greater range of travel reasons and durations. Simply described, travel is the act of embarking on a long journey. From a business standpoint, logistics in tourism is becoming increasingly important, as supply chain management.

The logistics industry is an essential industry to run the tourism industry in an effective manner. Yet both industries are taken separately and a linkage between both industries hasn’t formed yet. This concept must be built for that to formalize in the industry where a proper mechanism can be established to run the tourism sector where in the meantime innovative suggestions and solutions can be implemented for the effective and smooth run of the business. Travel and tourism are such a complicated phenomenon, logistics in travel and tourist operations has a strategic benefit. Improved logistical systems make it easier to provide high-quality travel and tourism services. Simply put it, if there is no way to move people from place to place, whether by air, sea, or land, there is no tourism industry. To put it another way, the travel and tourism industry's commercial products should be able to please its customers, particularly visitors. Tourists, according to the United Nations World Tourism Organization (UNWTO), are people who "travel to and stay in places outside their usual environment for more than twenty-four (24) hours and not more than one consecutive year for leisure, business, and other purposes. The purpose of this research is to craft a novel logistics concept in tourism. For the tourism operation to run smoothly, logistics is a fundamental requirement. Though logistics activities are essentially used in tourism operation a concept called “logistics in tourism” hasn’t been introduced yet. A literal gap has been identified between the concept of tourism and logistics.

1.2 Explore Importance of the Problem

The significance of the study is for the tourism industry decision makers to understand the indispensable nature of
logistics in tourism. It may be vital for the researchers and for the tourism institutions to study further this concept. The limitations of the study can be narrowed down to the focus on logistics related activities of tourism in the entire research. Another limitation can be the emphasis given only to the interdependency of logistics in tourism to build the literary framework and taking only the sources of interdependency of logistics and tourism and conduction of an archival analysis.

Tourism, which is the activity of visiting a location primarily for leisure is one of the oldest and fastest-growing industries on the planet. Tourism generates additional revenue streams, with foreign exchange gains being the most important. For many emerging countries, lowering unemployment is another vital element. After information technology, tourism is the second fastest expanding business sector in the country (Siriwardena & Silva, 2017). As a result, a tourist may stay in a location for several days to accomplish a variety of goals such as working, studying, seeing places, exploring cultures and cuisines, visiting family, and enjoying a variety of pleasures. It might be nothing but ease and freedom. Regardless of the goals or types of tourists, the new site should be easily accessible. Once there, the location must be able to supply all the necessary amenities for the traveler's stay to be a memorable one. Tourism is inextricably linked to the hotel business and cannot exist without it.

The hotel industry is a key aspect of the hospitality sector, which is part of the tourism industry. The travel business is one of the world's major service sectors, and the hotel industry caters to all forms of lodging and other hospitality needs. Tourists can visit the places by aviation, shipping, and other kinds of transportation. Without adequate logistics management, an effective and efficient transportation service will not be able to function. International tourism has increased dramatically in recent years, accounting for 7% of total global exports in 2016 (Rasool, Maqbool & Tarique, 2021). The supply of tourism products refers to the way various components of the tourist product are made available to visitors. Because the product, service, or experience that is consumed is constructed and includes a diverse variety of providers, tourism is ideally suited in the supply chain (University of Pretoria). Logistics is the management of the movement of goods between the point of origin and the point of consumption to suit the needs of consumers or organizations in a broad sense. Given the preceding discussion of tourist marketing, delivery of products and services needed by customers in accordance with their interests and requirements necessitates a solid foundation of a highly effective and efficient logistics system. Traditional attractions such as sea and sand, as well as geographic position, are insufficient. Through the value chain, the consumer must feel as though all his or her requirements and wishes are met above and beyond his or her expectations. This is only achievable if the physical supply chain's logistics nodes are well-managed.

1.3 Describe Relevant Scholarship

As far as commercial shipping of cargo is concerned, it is termed as a derived demand in terms of economics. However, this economic definition makes a different interpretation when it comes to cruise tourism as the passengers travel for a direct purpose. Cruise ships are destinations in themselves (Siriwardena & Silva, 2017). People travel for a variety of reasons, including business, formal meetings, reunions with friends and family, education, healthcare, and even pleasure. Tourism is defined as a leisure activity in which individuals spend a few days in a new location to appreciate new surroundings, try new foods, and breathe fresh air. Not all travelers are tourists, but all tourists are travelers (Hasa, 2016). Tourism is a result of contemporary social arrangements that began in Western Europe in the 17th century, though it has Classical antiquity as a forerunner (Walton, 2021). The United Nations World Tourism Organization defines tourism as "the movement of individuals to nations or areas beyond their customary surroundings for personal, commercial, or professional interests." Tourism is defined by the Britannica Dictionary as "the act or practice of spending time away from home in pursuit of entertainment, relaxation, and enjoyment while utilizing commercially provided services."

