

Tourism, Hospitality and Digital Transformation

Strategic Management Aspects

INNOVATION AND TECHNOLOGY HORIZONS



Edited by Kayhan Tajeddini,
Vanessa Ratten and Thorsten Merkle

ROUTLEDGE



‘This carefully edited book examines details and effects of digitalization on the tourism and hospitality industry from a number of perspectives. The authors of the chapters, each in their own way, allow the reader to understand the implications of Tourism 4.0 on business strategy as well as on the industry as a whole.’

Professor Michael Ottenbacher, *Kansas State University, USA*

‘This book, edited by Tajeddini, Ratten and Merkle, provides an excellent insight into the digital transformation impacting the tourism and hospitality industries. It helps businesses and individuals understand the disruptive forces in play, the need for innovation, and how to keep ahead of the curve.’

Dipra Jha, *Director of Global Engagement and Associate Professor of Practice, Hospitality, Restaurant and Tourism Management, University of Nebraska–Lincoln, USA*

‘The Fourth Industrial Revolution, blurring physics, biology, information and communication technologies into new collective cyber-physical systems, brings unraveled challenges to business and society. This book, showing how to turn these challenges into strategic opportunities in the context of hospitality and tourism organizations thriving at the forefront on customer value creation, is a “must have” for current and aspiring managers. It adopts an eclectic approach to current issues emerging with innovation and technological advancements, while rooting the theoretical reflection deeply into classical strategic management framework developed by Michael Porter. This book provides a unique forward-looking overview of what it takes to strategize, improve organizational performance and sustain competitive advantage by revolutionizing the business boundaries. Get it now!’

Evelina Gillard, *Senior Lecturer, César Ritz Colleges, Switzerland, and University of Derby, UK*



Taylor & Francis

Taylor & Francis Group

<http://taylorandfrancis.com>

TOURISM, HOSPITALITY AND DIGITAL TRANSFORMATION

Innovation and technological advancements can be disruptive forces, especially for conventional business in the hospitality and tourism industries. This book is timely with its critical examination of such forces and how the two industries should strategize and respond to changes effectively. It examines a wide scope of topics, from environmental scanning, formulation, implementation and evaluation to the way managers make strategy choices for better organizational performance.

The book illustrates how companies can re-orient their strategies and appraise the effectiveness of the business; its key competitors; and how they should set business goals through various cases, i.e. different types of hospitality and tourism business from traditional hotels to Airbnb, and endeavors to provide strategic conceptual theories with real world application through such case studies.

Kayhan Tajeddini is Professor of Strategic Management at Sheffield Hallam University, UK.

Vanessa Ratten is Associate Professor of Entrepreneurship and Innovation at La Trobe Business School, La Trobe University, Australia.

Thorsten Merkle is Professor at the University of Applied Sciences of the Grisons FHGR, Switzerland.

Innovation and Technology Horizons

Series Editor: Vanessa Ratten, La Trobe University, Australia

As business landscape constantly shifts in today's digital age, this timely series looks at how business and society can harness technological innovation to succeed and drive progress. The books in this series identify new innovation capabilities and emerging technologies and investigate the managerial implications of such technologies. As business processes become increasingly complex, the series also explores how businesses can transform themselves with new digital technologies while aligning themselves with today's societal goals. This series provides direction through research on innovation and technology management and will be of benefit to anyone who is keen to thrive in an evolving business environment.

A Global Guide to FinTech and Future Payment Trends

Peter Goldfinch

Frugal Innovation

Vanessa Ratten

Tourism Innovation

Technology, Sustainability and Creativity

Edited by Vanessa Ratten, Vitor Braga, José Álvarez García and Maria de la Cruz del Rio-Rama

Social Innovation

Asian Case Studies of Innovating for the Common Good

Edited by Sarah Lai-Yin Cheah

Tourism, Hospitality and Digital Transformation

Strategic Management Aspects

Edited by Kayhan Tajeddini, Vanessa Ratten and Thorsten Merkle

For more information about this series, please visit www.routledge.com/Innovation-and-Technology-Horizons/book-series/ITH

TOURISM, HOSPITALITY AND DIGITAL TRANSFORMATION

Strategic Management Aspects

*Edited by Kayhan Tajeddini,
Vanessa Ratten and Thorsten Merkle*

First published 2020
by Routledge
2 Park Square, Milton Park, Abingdon, Oxon OX14 4RN

and by Routledge
52 Vanderbilt Avenue, New York, NY 10017

Routledge is an imprint of the Taylor & Francis Group, an informa business

© 2020 selection and editorial matter, Kayhan Tajeddini, Vanessa Ratten and Thorsten Merkle;
individual chapters, the contributors

The right of Kayhan Tajeddini, Vanessa Ratten and Thorsten Merkle to be identified as the authors of the editorial material, and of the authors for their individual chapters, has been asserted in accordance with Sections 77 and 78 of the Copyright, Designs and Patents Act 1988.

All rights reserved. No part of this book may be reprinted or reproduced or utilised in any form or by any electronic, mechanical, or other means, now known or hereafter invented, including photocopying and recording, or in any information storage or retrieval system, without permission in writing from the publishers.

Trademark notice: Product or corporate names may be trademarks or registered trademarks, and are used only for identification and explanation without intent to infringe.

British Library Cataloguing in Publication Data

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

Library of Congress Cataloging in Publication Data

Names: Tajeddini, Kayhan, editor. | Ratten, Vanessa, editor. | Merkle, Thorsten, editor. | Routledge (Firm)

Title: Tourism, hospitality and digital transformation : strategic management aspects / edited by Kayhan Tajeddini, Vanessa Ratten and Thorsten Merkle.

Other titles: Innovation and technology horizons.

Identifiers: LCCN 2019031450 (print) | LCCN 2019031451 (ebook)

Subjects: LCSH: Tourism—Management. | Tourism—Marketing. |

Tourism—Information technology. | Hospitality industry—Management. |

Hospitality industry—Marketing. | Hospitality industry—Information technology.

Classification: LCC G155.A1 T589178 2020 (print) | LCC G155.A1 (ebook) |

DDC 910.68/4—dc23

LC record available at <https://lcn.loc.gov/2019031450>

LC ebook record available at <https://lcn.loc.gov/2019031451>

ISBN: 978-0-367-14999-4 (hbk)

ISBN: 978-0-367-15000-6 (pbk)

ISBN: 978-0-429-05439-6 (ebk)

Typeset in Bembo

by Swales & Willis, Exeter, Devon, UK

CONTENTS

<i>List of figures</i>	ix
<i>List of tables</i>	x
<i>Foreword: Strategizing in the fourth industrial revolution: transforming hospitality and tourism by Andy Abgottspon</i>	xii
<i>List of contributors</i>	xxi
1 Tourism, hospitality and digital transformation: the relevance for society <i>Vanessa Ratten, Kayhan Tajeddini and Thorsten Merkle</i>	1
2 Digitalization in the hotel industry <i>Christian Buer</i>	6
3 Change management and leadership in the fourth industrial revolution <i>Mark Beattie and Sharon Link Wyer</i>	25
4 Love is the bridge between you and everything: relationships of identity, experience, and benevolence to travelers' loyalty and willingness to purchase <i>Pantea Foroudi and Reza Marvi</i>	47
5 Understanding organizational agility: evidence from the hotel industry in Iran <i>Mahlagha Darvishmotevali and Kayhan Tajeddini</i>	73

6	The application of theories about capital structure: pecking order, trade-off and signaling in the hotel units in Portugal <i>Aida Maria de Brito Martins, Joaquim Carlos da Costa Pinho and Graça Maria do Carmo Azevedo</i>	88
7	Do customers really matter? Effect of customer orientation on innovativeness: evidence from the hotel industry in Poland <i>Marcin Olszewski, Barbara Kowalczyk and Łukasz Widła-Domaradzki</i>	105
8	Destination functional attributes and tourists' revisit intention to Sri Lanka's Pasikuda: a critical role of destination brand equity <i>Mohamed Ismail Mujahid Hilal and Kayhan Tajeddini</i>	134
9	Digital application: evidence from Zurich Airport <i>Thorsten Merkle, Kayhan Tajeddini, Sven Mostberger, Sarah Rohner, Kira Schmid and Eleanor Shaw</i>	147
10	Innovation in tourism destination marketing <i>Gretel Qumsieh-Mussalam and Kayhan Tajeddini</i>	165
11	Surf tourism knowledge system: a conceptual approach <i>Roberto Martín-González, Ana María Luque-Gil and Kamilla Swart</i>	175
	<i>Index</i>	221

FIGURES

2.1	Challenges to the core processes as part of change management in the hotel industry	13
2.2	PMS process and system requirements of an inventory management system	14
2.3	Process and system requirements of an integrated guest service system (during stay)	16
2.4	Process and system requirements of communication with the guest	17
2.5	Process and system requirements of communication with the employee – Back of house/GLITCH system	19
3.1	Servant-Leadership strategic focus for hospitality	31
4.1	The conceptual research model	54
5.1	Organizational agility hierarchy model	79
5.2	Typology of organizational agility	80
7.1	Proposed conceptual model and hypotheses	111
7.2	Structural standardised CFA model estimates	120
8.1	Structural model	142
9.1	Waiting times of passengers at Zurich Airport in 2017	150
9.2	Beacon usage opportunities for retailers	153
11.1	Combined disciplinary areas ('surf' AND 'tourism' and 'surfing' AND 'history') (Mode 1 Knowledge)	186

TABLES

3.1	Industry 4.0 Servant-Leadership Practices in the Hospitality and Tourism Industries	36
4.1	The domain and items of construct in extant literature, Cronbach Alpha, scale items, mean, and standard deviation	55
4.2	Correlation matrix for the constructs	60
4.3	Results of hypothesis testing	61
5.1	Agility features	75
5.2	Interviewees profile	78
6.1	Headquarters district of hotel establishments	95
6.2	Hotel establishments' dimension	96
6.3	Dependent and independent variables	96
6.4	Descriptive statistics	98
6.5	Multiple linear regression – random effects model results	98
7.1	Indicators of latent constructs: customers' knowledge acquisition.Variable names and item wordings	112
7.2	Indicators of latent constructs: customers' knowledge processing.Variable names and item wordings	113
7.3	Indicators of latent constructs: customers' knowledge exploitation.Variable names and item wordings	114
7.4	Sample characteristics	115
7.5	CFA model parameter estimates	116
7.6	Descriptive statistics and associated measures (mean, standard deviation, AVE and correlations)	118
7.A1	Assessment of normality	128
7.A2	Indicators of latent constructs.Variable names, item wordings, means, standard deviations, skew and kurtosis	129

7.A3	CFA model parameter estimates. Factor pattern coefficients of latent variables	130
7.A4	Measurement error variances	132
7.A5	Factor structure coefficient matrix. Correlation coefficients of the observed and latent variables	133
8.1	Construct validity and reliability	139
8.2	Fornell and Larcker criterion	139
8.3	Factorial cross loadings and T statistics	140
8.4	Direct effect of functional attributes on brand equity and revisit intention	141
8.5	Total effects and mediating role of brand equity	141
9.1	Benefits of gamification for the retail industry	152
11.1	Surfing and sustainability related subcategories and themes	178
11.2	'surf' AND 'tourism' and 'surfing' AND 'history' concepts search in title, abstract, and keywords in Scopus database (08/02/19)	184
11.3	Surf tourism research outputs by subject and disciplinary areas	185
11.4	Authors	189
11.5	Country of the authors' institutions	191
11.6	Type of document	193
11.7	Source title	193
11.8	Surf tourism-related products	196
11.9	Type of surf tourism-related products by SRS	197
11.10	Surf clubs in CT	199
11.11	Surf lifesaving clubs	200
11.12	Beach activities	200
11.13	Regulatory bodies	201
11.A1	'surf' AND 'tourism' research outputs (10/02/19)	210
11.A2	'surfing' AND 'history' research outputs (10/02/19)	216
11.A3	Surf spots and Web 2.0 surf spots' markers (wave-based and wind-based)	217

FOREWORD

Strategizing in the Fourth Industrial Revolution

Transforming hospitality and tourism

Andy Abgottspon

0.1 Introduction

This book should be read by every CEO, CFO, CIO, Chairman (well, pretty much any person who has a title starting with “C”), so that they can realize the challenges and opportunities of the fourth industrial revolution. Also, any child should probably read it also as it will be their future that is affected by this the most and, after all, child starts with a “C” too.

0.2 Industry 3.0

Imagine Sarah asking her dad: “Hey, I have this cool idea for a project in school that I am working on with my friends, but I need to write it down for the teacher so he sees what we want to do. How do I proceed?” The slightly overwhelmed father, to the best of his knowledge answers: “Hmm . . . I would probably write things down in a **Word file**, save it, send it via **email** to your friends first. They can edit the document, send it back to you, then you finalize it and send it to your teacher”.

Sarah is 8 years old. She looks at him with wondering eyes. What daddy explained to her was essentially the process of writing a letter on a typewriter, a machine she has probably never seen in her life; using a program requiring her to click an icon of a floppy disk, a thing she has probably never seen either; and then send it using a process equivalent to going to the post office and buying a stamp, something she has probably never done.

The dad has not even tried yet explaining why Sarah should probably create a PDF before she sends the document to her teacher. Because with all of us being busy creating a digital world mapping the analog one, we didn't manage to agree on certain standards in time, so we need an extra step if we want to make sure what Sarah and the teacher have in front of them actually looks the same.

And it does not get better once Sarah creates a PowerPoint presentation for her project, either. Sure, she can create nice animations, but it is an entirely new program to learn – you guessed it, one that is fundamentally based on the concept of what an overhead or slide projector would “play”. And yet, when she wants to send it to her teacher she needs to go the PDF route again, losing all her precious animations for the sake of portability. To make matters worse, the PDFs do not even look that great on the devices she uses, such as her phone or tablet. Oh, and I forgot that she also wanted to make a little video to add to that. So good luck adding that to your presentation and PDF.

If Sarah is lucky, she might have a dad that knows something about “the cloud”, recommending her to at least create her files using a cloud document platform. This will ease the pain a bit when collaborating, save a lot of back-and-forth and emails, but the complexity of understanding the separate tools remains. It is not that Sarah does not love learning, she does. It is just the fact that many of the things in that world do not make any intuitive sense. And behind every other door, there is an evil clown waiting with a big smile holding a floppy disk. If you were to insert the floppy drive into a (very old) computer and open the README.txt file it would say:

“Hello there. Glad, somebody actually reads this. I apologize for the inconvenience. I cannot defend, only explain. We created this world as a transition from the analog to the digital world. Many of these things will no longer make sense to future generations or anybody with even the tiniest appreciation of their own time”.

We cannot blame the dad for not knowing better or feeling how the younger generation will surpass him and his technical abilities quicker than he can rewind a cassette with a pencil.

Note to young people: a cassette is a sealed plastic unit containing a length of tape wound on a pair of spools. It is basically the size of your smartphone, but instead of holding 20,000 songs, it can hold 20. Ah, and to play them you need to insert it into a recorder, playback device, or other machine, a lot larger than your phone. In addition, none of you would even download, curate and store thousands of songs anymore when you can stream literally any song ever made within a second via Spotify, YouTube, etc.

But we also cannot blame Sarah for rolling her eyes in disbelief at how horribly inefficient, tedious, unintuitive and plainly speaking, *stupid*, a lot of this seems. Like the clown, we cannot defend, just explain. The question is whether the current or

the future generation or even us for that matter care to hear that explanation. So maybe let us skip the explanation and look forward. That was *Industry 3.0*, let us move on(e).

0.3 Industry 4.0

Let us move on to a world where all things are connected and parts of one bigger system. Not only technologically, but also philosophically. We will no longer differentiate between education, work and play. Education and learning have become lifelong. People who find their passion do not call what they do to earn a living *work*. A hobby is no longer just a hobby. Playing in a football club, band or theatre group can have a more positive impact on your own wellbeing and that of society at large than excelling at jobs that are no longer needed.

0.4 Everything is connected

It is all connected. In the end, there are actors and relationships between them: What for you might be your *personal* healthcare, is business for the insurance salesman. What the teacher calls work, for you is your daughter's education, and for your daughter, it is her future. What for a banker is his job in approving your loan, for you can mean a chance of building a home or a business on your own. What a hotelier calls their profession, for a guest is their well-earned vacation. Technology allows us to connect people but also things if we consider that our vacuum cleaner can be controlled remotely using our phone.

0.5 Dilution of meaning

So that is brilliant. We are done here, right? Not quite. There is a big problem in this brave new connected world, and I call it **the dilution of meaningfulness**: the more easily accessible, cheaper and connected things get, the harder it is to keep track of them and for them to have meaning to us.

An example: we used to take 36 pictures on a film roll with our analog camera and 20 of those turned out to be good. We looked at them together, put them in an album and shared an experience. Today, we take 200 photos on our smartphones and cameras, but still only 20 of those turned out to be good. Even though the end result might seem the same, we still need to make an effort to find these 20 and often do not even bother as the sheer speed and amount of influences constantly overwhelm us. Social media further accelerate this trend, letting us talk to more and more people in less significant ways.

Many of today's biggest players rely on business models that in fact profit from a fast-moving, cheap, low-value, consumer-driven world where users get entertaining apps in return for selling their data and being targeted with ads. We buy things we do not need from companies we do not trust with money we do not have to impress people we do not like.

0.6 A connected *and* meaningful world

So how can this meaning be reinstated without giving up the benefits of everything becoming more efficient and interconnected? One main reason for meaning to *decrease* is the fact that complexity and opportunities *increase*. Our ability for innovation has surpassed our ability for grasping the impact of such innovations by an order of magnitude.

“We need to simplify, unify, quantify and channel innovation without at the same time limiting it. This requires a paradigm shift, a new way of thinking, on a technological, social and strategic level”.

A paradigm shift will have to happen on a social and technological level. A shift that lets us connect any interaction or piece of information and be able to understand complex relationships easily. A shift away from representing the world as fragments, islands and separate (analog) concepts to one where all is one and can be granularly experienced and understood. But also, a shift that puts the individual and their data in the center, bringing back meaning and building trust through honest and transparent business models.

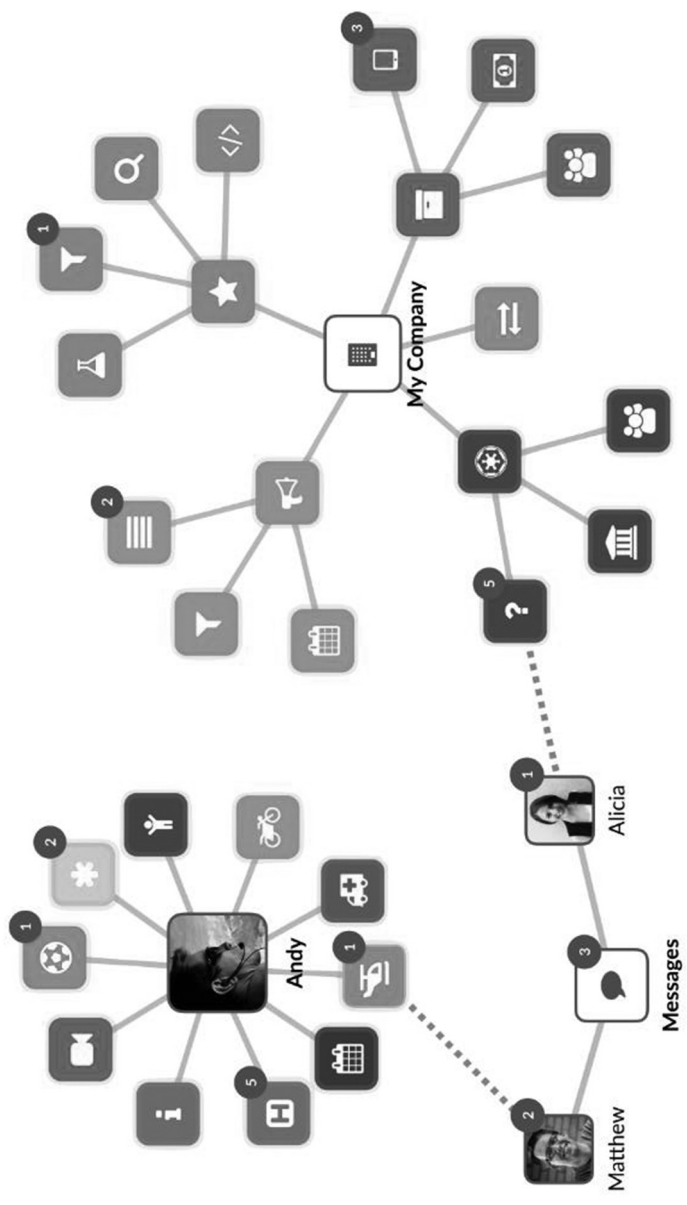
An example showing various aspects of my personal life, work, hobby and family, together in one unified, transparent and manageable way, could look like Figure 0.1.

As CEO of a company, I can see what is going on down to the level of a topic inside a meeting, or just look at my firm from a birds-eye perspective. Interactions like messages are shown in context. In the *mind map* visualization, you can see I have three unread messages. One of them is from Alicia, who is part of my support group. She messaged me about a customer support request (shown by a dotted line).

The other two messages are from Matthew, who I have never met. Since his messages contain the word “helicopter”, I can immediately contextualize his request. He probably saw that I am a helicopter pilot and is interested in joining a scenic flight over the Swiss Alps.

One of my other passions is football. I can see information, conversations and events from my team “flow” into the right place. I love to hear from my team, but during meetings, this can be distracting, so I can turn off notifications in that *branch* during working hours.

This is only an extract of my life. It might very well include interactions and relationships with my accountant, cell phone provider, alma mater, insurance or a hotel I will be staying at on a future trip; or with inanimate objects like my garage door or thermostat. What is important is the realization that we ought to stop defining borders merely around tools and platforms when the reality of our lives and the lives of our customers do not look like that.



0.7 Technological level

Representing today's reality accurately while respecting basic human cognition without relying on limited analog concepts, is a big challenge. On a technological level, core concepts in Table 0.1 are cornerstones for technology that are compatible with the future of work, education and life in general.

Intuitive & Visual	Information and relationships need to be <i>visual and intuitively understandable</i> . Studies show that 90% of information transmitted to the brain is visual and humans can process visual data up to 60,000 times faster than text.
Secure & Transparent	The paradigm must allow hierarchies to be reflected. Granular and safe control over each piece of data can be granted. Access can be shown transparently to the user.
Accessible & Interactive	The paradigm needs to be independent of location, medium/device and time (before, during and after an event). It also needs to allow for interaction and collaboration in real-time.
Semantic	Data needs to be well-structured in order to be processed by human and machine. This will be essential for any further insights through analytics or possibilities enabled by AI.
Unified & Universal	All data needs to be based on uniform principles and live inside the same space, allowing each bit of information to be connected with every other bit. Just like hyperlinks in the world-wide-web, but between any imaginable form of data (say connecting a task in a project to a paragraph in a Ph.D. thesis).

0.8 Social level

We have seen how a connected world could look like conceptually, but what does this mean socially? The famous German philosopher and author Richard David Precht and other leading thinkers point out the importance of asking ourselves the question: how do we *want* to live? And not merely: What is technologically possible?

Technological breakthroughs like the smartphone revolution made platform economies like Uber or Airbnb, as well as millions of apps, possible. The mobile revolution enabled new ways for workers to collaborate on the go, but can also lead to smartphone addiction on the flipside. Only through education and awareness can we benefit from the positive effects of technology, without fear or danger of the negative ones, just like we do for drugs or alcohol.

What we have seen so far, however, is merely a preview of what is yet to come. In a restaurant serving a five-course meal, we are barely at the amuse-bouche. This progress will replace a significant percentage of jobs we know today which,

unlike in previous industrial revolutions, will not be replaced by an equal amount of different jobs since markets no longer expand and required skillsets differ so vastly.

On the negative side, this should scare and alert us. Similar to the devastating effects of climate change on our livelihood, welfare, and economy, the impact of this digital tsunami will be just as large, with one difference: With 20% to 25% of the jobs in Switzerland being in danger until 2030 (some studies quote figures even much higher), this change is even more imminent and will be affecting more people globally than even the worst current climate change scenarios.

On the bright side, this offers an enormous opportunity for us to redefine the way we work (together) and live as a society as a whole. Only a century ago, humans worked 100 hours a week to make ends meet, today it is around 40 hours in most countries, while welfare is higher than ever. If we are smart about this – i.e. come up with new social mechanisms like an unconditional basic income could be – this number can further drop while the quality of life keeps improving.

The way a society treats their weakest and oldest shows its decency. If we consider how a hospital's operating room looked 100 years ago and today, we see a gigantic leap. The way a society treats their children shows whether it has a future at all. If we compare today's classrooms with the ones from back then, it is mostly still the same. One person lecturing a group of people for eight hours a day about old concepts and solutions in order to prepare them for a world where one of the only remaining valuable skills are to solve entirely new problems requiring thinking outside of the box. Or how can we expect students to develop joined-up thinking if we teach them in separate school subjects instead of projects with a higher goal?

“Technology and innovation are the eyes. We cannot see without them. But you do not just need eyes to see, you need vision”.

Our thinking in education but equally business (remember, it essentially becomes the same) needs to shift towards a holistic view. We need to understand the connections and navigate using a moral compass. Then the answer to our initial question of “How do we want to live?” will be “The way we want to!”.

0.9 Strategic level

Ice hockey legend Wayne Gretzky once said: “I skate to where the puck is going, not where it has been”. In school, we learn all about the material of that puck, how to measure its weight and velocity, but we do not actually learn how to skate.

In business, we are taught how to calculate the puck's trajectory using formulas that predicted this in the past. The problem with digital transformation is that it gets incredibly hard to predict where that puck is going. The reason for that is not that the formulas are wrong, but that in fact, we are not even sure that puck will have the same color, size or shape anymore because the rules of the game change rapidly. Thus, all of our assumptions, calculations and models become pretty useless.

So, what *can* we do? It would be presumptuous to pretend to know what exactly to do, but if I had to give any advice, it would probably come down to two things: agility and skills. The best we can do is learn how to skate really well, be agile, so no matter where the puck goes, no matter whether it changes direction all of a sudden, we do not lose our balance and can react. And we need skills so that when we get the puck, we actually know what to do with it. We need to understand and see the game. We need to take a shot if we have the chance, but also work as a team and see if our colleague is in a better position and trust him with the puck. That also is *vision*. All of that while being fully aware that also our skills themselves might need to adapt as pucks, goals and playing fields change.

“Understanding that the dividing lines get blurrier than ever before while at the same time some endpoints like certain jobs disappear altogether, is crucial to any form of strategic thinking in an industry 4.0. Our minds and our hearts need to be agile”.

