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Routledge Frontiers of Business Management

DIGITAL TRANSFORMATION IN AVIATION, TOURISM AND HOSPITALITY IN SOUTHEAST ASIA

Edited by
Azizul Hassan and Nor Aida Abdul Rahman



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Digital Transformation in Aviation, Tourism and Hospitality in Southeast Asia

Technological advances and the drive to digitalize business processes in aviation, tourism, and hospitality have forced the industries to go along with the digital movement. The results are often mixed. This book brings together contributions from leading scholars in the field and explores the digital transformation in these industries in Southeast Asia.

The book looks at the impact of digital transformation on the region and the issues and challenges brought about by this transformation. It also addresses trends in the industries from blockchain technology, AI, biometric and mobile technology applications to in-flight catering. It examines the impact of COVID-19 on the industries and how the pandemic has led to businesses adopting new business models. Through the case studies of digital adoptions in the region, readers will gain insights on how the countries have leveraged new technologies and the implementation processes to drive digital transformation.

The book aims to help scholars and policy makers understand the digital advances in the industries to better formulate responses in research and policy making and deliver effective digital transformation.

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Nor Aida Abdul Rahman

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Introduction

Azizul Hassan and Nor Aida Abdul Rahman

Aviation, tourism, and hospitality in Southeast Asian countries arguably have been experiencing digital transformation over the years. In this particular region of the world, digital transformation aims to satisfy the changing aviation, tourism, and hospitality business and market requirements. It also entails employing the most recent technologies for either adapting the current or developing new culture, processes of business, and consumer experiences. Technological innovations in this region are widely applied in both the consumer and business markets of aviation, tourism, and hospitality as one of the key factors to benefit these industries, and to improve both the tourists' and travellers' experiences.

Literally, technology stays by the tourists' and travellers' side during the entire purchase journey. One of the most important technologies in aviation, tourism, and hospitality is mobile technology. The cell phone has become the tourists' and travellers' tour guide, communicates with travel agencies, books airline tickets, finds the best restaurants, acts as a map, and so on. The Internet of things (IoT) plays a significant role in aviation, tourism, and hospitality. On the other hand, IoT brings significant updates to these industries with the support of integrated sensors connected to the Internet inside items like cars, suitcases, buildings, and more.

The technological characteristics of aviation, for example, show that the adoption of the emerging technologies helps ensure the safety of travellers. Globally, aviation is recognized as a highly regulated industry that helps the economic growth of any country. Aviation supports many other industries such as tourism, manufacturing, business, etc. Also, technology plays a significant role in aviation as most travellers use aircraft to travel from one location to another.

In tourism, technological innovations, tourism technology, or tourism automation benefit both the tourists and the travellers. Technological innovations, such as flight monitoring, online travel and tourism firms, and systems, allow tourists and travellers to rate their experiences. These also offer significant benefits allowing tourist to enjoy their travel and stay connected with the family. As far as technology advances in tourism are concerned, smartphones, smart speakers, and artificial intelligence (AI) assistants are all supporting tourists and travellers. Voice search is increasingly being used by tourists and travellers to check and get airline tickets, hotel rooms, and travel experiences.

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Hospitality is competitive and essentially needs to keep up with the very latest technological trends. Technology can help hospitality to streamline processes and to improve the level of customer experience. Technology supports hospitality, especially with regard to the widespread adoption of voice search, virtual reality (VR), augmented reality (AR), AI, the IoT, fingerprint recognition, and so on. Contactless payment for instance has become more popular in hospitality settings, while mobile check-ins have emerged in hotels, restaurants, and airports. Many of these technologies have grown because they help to reduce friction, and cut waiting times for hospitality customers.

Aviation, tourism, and hospitality still require more research studies to analyse the trend of digital transformation. Thus, the call to study digital transformation in aviation, tourism, and hospitality is a timely demand as these are among the fastest growing industries in Southeast Asia contributing to socio-economic development. On this note, this book focuses on the features, breadth, and diversity of digital transformation in aviation, tourism, and hospitality in Southeast Asia.

Hamid and Tan present the context of digital transformation in Southeast Asian aviation, tourism, and hospitality in the first chapter. In the recent era, digital transformation has not only enhanced, but also revolutionized or disrupted every company function. These innovations, which are now being used in aviation, tourism, and hospitality, will change the way customers, industries, and businesses operate. Southeast Asia is rapidly growing in the areas of aviation, tourism, and hospitality, all of which are important economic drivers. In this chapter, we look at how digital revolution is affecting aviation, tourism, and hospitality in Southeast Asia. A thorough examination of Internet marketing, computer systems, mobile communication, technology trends, AI technology, AR technology, VR technology, the IoT, voice recognition technology, and many other topics is conducted.

Nee and Dean, in Chapter 2, discuss the Association of Southeast Asian Nations (ASEAN) region's digital transformation influences, issues, and challenges in aviation, tourism, and hospitality.

Ahmad and Samsudin look at the theoretical and practical aspects of blockchain technology in aviation, tourism, and hospitality in the third chapter. The chapter covers blockchain's essential underlying technology and discusses how it might be used in the tourist industry, which encompasses the aviation and hospitality industries. The most significant obstacles to blockchain adoption are also explored.

Harun, Mokhtar, Singh, and Rahman highlight how artificial intelligence, biometric technology, and mobile technology application in aviation and tourism are changing the face of tourism and air travel in the fourth chapter. In this chapter, the researchers will explain how the current developments in three technologies, namely AI, biometrics, and mobile technology, have revolutionized the landscape of the global air travel and tourist business.