When it comes to business and economic activity, logistics has a variety of implications and complex subtleties of meaning. As a result, it includes two essential functions: transportation and storage, in which the supply network operates in a series of processes that include purchase, manufacture, and distribution of goods and services. Tourism is the business of organizing and running vacations and visits to tourist attractions (Hasa, 2016). Many millions of jobs and companies are depending on a robust and growing tourist sector throughout the world, according to UNWTO Secretary General Zurb Pololikashvili, regardless of a country's degree of development. It has been a driving force in the preservation of natural and cultural assets for future generations (World Tourism Organization, 2021). Logistics refers to a collection of services that facilitate the physical transportation of commodities, cross-border trade, and cross-border business. In both the commercial and governmental sectors, effective management and information technology solutions are essential for ensuring high-quality logistics. In today's global business environment, a country's competitiveness is determined by its ability to handle logistics.
In a tourist supply chain, there are three explicit travel phrases: pre departure, during trip, and post departure, as shown in figure 1.

![Figure 1. The Tourism Supply Chain](https://opentextbc.ca/introtourism2e/chapter/what-is-tourism/)

Reliable supply chains and dependable service delivery for merchants are important factors in logistics performance. The complexity of global supply systems is increasing (Arvis, J.-F., Ojala, L., Wiederer, C., Shepherd, B., Raj, A., Dairabayeva, K., & Kiiski, T. 2018). The environment is a major attraction for travelers in a tourism product (TP). Landscape, seascape, beaches, and climate are examples of natural resources. Built attractions include historical or modern townscapes, purpose-built resorts, theme parks, heritage and cultural attractions in the form of performances such as folklore organized as festivals and pageants, and theater shows, among others.

Furthermore, the tourist sector offers social attractions that allow people to connect and engage under various themes, interact with locals, and experience their way of life, among other things. The key motive for non-leisure travelers, such as those who visit friends and family, is their affection and affiliation with the place. However, popular recreational activities may continue to have an impact. The future of the travel industry is seen from a completely different viewpoint. Safety, social, environmental, and other factors are driving more stringent regulatory requirements for merchants and operators (Arvis, et al., 2018). It has posed several difficulties throughout the tourist supply chain. The durability and long-term viability of supply chains are becoming increasingly important (Arvis et al., 2018). Tourism relies heavily on the destination or new site, as well as the marketing strategy.

![Figure 2. Mill and Morrison’s Consumer Behavior Model](https://egyankosh.ac.in/bitstream/123456789/67180/3/Unit-6.pdf)

The customer behavior process in the travel industry is depicted in Figure 2. A trend is a generalized change in condition or behavior, as well as the overall direction in which things are moving. Several factors have influenced
consumer behavior and business procedures in the tourist industry, resulting in the emergence of new tourism trends (2021, Revfine).

Tourism logistics refers to the space- and time-related transformation of resources such as people, materials, information, energy, trash, and capital with the goal of delivering high-quality travel services at the most affordable prices. Tourism logistics networks are extremely complicated and dynamic phenomena with changing spatial coverage and a strong environmental susceptibility. A complex interaction between several groups of activities makes up a tourist logistics system, which produces a travel item that is acceptable to the travel market. The tourism attractions subsystem, the travel agencies subsystem, the transportation subsystem, and the hospitality subsystem are some of these subsystems (Zhang X., Song H, 2008). There are certain relationships between logistical problems and aspects of tourism, including coordination, perishability, information, product complexity, demand, and associated qualities like inventory management, product creation, and demand management. The logistics management, in its broadest sense, executes and oversees the effective flow and storage of goods, services, and related information between the point of origin and the site of consumption in order to satisfy the needs of customers. (Đorđević & Arsić, 2010).

2. Method

The Method section describes in detail how the study was conducted, including conceptual and operational definitions of the variables used in the study. Different types of studies will rely on different methodologies; however, a complete description of the methods used enables the reader to evaluate the appropriateness of your methods and the reliability and the validity of your results. It also permits experienced investigators to replicate the study. If your manuscript is an update of an ongoing or earlier study and the method has been published in detail elsewhere, you may refer the reader to that source and simply give a brief synopsis of the method in this section.

