

Impact of Industry 4.0 on Sustainable Tourism

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Impact of Industry 4.0 on Sustainable Tourism: Perspectives, Challenges and Future

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United Kingdom – North America – Japan – India – Malaysia – China

Emerald Publishing Limited
Emerald Publishing, Floor 5, Northspring, 21-23 Wellington Street, Leeds LS1 4DL

First edition 2024

Editorial matter and selection © 2024 Zuzana Tučková, Sandeep Kumar Dey, Hoc Huynh Thai and Sinh Duc Hoang.

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British Library Cataloguing in Publication Data

A catalogue record for this book is available from the British Library

ISBN: 978-1-80455-158-5 (Print)

ISBN: 978-1-80455-157-8 (Online)

ISBN: 978-1-80455-159-2 (Epub)



INVESTOR IN PEOPLE

This book is dedicated to students, academicians, researchers, practitioners and anyone mesmerised by the wonders of the fourth industrial revolution in ushering in a more sustainable tourism industry.

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Preface

The tourism and hospitality industry is at the forefront of the climate crisis as a significant source of carbon emissions on a global scale. There is a need to disseminate opportunities and explore scientific avenues in emerging technologies associated with Industry 4.0, such as the integration of AI, virtual and augmented reality, 'extended reality' or the use of service robots, big data and machine intelligence to predict human behaviour, and forecasting future trends in the tourism industry's fight against the climate crisis.

With the onset of Industry 4.0, the *Impact of Industry 4.0 on Sustainable Tourism* investigates current and future challenges in order to translate them into pragmatic solutions. Exploring the opportunities for both academia and industry in agile and disruptive technologies and integrate unique features of these advancements like Extended Reality (XR), Machine Intelligence (MI) and Computer Vision (CV), the authors determine the trajectory of sustainable tourism development. Of interest to academics and practitioners, *Impact of Industry 4.0 on Sustainable Tourism* informs on the disruptive technologies under the gambit of Industry 4.0, revealing patterns and projections to provide a discourse on the progression of futuristic technologies in sustainable tourism research and practice.

We are thrilled to present this book on the “*Impact of Industry 4.0 on Sustainable Tourism*” as the editor. This book brings together a collection of insightful chapters from leading scholars and practitioners in the field of tourism, sustainability and technology. The Fourth Industrial Revolution, or Industry 4.0, is characterised by the integration of advanced technologies, such as AI, big data analytics and the Internet of Things, into various industries. The tourism industry is no exception to this, and it is experiencing significant changes due to the integration of these technologies. As the tourism industry grows, it also faces challenges related to sustainability. Sustainable tourism is about meeting the needs of present tourists and host regions while also protecting and enhancing opportunities for the future. In this book, we explore how Industry 4.0 can help or hinder the pursuit of sustainable tourism. The title is developed keeping in mind the needs of post-graduate students and researchers, as knowledge in the vertical remains scarce. This book covers a myriad of pertinent topics ranging from autobots to extended reality in the hospitality and tourism industry. Industry practitioners can utilise the cutting-edge concepts and notions presented herewith. Simultaneously, readers can keep themselves abreast of the major developments taking place in the space. This book also represents a geographical diversity of

contributors and contexts, analyses from both emerging and developed economies.

We would like to thank all the authors who contributed their valuable insights to this book. We are grateful to them for sharing their knowledge and expertise with us. We would also like to express our appreciation to the reviewers for their constructive feedback, which helped to improve the quality of the chapters.

We hope this book will serve as a valuable resource for researchers, students, practitioners, policymakers and anyone interested in the intersection of Industry 4.0 and sustainable tourism.

Acknowledgement

The editors remain indebted to the anonymous referees and reviewers who provided their expertise in the selection of contributions for the book. We are thankful to the constituent faculties and deans of the Univerzita Tomáše Bati ve Zlíně, namely, fakulta managementu a ekonomiky (FAME), fakulta aplikované informatiky (FAI), and fakulta multimediálních komunikací (FMK). We extend our gratitude to the OP RDE project Junior grants of TBU in Zlin, reg. No. CZ.02.2.69/0.0/19_073/0016941 that assisted the team to amalgamate their ideas and significantly contribute towards building a corpus of knowledge in the scholastic pursuit of sustainable tourism management. We also take this opportunity to thank our departmental colleagues, Mark Ratilla, PhD, Khurram Ajaz Khan, PhD, our Dean of FAME, prof Ing David Tuček PhD and Vice-Dean for doctoral study, Ing Lubor Homolka, PhD, for their support and sharing our vision.

We are humbled by the cooperation offered by the Emerald Publication (UK) team for their timely and prompt services towards successfully completing this book.