Translated to the world of tourism and hospitality, that could mean rethinking business models, communication and the entire customer experience. If 90% of your users communicate with the important people in their lives via a messenger like WhatsApp, why do you still send them letters or emails? When visitors from other countries consider Grächen to be next door to Interlaken, why do you tell yourself that your location is too remote to be attractive?

0.10 Industry 4.0 and beyond

The fourth industrial revolution will not only require us to think outside the box, we will very often not even recognize the box anymore. We can either complain about this, deny that change and let others be successful or embrace it and leverage tools more powerful than any generation in the history of humanity ever had access to.

The good news is that we are all clueless about where the puck goes and how it looks like, to varying degrees at least. Anybody who tells you they know for sure is most likely a fairy or a fraud. In the end, we will have to try new things, be bold and courageous, even if we fail at times, and be obsessed with customer experience from beginning to end.

If we look at the transition from cassette to iPod over to cloud streaming services, we see that these changes come at exponential rates. It can be overwhelming to fathom all this, let alone master it and build upon it. Einstein said, “Everything is difficult before it becomes easy”. So, do not be afraid and use that time of fear and hesitation for better things. In fact, technology and innovation are what allows you to be lazy. If we are smart, it is what will give us more time to enjoy life and the meaningful things in it.

My dream was always to enable everybody to magnify that meaning and to give people a superpower to achieve everything I mentioned in this foreword. I call this

xx Foreword

dream *Hazu*. It is Japanese for “the way it should be”. I am following that dream and encourage you to join me on that journey and follow yours. I will give it my best shot. And I know you will too. Reading this book is a wonderful start.

Andy Abgottspon
CEO and Founder, Hazu, Inc.
www.hazu.io/andy

An interactive version of the Foreword can be accessed here: <https://hazu.io/andy/talks/foreword-transforming-hospitality-and-tourism>

LIST OF CONTRIBUTORS

Graça Maria do Carmo Azevedo is Professor at Universidade de Aveiro.

Mark Beattie is Associate Vice Chancellor for academic affairs at Washington State University, USA.

Christian Buer is Professor of Tourism and Hospitality at Heilbronn University of Applied Sciences, Germany.

Mahlagha Darvishmotevali is Lecturer in Tourism and Hospitality at Near East University, Cyprus.

Pantea Foroudi is Senior Lecturer in Marketing at Middlesex University, UK.

Mohamed Ismail Mujahid Hilal is Professor at South Eastern University of Sri Lanka, Sri Lanka.

Barbara Kowalczyk is Professor at Poznan University of Economics and Business, Poland.

Ana María Luque-Gil is Professor at University of Málaga, Spain.

Roberto Martín-González is Professor at University of Málaga, Spain.

Aida Maria de Brito Martins is Lecturer at the Instituto Politécnico da Guarda, Portugal.

Reza Marvi is a researcher at Middlesex University, UK.

xxii List of Contributors

Thorsten Merkle is Professor at the University of Applied Sciences of the Grisons FHGR, Switzerland.

Sven Mostberger is a researcher at Hochschule für Technik und Wirtschaft HTW Chur, Switzerland.

Marcin Olszewski is Professor at Poznan University of Economics and Business, Poland.

Joaquim Carlos da Costa Pinho is Professor at Universidade de Aveiro, Portugal.

Gretel Qumsieh-Mussalam is Professor at Les Roches Global Hospitality Education, Switzerland.

Vanessa Ratten is Associate Professor (Entrepreneurship and Innovation) at La Trobe Business School, La Trobe University, Australia.

Sarah Rohner is a researcher at Hochschule für Technik und Wirtschaft HTW Chur, Switzerland.

Kira Schmid is a researcher at Hochschule für Technik und Wirtschaft HTW Chur, Switzerland.

Eleanor Shaw is a researcher at Hochschule für Technik und Wirtschaft HTW Chur, Switzerland.

Kamilla Swart is Professor at American University in the Emirates, UAE.

Kayhan Tajeddini is Professor of Strategic Management at Sheffield Hallam University, UK.

Łukasz Widła-Domaradzki is a researcher at Poznan University of Economics and Business, Poland.

Sharon Link Wyer is a researcher at Washington State University, USA.

1

TOURISM, HOSPITALITY AND DIGITAL TRANSFORMATION

The relevance for society

Vanessa Ratten, Kayhan Tajeddini and Thorsten Merkle

1.1 Introduction

The global economy is undergoing a digital transformation made possible by the advances in information and communications technology (Huijibens & Johannesson, in press). The tourism and hospitality industry have been a major recipient of these changes both in terms of the types of businesses developed but also the services offered (Tajeddini, Ratten & Denisa, 2017b). Some of the most well-known new digital businesses such as Airbnb and Uber relate to the tourism sector. This makes digital transformation an important topic that will further change how we evaluate and use tourism services (Tsiotsou & Ratten, 2010). The aim of this book is to discuss how digital transformation is relevant for society both in terms of customer usage but also business development.

Digital technology can be classified into three main types: adaptive, ideal and potential. Adaptive technology change is based on social and market needs in a way that makes them more relevant to their citizens (Anggadwita, Luturlean, Ramadani & Ratten, 2017). These types of technology have established infrastructure but seek less reliance on government funding and to be more self-sufficient. For this reason, the digital technology adapts in order to have more independence and control of future applications. By focusing on high growth potential in tourism the adaptive technology can establish more value-added services, which helps stakeholders in tourism but also provides more flexibility with funding. Ideal technology involves new innovation that fits right into the tourism and hospitality industry. This means filling a gap in the market that was previously left unfilled by existing products or services. The technology is developed as a response to a need in tourism and hospitality services and matches the requirements of businesses in the industry. Potential technology focuses on anticipated needs in the future that are not met by current demand (Ferreira, Fernandes & Ratten, 2017). This means looking to the future as a way to predict change, but also to forecast innovations in tourism.

There has been rapid change in the way customers and business interact with each other in terms of the timeliness and relevance for communication (Ferreira, Ratten & Dana, 2017). Social media technologies such as mobile phone apps have been part of this change and have enabled customers to be co-creators in tourism experiences. Real time and instant communication are now possible in tourism services and this has further intensified competition in the industry. Large multinational tourism providers such as Marriott and Sheraton have invested much time and effort in developing and using digital technology. This is important particularly in terms of the internationalisation of services.

Whilst there has been an emphasis on the positive effects of digital transformation, there are also negative effects that need to be acknowledged. The tourism industry has a large number of small and medium sized businesses that enable change to occur on a frequent basis. Despite the resource constraints of these small businesses, they have been able to be creative in terms of services offered (Ratten, 2006). This has led to large tourism businesses imitating some of these innovations, but also capitalising on their potential. Creativity can occur in a number of different ways in tourism both through online booking but also with the location and type of accommodation services (Ratten, 2014). In the past, there was a time delay in terms of hotel booking but now with online instant feedback this has changed the nature of the industry. In addition, changing social demographics, such as the ageing population, have altered the type of hotel services needed. Whilst there has been a stereotype of digital innovators being young, this is not always the case as older people often have time and money to invest in digital innovation. Moreover, the rising middle class in emerging economies has meant a growth in interest about tourism. This is evident in countries such as Indonesia having a large increase in domestic tourism because of increased affordability.

In the future, the tourism and hospitality industry will continue to change as a result of digital transformation. There has been some discussion about the growing inequalities in society as a result of digital change that raises some interesting issues. For example, the increased population density in capital cities has meant other regions have lagged in development (Ratten & Ferreira, 2017). This has resulted in an exodus in population numbers of some regions to the more highly populated areas. In order to reinvigorate these lagging regions new tourism strategies have been introduced that focus on integrating digital experiences.

Digital change is necessary for a healthy community as generally in times of economic growth there tends to be a high percentage of entrepreneurship in the tourism industry. The main objective of digitalisation is to develop more integrated online services that can facilitate economic growth. This involves encouraging an attitude of self-reliance by facilitating creativity that then spurs more tourism start-ups. Some tourism businesses exploit entrepreneurship better than others by harnessing the collective creativity of individuals (Ratten, 2018). This enables the creativity to touch on the way a group of people can brainstorm ideas and derive novel solutions regarding tourism. To deliver successful outcomes there needs to be a focus on self-generated business ideas that are cultivated by community

interaction. The reality is that by definition tourism involve a group of people so when entrepreneurship is added creative outcomes will occur. However, there can be some confusion over the term tourism and hospitality as it can mean a range of businesses that include both small and large forms.

Growth in the research on tourism and hospitality has been fast due to the realisation that the environment is conducive to digital change. In the future, hopefully there will be more interest in digital transformation due to the positive association between the context of tourism and innovation. This means that there is ample opportunity for new research into digital transformation, which has the potential to change the field of tourism and hospitality. It will be useful for future research to focus on the impact of different forms of digital technology by examining their cultural and social affects. By building on prior research scholars can extrapolate current studies on digital development to provide more linkage to tourism and hospitality.

1.2 Overview of chapters

This book is a collection of research conducted on the topic of digital transformation in the tourism and hospitality industry. The second chapter titled 'Digitalization in the hotel industry' by Christian Buer provides a good overview about how digital technologies are transforming hotels. This is important as digitalisation is having a significant effect on the provision of hotel services. The third chapter titled 'Change management and leadership in the fourth industrial revolution' by Mark Beattie and Sharon Link Wyer focuses on digital transformation through the changes apparent in the fourth industrial revolution. In the previous industrial revolutions, the focus on the change was on different aspects such as automation but in the current industrial revolution it is on artificial intelligence and computing. This is interesting in a tourism context due to the new experiences consumers can have. The fourth chapter titled 'Love is the bridge between you and everything: relationships of identity, experience, and benevolence to travelers' loyalty and willingness to purchase' by Pantea Foroudi and Reza Marvi focuses on the emotional aspect of digital transformation. Whilst there are technological aspects to digital change there are also associated emotional effects that need to be taken into account. The fifth chapter titled 'Towards a typology of organizational agility for hotel industry' by Mahlagha Darvishmotevali and Kayhan Tajeddini highlights the increased performance benefits from technological change. Agility is a way to measure performance but it also has an impact on efficiency in tourism services. The sixth chapter titled 'The application of theories about capital structure: packing order, trade-off and signaling in the hotel units in Portugal' by Aida Maria de Brito Martins, Joaquim Carlos da Costa Pinho and Graca Maria do Carmo Azevedo analyses effectiveness of technology in the hotel industry. This is important in bridging the gap between theory and practice regarding digital transformation. The seventh chapter titled 'Do customers really matter? Effect of customer orientation on innovativeness: evidence from hotel industry in Poland' by Marcin Olszewski,

Barbara Kowalczyk and Łukasz Widła-Domaradzki examines the reasons why customers like or dislike digital disruption. As more customers are becoming part of the co-creation experience it is useful to understand their thoughts on innovation. The eighth chapter titled 'Destination functional attributes and tourists' revisit intention to Sri Lanka's Pasikuda: a critical role of destination brand equity' by Mohamed Ismail Mujahid Hilal focuses on cultural aspects of technology change. This is important in analysing the role destinations have on technological innovation. The ninth chapter titled 'Digital application: evidence from Zurich Airport' by Thorsten Merkle, Kayhan Tajeddini, Sven Mostberger, Sarah Rohner, Kira Schmid and Eleanor Shaw stresses the role of transport hubs in digital change. The increase in time efficiency of airport services made possible by technology is discussed in this chapter. The tenth chapter titled 'Innovation in tourism destination marketing' by Gretel Qumsieh-Mussalam and Kayhan Tajeddini focuses on advertising made possible by digital services. This helps stress the role technology has on changing the tourism marketing experience. The eleventh chapter titled 'Surf tourism knowledge system: a conceptual approach' by Roberto Martín-González, Ana María Luque-Gil and Kamilla Swart focuses on the surf industry as a recipient of technological change. This industry has incorporated many digital innovations that have further fueled the growth of the industry.

1.3 Conclusion

The chapters in this book contribute to a better understanding of digital transformation in the tourism and hospitality industry. Digital change has resulted in increased competitiveness of these industries and spurred the growth of new start-ups. Each of the chapters in this book stress the need to consider digital innovation as a way of further facilitating other innovations. The various approaches and topics in each of the chapters provide a holistic understanding of what digital transformation means and how it will affect the tourism and hospitality industry.

References

- Anggadwita, G., Luturlean, B. S., Ramadani, V., & Ratten, V. (2017). Socio-cultural environments and emerging economy entrepreneurship: Women entrepreneurs in Indonesia. *Journal of Entrepreneurship in Emerging Economies*, 9(1), 85–96.
- Ferreira, J. J., Fernandes, C. I., & Ratten, V. (2017). Entrepreneurship, innovation and competitiveness: What is the connection? *International Journal of Business and Globalisation*, 18(1), 73–95.
- Ferreira, J. J., Ratten, V., & Dana, L. P. (2017). Knowledge spillover-based strategic entrepreneurship. *International Entrepreneurship and Management Journal*, 13(1), 161–167.
- Huijbens, E., & Johannesson, G. (in press). Tending to destinations: Conceptualising tourism's transformative capacities. *Tourism Studies*, 1–16.
- Ratten, V. (2006). Policy drivers of international entrepreneurship in Europe. *Euromed Journal of Business*, 1(2), 15–28.

- Ratten, V. (2014). Future research directions for collective entrepreneurship in developing countries: A small and medium-sized enterprise perspective. *International Journal of Entrepreneurship and Small Business*, 22(2), 266–274.
- Ratten, V. (2018). Entrepreneurial intentions of surf tourists. *Tourism Review*, 73(2), 262–276.
- Ratten, V., & Ferreira, J. J. (2017). Future research directions for cultural entrepreneurship and regional development. *International Journal of Entrepreneurship and Innovation Management*, 21(3), 163–169.
- Tajeddini, K., Ratten, V., & Denisa, M. (2017b). Female tourism entrepreneurs in Bali, Indonesia. *Journal of Hospitality and Tourism Management*, 31, 52–58.
- Tsiotsou, R., & Ratten, V. (2010). Future research directions in tourism marketing. *Marketing Intelligence & Planning*, 28(4), 533–544.

2

DIGITALIZATION IN THE HOTEL INDUSTRY

Christian Buer

2.1 Digitalization in the hotel industry – challenges and outlook

The hotel and catering industry is characterized as an application sector of services to the guest. This service is the essence of the history of the hotel and catering industry. This essence is still key today and has not changed the production process of an overnight stay or a meal (food & drinks). According to Gruner, the definition of the hotel industry is:

The totality of tourism companies or establishments which serve the purpose of accommodating guests in turn for remuneration and, where applicable, also to cater for them. The hotel industry is part of the hospitality industry, which essentially consists of the hotel and catering industries. As a rule, hotels have a reception, guest rooms, lounges and (breakfast) restaurants. They offer two main services: **Accommodation services (Lodgment) and catering services (Food and Beverage)**.

(Gruner, 2008, p. 159)

Laesser had already come up with the adapted definition of a hotel as a result of radical change in 2008. In essence, Laesser comes to the conclusion that the **limits of typologization of hotels and delimitation in this way** no longer exist, particularly in an international context. Yet, Laesser maintains the definition of service as operational management (see also Laesser, 2008, p. 99ff)

This core service to the guest applies to the term **digitalization**. The hotel industry uses this term as a synonym for a homepage, web, online booking, review portals, Online Travel Agencies (OTAs), etc. Hotellerie Suisse uses the terms booking platform, review platforms, online marketing and sharing economy under the keyword “digitalization” (hotelleriesuisse.ch).

The reduction of services to the guest and the definition of digitalization, based on the use of internet-based applications for the hotelier to the guest, shows that Digitalization 4.0 has not yet been recognized, as laid down by Industry 4.0.

2.1.1 Industry 4.0/Digitalization 4.0

The term “Industry 4.0”, which first became known to the general public in 2011, originally came from research and is a conceptual continuation of the chronological development of economy and society since the introduction of the steam engine and mobility through the railway (the first Industrial Revolution). The second Industrial Revolution was the introduction of mass production supported by the creation of electricity. Automation of production (e.g. Ford) is the basis of robotization of manufacturing processes and is considered to be the third Industrial Revolution. Digitalization is considered to be the fourth Industrial Revolution.

As outlined in the chapter introduction, **digitalization** is taken to mean **use of the internet** (including social media), which falls short of the use of the term and therefore creates and disseminates a **false picture of hotel digitalization**. Digitalization means an integrative process to change operational procedures and therefore must become part of the business (see also Veit et al., 2014).

Digitalization describes an innovative change in **almost all branches of the industry** and not just the use of social media as a marketing tool. As such, digitalization per se should not be used, but rather integrated into operational procedures (Veit et al., 2014, p. 55 ff.). Digitalization is more far-reaching than the linear processes of the previous industrial revolutions. The complexity of digitalization affects the economy, politics and society and therefore creates new demands on the users of digitalization. This means that the term digitalization gains a social and economic importance, and at that the same time encounters the social change of generations that we know as baby boomers, Gen X, Gen Y and Gen Z.

The **delimitation of this social change** is linked to major events and the political and economic development that results therefrom. These events shape the orientations, values and preferences of the generation concerned and are significantly greater in importance for social categorization than the birth year itself. (Mangelsdorf, 2015, p. 12f). The resulting identity guides and controls people. They determine feelings, intentions, thoughts and actions of every individual (Eberhardt, 2016, p. 25f). This process is assisted by the fact that **individualization is at the core of contemporary society** and influences are accompanied by digital communication. Common value orientation is created by socialization influences and the choice of employer (Pfeil, 2016, p. 7ff). The consequence: five generations are brought into contact in their working lives!

This is the **main distinguishing feature of the fourth industrial revolution**, which so far has been seen as a linear integrated process as the introduction of “tools” to “optimise the world of work”. Digitalization in hotels simultaneously affects four generations working in hotels, who in principle perform the previous

service processes for their guests, and thereby reduce the change as such through application to the guest (online marketing). Conflict is pre-programmed!

2.1.2 The challenge of digitalization for staff

The teaching of management to staff in the hotel trade is a never ending subject, which since the introduction of management systems in the hotel industry (see also Buer, 1997), has attempted to close the conflict between specialized knowledge, increasing automation to the guest and back of house, and the increasing staff costs. The increased systematization of processes in the hotel industry in the 1990s and 2000s through automation (e.g. convenience food, integration of internet functions) experienced a positive correlation to rationalization.

The **challenge of Digitalization 4.0** is to **not see it as further rationalization**, but as a procedural modification of service to guests and in the hotel.

The **conflicts in the hotel trade** are:

1. The employee is closely wedded to the core service of “services to the guest” and is open to the idea of digitalization, but uses it little to not at all. Conflict – no mutual understanding (guest/employee) in communication and service; no understanding of colleagues’ behavior together.
2. The employee is extremely digital and constantly in digital communication and finds the related language in a daily exchange with his environment. This is the opposite conflict; i.e. the same conflict as in (1)
3. Digitalization is seen to be a purely technical aspect and leads to a technocratic application with a linear implementation pattern and therefore to the continuation of previous tasks within the previous activity.

How can the latent and apparent conflicts in hotels be steered towards a positive use of digital applications? This requires an application of the familiar with the new. Barbara Friedrich, Head of Data & ERFA at Hotellerie Suisse, reflected in an interview that:

In light of the current skills shortage, it is important to use the available staff resources optimally. **Digitalization** can help to **automate repetitive tasks**. It also helps to simplify processes. Thanks to modern technology, numerous processes no longer need to be done manually. Hotels should begin with the areas where digitalization enables savings without compromising on quality . . .

(Mosedale, 2018, p. 17)

Digitalization in the hotel industry with regard to employees is administered out of necessity, and has less to do with upcoming change in line with change management. The challenge of digitalization is not “the necessity of a skills shortage”, but rather the challenge of the increasing complexity of providing the guests with a service.

Services to the guest in the hotel and catering industry is essentially a 1:1 relationship according to the **mathematical formula**; i.e. a guest is looked after by an employee for a limited period of time. The development of automation since the 1990s led to an increasing “informationalization” and therefore to an **increase in service mentality** by the employee towards the guest. This trend or this focus on using computerized applications tried to establish a service not dependent on specific individuals via customer relation management. This inevitably led to a conglomeration of data and endless data records. Provocative – the first step to viewing “Big Data” as “nonsense”.

Today’s employee is used to being able to manage and direct the process themselves as a consumer and then have the information available if this is specifically requested. This is why the management of **guests** by handing out **information** in line with **self-governing control and management** is itself the unstoppable trend, which in turn gives the employee the freedom to be able to receive the guest in a more target-oriented way and therefore follow his learned 1:1 relationship. Important: As a management tool, this is independent of the generation question and of the hotel category.

The employee gets a greater responsibility in the control and management of the guest through the **use of interactive tools**, such as **guest service systems** (e.g. Code2Order, SuitePad, etc.), with the integrated GLITCH function for the interactive communication of guest requests to the hotel. These systems are mainly used to point out substantial deficiencies in the room through image and text explanations, and therefore communicate the information to building services more quickly and in a more targeted way.

2.1.3 Digitalization as a challenge for hotel marketing

The hotel industry tends to designate technical developments in the field of communication through the internet or even **digitalization as a marketing tool**. When the internet was introduced in 1996, the question from the point of view of the hotel industry, was how many brochures would this cut down on. At that time, my answer was the same as it is today to the question of saving paper in the field of guest information systems. None! Not in the next 10 years! The hotelier is caught in his linear operational process and does not recognize that the introduction of new media shows savings models, but guests do not change their own behavior overnight. For this reason, even the current introduction of **digitalization and the possible reduction of costs will only become apparent at a second glance**.

Conversely, revenue growth through cross selling and upselling is exemplified through the **introduction of digitalization in the business model**. Practice shows that this functions in individual cases, but it is not a guarantee for increased sales.

Digitalization has so far been seen in the field of marketing as an “online marketing toolbox” (BMWfJ, 2017, p. 3ff). This is an approach for dealing with the question of digitalization. Finally this is the now-known marketing approach for digitalization that looks for a relationship between hotel

(1 unit) and many guests (n units). This relationship controls and manages the one-dimensional communication (1:n) between the hotel and its guests. Digitalization today poses a challenge with regard to the transformation, as explained earlier, of relationships becoming m:n. In other words, many units and sub-units (here, meaning sectors of the hotel) encounter an array of different guests with differing tastes. Hoteliers understand this situation and have covered it according to the category and the service intensity reflected by the number of employees. In the operative management and control of guests, staff are no longer available, so that the “outsourcing of services to the guest” is inevitable, which the guest will also consider “easy and convenient”.

What this means in practice: **In future, the guest will take over more of the typical services of a hotelier.** These are the already well-known booking processes via the hotelier’s own booking structures and those of the service provider, known as a “channel manager” and/or “online travel agent” (OTA). An expanded process will be added to this, in that guest checks in himself, opens the doors himself through controlled means, and issues and pays an individualized invoice on his own device. The motto will be: **bring your own device (BYOD)**. The guest will find this exemplary process of activity at reception agreeable and be happy to make use of it. The consequence of this process: The hotelier will have to pass on the responsibility for this process to the guest and allow it to only be partially controlled and managed by a member of staff.

The convenience, as described here, will be the investment in a brand, in a hotel. The guest will see this **“guest experience” as a “digital guest experience”** to an **“investment in the sense of bringing added value”** to the hotel brand. Identity is created.

Explanation of this added value: Customer experience is subjective. The five levels of customer experience are: the rational, emotional, sensual, physical and finally, the spiritual level. In contrast to the traditional marketing of the 4 Ps, customer experience is not based on expectations, but on what is really experienced at the **different interfaces of added value in a hotel, known as a “guest journey”**. **The brand touch points are the stimuli of these interfaces as customer points of contact** (see also Gentile et al., 2007, p. 397).

Marketing in the hotel industry, and therefore value generation, takes place through the creation of added value in these interfaces as customer experience of the “personal and subjective experience of consumption” (Bruhn & Hadwich, 2012, p. 9).

“Customer experience” and therefore the subjective evaluation of a service has already been established on the internet on **“customer review sites”**. The hotel industry is required here to differentiate between “review” and “experience”. But the critical path is understood, which in turn is compared with other service industries.

They must compare these experiences to those of other industries offering guest journeys, which are reshaping customers’ preferences and behaviors.

Apply those insights to deliver a meaningful and unforgettable guest journey and experience. In the process, successful brands will modernize products and offerings, deliver innovative value propositions and solutions, and create agile models for business, systems, and operations. That's the basis for cementing next-generation customer loyalty.

(Solis, 2018, p. 4)

This moment of “customer touch point” is the point of transformation as a “juncture and contact point” to turn new customers into new guests and to confirm the judgement of existing guests (Schüller, 2012, p. 12).

Customer experience under the banner of digitalization is therefore an instrument of “immediate feedback” and enables to recognize the “brand touchpoints”. This allows analysis of the stability of the processes at the current interfaces of communication with the guest (= possible brand touchpoints) and to determine their stability. The more stable the process and thus the entire added value, the greater the guest satisfaction (=customer experience) and thus the increase in value of the brand (=customer equity). Hoteliers should not make the mistake here of viewing this process solely as an individual process, and argumentatively adopting the traditional attitude that a guest making a complaint will be helped at reception. It is far more about the control and management of processes through digital observation of the flow of guests. The indicators here are the use of digital information and the associated activation of processes and contents. Example: With a digital guest service system in connection with a hotel's own check-in system and the option of a digital check-out (these interfaces increase the attractiveness of the system and therefore the probability of use), the measurement of user behavior is immediate feedback on guest behavior in the hotel. Under data protection law, it must be ensured that this is not an individual measurement. This enables the management of personnel deployment to adapt to the guest's journey at short notice and therefore avoid the “danger” of a “negative review”. This is preventative process management.

The **significance of rating portals** for the hotel industry is high, based on the issue of the proportion of online bookings. Travel analysis in 2019 in Germany by the “Verband des Internets” (VIR) produced the following summary for 2018: 126.9 million trips booked with at least a one night stay, 60.3% share booked exclusively online (digital); 34.8% share booked exclusively the traditional way (analogue) and 5% both. (VIR, travel analysis 2018, 57). The study by the online holiday booking platform “Holiday Check” in 2016 showed that 90% of respondents in Germany primarily trust the reviews of products and services in hotels. **Trust in internet reviews** is steadily increasing. Back in 2009, Nielsen discovered in a survey that 70% of people booking trust the reviews before they buy a product; only families and friends are trusted more at 90% (Nielsen, 2009, p. 4ff).