The researchers conducted desk research to corroborate the research objective of crafting a novelty concept of logistics in tourism while emphasizing the Interdependence of Logistics and Tourism. The research design of the study consists of a theoretical framework, conceptual framework and operationalization. The theories based on tourism, logistics, shipping and supply chain were discussed in the literature review of the study. Tourism industry is depending on logistics activities, transport, delivery, warehousing and procurement. Desk research has been conducted to identify the interdependency of logistics and tourism. The interdependency of transportation, procurement, delivery and warehousing have been shown via analysis of peer reviewed journal articles regarding interdependency of tourism and logistics. A conceptual framework is designed to show the linkage between the tourism industry and logistics activities and the interdependency in nature between logistics and tourism.

![Conceptual Framework](image-url)

Source: Developed by Researchers, 2022
Transportation, which overcome the physical restraints of distance and meets the human requirements for movement over the space plays a vital role in the tourism industry is a key drive for socio-economic progress (transport for tourism, n.d.). Without proper transportation system, neither a tourist won’t be able to travel to a destination nor he will be able to travel within the destination. Tour guides, Tour operators and people travelling for different purposes within the country are facilitated by transportation. Due to the importance, transportation carries in the tourism industry it is being identified as a fundamental infrastructural component to practice tourism in any destination and it is considered as a factor contributing towards the development of tourism industry.

Taking the right goods to the right customer at the right time while working to improve the business operation is the fundamental concept behind distribution (Odoom, 2012). The impact of the final output of the tourism product selling in the establishments have an impact over the delivery of the quality raw materials from which the ultimate tourism product being produced. A good deliverance of the products leads to sustainable performance, good financial performance and quality tourism product (Tapper & Font, 2004). The expectation of the tourists purchasing a tourism product is the guest satisfaction. Guest satisfaction is derived by satiating the demand of the tourists by providing them quality tourism supplies. Quality tourism supplies can be only given if the deliverance of the raw materials is done in the prim and proper manner.

Warehousing which is storing of goods in a warehouse before they are being distributed and inventory storage are two most important concepts affecting from sourcing raw materials, efficiently managing inventory and delivering orders to the customers on time. Warehousing stores all the goods in a safe and organized manner until they are delivered making it convenient to know how long the products have been there in the warehouse and the quantity of the product (Lopienski, 2018). Warehousing should happen in the proper mechanism for the hotel to receive the right amount of goods in the right quality.

Procurement is the purchasing of goods that are required to run the tourism operation in the given establishment. This process includes selecting a suitable supplier, negotiating terms in relevance to money, delivery, terms and conditions and inspecting goods. A hotel requires many raw materials to proceed the operations, linen, vegetables, fruits, poultry items and confectionary items. Purchasing these from the right supplier in the given quality and standards is essential since it leads to the ultimate guest satisfaction which make sure the sustaining factor of the tourism business.

3. Results

The multiplier effect of tourism reflects and expresses the direct link between entries in the economic system in the form of investments and its outputs in the form of income levels of economic activities of many participants. Therefore, the multiplier effects can be measured through the changes produced in income levels, results, employments and balance of payments due to modification of tourism spending.

Considering the logistics and supply chain conditions required; transportation, warehousing, delivery and procurement to conduct tourism activities in a successful manner a holistic view is required. The diagram below shows a conceptual model of logistics in tourism. It evaluates the impact of the “4 A’s” of tourism destination management methods, namely attractions, access, amenities, and ancillary services, as well as economic and social variables, as well as the pull and push effects of marketing and sales (Edirisinghe, Silva & Siriwardena, 2022).

Figure 4. A conceptual model of illustrating Logistics in Tourism

Source - Developed by Researchers, 2022 [An extension to (Edirisinghe, 2021)]
The interdependency of logistics, supply chain and tourism industries have been manifested by the model. When a tourist is selecting a tourism destination to travel, the basic components that a country should fulfill to practice tourism matters a lot, attractions, accessibility, accommodation and amenities. If one of the given commodities are not being able to be fulfilled by the country, practice of tourism industry will be in vain. Apart from the 4As’ should be fulfilled by the destination, to attract tourists to the destination push and pull factors of the country matters. These are the reasons which motivates a tourist to select Sri Lanka as the tourism destination to travel. Also, the external environmental factors like economic factors and social factors matters in the selection criteria of the country. Tourism industry will be able to operate only if the tourists arrive to the country. Logistics in Tourism can be defined as a collection of logistical tourism activities that occur during the tourism process. It could involve transportation, resource supply, and the development of an overall tourism product employing linked technology to handle tourism vehicles and tourists using logistics knowledge, skills, and competency. The logistic process in tourism is shown in red dotted lines in the diagram above. Customers will soon reach this highly volatile sector after selecting trip destinations. Transportation and hospitality are the two key components of the logistics in tourism concept (SiT). Tourists were transported in a safe and efficient manner using multiple forms of transportation. Material supply is also vital, as tourists should be given with components that fall under the category of hospitality. Whether it's for passenger or cargo transportation, the transporter must ensure four key elements. Power, transportation, labor, and infrastructure are all part of it (Edirisinghe, 2021). The operational components of tourism, such as hotel, food and beverage, recreation, and entertainment, become active after the tourism product is created. To keep them operating, a constant supply of materials is required. Tourists consume items while they are being manufactured and supplied, because to the industry's intrinsic service features. As a result, the service provider is unable to save the creation for later use as a tangible product. As a result of this reality, logistics in tourism has become a very complicated and sensitive issue. Given the nature of the industry, a supply network (SN) strategy to improve the quality of tourism products may be more applicable. A supply network is defined as a set of active members inside an organization's supply chains, as well as inactive members to which an organization is linked, who can be relied upon to actively contribute to the supply chain if a need arises (Braziotis, Bourlakis, Rogers, & Tannock, 2013). Generally, tourism and hospitality sectors are highly customer focused service sectors. Marketing a service is generally difficult that marketing a tangible product.