In the fifth chapter, Ghafar discusses present and prospective big data analytics advances in the Southeast Asian aviation, tourist, and hospitality industries. This chapter also seeks to give a detailed explanation of big data analytics, with an emphasis on the technology's recent developments and important problems.

In the sixth chapter, Yusriza and Rahman examine the relationship between technology and in-flight food in a travel, tourism, and hospitality. The primary goal of this chapter is to analyse the role of technology in the airline catering industry and to explain how technology applications in the airline catering industry are related to air travel, tourism, and hospitality. Second, this chapter discusses present and prospective technology applications in airline catering, and third, this chapter examines case studies of many airline caterers who use technology. This chapter concludes with a discussion of existing research and opportunities for future research.

Kadir and Hussin study cross-country instances of technology use in the Asian tourist and aviation industries in the seventh chapter. The purpose of this research is to examine the technology applications of tourism and aviation industry growth in Malaysia and Thailand, two of the most populous ASEAN countries. The link between smartphone technology and the tourist and aviation sectors in Malaysia and Thailand is also examined in this study. TripAdvisor, PlateCulture, Offpeak, chatter bus, and KL Transit are just a few of the smartphone apps that may help tourists organize their travels better. The study also investigates the Internet's role as a source of information in the tourist and aviation industries.

In the eighth chapter, Sharin, Sentosa, and Perumal investigate whether Malaysia's resilient model for rural tourism sustainability is either chaotic or orderly. The tourist industry has been hit the hardest by the crisis. As a result, this research highlights the role of rural tourist activities in rural regions' economic growth in Malaysia before and during the COVID-19 pandemic, as well as providing an analysis of rural tourism locations. As a consequence, an integrated empirical model for rural tourist sustainability (RTS) was suggested, with community resource tourism (CRT) as a causative component and technical development processes (TDP) as a mediator.

Wan-Chik and Hasbullah look at the current and future advancements of big data analytics in Malaysia's aviation, tourism, and hospitality industries in the ninth chapter. This chapter provides an overview of big data and data analytics in the aviation, tourism, and hospitality industries, as well as their present and future developments. In the aviation, tourism, and hospitality industries, a study of previous and present advancements in the usage of big data and data analytics was conducted. The adoption of data analytics by various stakeholders in certain sectors, such as authorities, decision makers, domain researchers, application users, and typical consumers, is discussed in this chapter.

Yasa and Sentosa present an empirical study on the technology usage dimensions within the tourism craft business in Bali, Indonesia, using a structural equation modelling technique in the tenth chapter. Using a quantitative technique, the current study created a connection between technology usage and company growth in the dynamic movement of the tourism craft sector. To determine the three aspects of technology usage that were postulated, a second order confirmatory factor analysis (CFA) was used.

Wahyuningsih, Sentosa, and Hizam examine technological policy guidance on rural tourism sustainability in Indonesia in the 11th chapter. This research

proposes technological policy recommendations for the long-term viability of rural tourism in Indonesia.

Omar, Demong, and Maon wrote the 12th chapter, which analyses the tourist industry during the COVID-19 pandemic and proposes the Tourism Industry Technology Framework (TITEF). This research recommended the TITEF as a way to improve the tourism industry during the COVID-19 pandemic.

Mayor-Vitoria discusses the necessity of contactless hospitality technology in the post-COVID-19 age in the 13th chapter, based on the preceding discussion. This technological acceleration is already laying down a trail and establishing trends that we cannot ignore in the post-COVID-19 age. This chapter also examines a number of factors that are required for the long-term viability of tourist firms and must be considered while rethinking tourism plans.

Again, Mayor-Vitoria focuses on virtual tourism and rebuilding tourist business in the post-COVID-19 period in the 14th chapter. The current situation, which has arisen as a result of the COVID-19 health crisis, is fraught with uncertainty and offers a slew of issues for society in general and tourism in particular. This situation has resulted in the temporary absence of some of the classic tourism-related sustainability issues in select tourist destinations, which the scientific community has viewed as a once-in-a-lifetime chance to rethink tourism and develop a new model based on sustainability. This chapter will look at how an unprecedented worldwide crisis is affecting the tourist industry and how it is being addressed.

Ali, Rahman, and Hassan discuss the history, and present and future trends in technology as well as the safety of aviation and tourism in the 15th chapter. The goal of this study is to close the gap by elucidating the correlational link between safety and technology in aviation and tourism. This chapter expands on the topic of safety in aviation and tourism by emphasizing the significance of maintaining traveller safety throughout their tourist activity or trip from one place to another. This study focuses on the role of technology in ensuring the safety of travellers during air travel and tourist activities.

In Chapter 16, Rahman, Hassan, Sudharmin, Majid, and Nur discuss the future of technological research in aviation, tourism, and hospitality events. First, this chapter will discuss the importance of technology in the aviation industry and the tourism sector, with a focus on tourism event activities; second, it will highlight future technology applications for tourism events; and third, it will explore future research areas in the area of technology and tourism events.

In the 17th chapter, Rahman and Hassan discuss the development and future research priorities for digital transformation in the Southeast Asian countries' aviation, tourism, and hospitality industries. This chapter also discusses the necessity of digital transformation in the aviation, tourist, and hospitality industries in responding to technological, managerial, and marketing challenges.

This book delves deeply into Southeast Asia's digital revolutions in tourism, hospitality, and aviation. This book is deepened with in-depth knowledge about digital transformation technologies in tourism, hospitality, and aviation, as well as a solid understanding of related concepts. This book introduces ideas and dialogues that readers will find extremely beneficial.

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