The question is, what responsibility does each hotel have? To constantly keep an eye on the market and reviews and react to them? This “**monitoring**” in the hotel trade with **Web 2.0** has reinforced its importance, by the fact that the programme architecture enables the interaction of 1:1 to be intensified to 1:n (from one person

to one person → one person to many people, and many people to one person), which has increased the interactions on the internet and exponentially increased employment in communication on social media (see also Ebersbach et al., 2008, p. 29f).

Through the upcoming digitalization, marketing will take place in real time and thereby multiply the previous efforts to support this process so that it has little to nothing to do with the original core business of the hotel. Nevertheless, in future, **digitalization** will enable **customer retention through this real time activity** and therefore generate customer benefits during the stay, not only after it.

In addition to communication with the guest, the **generation of a price in line with the market price** for a room for a particular time (revenue management) will increase in complexity. Prices do get more individual! Hotels follow the consumer goods price formation process. Prices are already controlled today in the consumer sector through indicators such as equipment type (e.g. mobile device versus desktop computer, brand of device), the location and time of the enquiry, as well as frequency of a particular request (requesting the same product several times increases the price). This means that the price becomes more individual and therefore **price fluctuations for the same product will need to be accepted** (derived from individual purchase intentions). Social media networks like Facebook measure communication intensities and concepts and can match them with online purchases so that the individual price is generated by new indicators, and is thus no longer able to be determined in a linear way (= **Personal Pricing**) (see also Beenen et al., 2018).

The **control of prices in terms of revenue management** is not a digital challenge, but rather a **mathematical model**, which is still learning and constantly adapts to requirements as a result of an automatically collected data volume. Key words: **Artificial Intelligence, Big Data, Block Chain**. The influence of these technical instruments on the hotel industry will be explained later in the chapter. Setting the prices in hotels will, in future, be under the influence of a mathematician and no longer the exclusive responsibility of a member of hotel staff or the hotel manager!

2.2 Digitalization 4.0 in hotels – models of development and implementation

The derivation of digitalization as an interface to the employees and marketing will, in essence, trigger change management in the hotel, which is a “cultural change” and “management change”. Processes as shown in Figure 2.1 need to be represented in modular structure.

The challenge in the digitalization of the hotel industry is managing the sub-processes in a holistic way and disentangling oneself from existing structures, and thereby viewing the sub-processes as such individually. This is thinking in modules, which critically questions the existing computerized global solutions as a whole in the hotel industry. The constant social change of guest requirements of the hotel and

Challenge „Digitalisation“

Communication & Processes / Customer Journey & Brand Touchpoints

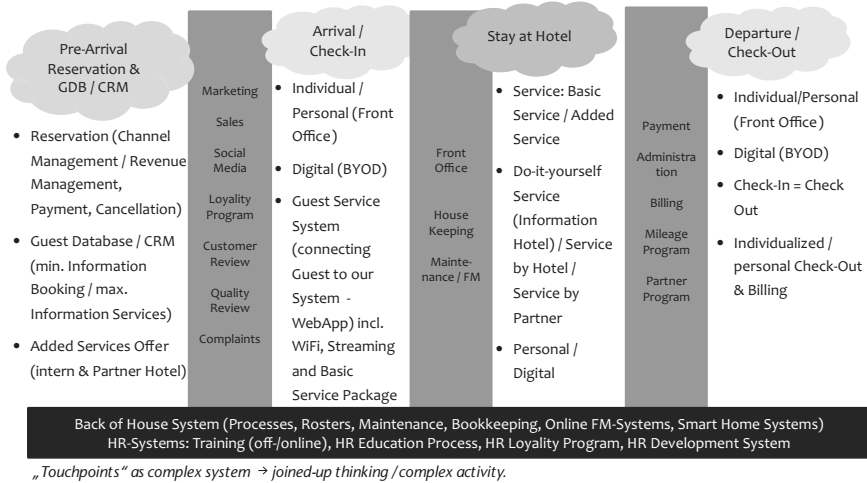


FIGURE 2.1 Challenges to the core processes as part of change management in the hotel industry (Source: own research)

also the staff demands this flexibilization of digital processes in individual modules, which occurs in turn as part of the overall process in the hotel. The challenge of this rethinking is: To critically question the existing body of thought, and thereby view the technological developments in light of “**responsible delegating**”. On a procedural and personal level, this is the **(agile) positive leadership** explained in the chapter introduction. On a technological level (software/hardware), familiar property management systems (PMS), which permanently served as an overall solution from the guest’s history, will no longer be needed in the same way. Depending on the hotel product and guest behavior, component solutions and therefore the **flexibilization of processes** are more appropriate and more profitable.

The **modular structure**, as illustrated in Figure 2.2, shows the separation of the system controls of “availabilities” in line with the “**inventory system**” to control instruments such as the setting of room prices and their sales channels. The separation of product and purchaser in two or more independent but linked systems follow the structure of an “online shop” on the internet.

The **sovereignty of the guest data** is **actively transferred** to the owner, i.e. the **guest**. The guest completes and controls the “guest profile/guest database” himself; irrespective of whether he currently has a stay or not. Provided the guest is prepared to communicate with the hotel during his stay in terms of customer retention, he will also do this using the “guest data system” in line with CRM. Large hotel chains control this via their customer program system. Providers such as Facebook, Xing and LinkedIn offer to transfer profiles to a service provider. Of the known processes in the hotel industry, this will be the challenge. The guest

Challenge „Digitalisation“

Communication & Processes / Customer Journey & Brand Touchpoints
Inventory System - Booking/Channel - Pricing - PMS - CRM

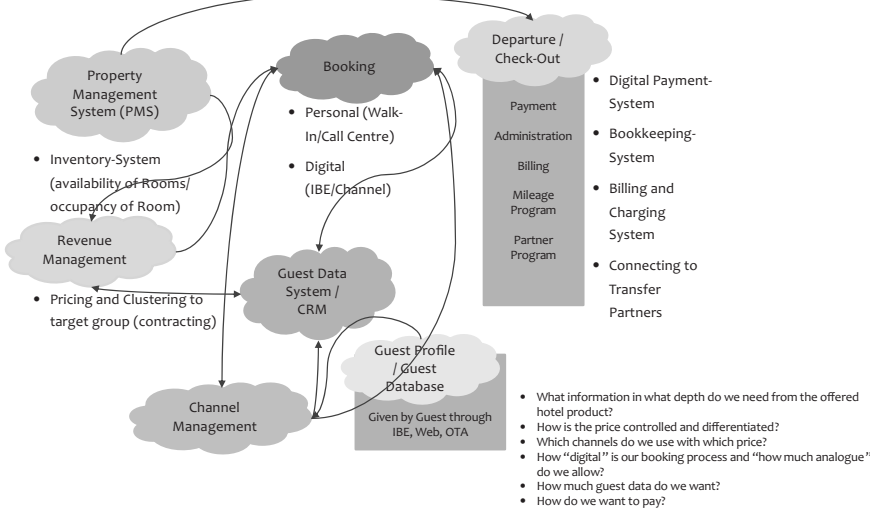


FIGURE 2.2 PMS process and system requirements of an inventory management system (Source: own research)

must actively become the “owner” of his “guest profile”. That is why “**guest service systems**” are inevitable in the **development of digitalization**. With this technology, the guest will communicate with the hotel interactively and at the same time establish a connection (loyalty). Hoteliers need to recognize that this is not about full individual profiling, but rather the provider restricting himself to the name and a contact option (e.g. email). The management of individual guest needs (preferred service packages in the hotel) takes place through the guest himself and is in his sovereignty. The guest releases this when booking and the hotelier can thereby adjust his processes to it.

This **individualized structure** enables the hotelier to follow the aforementioned principle of personal pricing. The modular structure gives the provider the opportunity, as derived from the guest’s profile, to control and manage offers and options according to demand (using the mathematical model). The available “hotel” product is structured in these modules and is the basis for guest relations and communications in the proportional relationship “m:n”.

The key questions of the hotelier to establish the necessary information include the following:

- What information and at what level, do we need from the hotel product offered?
- How will the price be controlled and differentiated?

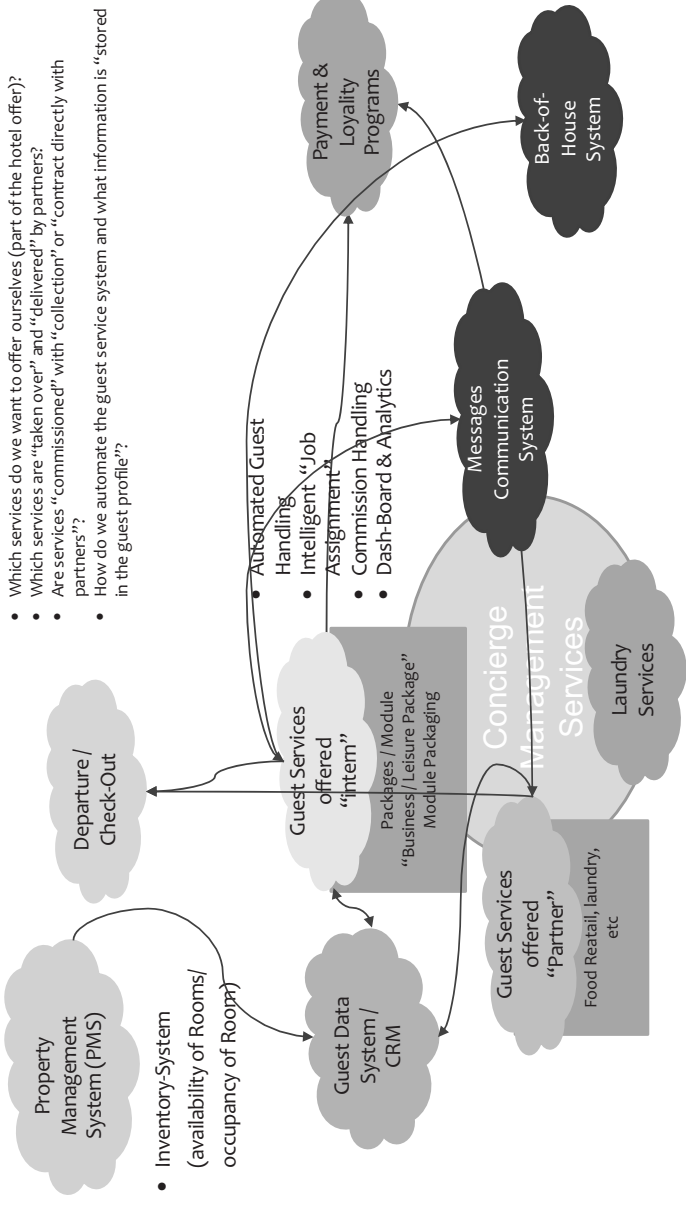
- Which channels will we use with which price?
- How “digital” is our booking process and “how much analog” do we want to allow?
- How many customer details do we want to have?
- How do we want to pay?

The guest journey and its customer interfaces (brand touch points) are interactive and can be controlled in their complexity by the creation of digital modular solutions. See Figure 2.3. Through this process, employees receive limited information for the relevant process at the time. Digitalization of this process enables the guest to control 80% of the information and processes himself in accordance with the Pareto principle and to reduce the necessary information and interfaces for the guest to the remaining 20%. The hotelier must remember that he is subjected to the fluctuation of staff as information carriers, and at the same time must confront a skills shortage and understand that not every employee can have all the information. Through the digitalization of the guest service process during the stay, the focus the hotelier is to concentrate on the core service and that information is also usable in the interaction through the BYOD device approach with the employee. The employee here also becomes interactive. The Federal Railways of Switzerland, Austria and Germany use this permanently during a train journey. Through their systems, delays are communicated, alternatives are shown and even the check-in is transferred to the guest.

The key questions of the hotelier to establish the necessary information include the following:

- Which services do we want to offer ourselves (part of the hotel offer)?
- Which services are “taken over” and “delivered” by partners?
- Which services are “commissioned” with “collection of payment” or “direct contract with partners”?
- How automated do we want the guest service systems to be and what information is “stored on the guest profile”?

Previous communication via social media channels can be increased through interaction during the stay (see Figure 2.4). Social media channels should be incorporated into the whole process. In the leisure hotel trade in particular, these systems are used too little. Families book a hotel room (especially by telephone in the leisure hotel category) and want to have as much information as possible. Hotels have the opportunity to gain an impression of the guests via the systems (even during the booking process). This enables the upselling mentioned at the beginning of this chapter to be interactively carried out. Furthermore, during the stay the behavior of the guest via the guest service system and on social media channels is measurable. The reservation, reception and marketing staff receive an interactive job profile, which becomes a wide-ranging multi-tasking activity.



- Which services do we want to offer ourselves (part of the hotel offer)?
- Which services are "taken over" and "delivered" by partners?
- Are services "commissioned" with "collection" or "contract directly with partners"?
- How do we automate the guest service system and what information is "stored in the guest profile"?

FIGURE 2.3 Process and system requirements of an integrated guest service system (during stay) (Source: own research)

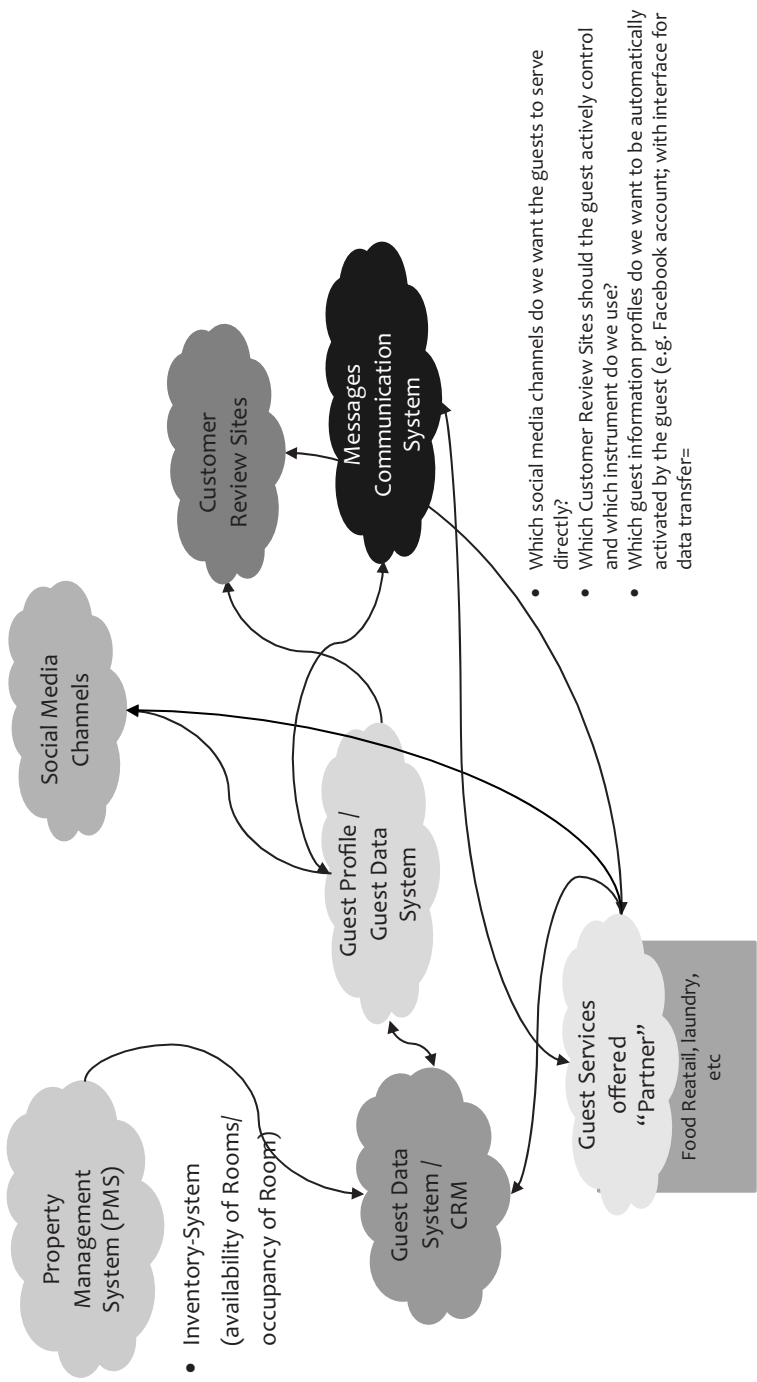


FIGURE 2.4 Process and system requirements of communication with the guest (Source: own research)

The reviews of hotel stays take place more swiftly (just in time):

- Which social media channels do we want guests to use?
- Which customer review sites should the guest actively control, and which instrument do we use to do this?
- Which guest information profiles do we want to have automatically activated by the guest (e.g. Facebook account; with interface for data transfer)?

Communication and control through digitalization with employees will take place through the **active involvement of the guest** and an **automated process**. As explained earlier, this is the process of “digitalized delegation” of responsibility to the guest. Applications of existing “back of house systems” will become more intuitive with this control instrument and therefore adapted to the guest’s optical surface. The existing thinking, that property management systems need to include a variety of additional information for the employee, which is withheld from the guest (the transparent guest), is outdated! As a result, the motto is transparency for the guest!

Guest communication via a guest service system should be viewed as an interface, which forwards information about deficiencies, poor service, etc via a GLITCH system (see Figure 2.5) to the hotel, which, depending on the deficiency (e.g. broken light bulb), enables the caretaker to know which measures he needs to take immediately. The same applies to the recording of shortcomings of all (!) members of staff and the associated communication of this to the person in charge.

Digital collection of information is a database, which corresponds to the “logbook”. It will increase efficiency in the age of **outsourcing the facility management**.

The hotel industry has, in part, already implemented the **digitalization of processes** in **Purchasing**. In Purchasing, we distinguish between durable consumer goods, non-durable consumer goods and capital goods. Capital goods are in practice more intense in a manual process, since this corresponds to the nature of “going shopping once”. Durable consumer goods and non-durable consumer goods should be recorded and transacted in day-to-day processing as part of the value creation process in individual modules. In summary, this consists of four sub-processes:

1. Establish a need: This can be determined electronically or through manual input.
2. Place an order: The price and the associated quality is defined through predefined and negotiated framework agreements with suppliers, purchasing companies or through the defined competence structures in the hotel.
3. Delivery and quality control (delivery note); checking the order with the actual delivery.
4. Invoice control and payment.

Challenge „Digitalization“

Communication & Processes / Customer Journey & Brand Touchpoints
Back-of-House

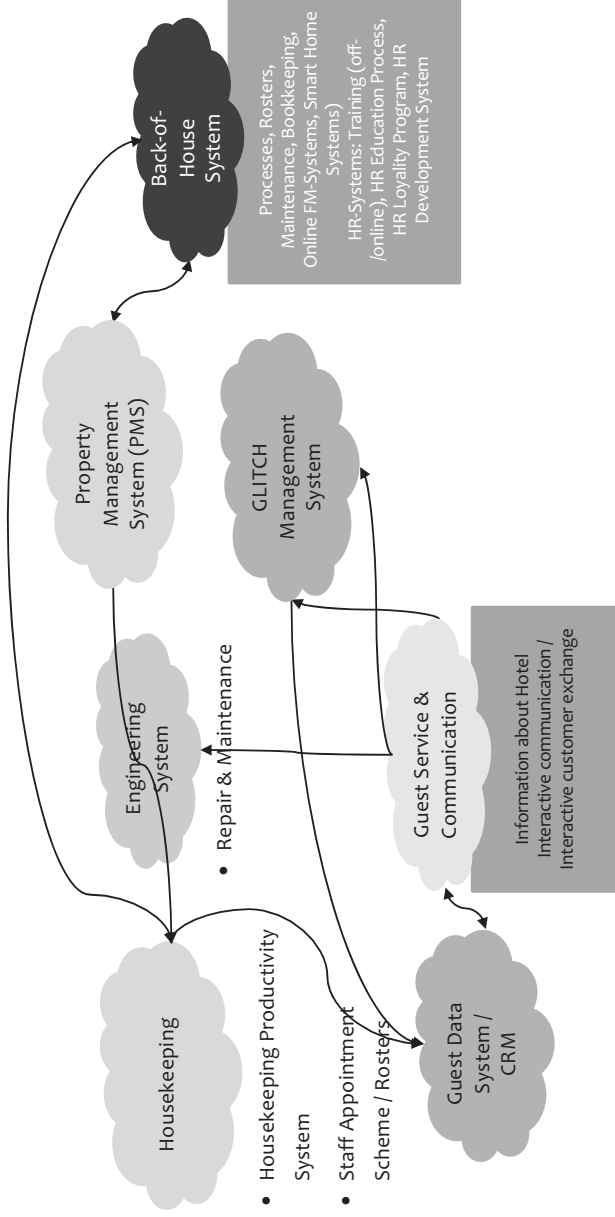


FIGURE 2.5 Process and system requirements of communication with the employee – Back of house /GLITCH system
(Source: own research)

In future, this process will be exclusively digital and not dependent on individuals. Large hotel chains and cruise lines are already implementing this (see also Oehler & Buer, 2017).

2.3 Technologies that will change the hotel process in future

Three terms currently dominate the digitalized world, about which the hotel industry has many questions:

- Big Data
- Artificial Intelligence
- Blockchain

The term **Big Data** has been established in the hotel industry for a few years and has just led to a change in the data landscape in dealing with the use of existing databases, particularly in the area of antediluvian property management systems. Big Data only controls and manages the necessary data volume needed by the hotel industry. As a term, Big Data also stands for a constant change of information, which in turn leads to an accumulation of data volumes. These data are the basis for analysis and are a contradiction in the question of personal privacy of the guest and employee (Plattner, 2017). The explained and altered processes lead to a larger volume of data, which will make identifying and channeling this volume of data in terms of Big Data unavoidable for the hotelier. For this reason, it is advisable to leave the guest's data sovereignty with the guest in this process. In terms of Big Data, the guest can specify whether all this information should be available to you, or whether it needs to be deleted after every stay. The guest thereby controls his requirements of service expectations in the hotel.

Artificial Intelligence (AI) is a term used in IT, which is essentially referred to as a self-learning system. The use of artificial intelligence in combination with the systematic evaluation of data from an available data pool creates scope for new business models and in the design of new competitive advantages through concentration on a unique proposition. For the hotel industry, this means supplementing the processes that follow a schematic procedure and do not make personal interaction mandatory with constant new information (=experience) and optimizing the process itself. Artificial intelligence allows the hotelier to create the necessary freedom to optimize his core business and thereby to improve the hotel's positioning. Furthermore, the hotelier can use the experiences in which artificial intelligence is already in use in expanded areas. This is possible in the recruitment of new employees. Dating platforms already use these systems. Large companies learn from the application profiles of employees and so gain an overview of which educational institutions and other companies create the ideal profile for their own company, and this in turn is a

good basis for recruiting and further training new and existing employees (see also Gentsch, 2018, p. 117ff).

The term **blockchain** is in practice seen to be a new system in which structured sales can be made. In principle, blockchain is a technology. This was founded on the idea of a cluster of computers that have the same data sets and constantly check whether they are identical in content (Dogru et al., 2018, p. 2ff). The characteristic feature of the technology is that databases in line with Big Data and individual data sets are not held centrally, essentially to increase the speed of access to the records and to check with mathematical algorithms whether the data set has changed, or if it is indeed the same as the desired original, e.g. a contract. “This entails algorithms developed in software which constantly automatically check the conditions of a contract and carry out appropriate measures. These rules are stored in a decentralized database – the so-called blockchain” (Gentsch, 2018, p. 52). The scope of application for blockchain in the travel industry is currently seen as “hope” for the hotelier to gain independence from the increased distribution channels (especially OTAs, search engines and GDS). The decentralized storage technology enables a reduction of third parties in one’s own business, increases security through the constant cross-checking of data sets on several computers (decentralized storage), increases transparency, and it can facilitate the intended development of a m:n relationship. Use cases are identity checks, multi-stage identification and authentication processes (e.g. shocard.com or sita.aeoro). There are already systems that are structured as a decentralized marketplace (beta.locktrip.com/hotels), which accept a cryptocurrency with payment, reviews and agencies (beetoken.com) or offer city tours (coolcousin.com). Ultimately, these developments are still in the early stages, but it is anticipated that these technologies will also lead to developing new products for the hotel industry. It is important to be attentive (see also Hospitality Inside, 2018).

2.4 Summary and outlook: how will digitalization challenge the hotelier?

- The hotelier will segment his service into sub-processes and have to specify himself which he can delegate to the guest. Here I use the term “outsourcing of services”. This is change management with the two components explained in the introduction:
 - Processes for the guest, which the guest carries out independently; consciously delegate.
 - Processes for the employee, which the employee will carry out himself in future.
- The challenge for the hotelier will be to introduce a positive, agile leadership. In doing so, modulating the work of an employee is part of the system change; furthermore, the inclusion of mobile devices in the work process is inevitable.

- Traditional marketing is taking a step back and **interactive communication** with the guest takes effect. So that the flexibilization and individualization of services to the guest can come into effect (including pricing), the responsibility for management, control and consent of the information must be given back to the guest. This gives employees the scope to design marketing in a more individual way and hereby concentrate on the requests of guests with a high desire for interaction. The profile of a marketing employee is changing from a performer to a communicator in the sense of **community building**.
- **Pricing** is entrusted to a mathematical, and therefore automated, self-learning system. Management controls and manages the system by specifying basic conditions (e.g. highest maximum price, lowest prices, capacities at which price, occupancy management through demand-related behavior etc). This means that the “gut” takes a back seat in pricing in the sense of revenue management and the “business analyst” and mathematician assume the role of management.
- The emerging technology will be an integral part of the daily process. The often criticized permanent availability afforded by smartphones through text messages and community platforms is part of everyday life in the same way a fork is used for eating and a glass for drinking. Therefore, it is inevitable that the “technology guests bring with them” will become part of the stay for the hotelier. With the changing technologies guests will have control themselves and it will also enable this individualized profile during a stay. This is the basis for the guest experience and therefore becomes guest equity, which in turn contributes to the **value of the “hotel brand”**.
- The developments of **digital solutions in blockchain** and the associated optimizations in sales, in agreements with the guest and also in payment transactions, will not only make future processes quicker, but also more efficient and therefore accelerate the aforementioned procedural change in the hotel industry. Artificial intelligence will be an accelerator and increase the leadership challenges in hotels. Digitalization 4.0 will bring about a completely individual Industrial Revolution for the hotelier for the first time since Conrad Hilton introduced standardized hotels. These challenges need to be tackled today and individual solutions developed.