4. Discussion

Tourism is highly dependent on logistics. To support the flow of people, goods, and services, the logistics sector is essential to the tourism sector. However, because tourism increases demand for services like distribution, storage, and transportation, the logistics sector benefits from tourism. For a tourist to travel to an overseas destination, international transportation services such as sea or air are required. Transport is one of the main overlapping areas between logistics and tourism. To assist transportation in the tourism business, logistics is essential in providing the necessary infrastructure and services. For instance, logistics firms offer airlines freight, ground handling, and aircraft maintenance services, all of which are crucial for the swift and secure transportation of people and products. Like this, logistics firms give cruise lines terminal and port services, making sure that travelers and their belongings can be loaded and unloaded quickly and effectively. Supply chain management is another area where logistics and tourism intersect. The management of the supply chain by logistics companies oversees making sure that the products and services required to support tourism activities are accessible. For instance, logistics firms oversee controlling the stock of food and drink goods in hotels and restaurants, making sure that there is adequate inventory to match visitor demand. To make sure that tourist purchases are made at the appropriate time and place, logistics businesses also oversee the distribution of souvenirs and other goods. The hospitality component in the tourism product is the most critical segment that ensures tourists’ satisfaction enroute or while at the destination. This factor is heavily dependent on logistics because the goods are mainly transported by ships. Yet neither the importance of logistics nor goods supply chain management has been explicitly identified in the tourism value chain. In the context of infrastructure, logistics and tourism also intersect. Warehouses, distribution facilities, and transportation hubs are just a few examples of the infrastructure that the logistics sector offers to support tourism-related activities. These facilities are crucial to ensure that goods and services can be transported promptly and effectively, serving the
needs of tourists. Additionally, logistics businesses are in charge of overseeing the repair and maintenance of these facilities, making sure they are in good functioning order and capable of meeting the expectations of the tourism industry. In the sphere of customer service, logistics and tourism are related. Particularly in the fields of transportation and supply chain management, logistics firms are essential to providing tourists with excellent customer experience. For instance, logistics businesses offer baggage handling services at airports, ensuring that travelers' luggage is transported effectively and safely. Like airlines, hotels, and car rentals, logistics businesses offer customer care help to travelers who require it. To leave the country of origin and to enter to destination country pre and post shipping activities such as emigration and immigration, customs etc. to be facilitated. Thereafter, to travel within the country domestic transportation services are required. Other logistics such banking facility, easy access to information about public or private transport system are crucial. The hotels and restaurants etc. should be made available to acter to the demand of wide spectrum of tourists. No tourist would like to settle down for what is available in the destination. To provide the maximum guest satisfaction quality products should be given which can only be generated by quality raw materials and goods. The supply of goods and materials must be done by storing the goods in a well-suited environment and by proper delivery without tarnishing the given quality of the product. As a result, there is a strong connection between the logistics and tourism industries. Specifically in the areas of transportation, supply chain management, infrastructure, and customer service, the performance of logistical operations is crucial to the tourism business. Similarly, tourism benefits logistics businesses since it increases demand for services like distribution, storage, and transportation. The need for collaboration and cooperation between the two industries is highlighted by the interdependence of logistics and tourism, as they work together to fulfill visitor needs and guarantee the expansion and success of the tourism sector. Identifying the interdependence of tourism and logistics, a new concept should be introduced as logistics in tourism.

References


University of Pretoria. (n.d.). Retrieved from https://repository.up.ac.za/bitstream/handle/2263/24684/02chapters3-4.pdf?sequence=3


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