

Chapter 7

The Synergy Between Tourism, Aviation, and Digital Transformation: A Path to Seamless Travel Experiences

Gonca Güzel Şahin
Atilim University, Turkey

ABSTRACT

This chapter explores the profound impact of digital transformation on the tourism and aviation sectors, highlighting the necessity for a comprehensive digital strategy in response to global changes. The tourism industry, in particular, is undergoing a paradigm shift, leveraging technological advancements such as mobile applications, social media, and digital platforms to enhance customer satisfaction, experience, and overall competitiveness. Within the aviation sector, digital developments span smart maintenance, risk management, air traffic optimization, and customer relations, all aimed at improving operational efficiency and passenger experience. The interconnectedness of tourism and aviation is evident in the increasing role of air travel, accounting for over 52% of global tourist movements. The chapter delves into the historical evolution of this symbiotic relationship, emphasizing the pivotal role of innovations, increased connectivity, and affordability in fostering tourism growth.

DOI: 10.4018/979-8-3693-0732-8.ch007

1. INTRODUCTION

The tourism sector has increasingly emphasized the use of technology in response to global changes over time. In conjunction with economic development, a digital transformation plan that also addresses environmental factors has become a necessity for the tourism sector. With the process of digital transformation, the effort to maintain customer satisfaction, experience, and a competitive environment has now become indispensable for businesses. Industry 4.0 has introduced a new lifestyle in all aspects of life, leading us to use technological devices such as the Internet, tablets, robots, and other technological tools. The primary goal of using technology in tourism is to make people comfortable in planning their travels and ensure the reliability of their journeys. New generation technological advancements aim to facilitate customers' travels as well as enhance the efficiency of businesses in terms of money, time, and effort across various sectors. The introduction of mobile application programs for communication with customers, navigation applications, and mobile payment systems has improved the quality of service in the tourism sector, making travel activities more accessible and increasing customer satisfaction. In addition to digital facilitators in customer experience, the mobile compatibility of social media platforms and other sharing platforms is also crucial in shaping the customer experience.

Airlines within the tourism sector also heavily benefit from digital developments while performing their core functions and managing supply, maintenance, operations, and customer relations. In the aviation sector, digital transformation encompasses various applications, including smart maintenance, risk management, air traffic optimization, customer satisfaction, cost reduction, revenue management, performance metrics, cost control and verification, cargo load control aimed at increasing fleet capacity, and ticket price adjustments, providing passengers with a tailored travel experience, and managing airport performance. The aviation sector aims to increase profitability through digital applications while also making it almost essential to maintain its presence in the sector in terms of customer satisfaction and competition. Considering both internal and external dynamics, the aviation sector significantly differs from other sectors in terms of innovation and renewal, making substantial use of digital applications in the process. In this context, this study focuses on the digital transformation and digital application areas in the aviation sector.

22 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/the-synergy-between-tourism-aviation-and-digital-transformation/340958

Related Content

Models for Drone Delivery of Medications and Other Healthcare Items

Judy E. Scott and Carlton H. Scott (2019). *Unmanned Aerial Vehicles: Breakthroughs in Research and Practice* (pp. 376-392).

www.irma-international.org/chapter/models-for-drone-delivery-of-medications-and-other-healthcare-items/226842

Skin Detection With Small Unmanned Aerial Systems by Integration of Area Scan Multispectral Imagers and Factors Affecting Their Design and Operation

Stephen R. Sweetnich and David R. Jacques (2019). *Unmanned Aerial Vehicles: Breakthroughs in Research and Practice* (pp. 215-234).

www.irma-international.org/chapter/skin-detection-with-small-unmanned-aerial-systems-by-integration-of-area-scan-multispectral-imagers-and-factors-affecting-their-design-and-operation/226834

Drones in the U.S. National Airspace System

David Stuckenberg and Stephen Maddox (2014). *International Journal of Aviation Systems, Operations and Training* (pp. 1-22).

www.irma-international.org/article/drones-in-the-us-national-airspace-system/138606

Review and Implementation Analysis of Safety Management Systems in Aviation Design: Supplemental Type Certificate Applicants and Holders

Heidi C. Kim (2015). *International Journal of Aviation Systems, Operations and Training* (pp. 21-32).

www.irma-international.org/article/review-and-implementation-analysis-of-safety-management-systems-in-aviation-design/152836

Emerging Role of Artificial Intelligence (AI) in Aviation: Using Predictive Maintenance for Operational Efficiency

Tereza Raquel Merlo (2024). *Harnessing Digital Innovation for Air Transportation* (pp. 28-46).

www.irma-international.org/chapter/emerging-role-of-artificial-intelligence-ai-in-aviation/340953