References

- Beenen, Janis/von der Hagen, Hans/Wilke, Felicitas: Das sind die Tricks der Buchungsportale, Süddeutsche Zeitung, Wirtschaft, 11.6.2018 at www.sueddeutsche.de/wirtschaft/online-handel-das-sind-die-tricks-derbuchungsportale-1.4009451; last checked on 13.8.2018 (Beenen, SZ 11.6.2018)
- Bruhn, Manfred/Hadwich, Karsten (Ed.): *Customer Experience: Forum Dienstleistungsmanagement*, Springer Gabler, Wiesbaden, 2012 (Bruhn/Hadwich 2012)

- Buer, Christian: *Gestaltung von ganzheitlichen Managementsystemen im Hotel - die Bedeutung des Informationsbedarfes, der Informationsgewinnung und Informationsverarbeitung für ein Führungssystem in einem ganzheitlichen Hotelbetrieb*, Haupt, Bern, 1997 (Buer, 1997)
- Bundesministerium für Wirtschaft, Familie und Jugend, Facebook, Twitter & Co., Erfolgreiches Online-Marketing in der Hotellerie, author: Mag. (FH) Thomas Hinterholzer, FH Salzburg GmbH; Dr. MMag. Mario Jooss, eTourism Foundation e.V., 2017 (BMWfJ, 2017)
- Dogru, Tarik/ Mody, Makarand/ Leonardi, Christie: *Blockchain Technology & its Implications for the Hospitality Industry*, *Boston Hospitality Review* (www.bu.edu/bhr), 2018 (Dogru et al, 2018)
- Eberhardt, Daniela: Generationen zusammen führen: mit Millennials, *Generation X und Babyboomern die Arbeitswelt gestalten*, 1st ed. Haufe Gruppe, Freiburg, Munich, 2016 (Eberhardt, 2016)
- Ebersbach, Anja/Glaser, Markus/Heigl, Richard (*Social Web*): *Social Web. UVK-Verl.-Ges (UTB, 3065)*, Konstanz, 2008 (Ebersbach, 2008)
- Gentile, Chiara/Spiller, Nicola/Noci, Giulano. (2007). How to sustain the Customer Experience: An Overview of experience Components that Co-create Value with the Customer. *European Management Journal* 25 (5): 395–410
- Gentsch, Peter: *Künstliche Intelligenz für Sales, Marketing und Service*, Springer Gabler, Wiesbaden, 2018 (Gentsch, 2018)
- Gruner, Axel (Hrsg.), *Management-Lexikon Hotellerie & Gastronomie*, Deutscher Fachverlag, Frankfurt, 2008 (Gruner, 2008)
- Hospitality Inside: Hotellerie die perfekte Branche – Blockchain-Startups zeigen erste Beispiele für Lösungen, 7.8.2018 at www.hospitalityinside.com/articles/hotellerie-die-perfekte-branche-blockchain-startups-zeigen-erste-beispiele-fuer-loesungen,35809,277.html; last checked on 17.9.2018 (Hospitality Inside, HI 17.9.2018)
- Laesser, Christian, *Was ist ein Hotel? Article on an adapted definition of hotel in: Jahrbuch der Schweizer Hotellerie, hotellerieuisse*, S.: 99–103, 2008 (Laesser, 2008)
- Mangelsdorf, Martina: *Von Babyboomer bis Generation Z: der richtige Umgang mit unterschiedlichen Generationen im Unternehmen*, Gabal, Offenbach am Main, 2015 (Mangelsdorf, 2015)
- Mosedale, Jan, *Einblicke in die Forschung, Digitalisierung in der Hotellerie*, HTW Chur, Mai 2018 (Mosedale, 2018)
- Oehler, Jochen/Buer, Christian: *Macht Einkauf*, Matthes Verlag, 2017 (Oehler/Buer, 2017)
- Pfeil, Silko: *Werteorientierung und Arbeitgeberwahl im Wandel der Generationen: Eine empirisch fundierte Analyse unter besonderer Berücksichtigung der Generation Y*, Springer Gabler, Wiesbaden, 2016 (Pfeil, 2016)
- Plattner, H. (www.enzyklopaedie-der-wirtschaftsinformatik.de/lexikon/daten-essen/Datenmanagement/Datenmanagement-Konzepte-des/Big-Data. From www.enzyklopaedie-der-wirtschaftsinformatik.de: www.enzyklopaedie-der-wirtschaftsinformatik.de/lexikon/daten-essen/Datenmanagement/Datenmanagement-Konzepte-des/Big-Data, last checked on 29.01.2017) (Plattner, 2017)
- Schüller, Anne M.: *Touchpoints: Auf Tuchfühlung mit dem Kunden von heute. Managementstrategien für unsere neue Businesswelt*. 3rd ed. Offenbach, GABAL Verlag, 2012 (Schüller, 2012)
- Solis, Brian: *Digital Transformation of the guest Experience*, Altimeter Prophet, March 2018 (Solis, 2018)
- The Nielsen Company (Consumer Survey): The Nielsen Global Online Consumer Survey. Available online at www.nielsen.com/content/dam/corporate/us/en/newswire/uploads/2009/07/pr_global-study_07709.pdf, 2009; last checked on 27.02.2018 (Nielsen, 2009)

Veit, D.; Clemons, E.; Benlian, A.; Buxmann, P.; Hess, T.; Kundisch, D.; Leimeister, J. M.; Loos, P. & Spann, M. (2014): Geschäftsmodelle - Eine Forschungsagenda für die Wirtschaftsinformatik. In: *WIRTSCHAFTSINFORMATIK* - Research Notes, edition: 1, 2014. Pages: 55–64. (Veit, 2014)

Verband Internet-Reisen (VIR): VIR Daten & Fakten zum Online-Reisemarkt – Daten und Fakten 2019, 21.7.2019 at <https://v-i-r.de/df/2019/mobile/index.html>

3

CHANGE MANAGEMENT AND LEADERSHIP IN THE FOURTH INDUSTRIAL REVOLUTION

Mark Beattie and Sharon Link Wyer

As we sit at the new precipice of the Fourth Industrial Revolution, there are many questions, considerations, and confusion about what might occur and ways new technologies should be implemented or even corralled. We come to you as two colleagues who considered some of these questions and contemplated potential solutions regarding the variables of leadership, change management, and the hospitality and tourism industries. This chapter offers key definitions, potential considerations, and our research findings after conducting a hermeneutic phenomenological exploration of organizational leadership in the hospitality and tourism industries within the context of the Fourth Industrial Revolution.

Initially, we examined organizations espousing servant-leadership as a strategic management ethos in their mission and vision. By focusing on seven hospitality and tourism companies, the ways in which mission and vision statements combine the person-focused approach to servant-leadership are contrasted with the technological advances of the Fourth Industrial Revolution in ways managers make strategic choices to improve organizational performance. Specifically, we combined Schwab's (2017, 2018) perspectives with Porters' (1980) competitive strategies to evaluate organizational effectiveness. Next, we revisited Schwab's (2018) edict that a new type of values-based leadership is needed in the Fourth Industrial Revolution to offset concepts best described as "velocity, scope, and impact."

Then, we determined ways that values-based leadership might offset potential damage, and we focused on Greenleaf's (1977) model of servant-leadership to lever this conversation. This chapter provides a more in-depth understanding of leadership and organizational development as positive factors in hospitality and tourism. Implications are presented positing servant-leadership as a differentiator for hospitality and tourism organizations that embrace these approaches.

3.1 The fourth industrial revolution

Schwab (2017) defined the Fourth Industrial Revolution as “the fusion of technologies and their interaction across the physical, digital, and biological domains” (p. 8). While this transformation is happening at lightning speed, Schwab stated:

Every company is compelled to reconsider their traditional ways of doing business to keep pace with rapidly changing technology and consumer expectations. In all cases, particularly with artificial intelligence (AI), genetic engineering and other technologies that could conceivably escape our control, we need to take care in building systems that minimize risks and improve the human condition.

He further described,

Many of these innovations, including AI, robotics, autonomous vehicles, 3D printing, nanotechnology, biotechnology, materials science, energy storage, and quantum computing, are in their infancy, but they are already reaching an inflection point in their development as they build on and amplify each other in a fusion of technologies across the physical, digital, and biological worlds.

(2017, p. 1)

Based on these rapidly changing elements, Schwab (2018) called for “a paradigm shift in ways we work, communicate, express, inform and entertain ourselves.” He indicated, “We must have a comprehensive and globally shared view of how technology is changing our lives and those of future generations, and how it is reshaping the economic, social, cultural, and human context in which we live” (p. 2). Schwab (2018) expressed, “Perhaps the greatest concern of the Fourth Industrial Revolution is that the value will not be fairly shared – and that resulting increases in inequality could undermine social cohesion. First-mover technology will facilitate domination of a wide range of markets” (p. 25). Given that these changes will happen so rapidly, there will need to be a consistently adaptive model to consider these changes with agile processes in every field. As industries and businesses are differentiated by these swiftly evolving technologies, service-related organizations, such as those in the tourism and hospitality sectors, will need to quickly adjust, and many are already doing so. In fact, the results from our research show that not only are tourism and hospitality industries briskly changing, Industry 4.0 has become an “equalizing economic force” for disparate countries, as they can more readily cut through bureaucracy to act hastily and take on industry leadership regarding early adoption of technologies, innovation, and rapid implementation.

According to the website, Tourism 4.0, this is the name for the current trend of big data processing collected from a vast number of travelers to create a personalized traveling experience. Tourism 4.0 generates seamless journeys, and

leverages technologies, such as AI, Internet of Things (IoT), big data analysis and cloud computing, to enable travel experiences to be more efficient, safer, and more sustainability-driven with fewer hassles while optimizing journey times, and minimizing costs for travelers. Sustainability and technology are two of the hallmark characteristics of the Industry 4.0 hospitality paradigm.

One such example where Tourism 4.0 has emerged is Slovenia. According to Tourism 4.0, Slovenia is a “living lab” and is integrating technologies with travel. These technologies include AI, IoT, blockchain, augmented reality (AR), emerging technologies, high-performance computing, wireless connectivity, cloud computing, and big data. Tourism 4.0 is focused on building an ecosystem with the goal of understanding the current state and technology readiness level in the tourism ecosystem and innovation potential (Tourism 4.0, 2019).

Schwab (2016) deemed a new social covenant governed by disruption and compounded by velocity, scope, and impact. Velocity may best be described as the speed of something in a given direction. In the case of Industry 4.0, contrasted with previous industrial revolutions, the velocity at which this revolution is progressing is exponential rather than linear. Examples of two disruptors in the hospitality and tourism segment today that are achieving global scale: (a) the sharing economy (i.e. Airbnb, Uber, Alibaba) and (b) third-party booking services (Expedia, Orbitz, Kayak). In addition, communication has both velocity and scope (TripAdvisor, Yelp!, Instagram). New entrants to these arenas create constant challenges for operators to participate with and track.

In terms of impact, which might best be described as “a strong effect or forcible connection,” Fourth Industrial Revolution disruptions are certainly impacting the hospitality and tourism industries. Traditionally, the hospitality and tourism industry has been slow to change and adopt new technologies. In fact, historically, hospitality and tourism providers have been so resistant to early adoption, legislation has been passed to force compliance with the status quo, according to Weiser and Goodman (2019) and MacMillan (2015). We would add that new technologies, increased service, and/or empathy are difficult changes to assimilate, yet opportunity awaits for hospitality and tourism operators that embrace the future.

Along with disruptive strategy, Schwab (2016) indicated that another strategy should emerge that “empowers humans” rather than replaces them. Ethical and values based considerations must be considered in order to manage the ramifications of instantaneous and radical adoption of potentially damaging technological advancements such as (a) robots replacing humans; or (b) AI that reads minds, collects data, and inflicts harm to humans before humans can catch up to the damage. Our personal concern is that without ethical considerations, those who are managing and developing the technologies will be so caught up in the glory of their technological achievement and competitive advantage that potential harm will outstrip possible benefits. From an organizational perspective, these changes need to be managed with agility because (a) organizations that adapt too fast will negatively impact humans and (b) organizations that do not change quickly enough will lose market share.

3.2 Competitive strategies

Porter (1980) offered competitive strategies as a lens to view organizational effectiveness. The ideas have endured and Porter's work is still considered to be seminal, bringing forth a framework contrasting important differences among industries and ways industries evolved, and helped companies position themselves. The classic five forces are (a) Bargaining Power of Suppliers, (b) Bargaining Power of Customers, (c) Threat of New Entrants, (d) Threat of Substitute Products, and (e) Industrial rivalry, and are both challenged and extenuated by the technological advances of the Fourth Industrial Revolution. We use these competitive strategies as a framework for exploring Industry 4.0 tourism and hospitality practices through the lens of service and sustainability.

To support his theoretical framework, Porter (1980) created an analysis of internal and external factors in relation to an organization's strengths and weaknesses, opportunities and threats, personal values of stakeholders, and broader societal expectations. He reasoned that these four factors should be considered before a business could develop and implement realistic goals and consistent expectations.

Porter (1980) recognized the effects of business cycles in his models. Beginning with the Introduction, the business becomes a new entrant into the marketplace. Growth may take several years as observed in the flywheel effect described by Collins (2001) that occurs when a business can "point to tangible accomplishments – however incremental at first – and show how these steps fit into the context of an overall concept that will work . . . people see and feel the buildup of momentum" (pp. 174–5). Porter's next stage is the growth phase that follows with a period of maturity and then declines as new products or entrants come into the market place (p. 158). While this business cycle remains a viable model, it is accelerated in the Fourth Industrial Revolution as referred by Schwab (2016) as "velocity . . . evolving at an exponential rather than linear pace" (p. 3).

Wheatley (2005) recognized the difference between "old systems" leading toward failure if not met with "radically different processes and methods...the work becomes not process improvement but process revolution" (p. 163). This work is carried out by those she termed as "paradigm pioneers" that create new contexts that gather to give birth to new systems. These new systems welcome large numbers of people who share in the work moving forward (pp. 173–9). The Fourth Industrial Revolution is made up of those actors that embrace what Schwab (2016) foretold as "profound and systemic change" (p. 9).

Porter, Wheatley, and Collins each recognized that it is not just speed, but also scale and scope that brings about change. Schwab (2016) echoed this by noting "the scale and scope of change and explained why disruption and innovation feel so acute today" (p. 9). Zhexembayeva, Galushin and Gorbach (2019) claimed that these business cycles do not always rely on new entrants to the market place to replace the companies in decline. She frames the opportunity for reinvention as opposed to innovation by recognizing the following, "What separates companies that survive from those that go down is the ability to start a new lifecycle, to pivot their company

far enough from the path of destruction to find a new opportunity for growth” (p. 30). The industry segment dictates how often a firm should reinvent, but data from a study of 2,000 companies showed that 79.7% currently require change every 2–5 years (p. 32). Taken together, the five forces of Porter’s competitive strategy coupled with business cycles are increasing in velocity, scope, and scale which indicate opportunities for those who embrace change to survive and succeed in the Fourth Industrial Revolution. We discuss what occurs to those who do not use these forces later in the chapter.

3.3 Industry 4.0 technologies

As hospitality organizations implement more technology in their operations, technologies are emerging that are shifting the way services are provided. At times, these technologies are so disruptive that a great deal of attention should be paid to ethics, sustainability, leadership, and change management. Then, as the Fourth Industrial Revolution comes into its fullness, the following technologies should be better understood: virtual reality (VR), AR, AI, and robotics.

3.4 Definitions

1. **Virtual Reality** or (VR) can best be described as an interactive computer-generated experience taking place within a simulated environment.
2. **Augmented Reality** or (AR) can best be described as an interactive experience of a real-world environment in which objects that reside in the real-world are “augmented” by computer-generated perceptual information, which may include multiple sensory modalities, such as visual, auditory, haptic, somatosensory, and olfactory.
3. **Artificial Intelligence** or (AI) can be described as intelligence demonstrated by machines. In short, AI may be perceived as any device that is aware of its environment and takes actions to successfully achieve objectives, which are currently programmed, but soon self-determined.
4. **Robotics** can best be described as an integrated branch of engineering and science that deals with the design, construction, operation, and use of robots, as well as computer systems for their control, sensory feedback, and information processing.

VR and AR have the potential to become the next big computing platform, similar to the PC and smartphone. Markets will be created and existing markets are being disrupted. As technology advances, price points decline, and an entirely new marketplace of applications (both business and consumer) flood the market, VR/AR will create multibillion-dollar industries aimed toward creating vastly different tourism and hospitality experiences. As global tourism moves toward higher levels of sustainability, these advancements will likely be as game-changing as the advent of the PC.

Marriott Hotels has built upon the customer desire for personalization using AI and the IoT to create

the hospitality industry's first smart hotel room, and the lab will be made up of and feature multiple responsive IoT systems, applications, and devices, all of which will communicate with the other ones in order to serve guests and absolutely optimize hotel operations to the best of modern technology's ability.

(Grass, 2017)

Cai, Lu, & Gursoy (2018) found that robots in hospitality settings were accepted by customers when fulfilling transactional tasks and recommend that "hospitality businesses should also improve the interactional pleasure to motivate consumers to embrace service robots, such as adding entertaining components, using amusing tones in communication and designing a special physical appearance for service robots" (p. 46). Following this recommendation requires re-orienting strategies that execute business goals and differentiate organizations from competition while appraising effectiveness through data analysis, embedded sustainability practices, and a strategic focus for hospitality and tourism in the realm of Tourism 4.0.

3.5 Embedded sustainability in the hospitality and tourism industry

Long-term sustainability practices are a significant part of Tourism 4.0. In order to manage tourism, continual change must be balanced, long-term impacts should be managed, and planning is paramount. This process requires 10 to 20 years of ongoing consideration with all stakeholders at the table, including indigenous peoples, local communities, visitors, industry, and governments. Servant-leadership offers practical methods for creating a sound strategy that focuses on Industry 4.0 processes. We recreated his model, as shown in Figure 3.1.

This type of thinking requires a strategic focus. Figure 3.1 illustrates six strategies to help hospitality businesses make the transition to Industry 4.0 practices.

These strategies are as follows: (1) Map out a strategy before building and gain commitments from the top of the business first; (2) Start small and create a proof of concept that can be piloted to narrow scope and build collaboration; (3) Define capabilities by developing a blueprint through an agile change management process; (4) Use cross-functional analytics to continually drive improvement, test the strategic priorities, and create intelligent systems; (5) Transform the business into a digital enterprise that is open to continual improvement and reinvention; and (6) Build an ecosystem approach to the business by incorporating high levels of collaboration and consideration of all stakeholders by using a servant-leadership approach to this framework.

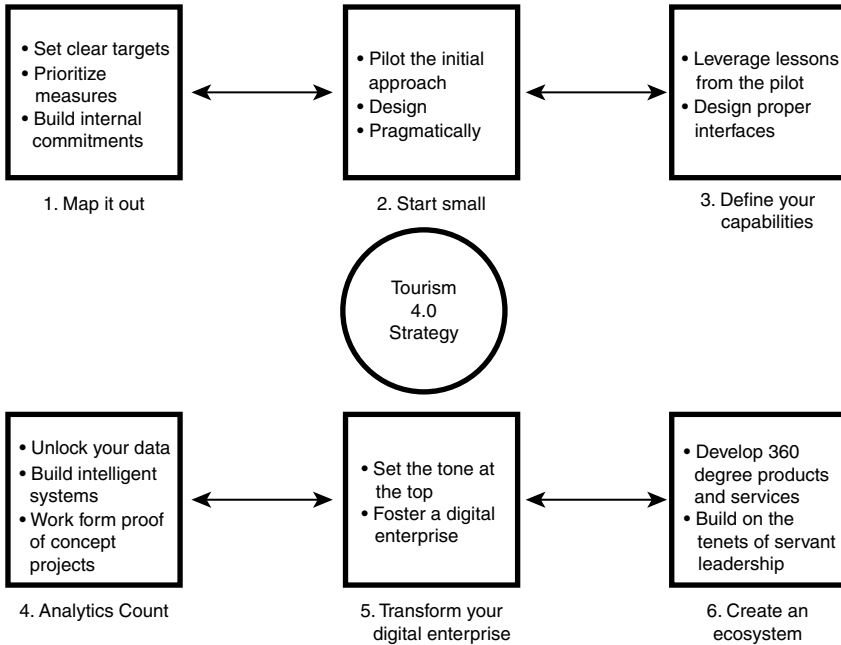


FIGURE 3.1 Servant-Leadership strategic focus for hospitality

3.6 Change management

Simultaneously, leadership must manage constant change encountered in the Fourth Industrial Revolution. Schwab (2017) wrote:

Solving problems related to the Fourth Industrial Revolution will take the following: (a) Collaborative and Inspired leadership to address the systemic changes and to succeed in delivering a better future for the planet and its societies; and (b) Systems leadership, which is about cultivating a shared vision for change – working together with all stakeholders of global society – and then acting on it to change how the system delivers its benefits, and to whom. Systems leadership can be broken into three areas of focus: (a) technology leadership, (b) governance leadership, and (c) values leadership.

3.7 Titanic syndrome

Porter (1980) claimed that “an end game can be profitable” with several conditions that include price-insensitive buyers with little bargaining power, high switching costs, vulnerability of demand from substitutes, and mobility barriers (p. 258). However, businesses that focus on a declining end game strategy will eventually fail.

This process is termed by Collins (2001) as the “Doom Loop,” which is defined as the process of launching new programs only to see them fail to produce sustained results. “After years of lurching back and forth . . . [the companies] failed to build momentum” (p. 176). Later, Collins (2009) modeled the “Five Stages of Decline” as follows: 1) hubris because of success; 2) undisciplined pursuit of more; 3) denial of risk and peril; 4) grasping for salvation; 5) capitulation to irrelevance or death. In this model, decline begins with the lack of strategy and culture at the beginning of the business cycle.

Zhexembayeva, Galushin and Gorbach (2019) studied similar declines in her description of “Titanic Syndrome” which can be thought of as “a corporate disease in which organizations facing disruption create their own downfall through arrogance, excessive attachment to past success, or an inability to recognize the new and emerging reality” (p. 3). These models emphasize the necessity for businesses to create strategies that recognize and embrace change management. It is leadership that creates the corporate culture to allow for reinvention to occur, thus building continued success.

Wheatley’s (2005) model focused on people being critical to the fourfold approach to change that includes naming, connecting, nourishing, and illuminating the community that has accepted responsibility to create new ways of conducting business (p. 173). The aforementioned fourfold approach creates emergent phenomena akin to natural environments noted by characteristics of being more powerful than the sum of their parts, possessing capacities different from the local actions that engendered them, and always surprising us (p. 178). By observing living systems, Wheatley recognized the role of equilibrium as bringing balance by claiming the following: “Any living thing will change only if it sees change as the means of preserving itself” (Wheatley, 1992, p. 147). Conversely, “when leaders strive for equilibrium and stability by imposing control . . . they only create the conditions that threaten the organization’s survival” (p. 89). Schwab (2016) concluded three conditions for future strategies: (1) raising awareness across society, (2) developing comprehensive narratives about shaping the Fourth Industrial Revolution, and (3) restructuring our economic social and political systems to take full advantage of these opportunities (pp. 112–3). Fundamental to hospitality and tourism strategies are people, and this concept is emphasized by Schwab (2016), “in the end, it comes down to people, culture and values” (p.114). Logistically, we see the tenets of servant-leadership as a relevant process for expressing lasting values, especially as a stabilizing force during organizational turmoil.

3.8 Servant-leadership

Spears (2010) emphasized the following ten characteristics of servant-leadership: listening, empathy, healing, awareness, persuasion, conceptualization, foresight, stewardship, commitment to the growth of people, and building community. These characteristics are detailed in the following sections.

3.9 Ten characteristics of servant-leadership

1. Listening – According to Spears (2010), “Listening, coupled with periods of reflection, is essential to the growth and well-being of the servant-leader” (p. 27). Listening is also a critical component of establishing the “habit of dialogue” (Daloz, Keen, Keen & Parks, 1996) and nurtures affirmation garnered through appreciative inquiry (Cooperrider, Whitney & Stavros, 2005).
2. Empathy – According to Spears (2010), “People need to be accepted and recognized for their special and unique spirits” (p. 27). Empathy enables individuals to see other perspectives and walk in the shoes of others (Gehlbach, 2017). “The most successful servant-leaders are those who have become skilled empathetic listeners” (Spears, 2010). Beckham and Riedford (2017) indicated, “Empathy involves caring, recognition of distress experienced by self and others, and provision of support” (p. 81).
3. Healing – Spears (2010) wrote, “One of the great strengths of servant-leadership is the potential for healing one’s self and one’s relationship to others” (p. 27). According to Uhl-Bien, Riggio, Lowe and Carsten (2014) and Kratz (2017), organizational healing promotes higher levels of energy, productivity, and caring, which in turn advances thoughtfulness, creativity, and improves self-care in sample populations. Organizations need individuals to be in a state of healing and wellness to engage, work, contribute, and serve.
4. Awareness – According to Spears and Lawrence (2002), servant-leaders operate from a place of awareness. Thumma and Beene (2015) wrote, “Awareness can mean that tiny, apparently trivial things can have great meaning.” Additionally, “awareness helps individuals understand issues involving ethics, power, and values” (Spears, 2010, pp. 27–28). Empowering and developing constituents promotes personal power and encourages individuals to be self-authoring, self-directed, and more aware (Laub, 1999; van Dierendonck, 2011).
5. Persuasion – As Spears (2010) specified, a servant-leader seeks to convince others and build consensus, rather than coerce compliance. By implementing servant-leadership strategies, punitive measures are avoided. According to Falk and Schultz (2018), there are distinct advantages in coupling psychological and economic models with persuasion, social influence, and successful communication with decision-making rather than punishment. By offering appropriate rewards and incentives that intrinsically motivate, employees become more inherently motivated to perform according to self-determination theory (Deci & Ryan, 1985).
6. Conceptualization – Through conceptualization, servant-leaders are able to see beyond day-to-day realities (Spears, 2010). They can see the whole picture (Senge, 2006). Conceptualization might also be considered systems thinking. Servant-leaders are naturally systems thinkers (Senge, 2006) and are able to hold multiple perspectives simultaneously. They are able to analyze problems from a whole-systems approach and nurture visionary concepts by holding a day-to-day approach along with conceptual thinking (Spears, 2010). Systems

thinking allows leaders to see through the chaos, manage interdependency, and understand choice (Shaked & Schechter, 2013, p. 774).

7. Foresight – “Foresight is a characteristic that enables the servant-leader to understand the lessons from the past, the realities of the present, and the likely consequence of a decision for the future. It is also deeply rooted within the intuitive mind” (Spears, 2010, p. 28). Foresight stems from strategic thinking and visionary leadership (Mack, 2015; Nanus, 1995), and offers a building block for servant-leaders.
8. Stewardship – “Servant-leadership, like stewardship, assumes first and foremost a commitment to serving the needs of others. It also emphasizes the use of openness and persuasion, rather than control” (Spears, 2010, p. 29). Stewardship redirects “the locus of control from the leader to the ‘We’ or people. In this way teamwork, synergy, and group intelligence can surface” (Bordas, 2016, p. 64). Stewardship implies a higher level of consideration and governance operating a moral level and holding in trust for the greater good of society (Block, 1993; Spears, 2010).
9. Commitment to the growth of people – According to Spears (2010), “The servant-leader is deeply committed to the growth of each and every individual within his or her organization. The servant-leader recognizes the tremendous responsibility to do everything in his or her power to nurture the personal and professional growth of employees and colleagues” (p. 29). According to Cline (2015), “The servant-leader focuses on accountability” (p. 82).
10. Building Community – Greenleaf (1977/2002) wrote, “All that is needed to rebuild community as a viable life is for enough servant-leaders to show the way, not by mass movements, but by each servant-leader demonstrating his or her unlimited liability for a quite specific community-related group” (p. 53). Servant-leaders believe that community-building is an essential component to revitalize relationships and forge mass movements (Greenleaf, 1977/2002; Spears, 2010). In the community model envisioned by Bettez and Hytten (2013), “expertise is shared, organic, and emergent in genuine relationships and partnerships” (p. 62). Building community directly contributes to increased trust (Covey, 2010) and improved team building (Bloom, Stevens & Wickwire, 2003, p. 135.) which ultimately leads to empowered innovation and cohesion among disparate individuals or groups. Four key conditions that build communities include (1) interdependence, (2) leadership; (3) joint decision; and (4) equal influence (Weisbord, 1992, p. 27).

3.10 Our research

We posit that each servant-leadership condition has important implications for Schwab’s (2017) call for values’ based leadership in the Fourth Industrial Revolution, especially as organizations, countries, and people compete. We opted to qualitatively evaluate the three factors of change management, leadership, and the Fourth Industrial Revolution through phenomenology because we thought

this would capture the novelty of a new occurrence while speculating the potential for long-term effects. Von Eckartsberg's (1986) described phenomenological methodology as framed by systematic and rigorous analyses of procedures that describe the participants' experiences. Shank (2002) explained phenomenology as a simple notion. He argued that humans know reality by the impact events have on our consciousness rather than experiencing life as it really is. "In other words, what we really know are the effects of things on our awareness, and not the things themselves" (p. 80). Sokolowski (2000) wrote that phenomenology acts in two ways. First, phenomenology demonstrates that the mind is a public entity that behaves and manifests behaviors in the open and is not limited to its own confines. Second, phenomenology helps "reclaim a public sense of thinking, reasoning, and perception. It helps us reassume our human condition as agents of truth" (p. 12).

Patton (1990) indicated that researchers utilizing qualitative methods should "strive to understand a phenomenon or program as a whole" (p. 49). Holistic data yields themes inductively reasoned from a series of semi-structured interviews with the participants to make sense of the phenomenon. Patton asserted that the "purpose of interviewing is to find out what is in and on someone else's mind" (p. 278). Miles and Huberman (1994, p. 7) defined this branch of research as "the comprehension of the meaning of text [and] discerning of themes" in order to more fully understand the experiences examined.

Creswell (1998) described a phenomenological study as one that could describe the significance of lived experiences about a belief or the phenomenon (p. 51). Husserl (as cited in Lawlor, 2002) suggested that the essence of the phenomenon can best be described as a search for the meaning of the experienced phenomenon. Other scholars who have written about phenomenology, such as Douglass and Moustakas (1985), Frick (1990); Moustakas (1990), and Patton (1990) have analyzed and synthesized Husserl's ideas concerning the essence of phenomenology being the composition and significance of the phenomenon. Creswell (1998) stated that essence comprises the underlying importance of the phenomenon and the "intentionality of consciousness [in which] experiences contain both the outward appearance and inward consciousness based on memory, image, and meaning" (p. 52). Miles and Huberman (1994) emphasized that human and societal idiosyncrasies complicate our understanding of our own peculiarities. Nonetheless, peculiar behaviors can be understood (p. 4).

Data were analyzed using qualitative analysis techniques. Observations were noted, annotated, and coded for meaning until a set of comprehensive categories and themes emerged. The data analysis routine, an accepted process in qualitative research, seeks to "understand the phenomena studied" and induce meaning from the data (Patton, 1990, p. 392). Thus, categories and themes were grounded in the data collected from observations and by documenting relevant themes related to organizational behaviors.

Table 3.1 presents the analyses of the language of servant-leadership currently practiced in international Fourth Industrial Revolution hospitality and tourism organizations. After collecting mission statements from seven hospitality and

TABLE 3.1 Industry 4.0 Servant-Leadership Practices in the Hospitality and Tourism Industries

<i>Organization</i>	<i>Mission Statement</i>	<i>Servant-Leadership Themes</i>
<p>Chick-fil-A – an American fast food restaurant chain headquartered in the city of College Park, Georgia, specializing in chicken sandwiches.</p>	<p>Customer First, Personal Excellence, Continuous Improvement, Working Together, and Stewardship. Influence – Relationships with our fellow team members and our customers. Being consistently cheerful is one behavioral characteristic that contributes to having a positive influence.</p>	<ol style="list-style-type: none"> 1. Customer First, 2. Personal Excellence, 3. Continuous Improvement, 4. Working Together, 5. Stewardship, and 6. Persuasion through Influence.
<p>Darden Restaurants – an American multi-brand restaurant operator headquartered in Orlando, Florida. As of April 2017, the firm owns two fine dining restaurant chains: Eddie V's Prime Seafood and The Capital Grille; and six casual dining restaurant chains: Olive Garden, LongHorn Steakhouse, Bahama Breeze, Seasons 52, Yard House, and Cheddar's Scratch Kitchen.</p>	<p>We believe our values and culture help our team members learn, thrive and grow. In fact, we believe our culture gives our company a competitive advantage. Our values have been forged over a 70-plus-year history. We look to these values – Inclusion & diversity, respect & caring, always learning, always teaching, integrity & fairness, teamwork, excellence, being of service – as we work to fulfill our mission.</p>	<p>We believe our values and culture help our team members learn, thrive and grow. We look to these values –</p> <ol style="list-style-type: none"> 1. Inclusion & diversity, 2. Respect & caring, 3. Always learning, 4. Always teaching, 5. Integrity & fairness, 6. Teamwork, 7. Excellence, 8. Being of service – as we work to fulfill our mission.

(Continued)

TABLE 3.1 (Cont.)

<i>Organization</i>	<i>Mission Statement</i>	<i>Servant-Leadership Themes</i>
<p>Marriott International – an American multinational diversified hospitality company that manages and franchises a broad portfolio of hotels and related lodging facilities.</p>	<p>Our core values make us who we are. As we change and grow, the beliefs that are most important to us stay the same – putting people first, pursuing excellence, embracing change, acting with integrity and serving our world. Being part of Marriott International means being part of a proud history and a thriving culture. We empower people with disabilities.</p> <p>We put people first. “Take care of associates and they will take care of the customers.”</p> <p>We pursue excellence. Marriott’s reputation for superior customer service dates back to J. Willard Marriott’s original goal for his business: “good food and good service at a fair price.” We take pride in the details – every day, in every destination worldwide.</p> <p>We embrace change. The Marriott family helped shape the modern hospitality industry. We’re driven to continually challenge the status quo and anticipate our customers’ changing needs with new brands, new global locations, and new guest experiences.</p> <p>We act with integrity. We hold ourselves to uncompromising ethical and legal standards.</p>	<ol style="list-style-type: none"> 1. Empower, 2. Put others first, 3. Pursue excellence, 4. Embrace change, 5. Act with integrity, 6. Serve our world, 7. Inclusion, 8. “Take care of associates and they will take care of the customers,” 9. “Good food and good service at a fair price.” <p>We take pride in the details – every day, in every destination worldwide.</p>

(Continued)

TABLE 3.1 (Cont.)

<i>Organization</i>	<i>Mission Statement</i>	<i>Servant-Leadership Themes</i>
<p>MOD Pizza – a fast casual pizza restaurant chain based in the United States. Founded in Seattle, Washington, in 2008, MOD has more than 400 locations in the United States and United Kingdom.</p>	<p>People First Mission Spreading MODness means many things, but mostly it means treating our employees (aka the MOD Squad) right. By putting people first, we strive to be a force for positive change in their lives and the communities they serve. From above-industry pay and benefits to hiring people with special needs – including people in need of a second chance – our ethos is deeply rooted in acceptance, opportunity and development. The result? An amazing spirit of individuality, teamwork and service has emerged. It’s our culture of doing good – and it’s catching on. – If we wouldn’t serve it to our kids, we won’t serve it to you. It’s that simple.</p>	<p>Our ethos is deeply rooted in acceptance, opportunity and development. The result? An amazing spirit of individuality, teamwork, and service has emerged. It’s our culture of doing good – and it’s catching on. Putting people first, we strive to be a force for positive change in their lives and the communities they serve. Ethos is deeply rooted in acceptance, opportunity and development.</p>
<p>Southwest Airlines – a major United States airline headquartered in Dallas, Texas, and is the world’s largest low-cost carrier.</p>	<p>The mission of Southwest Airlines is dedication to the highest quality of customer service delivered with a sense of warmth, friendliness, individual pride, and company spirit. Purpose – Connect people to what’s important in their lives through friendly, reliable, low-cost air travel. Vision – To become the world’s most loved, most flown, and most profitable airline. Mission – The mission of Southwest Airlines is dedication to the highest quality of customer service delivered with a sense of warmth, friendliness, individual pride, and company spirit.</p>	<p>Warmth, friendliness, individual pride, and company spirit Dedication to the highest quality of customer service delivered with a sense of warmth, friendliness, individual pride, and company spirit.</p>

(Continued)

Organization	Mission Statement	Servant-Leadership Themes
<p>Starbucks – an American coffee company and coffeehouse chain. Starbucks was founded in Seattle, Washington in 1971. As of early 2019, the company operates over 30,000 locations worldwide.</p>	<p>Starbucks Coffee’s corporate mission is “to inspire and nurture the human spirit – one person, one cup and one neighborhood at a time.”</p> <p>Starbucks’s core values are written like a philosophy: Creating a culture of warmth and belonging, where everyone is welcome.</p> <p>Acting with courage, challenging the status quo.</p> <p>Being present, connecting with transparency, dignity and respect.</p> <p>Delivering our very best in all we do, holding ourselves accountable for results.</p> <p>We are performance driven, through the lens of humanity.</p>	<p>Creating a culture of <i>warmth and belonging</i>, where <i>everyone is welcome</i>.</p> <p>Acting with courage, challenging the status quo.</p> <p>Being present, connecting with transparency, dignity and respect.</p> <p>Delivering our very best in all we do, holding ourselves accountable for results.</p> <p>We are performance driven, through the lens of humanity.</p>
<p>Yum Brands – Yum! Brands, Inc., or Yum! and formerly Tricon Global Restaurants, Inc., is an American fast food company.</p>	<p>Our mission is to build the world’s most loved, trusted, and fastest growing restaurant brands.</p> <p>We’ve built a unique culture that’s filled with energy, opportunity, and fun. We believe in our people, trust in their positive intentions, encourage ideas from everyone, and have actively developed a workforce that is diverse in style and background.</p> <p>We’re focused on our four growth drivers:</p> <ol style="list-style-type: none"> 1. Distinctive relevant brands, 2. Unmatched franchise operating capability, 3. Bold restaurant development, 4. Unrivaled culture and talent. 	<ol style="list-style-type: none"> 1. Filled with energy, opportunity, and fun, 2. Trust in their positive intentions, 3. Believe in our people, 4. Trust in their positive intentions, 5. Encourage ideas from everyone. <p>We’re focused on our four growth drivers:</p> <ol style="list-style-type: none"> 1. Distinctive relevant brands, 2. Unmatched franchise operating capability, 3. Bold restaurant development, 4. Unrivaled culture and talent.

tourism based organizations, key words were analyzed and clustered for meanings based on commonalities, approaches, and relevant themes. By focusing on these hospitality and tourism companies, the ways in which mission and vision statements combine the person-focused approach to servant-leadership are contrasted with the technological advances of the Fourth Industrial Revolution that influence managers' strategic choices to improve organizational performance.

We identified these organizations by conducting an internet search for servant-leader-based terms and cross-referenced these potential organizations with another site specializing in recruiting servant-leaders for servant-leader organizations. Each of the organizations we referenced had at least one reference to the tenets of servant-leadership described by Spears (2010). After we identified our top seven organizations, we also considered Industry 4.0 technologies and Fourth Industrial Revolution characteristics.

We designed an assessment to sort each organization through their mission statements, characteristics of servant-leadership, and whether they effectively addressed Tourism 4.0 strategies, as described earlier in the chapter and as framed by our findings. The assessment is included as Appendix I.

3.11 Findings

After evaluating each of the organizations through the framework of the following statements, we determined that each of the mission statements supported our premise that the organizations in question embrace servant-leadership and were phenomenologically adapting to the ethical challenges of Industry 4.0 ethical best practice. We also add that in addition to the tenets of servant-leadership that Spears (2010) set forth, serving individuals with diversity and creating an inclusive culture for inclusion and diversity were front and center for several of these organizations.

We determined that each organization demonstrated the following:

1. Strategy-driven decision-making through the tenets of critical listening.
2. Commitment to sustainability through empathy by integrating global and human best practice and highest service.
3. Evidence of continuous and transformative improvements to foster a positive and even healing guest experience.
4. Evidence that the organization designed a technology blueprint to foster a platform of systemic change through the lens of deep awareness – both interpersonally, regionally, and globally.
5. Evidence that each of these organizations fosters a change management and leadership approach to tourism and hospitality through persuasive invitation that relies on transformative improvement, systems design, and a commitment to serving guests first.
6. Evidence that the organization conceptualizes through the cross-functional analysis of all integrated systems that uses technology to serve rather than replace.

7. Evidence that the organization maintains foresight regarding the digital global landscape and internal ecosystem and applies insights properly, ethically, and auspiciously.
8. Recognition that continuous improvement is needed and evidence that the organization continually reinvents itself in ways that are focused through stewardship and doing what is best for others because of ethical best practice and commitment to service.
9. Evidence that dynamic collaboration internally and externally among stakeholder occurs through the commitment to the growth of others using technology as an assistive tool, and not as a replacement for humans.
10. Confirmation that community-building occurs by connecting guests digitally, socially, and cross-functionally for the purposes of ethical commitment, sustainability, and dedication to service.

3.12 Conclusions

The Fourth Industrial Revolution is upon us. It is rapidly changing how we do travel, design our businesses, experience travel, and harvest an ecosystem of service in a rapidly changing landscape. Without proper design thinking, servant-leadership, and the consideration for the human experience with burgeoning, and seemingly threatening technologies, once thriving hospitality and tourism businesses will wither and die. Extinct businesses harm economies, and regions that once were tourist and hospitality meccas will be harmed. This chapter helps hospitality and tourism businesses become aware of these changes, plan accordingly, prosper regionally, and compete globally.

References

- Beckham, R. & Riedford, K. (2017). Emotional competence: Demonstrated performance. *MedSurg Nursing Journal*, 26(2), pp. 79–92.
- Bettez, S. C. & Hytten, K. (2013). Community building in social justice work: A critical approach. *Educational Studies*, 49(1), pp. 45–66. doi:10.1080/00131946.2012.749478
- Block, P. (1993). *Stewardship: Choosing service over self-interest*. San Francisco, CA: Berrett-Koehler.
- Bloom, G. A., Stevens, D. E., & Wickwire, T. L. (2003). Expert coaches' perceptions of team building. *Journal of Applied Sport Psychology*, 15(2), pp. 129–143. doi:10.1080/10413200390213830
- Bordas, J. (2016). Leadership lessons from communities of color: Stewardship and collective action. *New Directions for Student Leadership*, 152, pp. 61–74. doi:10.1002/yd.20209
- Cai, R., Lu, L., & Gursoy, D. (2018). Effect of disruptive customer behaviors on others' overall service experience: An appraisal theory perspective. *Tourism Management*, 69, pp. 330–344. <http://dx.doi.org/10.1016/j.tourman.2018.06.013>
- Cline, D. K. (2015). Developing leaders for the next generation. *Fire Engineering*, 168(7), pp. 82–85.
- Collins, J. C. (2001). *Good to great: Why some companies make the leap . . . and others don't*. New York: HarperCollins.

- Collins, J. C. (2009). *How the mighty fall: And why some companies never give in*. New York: HarperCollins.
- Cooperrider, D. L., Whitney, D., & Stavros, J. M. (2005). *Appreciative inquiry handbook the first in a series of AI workbooks for leaders of change*. Brunswick, GA: Crown Custom Publishing.
- Covey, S. R. (2010). How can workplace learning and performance professionals instill trust in an organization's leaders? *T+D*, 64(10), p. 10.
- Creswell, J. W. (1998). *Qualitative inquiry and research design: Choosing among five traditions*. Thousand Oaks, CA: Sage.
- Daloz, L. A., Keen, C., Keen, J., & Daloz Parks, S. (1996). *Common fire: Lives of commitment in a complex world*. Boston, MA: Beacon Press.
- Darden restaurants: A leader in the full-service restaurant industry. Retrieved March 28, 2019, from www.darden.com/
- Deci, E. L. & Ryan, R. M. (1985). The general causality orientations scale: Self-determination in personality. *Journal of Research in Personality*, 19(2), pp. 109–134.
- Douglass, B. & Moustakas, C. (1985). Heuristic inquiry: The internal search to know. *Journal of Humanistic Psychology*, 25(3), pp. 39–55.
- Frick, W. B. (1990). The symbolic growth experience: A chronicle of heuristic inquiry and a quest for synthesis. *Journal of Humanistic Psychology*, 30(1), pp. 64–80.
- Gehlbach, H. (2017). Learning to walk in another's shoes. *Phi Delta Kappan*, 98(6), pp. 8–12. doi:10.1177/0031721717696471
- Grass, J. (2017). *Marriott uses IoT to create hotel room of the future*. Retrieved from www.hospitalitynet.org/news/4085695.html
- Greenleaf, R. K. (1977). *Servant leadership: A journey into the nature of legitimate power and greatness*. New York: Paulist Press.
- Kratz, G. (2017, June 14). *How a shorter work week can benefit companies, workers*. Retrieved June 14, 2018, from www.workflexibility.org/shorter-week-can-benefit-companies-workers/
- Laub, J. A. (1999). Assessing the servant organization: Development of the Organizational Leadership Assessment (OLA) model. *Dissertation Abstracts International*, 60(02), pp. 308A (UMI No. 9921922).
- Lawlor, L. (2002). *Derrida and Husserl*. Bloomington, IN: Indiana University Press.
- Mack, G. R. (2015). Visionary leadership: Charting a course through the storms. *Techniques: Connecting Education & Careers*, 90(3), pp. 10–11.
- MacMillan, D. (2015, January 30). *Uber Laws: A primer on ridesharing regulations*. Retrieved from <https://blogs.wsj.com/digits/2015/01/29/uber-laws-a-primer-on-ridesharing-regulations/>
- Miles, M., & Huberman, M. (1994). *Qualitative data analysis*. Thousand Oaks, CA: Sage.
- MOD Pizza is on the Private Titans. Retrieved March 28, 2019, from www.inc.com/profile/mod-pizza
- Moustakas, C. E. (1990). *Heuristic research: Design, methodology, and applications*. Newbury Park, CA: Sage.
- Nanus, B. (1995). *Visionary leadership*. San Francisco, CA: Jossey-Bass Publishers.
- Patton, M. Q. (1990). *Qualitative evaluation and research methods*. Newbury Park, CA: Sage.
- Porter, M. E. (1980). *Competitive strategy*. New York: Free Press.
- Schwab, K. (2016). *The Fourth Industrial Revolution: What it means and how to respond*. Retrieved March 28, 2019, from www.weforum.org/agenda/2016/01/the-fourth-industrial-revolution-what-it-means-and-how-to-respond/
- Schwab, K. (2017). *The fourth industrial revolution*. London: Portfolio Penguin.
- Schwab, K. (2018). *Shaping the future of the fourth industrial revolution: A guide to building a better world*. London: Portfolio Penguin.
- Senge, P. M. (2006). *The fifth discipline: The art and practice of the learning organization*. New York: Doubleday.

- Shaked, H., & Schechter, C. (2013). Seeing wholes: The concept of systems thinking and its implementation in school leadership. *International Review of Education*, 59(6), pp. 771–791. doi:10.1007/s11159-013-9387-8
- Shank, G. (2002). *Qualitative research: A personal skills approach*. Upper Saddle River, NJ: Merrill Prentice Hall.
- Sokolowski, R. (2000). *Introduction to phenomenology*. Cambridge: Cambridge University Press.
- Southwest airlines – Book flights & more – Wanna get away? Retrieved March 28, 2019, from www.southwest.com/
- Spears, L. (2010). Character and servant leadership: Ten characteristics of effective, caring leaders. *The Journal of Virtues & Leadership*, 1(1), pp. 25–30.
- Spears, L. C. & Lawrence, M. (2002). *Focus on leadership: Servant-Leadership for the twenty-first century*. New York: John Wiley.
- Starbucks – The best coffee and espresso drinks. Retrieved March 28, 2019, from www.starbucks.com/
- Thumma, S. & Beene, S. (2015, February 6). *Servant-leadership-one leadership style for judges' out-of-the-courtroom activities*. Retrieved March 27, 2019, from www.americanbar.org/news/abanews/aba-news-archives/2015/02/servant-leadership/
- Tourism 4.0. (2019). Tourism 4.0. Retrieved March 27, 2019, from <https://www.tourism4-0.org/>
- Uhl-Bien, M., Riggio, R. E., Lowe, K. B., & Carsten, M. K. (2014). Followership theory: A review and research agenda. *The Leadership Quarterly*, 25(1), pp. 83–104.
- van Dierendonck, D. (2011). Servant leadership: A review and synthesis. *Journal of Management*, 37(4), pp. 1228–1261. doi:10.1177/0149206310380462
- Von Eckartsberg, R. (1986). *Life-world experience: Existential-phenomenological research approaches in psychology*. Washington, DC: Center for Advanced Research in Phenomenology & University Press of America.
- Weisbord, M. (1992). *Discovering common ground: How future search conferences bring people together to achieve breakthrough innovation, empowerment, shared vision, and collaborative action*. San Francisco, CA: Berrett-Koehler.
- Weiser, B., & Goodman, J. D. (2019, January 03). *Judge blocks New York City law aimed at curbing Airbnb rentals*. Retrieved March 28, 2019, from www.nytimes.com/2019/01/03/nyregion/nyc-airbnb-rentals.html
- Wheatley, M. J. (1992). *Leadership and the new science: Discovering order in a chaotic world*. San Francisco, CA: Berrett-Koehler.
- Wheatley, M.J. (2005). *Finding our way: Leadership for an uncertain time*. San Francisco: Berrett-Koeler.
- Zhexembayeva, N., Galushin, I., Gorbach, M., (2019). *Titanic syndrome*. Retrieved from <https://chiefreinventionofficer.com/titanic-syndrome/>

Appendix I

Servant-Leadership | Fourth Industrial Revolution Assessment

Sharon Link Wyer, Ph.D. and Mark Beattie (2019)

These questions are based on a qualitative analysis of the mission statements in terms of Servant-Leadership and Industry 4.0 Strategy and accompanying evidence. Statements have been formulated for the assessment specialist to evaluate the mission statement, answer the questions by providing proofs from the collected mission statements, and then to provide any other anecdotal information to determine ways the organization is integrating servant-leadership with their

Industry 4.0 strategy. This assessment is for theoretical perspectives only and requires more holistic preparation to determine statistical implications.

Directions: Analyze each mission statement from the organization and respond accordingly to determine your findings. Use the Likert Scale to evaluate the following statements.

1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly agree

Mission Statement Reference to Servant-Leadership Tenets and Industry 4.0.

1. **Listening** – According to Spears (2010), “Listening, coupled with periods of reflection, is essential to the growth and well-being of the servant leader” (p. 27). Critical listeners are:
 - a. Engaged – they deliberately seek understanding as they listen.
 - b. Fully Attentive – they resist forming a response before the speaker finishes speaking.
 - c. Systematically Analytical – they apply the elements of reasoning to information, claims, and ideas.
 - d. Focused on Clarity – they ask follow-up questions until they achieve understanding.
 - e. Responsive – they paraphrase the speaker’s statements to demonstrate comprehension.
 - f. Empathetic – they try to understand the speaker’s needs, assumptions, values, and opinions.
 - g. Collaborative – they seek ways to find value in the combination of ideas and input.

Rate to the following:

The mission statement comprises strategy-driven decision-making through the tenets of critical listening.

Likert Scale 1 2 3 4 5

Free Response and supporting narrative:

2. **Empathy** – Empathy allows individuals to see through another’s eyes and is enhanced by mindful listening and spellbound attention. Empathy enables individuals to not only see from another perspective, but it also allows humans or artificial intelligence to evaluate a situation from a moral and upright point of view that will benefit and provide service to customers.

Respond to the following:

The mission statement provides evidence of a commitment to sustainability through empathy by integrating global and human best practice and highest service.

Likert Scale 1 2 3 4 5

Free Response and supporting narrative:

3. **Healing** – Spears (2010) argued, “One of the great strengths of servant-leadership is the potential for healing one’s self and one’s relationship to others” (p. 27) Healing is to make whole—either physically, emotionally, or spiritually.

Respond to the following:

The mission statement provides evidence of continuous and transformative improvements to foster a positive and healing guest experience.

Likert Scale 1 2 3 4 5

Free Response and supporting narrative:

4. **Awareness** – Empowering and developing learners offers students a sense of personal power and encourages students to be self-authoring, self-directed, and more aware (Laub, 1999; van Dierendonck, 2011).

Respond to the following:

The mission statement provides evidence that organization designing a technology blueprint to foster systemic change through the lens of deep awareness—both interpersonally, regionally, and globally.

Likert Scale 1 2 3 4 5

Free Response and supporting narrative:

5. **Persuasion** – As Spears (2010) discussed, a servant-leader seeks to convince others and build consensus, rather than coerce compliance.

Respond to the following:

The mission statement provides evidence that the organization fosters a change management and leadership approach to tourism and hospitality through persuasive invitation that relies on transformative improvement, systems design, and a commitment to serving guests first.

Likert Scale 1 2 3 4 5

Free Response and supporting narrative:

6. **Conceptualization** – Naturalistically, servant-leaders are systems thinkers (Senge, 2006) and hold multiple perspectives simultaneously.

Respond to the following:

The mission statement provides evidence that organization conceptualizes through the cross-functional analysis of all integrated systems that uses technology to serve rather than replace.

Likert Scale 1 2 3 4 5

Free Response and supporting narrative:

7. **Foresight** – Foresight stems from strategic thinking and visionary leadership (Mack, 2015; Nanus, 1995) and enables servant-leaders to evaluate lessons from the past, synthesize realities of the present, and predict future consequences based on this deep level of knowledge.

The mission statement provides evidence that organization maintaining foresight regarding the digital global landscape and internal ecosystem and applies insights properly, ethically, and auspiciously.

Likert Scale 1 2 3 4 5

Free Response and supporting narrative:

8. **Stewardship** – Servant-leaders consider they are entrusted with the nurturance and custody of any assigned to their care. Stewardship implies a higher level of consideration and governance operating a moral level and holding in trust for the greater good of society (Block, 1993; Spears, 2010).

The mission statement provides evidence that organization continual reinvention is focused through stewardship and doing what is best for others because of ethical best practice and commitment to service.

Likert Scale 1 2 3 4 5

Free Response and supporting narrative:

9. **Commitment to the Growth of People** – In order to nurture the personal and professional growth of constituents, the servant-leader recognizes and acts on the personal responsibility to do everything in his or her power to empower others (Spears, 2010).

The mission statement provides evidence that dynamic collaboration internally and externally among stakeholder occurs through the commitment to the growth of others using technology as an assistive tool, not as a replacement for humans.

Likert Scale 1 2 3 4 5

Free Response and supporting narrative:

10. **Building Community** – In order to nurture the personal and professional growth of constituents, the servant-leader recognizes and acts on the personal responsibility to do everything in his or her power to empower others (Spears, 2010). Greenleaf (1977/2002) wrote, “All that is needed to rebuild community as a viable life is for enough servant-leaders to show the way, not by mass movements, but by each servant-leader demonstrating his or her unlimited liability for a quite specific community-related group” (p. 53).

The mission statement provides evidence that community-building occurs by connecting guests digitally, socially, and cross-functionally for the purposes of ethical commitment, sustainability, and dedication to service.

Likert Scale 1 2 3 4 5

Free Response and supporting narrative:

4

LOVE IS THE BRIDGE BETWEEN YOU AND EVERYTHING

Relationships of identity, experience, and benevolence to travelers' loyalty and willingness to purchase

Pantea Foroudi and Reza Marvi

4.1 Introduction

There is only one real satisfaction in human life, to love and be loved. Sometimes humankind can go beyond this and start loving other than people, brands for example (Batra et al., 2012). Brand love is a newly emerged concept in tourism's academic literature. Researchers have shown that brand love is an antecedent of brand loyalty and co-creation behavior (Aro et al., 2018; Giovanis and Athanasopoulou, 2018; Merz et al., 2018). In addition, researchers have stated that brand love is positively linked to willingness to purchase (Bairrada et al., 2018; Liu et al., 2018; Zhang and Patrick, 2018). Although there have been plenty of quite different studies regarding brand love and its consequences and antecedents in a sharing-economy context, there have not been many studies about brand love and its results in the peer-to-peer tourism context. The area surely is important for conducting research, owing to the increasing competition in the tourism industry and the emergence of different and distinctive sharing-economy tourism platforms such as Airbnb.

What are the main influencing constructs affecting travelers' love in a sharing-economy tourism context such as Airbnb? What are the key influences of sharing-economy's identity on travelers' experience and benevolence which can impact on their likability and satisfaction? What and how can travelers' experience and benevolence influence travelers' love towards sharing-economy? What makes sharing-economy customers' platforms love a website like Airbnb? What are the key consequences of travelers' sharing-economy love? When and why are such relations likely to occur? In answering such questions, there have been different answers ranging from identity (Foroudi et al., 2018), satisfaction (Aro et al., 2018), and likability (Ramadan, 2018; Suetrong et al., 2018).

This study draws upon the theory of love (Langner et al., 2015; Sternberg, 1986), and aims to find a comprehensive understanding of brand love as part of

peer-to-peer accommodation and its antecedents and consequences. In addition, this research tries to find an understanding of when customers are more likely to form and feel a sense of love with sharing-economies such as Airbnb. This chapter contributes to the burgeoning research on the peer-to-peer relationship by offering the nature of brand love as one of the most important psychological elements for the kind of sustainable and meaningful relationship that tourism managers and policymakers are seeking to make with travelers. Yet, there are a limited number of studies regarding sharing-economy websites such as Airbnb and trust and satisfaction, together with co-creation behavior. Furthermore, there are a lack of studies on why tourists choose websites such as Airbnb to book their trips, instead of using the traditional forms of travel agencies and hotels.

The following sections provide an analysis of sharing-economy as a disruptive innovation; they try to develop a deeper understanding of brand love antecedents and consequences and develop the traveler-level conceptual model. The method and methodology employed to examine the proposed conceptual framework is described. Afterwards, the paper concludes with a discussion of the theoretical and managerial significance, limitations and suggested avenues for future studies.

4.2 Identity and experience

Identity is the core value of the company which remains unchanged at all times, while the products and services may not (Huang and Cai, 2015). Identity plays an important role in the communication process. Identity makes customers pay more attention to a sharing-economy, and in turn it enables the recognition and remembering of a sharing-economy during purchasing, using, and after-purchase behavior (Foroudi et al., 2016); it is also important for firms to connect to a customer's deepest values (Aro et al., 2018). Identity is conceptualized as what makes a company distinctive from its competitors in a market. Like human interactions, key parts of identity are combinations of the core values and demographics presented in the market by a sharing-economy (Perez-Vega et al., 2018). In a tourism context, communicating this distinctive identity through customer experience is quite important. Traveler experience can aid companies to develop relationships with their online tourism website which will ultimately be very beneficial for them (Foroudi et al., 2017). Furthermore, customers evaluate a product/service value based on their experience (Wu et al., 2018). Virtual brand experience can have an impact on a customer's behavior (Daugherty et al., 2008; Hussein, 2017). This experience can be gained through encounters with a firm's touchpoints (Daugherty et al., 2008; McLean et al., 2018) such as the Airbnb website. For instance, Airbnb hosts can create an image about themselves through their online profiles. Through that, they have the chance to form consumer insight about their identity, make positive impressions of themselves, and, as result, positively affect their customers' choice (Tussyadiah and Park, 2018).

Travelers these days pay increasing attention to the importance of modern values such as trust (Tussyadiah, 2016), transparency (Nunkoo et al., 2018), and fairness

(Park et al., 2018). Benevolence, as one of these modern values, is conceptualized as integrity, moral behavior and sincerity, and helpfulness, and generally perceived well-being of a particular brand (Choi et al., 2016). Along with other factors such as longevity (Mehta et al., 2006), benevolence (Doney and Cannon, 1997) is about how much a brand is willing to aid its customers (Giovanis and Athanasopoulou, 2018), and the credit given to customers due to implementation of a customer-oriented strategy to the account of customers' benefit, even before brand benefit, over a short period of time (Gurviez and Korchia, 2003).

Identity can have a huge impact on trust (Louis and Lombart, 2010). As plenty of online travelers and customers may lack knowledge of online peer-to-peer accommodation websites (e.g., Airbnb, booking.com, tripadvisor.com) that work through the internet, identity can have an impact on trust, ultimately resulting in shaping online travelers' behavior. What is more, new customers who lack experience with these online sharing economies rely on the identity and the content made by previous travelers (Sparks et al., 2016) who booked their trips through them.

Experience can be influenced by identity (Kara et al., 2018; Phillips et al., 2014; Velasco Vizcaíno, 2018). A wonderful case study of Harley-Davidson revealed that customers can not only shape experience, but they can have an impact on a firm's identity as well (Schembri, 2009). In addition, many travelers and customers are becoming more interested in expressing their personal self-image through identity gained by their experience (Kim et al., 2015). Identity reflects the customer outlook toward an online sharing-economy gained by customer experience (Black and Veloutsou, 2017), thus as discussed earlier, we propose the following hypotheses:

H1: Identity positively influences travelers' experience (H1a) and benevolence (H1b)

4.3 Experience, benevolence, satisfaction and likability

Unique experience is the main key of shaping future travelers' behavior. Customer experience can aid companies to make long-lasting relationships, which are consequently very beneficial, (Foroudi et al., 2017). Travelers evaluate a product/service according to their experience (Wu et al., 2018). The experience for travelers is gained through online sharing-economy touchpoints (McLean et al., 2018). Likability/unlikability of brands is mostly dependent on the travelers' experience (Zarantonello and Schmitt, 2013). Likability is defined as the evaluation of charm a traveler finds in a firm which is a psychological factor that has impact on customer reaction regarding other competitors in the market (Reysen, 2005).

Experience has influence on likability. More positive experience can result in generating more liking of a specific brand (Völckner and Sattler, 2006). Having the same experience level can result in different levels of likability (Sirianni et al., 2013). Likability for consumers is directly linked to the brand experience gained by their experiences (Lau and Lee, 1999). In addition, brand likability can reinforce

customer-brand relationship and result in better financial performance of firms (Narteh, 2018).

Experience also plays an important role in influencing satisfaction (Ha and Perks, 2005). In today's highly competitive peer-to-peer accommodation websites, where plenty of firms are operating, sharing economies should pay extra attention to accommodating their customers' needs as customer satisfaction can be gained with difficulty and is easy to lose (Ngai, 2005). Satisfaction is expectations driven from a deduction of perception. What is more, satisfaction shapes future customer behavior toward a sharing-economy (Brown et al., 2016; Chen et al., 2016). Service experience can have a significant influence on travelers' satisfaction with a received service (Wu et al., 2018). In addition, different scholars stated that the quality of experience has significant impact on travelers (Kao et al., 2008; Wu and Li, 2015, 2017). A good customer experience might result in trust/benevolence in the brand (Lemon and Verhoef, 2016). In a tourism context, a study done by Filieri et al. (2015) revealed that experience is the antecedent of benevolence in peer-to-peer accommodations sites such as Airbnb. Another study done by Han and Hyun (2015) suggested that satisfactory experience plays an important role in forming benevolence. The sharing-economy sites such as Airbnb, in which customers generate its content and reviews, usually have a high level of source credibility resulting in benevolence of new travelers (Boo and Busser, 2018). Also, successful customer experience can aid in developing benevolence in the sharing-economy s (Choo and Petrick, 2014). Finally, as discussed above we propose the following hypothesis:

***H2:** Experience positively has impact on travelers' benevolence (H2a), satisfaction (H2b), and likability (H2c)*

4.4 Benevolence and satisfaction

Benevolence plays a significant role in any business transactions. Having benevolence in sharing-economy s will result in choosing a sharing-economy and peer-to-peer accommodations like Airbnb (Kim et al., 2011; Sparks and Browning, 2011). Authors (Silva and Topolinski, 2018; Sirdeshmukh et al., 2002) conceptualized benevolence as expectations of customers regarding how the service provider can be relied on and to what extent it can deliver its promises. Nusair and Hua (2010) also stated that benevolence/trust is the state of how much a firm is trustworthy and can be counted on by its customers. In tourism, benevolence refers to the enthusiasm of travelers to depend on the ability of sharing-economy to delivering their advertised promises. In the tourism industry, benevolence has been found to have an enormous impact on the success of sharing-economies (Ponte et al., 2015) and businesses operating in the tourism industry (Kelliher et al., 2018). Benevolence has been found to have positive impact on satisfaction in the tourism industry (Chang, 2014). Oliver (1993) conceptualized satisfaction as the customers' responses and the assessment that a product/service feature provides for its customers. Furthermore,

customers' judgment response is the main aspect of describing satisfaction (Han et al., 2017). Besides, benevolence's perceived value has an impact on satisfaction (Eid and El-Gohary, 2015). Perceived value has been conceptualized as overall usefulness of a product/service measured by the difference between what is gained and what is lost (Busser and Shulga, 2018). The concept of value has received burgeoning consideration both in marketing and tourism research in the past 30 years (Prebensen and Xie, 2017). In the tourism industry, perceived value is conceptualized as an approach which tourists gain, form, and derive information according to their distinctive experiences (Prebensen et al., 2012).

There have been many studies to analyze the impact of satisfaction on benevolence (Han and Hyun, 2015; Jin et al., 2008; Kim et al., 2006; Lee and Back, 2010; Nusair and Hua, 2010; Ranaweera and Prabhu, 2003). However, there have been limited studies relating to the effect of benevolence on satisfaction. Recent research also has shown that benevolence/trust has impact on satisfaction (Drennan et al., 2015). Furthermore, it was found that benevolence can be an antecedent of satisfaction in any business relations regardless of its kind (Altinay et al., 2014). Another study done by Brashear et al. (2005) suggested that benevolence has a positive impact on satisfaction as well as customer-company relations. Plenty of recent studies have shown the important role of tourists' perceived value regarding satisfaction (Ryu et al., 2012). Travelers' perceived value of a tourism sharing-economy such as Airbnb has impact on their satisfaction and their future behavior (Fang et al., 2016; Lin et al., 2017; Lin and Kuo, 2016; Liu et al., 2015). To date and to researchers' knowledge there has not been any study analyzing the moderator role of perceived value on satisfaction; as discussed above, we propose the following hypothesis:

H3: *Benevolence has impact on travelers' satisfaction*

4.5 Likability, satisfaction and love

Every firm needs its customers to like their different services and products (Kotler and Armstrong, 2010). Besides, brand likability in a customer relationship is the key driver of other customer relationships (Narteh, 2018), and a contributing factor for brand performance (Ewing and Napoli, 2005). During the last few years, scholars have tried to find a deeper and comprehensive understanding of customers' emotional impact on their decision behavior which ultimately leads their studies to a concept called brand likability (Nguyen et al., 2015). This is conceptualized, as Nguyen et al. (2015) suggested, as an antecedent of creating brand attachment and love. What is more, customers are driven toward a particular brand when they like it (Carroll and Ahuvia, 2006). Further, Batra et al. (2012) suggested that customers who experience a liking for a brand are great assets for firms owing to their advocacy and evangelism, and unwillingness to purchase competitor products and services. These three are all antecedents and consequences of brand love.

Different firms in a competitive market such as peer-to-peer accommodation platforms are trying to increase their customer satisfaction (Tussyadiah, 2016). This

satisfactory feeling can lead to a phenomenon called brand love. Love as Carroll and Ahuvia (2006) conceptualized it is an emotional and passionate feeling of an individual for a brand. Based on their description, satisfaction is an antecedent of brand love (Schnebelen and Bruhn, 2018). They also confirmed that the concept of love is “experienced by some, but not all, satisfied consumers” (p. 81). According to authors (Albert et al., 2007; David, 2018), being satisfied with a particular brand for a period of time can make customers love particular brands. Besides, a study done by Whang et al. (2004) revealed that in order to have any sense of love toward a brand, customers should be first satisfied with their chosen brands. Furthermore, as Thomson et al. (2005) stated, satisfaction can lead a customer to form an emotional bond over a period of time on account of multiple interactions with the brand. Therefore, we propose the following hypotheses:

H4: Likability (H4a) and satisfaction (H4b) positively influence travelers’ love

H4c: Likability positively influences travelers’ satisfaction

4.6 Travelers’ love, co-creation, loyalty, and willingness to purchase

Love is conceptualized as a degree to which a satisfied customer forms a relationship with a specific brand (Carroll and Ahuvia, 2006). It has been analyzed through measuring different concepts ranging from customer satisfaction (Fournier and Mick, 1999; Severt et al., 2007) and brand loyalty (Aro et al., 2018; Hudson et al., 2015). Love is an emerging concept referring to a formed emotional attachment between a satisfied customer and a brand. This concept is drawn on the theory of Sternberg’s (1986) triangular theory of love. This theory mainly focuses on interpersonal love like the romantic love that humankind can experience. However, Batra et al. (2012) stated that brand love in marketing cannot be studied like love between men. He highlighted five differences as compared to love in humankind. As he stated, the first difference is that brand love is often less significant and important for customers, compared to their personal love. The second one is that although interpersonal love contains a strong concern about the loved one, this is not true and appropriate for brand love that customers may experience.

The third important difference is that love in humankind is usually a result of a mutual relationship while in brand love it is only one-sided. The fourth difference is that in Sternberg’s triangular theory of love, there is nothing relating to the combination of the beloved into the self, while this integration seems important in the academic literature of brand love. Finally, a love is a person’s conscious perspective to consider their relationship as love which is different from brand love. Besides, brand love is one of the six dimensions used for customer-brand relationships (Roy et al., 2013). The concept of love can respond to the question of whether travelers can ultimately feel a love toward particular travelers’ sharing-economy or not. Researchers have revealed that such feeling might really exist and some customers may form such relationships with brands (Rageh Ismail and Spinelli, 2012).

Love has a positive impact on co-creation behavior and can make customers actively engage in producing values sustainable for themselves and profitable for the firms (Merz et al., 2018). Previous studies have shown the importance of co-creation behavior in producing new products and services (Hoyer et al., 2010; Kohler et al., 2011; Ranjan and Read, 2016; Skålén et al., 2015). Co-creation behavior mainly consists of two types (1) customer participation behavior and (2) citizenship behavior (Yi and Gong, 2013). The first type of behavior refers to customer co-creation of a particular service or product with a particular company (Yi and Gong, 2013) and the second type refers to additional effort that customers make for improving company performance (Yi and Gong, 2013). In addition, co-creation needs users to be actively engaged psychologically (Grissmann and Stokburger-Sauer, 2012). The initial starting point of co-creation is the exiting bonds between the customers and brands. This relationship can be bounded based on the shared values (Bagozzi and Dholakia, 2006; Liu, 2018) and also emotional bonds (Casidy et al., 2018; Ouyang et al., 2017), which illustrates that the center of concentration comes in co-creation behavior, and the brand love can be used. As discussed, love can have a direct effect on co-creation (Quach and Thaichon, 2017). Online tourism websites use their online platforms (for example, Airbnb) to actively engage their customers.

A study done by Kim and Fesenmaier (2017) on an Airbnb competitors (Tripadvisor.com) revealed that a traveler is no longer just an information seeker but is actively an information inventor, editor, and a channel of distribution as well, which consequently leads customers to co-creating their personal and individual experience. However, till today, based on the author's knowledge, there has been limited study regarding the influence of brand love on co-creation. Besides co-creation behavior, Carroll and Ahuvia (2006) stated that brand love can result in brand loyalty. Regardless of the sharing-economy nature of business, this result is the same for all of them (Bilgihan, 2016). Customers who experience brand love are interested in future purchases (Iordanova, 2017), and recommending the brand to their friends and relatives (Sánchez-Rebull et al., 2017). All of the mentioned behaviors are associated with brand loyalty (Leckie et al., 2016). Besides, Sternberg (1986) suggested that individuals who love their partners are more loyal and dedicated to their partners. Another resulting consequence of brand love which has been widely discussed in academic literature is enthusiasm to pay a higher price and future purchases (e.g., Batra et al., 2012; Giovanis and Athanasopoulou, 2018; Hosany and Gilbert, 2010; Huang and Cai, 2015; Pandey and Chawla, 2014; Swimberghe et al., 2014). According to Loureiro and Kastenholtz (2011), there is a relationship between the power of love and a customer's motivation to pay a higher price for a brand. What is more, Albert et al. (2013) stated that when customers love their chosen products and services, they are willing to pay more. Also, Roy et al. (2013) suggested that firms can sell their products and services at higher prices through love. In addition, Fetscherin and Heinrich (2015) found that future purchase behavior can be shaped through love. As discussed earlier, we propose the following hypothesis:

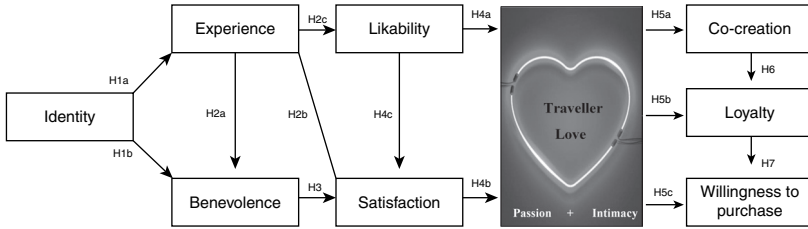


FIGURE 4.1 The conceptual research model

H5: Brand love positively influences co-creation behavior (H5a), loyalty (H5b), and willingness to purchase (H5c).

4.7 Co-creation, loyalty, and willingness to purchase

Companies try to involve their customers in identity group activities so that they can improve customers' feelings of being as a member of a community (Benur and Bramwell, 2015). A wide range of studies have suggested that co-creation behavior has a positive effect on improving this sense of community and ultimately improving the sense of loyalty to a particular brand (e.g., Auh et al., 2007; Fernandes and Cruz, 2016; Park and Ha, 2016; Sørensen and Jensen, 2015; Suntikul and Jachna, 2016). As a result, we suggest that travelers' engagement in service and product production will have an influence on their loyalty. Travelers' loyalty means having a deep commitment for using services or products of a particular brand in the future (Almeida-Santana and Moreno-Gil, 2018) which results in better performance of a brand (Geetha et al., 2017).

Maybe the most predictable results of brand loyalty are purchase intention (Yoon and Uysal, 2005), future purchase (Chi and Qu, 2008; Yuksel et al., 2010; Yi et al., 2018) and willingness to pay higher prices for services or products (Aro et al., 2018; Casidy et al., 2018). The concept of loyalty can result in customers using a brand again in the future (Haryanto et al., 2016). By the advances of technology, customers have a greater chance of expressing their willingness to purchase to other customers (Eelen et al., 2017). Thus, we propose the following hypotheses:

H6: Co-creation positively has influence on travelers' loyalty

H7: Brand loyalty positively influences travelers' willingness to purchase

4.8 Materials and methodology

This research was conducted to understand travelers' identity and experiences in the sharing-economy and how they can impact on love, loyalty and willingness to purchase from the travelers' perception. The concept of a peer-to-peer website and sharing-economy has developed against a background of rapid growth in global tourist arrivals around the globe and in the European Union. According to UNWTO (2018) international tourist arrivals, the United Kingdom has

ranked eighth and attracted the world's attention as a tourist destination. The survey was conducted to obtain data for supplementary scale purification and hypotheses investigation. The following research consisted of questions referring to understanding how identity and travelers' experience and benevolence can impact on their likability and satisfaction, which then influence travelers' love towards sharing-economy, co-creation, loyalty, and willingness to purchase.

This study was done with UK tourists using a peer-to-peer accommodation website (Airbnb) in the UK by utilizing a convenience sampling technique (Bryman et al., 2007; McDaniel and Gates, 2006). We employed three skilled field research assistants. From 600 questionnaires distributed among the sharing-economy's users/ travelers/customers face-to-face and online, 417 usable completed questionnaires were processed and examined. In addition, non-probability "snowballing" was used as a distribution method by inviting original informants to recommend others who could offer further insights (Kirby and Kent, 2010).

Following the recommendations of previous studies (Foroudi et al., 2018), before the main survey study, a qualitative study was employed from interviews with academics and experts and focus groups with travelers. During the qualitative stage, eight interviews were conducted with experts in tourism and four focus groups (a total of 22 participants). Table 4.1 illustrates the results of the demographic profiles of the participants from the survey. 54.7% were female and 41.0% were under 25 years of age. The ethnic group of the majority of participants was white British (26.1%) followed by white-Irish (18.2%). The participants' occupations were students (16.8%), Craft workers (14.6%), and office/clerical staff (14.4%); 40.8% of the participants had a postgraduate degree.

TABLE 4.1 The domain and items of construct in extant literature, Cronbach Alpha, scale items, mean, and standard deviation

	<i>CFA Loading</i>	<i>Mean</i>	<i>Standard Dev.</i>	<i>AVE</i>	<i>Cons. Reliability</i>	<i>Cronbach's alpha</i>
Identity						
Personality				0.863	0.775	0.934
X has sincere personality	0.826	5.2470	1.43410	Aaker, 1997; Melewar et al., 2017		
X has rugged personality	0.880	5.0384	1.63744			
X has competent personality	0.883	5.0312	1.60423			
X has sophisticated personality	0.861	5.1079	1.63800			

(Continued)

TABLE 4.1 (Cont.)

	<i>CFA Loading</i>	<i>Mean</i>	<i>Standard Dev.</i>	<i>AVE</i>	<i>Cons. Reliability</i>	<i>Cronbach's alpha</i>
Positioning				0.893	0.728	0.907
X has a strong competitive positioning strategy in the marketplace	0.911	5.4556	1.55927	Hatch and Schultz, 2010; Melewar et al., 2017		
X differs across product categories	0.937	5.4916	1.54128			
X is distinctive	0.832	5.6571	1.58718	Qu et al., 2015		
Prestige				0.936	0.718	0.976
X has a high status	0.737	5.7050	1.32534	Hwang and Han, 2014		
X has an upscale image	0.891	5.9161	1.17880			
X has a respected image	0.914	5.8657	1.24081	Hwang and Han, 2014		
Promise				0.886	0.737	0.957
X promises courtesy	0.955	5.3621	1.63372	Zyman, 2002		
X promises efficiency	0.891	5.4628	1.61251			
X promises entertainment	0.963	5.4221	1.52520			
Experience						
Affective Experience				0.853	0.721	0.890
My decision to use X made me happy	0.795	5.5851	1.33484	Dennis et al., 2014, Foroudi et al., 2016; Yuksel et al., 2010		
My decision to use X was a right decision	0.911	5.6978	1.33547			
My decision to use X made me satisfied	0.877	5.5468	1.42382			

(Continued)

	<i>CFA Loading</i>	<i>Mean</i>	<i>Standard Dev.</i>	<i>Cons. AVE</i>	<i>Cons. Reliability</i>	<i>Cronbach's alpha</i>
Intellectual Experience				0.893	0.727	0.938
I can find what I am looking for in X	0.860	4.9329	1.53024		Dennis et al., 2014	Foroudi et al., 2016
I find X helpful	0.903	5.1799	1.52030			
I can decide better with X	0.894	4.9688	1.63539			
Benevolence				0.853	0.719	0.979
X is sincere	0.851	4.9472	1.73125		Tussyadiah and Park, 2008	
X is helpful	0.870	4.8657	1.75581			
X is welfare	0.837	5.2302	1.60520			
Likability				0.873	0.705	0.862
Airbnb is friendly X	0.815	5.2038	1.57021		Nguyen, Melewar, Chen, 2015;	Reysen, 2005
I find X attractive	0.847	5.2902	1.60220			
I find X employees approachable	0.726	5.4173	1.57611			
Satisfaction				0.873	0.724	0.896
My decision to use X was wise	0.901	4.7842	1.62061		Chu and Lu, 2007	
My decision to purchase from X was a right decision	0.864	4.9568	1.71197			
My decision to use X met my needs	0.853	4.8106	1.66989			
Traveler e-retailer Love						
Passion				0.859	0.720	0.938
I think about X during the day	0.809	4.7986	1.70624		Albert and Valette-Florence, 2010	
I feel lonely when I am no longer with X	0.879	4.7626	1.70794			
I have some obsessive thoughts about X	0.888	4.9161	1.70834			

(Continued)

TABLE 4.1 (Cont.)

	<i>CFA Loading</i>	<i>Mean</i>	<i>Standard Dev.</i>	<i>AVE</i>	<i>Cons. Reliability</i>	<i>Cronbach's alpha</i>
Intimacy				0.928	0.788	0.963
I know X better than its competitors	0.908	4.8417	1.75244	Kim et al., 2005		
I describe X to my friends	0.903	5.2542	1.56821			
I am familiar with X	0.952	5.0192	1.69264			
I feel comfort with X	0.948	5.0911	1.66449			
Co-creation				0.857	0.720	0.888
X I use for my past experiences to arrange my current purchase	0.890	5.5588	1.48130	Grissemann and Stokburger- Sauer, 2012		
X there are useful suggestions about how to arrange my purchase	0.885	5.4101	1.47322			
Considerable amount of time arranging my purchase	0.796	5.3957	1.66966			
Loyalty				0.889	0.727	0.914
I will use X again	0.856	5.3765	1.53006	Kolar and Zabkar, 2010		
I will recommend X to my friends and relatives						
I will visit X again in the future	0.884	5.5612	1.38040			
I will recommend X services to friends in the future	0.926	5.4700	1.42764			

(Continued)

TABLE 4.1 (Cont.)

	<i>CFA Loading</i>	<i>Mean</i>	<i>Standard Dev.</i>	<i>Cons. AVE</i>	<i>Cons. Reliability</i>	<i>Cronbach's alpha</i>
Willingness to purchase				0.883	0.726	0.934
I am happy for the cost of accommodation	0.890	5.0504	1.43274		Chu and Lu, 2007	
I am willing to pay more for X	0.844	5.0048	1.46595			
I am considering using X again in the future	0.915	5.0168	1.44854			

4.8.1 Measurement

This study employed the item measurement for the research constructs of interest which were well-recognized from previous studies (Foroudi et al., 2018), established to be psychometrically sound (Churchill, 1979; Hair et al., 2006). Identity was measured with four constructs (personality, positioning, prestige, and promise) (Melewar et al., 2017; Hatch and Schultz, 2001; Hwang and Han, 2014) and experience with two constructs (affective experience and intellectual experience) (Dennis et al., 2014; Foroudi et al., 2016; Yuksel et al., 2010). Benevolence was measured through three item measurements (Tussyadiah and Park, 2018). Likability was measured through three item measurements (Nguyen et al., 2015; Reysen, 2005). Satisfaction was measured through three item measurements (Chu and Lu, 2007). Love contained two constructs (passion and intimacy) based on the context of the research (Albert and Valette-Florence, 2010). Co-creation was measured through three item measurements (Grissemann and Stokburger-Sauer, 2012). Loyalty was obtained through four item measurements (Kolar and Zabkar, 2010). Ultimately, willingness to purchase was analyzed through three item measurements (Chu and Lu, 2007). Respondents were asked to show their feelings on seven-point Likert-type scales ranging from (1) strongly disagree to (7) strongly agree.

The genuine measurement scales were subjected to a series of reliability and factor investigations. The composite reliability (construct level reliability) reassures that items assigned to the same constructs reveal higher relationships with other items. Based on the recommendation by Hair et al. (2006) and Nunnally (1978), the compound reliabilities of the scales were all above the commonly accepted requirements for psychometric reliability examinations (.862 through .979 > .70).

4.9 Results and analysis

To examine inter-relationships between the current study variables and to clarify the variables in terms of their common underlying factors, EFA (exploratory factor analysis) was employed (Hair et al., 2006). In addition, EFA was employed

TABLE 4.2 Correlation matrix for the constructs

	Personality	Positioning	Prestige	Promise	Affective Experience	Intellectual Experience	Benevolence	Likability	Satisfaction	Passion	Intimacy	Co-creation	Loyalty	Willingness to purchase
Personality	1													
Positioning	.253*	1												
Prestige	.177**	.169**	1											
Promise	.275**	.202**	0.064	1										
Affective Experience	.279**	.131**	.202**	.105*	1									
Intellectual Experience	.352**	.185**	.0246**	.174**	.343**	1								
Benevolence	.300*	.174**	.082*	.206**	.212**	.155**	1							
Likability	.401**	.237**	.205**	.200**	.296**	.237**	.306**	1						
Satisfaction	0.025	.135**	0.037	0.065	.155**	.125**	.187**	.270**	1					
Passion	.289**	.161**	.241**	.221**	.273**	.384**	.202**	.429**	.279**	1				
Intimacy	.176**	0.029	.086*	-0.008	.208**	.139**	.082*	.336**	.125**	.300**	1			
Co-creation	.292**	.161**	.440**	.165**	.203**	.267**	.246**	.254**	0.069	.250**	.133**	1		
Loyalty	.204**	0.073	0.066	.112*	.230**	.223**	.308**	.266**	.183**	.268**	.173**	.162**	1	
Willingness to purchase	0.070**	.200**	.238**	.095*	.173**	.203**	.151**	.278**	.439**	.330**	.170**	.157**	.271	1

** .Correlation is significant at the 0.01 level (1-tailed).

*. Correlation is significant at the 0.05 level (1-tailed).

to scrutinize internal reliability, illuminate the factor structure of measures, and determine underlying structures in the research constructs (Tabachnick and Fidell, 2007). Initially, 44 measures of the nine proposed constructs were subjected for EFA. Table 4.2 reports item loadings, ranging from 0.726 through 0.955 from the rotated component matrix, the results show they satisfy the minimum criteria for factor loadings (Hair et al., 2006) and the fitness in the theoretical factor structures. Furthermore, the results specify that each factor was internally consistent (Nunnally and Bernstein, 1978). Table 4.3 illustrates the correlation matrix for the constructs.

TABLE 4.3 Results of hypothesis testing

<i>HYPOTHESES RELATIONSHIP</i>			<i>Estimate</i>	<i>S.E</i>	<i>C.R</i>	<i>p</i>	
H1a	Identity	---> Experience	0.555	0.098	5.644	***	Significant
H1b	Identity	---> Benevolence	0.522	0.107	4.89	***	Significant
H2a	Experience	---> Benevolence	.129	.093	1.381	.167	Not-Significant
H2b	Experience	---> Satisfaction	.392	.147	2.664	.008	Significant
H2c	Experience	---> Likability	0.66	0.143	4.602	***	Significant
H3	Benevolence	---> Satisfaction	0.205	0.079	2.6	0.009	Significant
H4a	Likability	---> Traveler e-retailor love	0.34	0.059	5.771	***	Significant
H4b	Satisfaction	---> Traveler e-retailor love	0.183	0.035	5.185	***	Significant
H5a	Traveler e-retailer love	---> Co-creation	.645	.150	4.298	***	Significant
H5b	Traveler e-retailer love	---> Loyalty	0.691	0.152	4.557	***	Significant
H5c	Traveler e-retailer love	---> Willingness to purchase	1.06	0.195	5.429	***	Significant
H6	Co-creation	---> Loyalty	0.064	0.046	1.382	0.167	Not-Significant
H7	Loyalty	---> Willingness to purchase	0.063	0.057	1.107	0.268	Not-Significant

This research predominantly uses a positivist paradigm (a quantitative method) to inspect the causal association among the proposed research hypotheses (DeVellis, 2012). In order to examine the model and hypotheses, AMOS 21 (analysis of moment structure) was used. Based on the recommendation by Hair et al. (2006) and Tabachnick and Fidell (2007), the model fit was checked for total fit indices.

RMSEA (the root mean squared approximation of error) ($0.055 < 0.08$) and CFI (the comparative fit index) (.936) provide sufficient special information to the model which presents an acceptable fit (Garver and Mentzer, 1999). TLI (Tucker-Lewis index) and IFI (the incremental fit index) were 0.931 and 0.936 respectively. All were greater than the recommended threshold of 0.90 and each criterion of fit, so indicated that the proposed measurement model fit was satisfactory (Hair et al., 2006).

Furthermore, GFI (the goodness-of-fit index) measures the fitness of a model in comparison with another model and the result (0.813) and AGFI (the adjusted goodness-of-fit index) changes model complexity (0.789). Both the GFI and AGFI are below the acceptable shortcuts levels. According to Hair et al. (2006), there is no specific value on any index that can separate distinct models into satisfactory and unsatisfactory fits. Based on the standardized parameter estimates for the hypothesized associations between the research constructs, the findings offer support for H1a (identity- \rightarrow experience $\gamma=0.555$, $t=5.644$) and H1b (identity- \rightarrow benevolence $\gamma=0.522$, $t=4.89$). Regarding H2a (experience- \rightarrow benevolence), the relationship between customers'/visitors'/tourists' experience and their benevolence to Airbnb was not statistically significant ($\gamma=.129$, $t=1.381$, $p=0.167$). On the other hand, there is a significant relationship between travelers' experience and their satisfaction (H2b $\gamma=0.392$, $t=2.664$) and likability (H2c $\gamma=0.66$, $t=4.602$). With regard to hypothesis H3, there is a significant relationship between travelers' benevolence and their satisfaction ($\gamma=.195$, $t=3.09$). H4a (likability- \rightarrow travelers' sharing-economy love) and H4b (satisfaction- \rightarrow travelers' sharing-economy love) were accepted ($\gamma=0.34$, $t=5.771$; $\gamma=0.183$, $t=5.185$, respectively). The relationship between travelers' sharing-economy love and co-creation (H5a), loyalty (H5b), and willingness to purchase (H5c) ($\gamma=.645$, $t=4.298$; $\gamma=0.691$, $t=4.557$; $\gamma=1.06$, $t=5.429$, respectively) are confirmed. The relationship between co-creation and loyalty (H6: $\gamma=0.064$, $t=1.382$, $p=0.167$) was accepted. In addition, the results show that there is no relationship between travelers' loyalty and willingness to purchase (H7: $\gamma=0.063$, $t=1.107$, $p=0.268$). Therefore, hypotheses 6 and 7 were rejected. As for the findings, it can be a challenge for the online sharing-economy to upsurge their effect on consumers'/travelers' loyalty. Table 4.3 illustrates the results of hypotheses' examinations; 10 out of 13 hypotheses were accepted.

4.10 Discussion

Nowadays, owing to revolutions in the micro- (customers, competitors in the market, etc.) and macro- environment (political, demographic), the tourism industry has to overcome many challenges. As a result, with such profound changes, the question of what are the most effective factors that have impact on tourists' decisions to visit a destination is gaining more significance in the tourism industry than before (Kastenholz et al., 2012). Making tourists/customers feel loved is one of the most vital concerns for any sustainable tourist firms. Thoughts like this raise the questions of the main issues affecting love and the consequences of brand love

in sharing-economy firms such as Airbnb, and when and why such relationships are likely to happen. Academic scholars, tourism policy makers and managers need to find an answer in order to find the most effective and tactful strategy within a sweeping and lightning-fast pace. In the light of the preceding discussion, the first purpose of the study was to search and find an integrated model considering the effects and antecedents of brand love.

The research provides such invaluable insight regarding the demand side of sharing-economy firms such as Airbnb. The results revealed that identity is favorable to travelers and impacts on their attitude toward the experience and benevolence. Such findings proffer suggestion for tourism managers and policy makers about how to create and manage peer-to-peer accommodation websites. With the growth and widely increasing usage and necessity of World Wide Web tools (Segota, 2015), it might be necessary for managers to consider the tools used in creating and enhancing benevolence and their customer experience.

In a peer-to-peer accommodation websites like Airbnb, customer experience is the key contributing factor for likability and satisfaction. This result is consistent with prior research in tourism and marketing literature, which shows that experience can shape satisfaction and likeability (Brakus et al., 2009). However, also in peer-to-peer accommodation websites like Airbnb, experience was not found to have an effect on benevolence. Such findings contradict previous academic literature (Jevons and Gabbott, 2000). The experience provided in peer-to-peer websites should be likable and meet customers' needs so that they are satisfied with their choice. On the other hand, firms and policy makers can increase their customers' benevolence through enhancement of their identity.

Benevolence influences likability and satisfaction. This is expected as customers find a website or a sharing-economy more likable when they can easily find benevolence on it and they also become more satisfied as they try to meet their needs through it. As there has been limited study regarding the influence of benevolence on satisfaction, this study can add knowledge to academic literature. However, this study is in line with studies carried out on this topic (Chang, 2014; Drennan et al., 2015). Therefore, the trustworthiness of a peer-to-peer accommodation website (like Airbnb) can assist tourism managers in shaping tourists' perspective. However, the website, like Airbnb, should be carefully monitored and built so that customers can trust on it.

Likability was found effective in forming customer love and customer satisfaction in peer-to-peer accommodation websites like Airbnb. This result was consistent with prior results (Fornell et al., 2010; Park et al., 2010). As likability has influence on brand love (Nguyen et al., 2013), policy makers and tourism managers should try to adopt an approach for increasing customers' love through customer likability.

On the other side, satisfaction was found to be an influence on love as well. As stated by Carroll and Ahuvia (2006), satisfied customers can show emotional attachment to a particular brand. As a result, like the previous studies, satisfaction was found effective on brand love (Batra et al., 2012; Roy et al., 2013). By making customers satisfied with their choice, policymakers and tourism managers can make

their customers love their peer-to-peer sharing accommodation. As a matter of fact, the more customers are satisfied, the more they are likely to love a firm.

The results of the study revealed that love can have an impact on co-creation, loyalty, and ultimately, willingness to purchase. These results are found to be in line with preceding researchers in the marketing literature and tourism context (Aro et al., 2018; Liu et al., 2018). These results support the prior finding that brand love can result in loyalty (Giovanis and Athanasopoulou, 2018), co-creation (Kaufmann et al., 2016), and willingness to purchase (Liu et al., 2018). Due to the importance of love and the significant consequences of it on tourists, tourism managers and marketing managers can increase their customers' loyalty thorough love and can make their customers keen to buy their services and products. What is more, due to the necessity of co-creation in peer-to-peer accommodation websites like Airbnb, where customers mainly make and produce most of the website content, it is vital to engage travelers in co-creation and actively involve them in making content for a website.

On the other hand, co-creation was found not to have an effect on customer loyalty. The result was found to be in contrast to the result of other researchers (Bru and Scaringella, 2018; Rihova et al., 2018). Perhaps the result could be because of the peer-to-peer context behavior that customers demonstrate. Another unexpected result derived from the survey illustrates that the traveler's loyalty has no impact on peer-to-peer customers' willingness to purchase. This result is also in contrast to the prior research (Li et al., 2018; Srinivasan et al., 2002). These two unexpected results may be because of the context of the study.

4.11 Conclusion and limitation

Peer-to-peer accommodation websites are becoming the next phenomenon in the tourism industry. More and more tourists and travelers are using them these days. However, there is a limited understanding of why tourists are becoming more interested in using peer-to-peer accommodation websites like Airbnb instead of traditional bookings. The main contribution of this research was to investigate the antecedents and consequences of brand love. The first contribution of this research is to increase the understanding of the traveler's perception towards new emerging peer-to-peer accommodation websites like Airbnb and of how brand love can impact on the loyalty of travelers and tourists. The current study aims to support the idea that love is one of the most important factors for actively involving tourists in producing content for peer-to-peer sharing accommodation.

Just like all other research, the current study has a number of limitations. The main limitation of this study is regarding the context of the study. The study context was London; however, the result might be different in other regions of the world, for example in Asia owing to their different culture. To remedy this situation, future research should take into account the moderating role of culture as well. What is more, future research can include other cities with more diverse population and tourists. Secondly, this research only considered Airbnb customers and other

peer-to-peer accommodation websites (e.g., Booking.com). Future researchers are recommended to focus on other peer-to-peer websites such as booking.com and compare those results with our results. Finally, as individual evaluation can vary, it might be that a different cultural background may be related to different perceptions of love. Therefore, further studies should be expanded to develop the conceptual model by adding cultural variables as well. This study encourages researchers and practitioners to follow up a number of potentially useful areas of future research.

References

- Albert, N., Merunka, D., and Valette-Florence, P. (2007). When consumers love their brands: Exploring the concept and its dimensions. *Journal of Business Research*, 61(10), 1062–1075.
- Albert, N., and Merunka, D. (2013). The role of brand love in consumer-brand relationships. *Journal of Consumer Marketing*, 30(3), 258–266.
- Albert, N., Merunka, D., and Valette-Florence, P. (2013). Brand passion: Antecedents and consequences. *Journal of Business Research*, 66(7), 904–909.
- Albert, N., and Valette-Florence, P. (2010). Measuring the love feeling for a brand using interpersonal love items. *Journal of Marketing Development and Competitiveness*, 5(1), 57.
- Almeida-Santana, A., and Moreno-Gil, S. (2018). Understanding tourism loyalty: Horizontal vs destination loyalty. *Tourism Management*, 65(April), 245–255.
- Altinay, L., Brookes, M., Madanoglu, M., and Aktas, G. (2014). Franchisees' trust in and satisfaction with franchise partnerships. *Journal of Business Research*, 67(5), 722–728.
- Aro, K., Suomi, K., and Saraniemi, S. (2018). Antecedents and consequences of destination brand love-A case study from Finnish Lapland. *Tourism Management*, 67(August), 71–81.
- Auh, S., Bell, S.J., McLeod, C.S., and Shih, E. (2007). Co-production and customer loyalty in financial services. *Journal of Retailing*, 83(3), 359–370.
- Bagozzi, R.P., and Dholakia, U.M. (2006). Antecedents and purchase consequences of customer participation in small group brand communities. *International Journal of Research in Marketing*, 23(1), 45–61.
- Bairrada, C.M., Coelho, F., and Coelho, A. (2018). Antecedents and outcomes of brand love: Utilitarian and symbolic brand qualities. *European Journal of Marketing*, 52(3/4), 656–682.
- Batra, R., Ahuvia, A., and Bagozzi, R.P. (2012). Brand love. *Journal of Marketing*, 76(2), 1–16.
- Benur, A.M., and Bramwell, B. (2015). Tourism product development and product diversification in destinations. *Tourism Management*, 50(October), 213–224.
- Bilgihan, A. (2016). Gen Y customer loyalty in online shopping: An integrated model of trust, user experience and branding. *Computers in Human Behavior*, 61(August), 103–113.
- Black, I., and Veloutsou, C. (2017). Working consumers: Co-creation of brand identity, consumer identity and brand community identity. *Journal of Business Research*, 70(January), 416–429.
- Boo, S., and Busser, J.A. (2018). Meeting planners' online reviews of destination hotels: A twofold content analysis approach. *Tourism Management*, 66(June), 287–301.
- Brakus, J.J., Schmitt, B.H., and Zarantonello, L. (2009). Brand experience: What is it? How is it measured? Does it affect loyalty? *Journal of Marketing*, 73(3), 52–68.
- Brashear, T.G., Manolis, C., and Brooks, C.M. (2005). The effects of control, trust, and justice on salesperson turnover. *Journal of Business Research*, 58(3), 241–249.
- Brown, G., Smith, A., and Assaker, G. (2016). Revisiting the host city: An empirical examination of sport involvement, place attachment, event satisfaction and spectator intentions at the London Olympics. *Tourism Management*, 55(August), 160–172.

- Bru, M., and Scaringella, L. (2018). Can online co-creation influence lead users' and opinion leaders' behaviors? In *Knowledge, learning and innovation* (27–47). Cham: Springer.
- Bryman, A., Bell, E., Mills, A.J., and Yue, A.R. (2007). *Business research strategies*. Oxford: Oxford University Press.
- Busser, J.A., and Shulga, L.V. (2018). Co-created value: Multidimensional scale and nomological network. *Tourism Management*, 65(April), 69–86.
- Carroll, B.A., and Ahuvia, A.C. (2006). Some antecedents and outcomes of brand love. *Marketing Letters*, 17(2), 79–89.
- Casidy, R., Wymer, W., and O'Cass, A. (2018). Enhancing hotel brand performance through fostering brand relationship orientation in the minds of consumers. *Tourism Management*, 66(June), 72–84.
- Chang, K.C. (2014). Examining the effect of tour guide performance, tourist trust, tourist satisfaction, and flow experience on tourists' shopping behavior. *Asia Pacific Journal of Tourism Research*, 19(2), 219–247.
- Chen, C.C., Huang, W.J., and Petrick, J.F. (2016). Holiday recovery experiences. *Tourism Satisfaction and Life Satisfaction – Is There a Relationship?* *Tourism Management*, 53(April), 140–147.
- Chi, C.G.Q., and Qu, H. (2008). Examining the structural relationships of destination image, tourist satisfaction and destination loyalty: An integrated approach. *Tourism Management*, 29(4), 624–636.
- Choi, M., Law, R., and Heo, C.Y. (2016). Shopping destinations and trust – Tourist attitudes: Scale development and validation. *Tourism Management*, 54, 490–501.
- Choo, H., and Petrick, J.F. (2014). Social interactions and intentions to revisit for agritourism service encounters. *Tourism Management*, 40(February), 372–381.
- Chu, C.W., and Lu, H.P. (2007). Factors influencing online music purchase intention in Taiwan: An empirical study based on the value-intention framework. *Internet Research*, 17(2), 139–155.
- Churchill Jr., G.A. (1979). A paradigm for developing better measures of marketing constructs. *Journal of Marketing Research*, 16(1), 64–73.
- Daugherty, T., Li, H., and Biocca, F. (2008). Consumer learning and the effects of virtual experience relative to indirect and direct product experience. *Psychology & Marketing*, 25(7), 568–586.
- David, M.E. (2018). I love the product but will you? The role of interpersonal attachment styles in social projection. *Psychology & Marketing*, 35(3), 197–209.
- Dennis, C., Brzkus, J.J., Gupta, S., and Alamanos, E. (2014). The effect of digital signage on shoppers' behavior: The role of the evoked experience. *Journal of Business Research*, 67(11), 2250–2257.
- DeVellis, R.F. (2012). *Scale development: Theory and applications*. Applied social research methods series. Thousand Oaks, CA: Sage.
- Doney, P.M., and Cannon, J.P. (1997). An examination of the nature of trust in buyer-seller relationships. *Journal of Marketing*, 61(2), 35–51.
- Drennan, J., Bianchi, C., Cacho-Elizondo, S., Louriero, S., Guibert, N., and Proud, W. (2015). Examining the role of wine brand love on brand loyalty: A multi-country comparison. *International Journal of Hospitality Management*, 49(August), 47–55.
- Eelen, J., Özturan, P., and Verlegh, P.W. (2017). The differential impact of brand loyalty on traditional and online word of mouth: The moderating roles of self-brand connection and the desire to help the brand. *International Journal of Research in Marketing*, 34(4), 872–891.
- Eid, R., and El-Gohary, H. (2015). The role of Islamic religiosity on the relationship between perceived value and tourist satisfaction. *Tourism Management*, 46(February), 477–488.

- Ewing, M.T., and Napoli, J. (2005). Developing and validating a multidimensional nonprofit brand orientation scale. *Journal of Business Research*, 58(6), 841–853.
- Fang, B., Ye, Q., Kucukusta, D., and Law, R. (2016). Analysis of the perceived value of online tourism reviews: Influence of readability and reviewer characteristics. *Tourism Management*, 52(February), 498–506.
- Fernandes, T., and Cruz, M. (2016). Dimensions and outcomes of experience quality in tourism: The case of Port wine cellars. *Journal of Retailing and Consumer Services*, 31(July), 371–379.
- Fetscherin, M., and Heinrich, D. (2015). Consumer brand relationships research: A bibliometric citation meta-analysis. *Journal of Business Research*, 68(2), 380–390.
- Filieri, R., Algezauzi, S., and McLeay, F. (2015). Why do travelers trust TripAdvisor? Antecedents of trust towards consumer-generated media and its influence on recommendation adoption and word of mouth. *Tourism Management*, 51(December), 174–185.
- Fornell, C., Rust, R.T., and Dekimpe, M.G. (2010). The effect of customer satisfaction on consumer spending growth. *Journal of Marketing Research*, 47(1), 28–35.
- Foroudi, P., Akarsu, T.N., Ageeva, E., Foroudi, M.M., Dennis, C., and Melewar, T.C. (2018). Promising the dream: The changing destination image of London through the effect of website place. *Journal of Business Research*, 83(Feb), 97–110.
- Foroudi, P., Dinnie, K., Kitchen, P.J., Melewar, T.C., and Foroudi, M.M. (2017). IMC antecedents and the consequences of planned brand identity in higher education. *European Journal of Marketing*, 51(3), 528–550.
- Foroudi, P., Jin, Z., Gupta, S., Melewar, T.C., and Foroudi, M.M. (2016). Influence of innovation capability and customer experience on reputation and loyalty. *Journal of Business Research*, 69(11), 4882–4889.
- Fournier, S., and Mick, D.G. (1999). Rediscovering satisfaction. *The Journal of Marketing*, 63(4), 5–23.
- Garver, M.S. and Mentzer, J.T. (1999). Logistics research methods: Employing structural equation modeling to test for construct validity. *Journal of Business Logistics*, 20(1), 33–57.
- Geetha, M., Singha, P., and Sinha, S. (2017). Relationship between customer sentiment and online customer ratings for hotels—An empirical analysis. *Tourism Management*, 61(August), 43–54.
- Giovanis, A.N., and Athanasopoulou, P. (2018). Consumer-brand relationships and brand loyalty in technology-mediated services. *Journal of Retailing and Consumer Services*, 40(January), 287–294.
- Grissemann, U.S., and Stokburger-Sauer, N.E. (2012). Customer co-creation of travel services: The role of company support and customer satisfaction with the co-creation performance. *Tourism Management*, 33(6), 1483–1492.
- Gurviez, P., and Korchia, M. (2003). Proposal for a multidimensional brand trust scale. In 32nd Emac-Conference-Glasgow, Marketing: Responsible and Relevant, 438–452.
- Ha, H.Y., and Perks, H. (2005). Effects of consumer perceptions of brand experience on the web: Brand familiarity, satisfaction and brand trust. *Journal of Consumer Behaviour*, 4(6), 438–452.
- Hair Jr., J.F., Black, W.C., Babin, B., Anderson, R.E., and Tatham, R.L. (2006). *Multivariate data analysis*. Upper Saddle River, NJ: Prentice-Hall International.
- Han, H., and Hyun, S.S. (2015). Customer retention in the medical tourism industry: Impact of quality, satisfaction, trust, and price reasonableness. *Tourism Management*, 46(February), 20–29.
- Han, H., Meng, B., and Kim, W. (2017). Bike-traveling as a growing phenomenon: Role of attributes, value, satisfaction, desire, and gender in developing loyalty. *Tourism Management*, 59(April), 91–103.

- Haryanto, J.O., Moutinho, L., and Coelho, A. (2016). Is brand loyalty really present in the children's market? A comparative study from Indonesia, Portugal, and Brazil. *Journal of Business Research*, 69(10), 4020–4032.
- Hatch, M.J., and Schultz, M. (2010). Toward a theory of brand co-creation with implications for brand governance. *Journal of Brand Management*, 17(8), 590–604.
- Hosany, S., and Gilbert, D. (2010). Measuring tourists' emotional experiences toward hedonic holiday destinations. *Journal of Travel Research*, 49(4), 513–526.
- Hoyer, W.D., Chandy, R., Dorotic, M., Krafft, M., and Singh, S.S. (2010). Consumer cocreation in new product development. *Journal of Service Research*, 13(3), 283–296.
- Huang, Z.J., and Cai, L.A. (2015). Modeling consumer-based brand equity for multinational hotel brands—When hosts become guests. *Tourism Management*, 46(February), 431–443.
- Hudson, S., Roth, M.S., Madden, T.J., and Hudson, R. (2015). The effects of social media on emotions, brand relationship quality, and word of mouth: An empirical study of music festival attendees. *Tourism Management*, 47(April), 68–76.
- Hussein, A.S. (2017). Effects of brand experience on brand loyalty in Indonesian casual dining restaurant: Roles of customer satisfaction and brand of origin. *Tourism and Hospitality Management*, 24(1), 1–14.
- Hwang, J., and Han, H. (2014). Examining strategies for maximizing and utilizing brand prestige in the luxury cruise industry. *Tourism Management*, 40(Feb), 244–259.
- Iordanova, E. (2017). Tourism destination image as an antecedent of destination loyalty: The case of Linz, Austria. *European Journal of Tourism Research*, 16, 214–232.
- Jevons, C., and Gabbott, M. (2000). Trust, brand equity and brand reality in internet business relationships: An interdisciplinary approach. *Journal of Marketing Management*, 16(6), 619–634.
- Jin, B., Park, J., and Kim, J. (2008). Cross-cultural examination of the relationships among firm reputation, e-satisfaction, e-trust, and e-loyalty. *International Marketing Review*, 25(3), 324–337.
- Kao, Y.F., Huang, L.S., and Wu, C.H. (2008). Effects of theatrical elements on experiential quality and loyalty intentions for theme parks. *Asia Pacific Journal of Tourism Research*, 13(2), 163–174.
- Kara, S., Vredevelde, A.J., and Ross Jr, W.T. (2018). We share; we connect: How shared brand consumption influences relational brand connections. *Psychology & Marketing*, 35(5), 325–340.
- Kastenholz, E., Eusébio, C., Figueiredo, E., and Lima, J. (2012). Accessibility as competitive advantage of a tourism destination: The case of Lousã. In *Field guide to case study research in tourism, hospitality and leisure* (369–385). Bradford: Emerald Group Publishing.
- Kaufmann, H.R., Loureiro, S.M.C., and Manarioti, A. (2016). Exploring behavioural branding, brand love and brand co-creation. *Journal of Product and Brand Management*, 25(6), 516–526.
- Kelliher, F., Reinl, L., Johnson, T.G., and Joppe, M. (2018). The role of trust in building rural tourism micro firm network engagement: A multi-case study. *Tourism Management*, 68(October), 1–12.
- Kim, J., and Fesenmaier, D.R. (2017). Sharing tourism experiences: The post trip experience. *Journal of Travel Research*, 56(1), 28–40.
- Kim, J.W., Lee, F., and Suh, Y.G. (2015). Satisfaction and loyalty from shopping mall experience and brand personality. *Services Marketing Quarterly*, 36(1), 62–76.
- Kim, M.J., Chung, N., and Lee, C.K. (2011). The effect of perceived trust on electronic commerce: Shopping online for tourism products and services in South Korea. *Tourism Management*, 32(2), 256–265.

- Kim, W.G., Ma, X., and Kim, D.J. (2006). Determinants of Chinese hotel customers' e-satisfaction and purchase intentions. *Tourism Management*, 27(5), 890–900.
- Kirby, A.E., and Kent, A.M. (2010). Architecture as brand: Store design and brand identity. *Journal of Product and Brand Management*, 19(6), 432–439.
- Kohler, T., Fuller, J., Matzler, K., Stieger, D. (2011). Co-creation in virtual worlds: The design of the user experience. *MIS Quarterly*, 35(September), 773–788.
- Kolar, T. and Zabkar, V. (2010). A consumer-based model of authenticity: An oxymoron or the foundation of cultural heritage marketing? *Tourism Management*, 31(5), 652–664.
- Kotler, P., and Armstrong, G. (2010). *Principles of marketing*. London: Pearson Education.
- Langner, T., Schmidt, J., and Fischer, A. (2015). Is it really love? A comparative investigation of the emotional nature of brand and interpersonal love. *Psychology & Marketing*, 32(6), 624–634.
- Lau, G.T., and Lee, S.H. (1999). Consumers' trust in a brand and the link to brand loyalty. *Journal of Market-Focused Management*, 4(4), 341–370.
- Leckie, C., Nyadzayo, M.W., and Johnson, L.W. (2016). Antecedents of consumer brand engagement and brand loyalty. *Journal of Marketing Management*, 32(5–6), 558–578.
- Lee, J.S., and Back, K.J. (2010). Reexamination of attendee-based brand equity. *Tourism Management*, 31(3), 395–401.
- Lemon, K.N., and Verhoef, P.C. (2008). Understanding customer experience throughout the customer journey. *Journal of Marketing*, 80(6), 69–96.
- Lin, C.H., and Kuo, B.Z.L. (2016). Tourism Management Perspectives. *Tourism Management*, 18(April), 84–91.
- Lin, Z., Chen, Y., and Filieri, R. (2017). Resident-tourist value co-creation: The role of residents' perceived tourism impacts and life satisfaction. *Tourism Management*, 61(August), 436–442.
- Liu, C.H.S. (2018). Examining social capital, organizational learning and knowledge transfer in cultural and creative industries of practice. *Tourism Management*, 64(February), 258–270.
- Liu, C.H.S., Horng, J.S., and Chou, S.F. (2015). A critical evaluation of sustainable tourism from the integrated perspective: Conducting moderated-mediation analysis. *Tourism Management Perspectives*, 16(October), 43–50.
- Liu, C.R., Chiu, T.H., Wang, Y.C., and Huang, W.S. (2018). Generation Y's revisit intention and price premium for lifestyle hotels: Brand love as the mediator. *International Journal of Hospitality and Tourism Administration*, (April), 1–23.
- Louis, D., and Lombart, C. (2010). Impact of brand personality on three major relational consequences (trust, attachment, and commitment to the brand). *Journal of Product and Brand Management*, 19(2), 114–130.
- Loureiro, S.M.C., and Kastenholz, E. (2011). Corporate reputation, satisfaction, delight, and loyalty towards rural lodging units in Portugal. *International Journal of Hospitality Management*, 30(3), 575–583.
- McDaniel, C., and Gates, R. (2006). *Marketing research*, 7. Hoboken, NJ: Auflage.
- McLean, G., Al-Nabhani, K., and Wilson, A. (2018). Developing a Mobile Applications Customer Experience Model (MACE) – Implications for retailers. *Journal of Business Research*, 85(April), 325–336.
- Mehta, R., Polsa, P., Mazur, J., Xiucheng, F., and Dubinsky, A.J. (2006). Strategic alliances in international distribution channels. *Journal of Business Research*, 59(10–11), 1094–1104.
- Melewar, T.C., Foroudi, P., Gupta, S., Kitchen, P.J., and Foroudi, M.M. (2017). Integrating identity, strategy and communications for trust, loyalty and commitment. *European Journal of Marketing*, 51(3), 572–604.
- Merz, M.A., Zarantonello, L., and Grappi, S. (2018). How valuable are your customers in the brand value co-creation process? The development of a Customer Co-Creation Value (CCCV) scale. *Journal of Business Research*, 82(January), 79–89.

- Minghetti, V., and Celotto, E. (2013). Measuring quality of information services: Combining mystery shopping and customer satisfaction research to assess the performance of tourist offices. *Journal of Travel Research*, 53(5), 565–580.
- Narteh, B. (2018). Brand equity and financial performance: The moderating role of brand likeability. *Marketing Intelligence and Planning*, 36(3), 381–395.
- Ngai, E.W. (2005). Customer relationship management research (1992–2002): An academic literature review and classification. *Marketing Intelligence and Planning*, 23(6), 582–605.
- Nguyen, B., Choudhury, M.M., and Melewar, T.C. (2015). An integrated model of firms' brand likeability: Antecedents and consequences. *Journal of Strategic Marketing*, 23(2), 122–140.
- Nguyen, B., Melewar, T.C., and Chen, J. (2013). A framework of brand likeability: An exploratory study of likeability in firm-level brands. *Journal of Strategic Marketing*, 21(4), 368–390.
- Nunkoo, R., Ribeiro, M.A., Sunnassee, V., and Gursoy, D. (2018). Public trust in mega event planning institutions: The role of knowledge, transparency and corruption. *Tourism Management*, 66(June), 155–166.
- Nunnally, J.C., and Bernstein, I.H. (1978). *Psychometric testing*. New York: McGraw Hill.
- Nusair, K., and Hua, N. (2010). Comparative assessment of structural equation modeling and multiple regression research methodologies: E-commerce context. *Tourism Management*, 31(3), 314–324.
- Oliver, R.L. (1993). Cognitive, affective, and attribute bases of the satisfaction response. *Journal of Consumer Research*, 20(3), 418–430.
- Ouyang, Z., Gursoy, D., and Sharma, B. (2017). Role of trust, emotions and event attachment on residents' attitudes toward tourism. *Tourism Management*, 63(December), 426–438.
- Pandey, S., and Chawla, D. (2014). E-lifestyles of Indian online shoppers: A scale validation. *Journal of Retailing and Consumer Services*, 21(6), 1068–1074.
- Park, J., and Ha, S. (2016). Co-creation of service recovery: Utilitarian and hedonic value and post-recovery responses. *Journal of Retailing and Consumer Services*, 28(January), 310–316.
- Park, S., Hahn, S., Lee, T., and Jun, M. (2018). Two factor model of consumer satisfaction: International tourism research. *Tourism Management*, 67(August), 82–88.
- Perez-Vega, R., Taheri, B., Farrington, T., and O'Gorman, K. (2018). On being attractive, social and visually appealing in social media: The effects of anthropomorphic tourism brands on Facebook fan pages. *Tourism Management*, 66(June), 339–347.
- Phillips, B.J., McQuarrie, E.F., and Griffin, W.G. (2014). How visual brand identity shapes consumer response. *Psychology and Marketing*, 31(3), 225–236.
- Ponte, E.B., Carvajal-Trujillo, E., and Escobar-Rodríguez, T. (2015). Influence of trust and perceived value on the intention to purchase travel online: Integrating the effects of assurance on trust antecedents. *Tourism Management*, 47(April), 286–302.
- Prebensen, N.K., Woo, E., Chen, J.S., and Uysal, M. (2012). Experience quality in the different phases of a tourist vacation: A case of northern Norway. *Tourism Analysis*, 17(5), 617–627.
- Prebensen, N.K., and Xie, J. (2017). Efficacy of co-creation and mastering on perceived value and satisfaction in tourists' consumption. *Tourism Management*, 60(June), 166–176.
- Qu, M., Hou, Y., Xu, Y., Shen, C., Zhu, M., Xie, L., and Chai, G. (2015). Precise positioning of an intraoral distractor using augmented reality in patients with hemifacial microsomia. *Journal of Cranio-Maxillo-Facial Surgery*, 43(1), 106–112.
- Quach, S., and Thaichon, P. (2017). From connoisseur luxury to mass luxury: Value co-creation and co-destruction in the online environment. *Journal of Business Research*, 81(December), 163–172.

- Rageh Ismail, A., and Spinelli, G. (2012). Effects of brand love, personality and image on word of mouth: The case of fashion brands among young consumers. *Journal of Fashion Marketing and Management: An International Journal*, 16(4), 386–398.
- Ramadan, Z. (2018). The gamification of trust: The case of China's "social credit". *Marketing Intelligence and Planning*, 36(1), 93–107.
- Ranaweera, C., and Prabhu, J. (2003). The influence of satisfaction, trust and switching barriers on customer retention in a continuous purchasing setting. *International Journal of Service Industry Management*, 14(4), 374–395.
- Ranjan, K.R., and Read, S. (2016). Value co-creation: Concept and measurement. *Journal of the Academy of Marketing Science*, 44(3), 290–315.
- Reysen, S. (2005). Construction of a new scale: The Reysen likeability scale. *Social Behavior and Personality*, 33(2), 201–208.
- Rihova, I., Buhalis, D., Gouthro, M.B., and Moital, M. (2018). Customer-to-customer co-creation practices in tourism: Lessons from customer-dominant logic. *Tourism Management*, 67(April), 362–375.
- Roy, S.K., Eshghi, A., and Sarkar, A. (2013). Antecedents and consequences of brand love. *Journal of Brand Management*, 20(4), 325–332.
- Ryu, K., Lee, H.R., and Gon Kim, W. (2012). The influence of the quality of the physical environment, food, and service on restaurant image, customer perceived value, customer satisfaction, and behavioral intentions. *International Journal of Contemporary Hospitality Management*, 24(2), 200–223.
- Sánchez-Rebull, M.V., Rudchenko, V., and Martín, J.C. (2017). The antecedents and consequences of customer satisfaction in tourism: A systematic literature review. *Tourism and Hospitality Management*, 24(1), 1–33.
- Schembri, S. (2009). Reframing brand experience: The experiential meaning of Harley-Davidson. *Journal of Business Research*, 62(12), 1299–1310.
- Schnebelen, S., and Bruhn, M. (2018). An appraisal framework of the determinants and consequences of brand happiness. *Psychology & Marketing*, 35(2), 101–119.
- Segota, T. (2015). The international handbook on tourism and peace. *European Journal of Tourism Research*, 9, 152.
- Silva, R.R., and Topolinski, S. (2018). My username is IN! The influence of inward vs. outward wandering usernames on judgments of online seller trustworthiness. *Psychology & Marketing*, 35(4), 307–319.
- Sirdeshmukh, D., Singh, J., and Sabol, B. (2002). Consumer trust, value, and loyalty in relational exchanges. *Journal of Marketing*, 66(1), 15–37.
- Sirianni, N.J., Bitner, M.J., Brown, S.W., and Mandel, N. (2013). Branded service encounters: Strategically aligning employee behavior with the brand positioning. *Journal of Marketing*, 77(6), 108–123.
- Skálén, P., Pace, S., and Cova, B. (2015). Firm-brand community value co-creation as alignment of practices. *European Journal of Marketing*, 49(3/4), 596–620.
- Sørensen, F., and Jensen, J.F. (2015). Value creation and knowledge development in tourism experience encounters. *Tourism Management*, 46(February), 336–346.
- Sparks, B.A., and Browning, V. (2011). The impact of online reviews on hotel booking intentions and perception of trust. *Tourism Management*, 32(6), 1310–1323.
- Sparks, B.A., So, K.K.F., and Bradley, G.L. (2016). Responding to negative online reviews: The effects of hotel responses on customer inferences of trust and concern. *Tourism Management*, 53(April), 74–85.
- Srinivasan, S.S., Anderson, R., and Ponnavaolu, K. (2002). Customer loyalty in e-commerce: An exploration of its antecedents and consequences. *Journal of Retailing*, 78(1), 41–50.
- Sternberg, R.J. (1986). A triangular theory of love. *Psychological Review*, 93(2), 119.

- Suetrong, P., Pires, G.D., and Chen, T. (2018). Conceptualising the effect of brand love on consumers repurchase intentions for consumer products. *Global Business and Economics Review*, 20(2), 213–230.
- Suntikul, W., and Jachna, T. (2016). The co-creation/place attachment nexus. *Tourism Management*, 52(February), 276–286.
- Swimberghe, K.R., Astakhova, M., and Wooldridge, B.R. (2014). A new dualistic approach to brand passion: Harmonious and obsessive. *Journal of Business Research*, 67(12), 2657–2665.
- Tabachnick, B.G. and Fidell, L.S. (2007). *Using multivariate statistics*. New York: Allyn and Bacon/Pearson Education.
- Thomson, M., MacInnis, D.J., Park, C.W. (2005). The ties that bind: Measuring the strength of consumers' emotional attachments to brands. *Journal of Consumer Psychology*, 15(1), 77–91.
- Tussyadiah, I.P. (2016). Factors of satisfaction and intention to use peer-to-peer accommodation. *International Journal of Hospitality Management*, 55(May), 70–80.
- Tussyadiah, I.P., and Park, S. (2018). When guests trust hosts for their words: Host description and trust in sharing economy. *Tourism Management*, 67(Aug), 261–272.
- UNWTO. (2018). www2.unwto.org/event/fitur-2018 (Assessed by 10 April 2018).
- Velasco Vizcaino, F. (2018). Beyond window signs: Understanding the affect-based effects of window signs on store patronage intentions. *Psychology & Marketing*, 35(7), 542–552.
- Völckner, F., and Sattler, H. (2006). Drivers of brand extension success. *Journal of Marketing*, 70(2), 18–34.
- Whang, Y.O., Allen, J., Sahoury, N., Zhang, H. (2004). Falling in love with a product: The structure of a romantic consumer-product relationship. *Advances in Consumer Research*, 31(1), 320–327.
- Wu, H.C., Cheng, C.C., and Ai, C.H. (2018). A study of experiential quality, experiential value, trust, corporate reputation, experiential satisfaction and behavioral intentions for cruise tourists: The case of Hong Kong. *Tourism Management*, 66(June), 200–220.
- Wu, H.C., and Li, T. (2015). An empirical study of the effects of service quality, visitor satisfaction, and emotions on behavioral intentions of visitors to the museums of Macau. *Journal of Quality Assurance in Hospitality and Tourism*, 16(1), 80–102.
- Wu, H.C., and Li, T. (2017). A study of experiential quality, perceived value, heritage image, experiential satisfaction, and behavioral intentions for heritage tourists. *Journal of Hospitality and Tourism Research*, 41(8), 904–944.
- Yi, Y., and Gong, T. (2013). Customer value co-creation behavior: Scale development and validation. *Journal of Business Research*, 66(9), 1279–1284.
- Yoon, Y., and Uysal, M. (2005). An examination of the effects of motivation and satisfaction on destination loyalty: A structural model. *Tourism Management*, 26(1), 45–56.
- Yuksel, A., Yuksel, F., and Bilim, Y. (2010). Destination attachment: Effects on customer satisfaction and cognitive, affective and conative loyalty. *Tourism Management*, 31(2), 274–284.
- Zarantonello, L., and Schmitt, B.H. (2013). The impact of event marketing on brand equity: The mediating roles of brand experience and brand attitude. *International Journal of Advertising*, 32(2), 255–280.
- Zhang, Z., and Patrick, V.M. (2018). Call me Rollie! The role of brand nicknames in shaping consumer-brand relationships. *Journal of the Association for Consumer Research*, 3(2), 147–162.
- Zyman, S. (2002). *The end of advertising as we know it*. Hoboken, NJ: John Wiley and Sons.

5

UNDERSTANDING ORGANIZATIONAL AGILITY

Evidence from the hotel industry in Iran

Mahlagha Darvishmotevali and Kayhan Tajeddini

5.1 Introduction

The world in which today's businesses operate has become more volatile, uncertain, complex, and ambiguous (Nabatchian, 2014; Schoemaker, Heaton, & Teece, 2018). This situation has led to a significant reform in the perspective of organizational strategy, business priorities, and disrupts the traditional models. Prior research indicates that the regular methods have failed to meet the organizational challenges when faced with changes in the external environment. Therefore, previous strategies have been replaced with new approaches and perspectives (D'Ortenzio, 2012). Under these conditions, developing and improving organizational flexibility, accountability and agility are essential for a firm to gain competitive advantage. Agile project management helps organizations to gain an edge over their competitors that have yet to take advantage of its flexibility and responsiveness. Agile enterprises operate with a common business vocabulary across the whole organization, and make the intersection points of related processes accessible and easy to use, thus producing increased consistency of results. Agility is the capability, potency and effective reaction in response to environmental alterations (Dove, 2001). Agility promotes the organization's potency to supply a high standard of products and services. An agile organization does not easily fail in a competitive market when faced with unexpected events and changes. An agile organization is consistent and powerful and exhibits fast responses to sudden changes, new market opportunities and to customer requirements (Nickpour & Salajegheh, 2011). In terms of revenue and turnover, the tourism industry is recognized as the third largest industry in the world after the oil and automotive industries (Giap, Gopalan, & Ye, 2016). Hence, tourism is experiencing stunning growth across the world, and most countries are concentrating on implementing various programs and using competitive

strategies for attracting tourists and ultimately to earn revenue through this industry. In the meantime, the hospitality industry, as an integral part of the tourism industry that provides welfare for tourists, has an effective role in boosting the entire industry. Since the hospitality industry is directly linked with customers, it must be very agile in order to improve product management, increasing efficiency and productivity (Tajeddini and Mueller, 2019). Intense competition in the hospitality industry and increased environment changes (external and internal), which have led to changes in the levels of customer needs, has caused the hospitality industry to be more agile than other industries.

By referring to the organizational agility literature, it can be observed that extensive research has conducted on this practical implication (e.g., Glenn, 2009; Mehrabi, 2013; Nabatchian, 2014); however, given the importance of agility in the hospitality industry, a particular framework of organizational agility in the hospitality industry has not been provided until now. Therefore, the results of this study will make a valuable contribution to the agility literature by providing a typology of organizational agility in the hospitality industry.

5.2 Theoretical foundations and research background

5.2.1 *Organizational agility*

The implication of organizational agility was initially defined by four researchers (Goldman, 1991) from Lehigh University. They argued that in competitive markets, the need for an agile organization that can responds to environmental changes and customer needs is a must (Charbonnier-Voirin, 2011). Based on Goldman's (1995a) definition, organizational agility is a conscious and weighted answer to unpredictable and continual changes in the environment, which enables companies to continue to grow and develop in a competitive environment. In terms of his viewpoint, an agile organization should have series of general features such as: cooperative systems, employee empowerment, flexible methods and technology, customer orientation, continuous learning, creativity and ultimately, innovation. The core competency of agile organizations is that they should be able to operate successfully in a dynamic and changing environment (Shafer, Dyer, Kilty, Amos, & Ericksen, 2001). Shafer et al. (2001) considered three aspects of agile organizations: awareness of the market and the power of analysis, cooperation and mobilization to respond quickly and appropriately and the third dimension is embedding learning. They emphasized that personnel have an important role in creating an agile organization. Organizations must pay particular attention to promoting training, empowerment of staff, reward systems, work systems, human relations (employees) and performance management (Charbonnier-Voirin, 2011).

The general features of agility, as seen in Table 5.1, can be defined as environmental changes, accountability based on changes, skill development, empowering employees, access to updated information, organized information, and creativity

TABLE 5.1 Agility features

<i>Author and year</i>	<i>Agility features</i>
Charbonnier-Voirin, 2011	Proactivity, Reactivity and Strategic Communication- Assessment of Performance, Employee Participation and Autonomy, Skill Development and Knowledge Expansion, Creativity and Continuing Recovery and Responsibility Committee – Internal & External Collaboration – Awareness of Customers’ Priorities, Forecasting the Customer Changes, Personal and Special Services.
Lin, Chiu, & Chu, 2006	Responsiveness, Competence, Flexibility, Quickness.
Barrand, 2006	Foresight, Customer Orientation, Complexity of Human, Collaboration, Changing, Innovation, Global Offering.
Kassim et al., 2004	Customer Orientation, Dominance of Changes, Collaboration for Competition, Leveraging Resources.
Sharifi et al., 2001	Responsiveness, Competence, Flexibility, Quickness.
Breu et al., 2001	Environment Changes, Accountability Based on Changes, Skill Development, Empowering Employees, Access to Updated Information, Organized Information, and Creativity.
Gunasekaran et al., 2001	Strategies, Technologies, People, Systems.
Yusuf et al., 1999	Responsiveness to Alterations & Uncertainty, Technologies, Collaboration, Flexibility, Creativity, Profitability, High Standard of Customized Products, Competencies.
Shafer et al., 2001	Awareness of the Market, Power of Analysis, Cooperation and Mobilization, Embedding Learning.
Goldman et al., 1995	Customer Enrichment, Collaboration to Increase Competitiveness, Dominance of Changes, Influence of People and Information.

(Breu et al., 2001). Sharifi et al. (2001), in a study entitled “A methodology for achieving agility in manufacturing organizations: an introduction”, expressed that the capabilities of an agile organization are having responsiveness (accountability), flexibility, competence and speed. In 2011, a group of writers and editors from various universities attempted to provide a model for measuring the psychometric properties of organizational agility. This model included four dimensions with a total of eleven sub-dimensions as follows: mastering change (proactivity, reactivity and strategic communication), valuing human resources (assessment of performance, employee participation and autonomy, skill development and knowledge expansion, creativity and continuing recovery and responsibility committee), cooperative approaches (internal and external collaboration) and customer orientation (awareness of customers’ priorities, forecasting customer changes, personal and special services) (Charbonnier-Voirin, 2011).

Agile companies have unique capabilities and skills, which make them empower to tap opportunities in a more strategic and effective manner than more conventionally structured companies. An Agile organization is able to move from strategy to execution far more efficiently and quickly by:

- Predicting environmental changes and planning to tap external opportunities. With a decentralized and flexible business structure, significant information from across the organization or the external sources becomes more available to use in forecasting future environmental changes and reduce uncertainty.
- Simplifying and integrating business activities so they can be analyzed for cost and value. Agile companies try to lessen unnecessary activities, which lead to less organizational complexity and operating costs. Agile companies more concentrate on reduce cost (cost strategies) and increase investment opportunities.
- Focusing on transformation, creativity and innovation. Agile companies with flexible structure target innovation opportunities. They have a clear understanding of which innovation creates competitive strategies for the organization. They know innovation is significant key to achieve high market share and growth.
- Integrating organizations resources and capabilities continuously, rapidly to promote organizations competencies. Agile companies efficiently incorporate new capabilities, which result from imitation, mergers, acquisitions, cost leadership, and strategic alliances. Agile system can predict the external environment' threats effectively and timely and reduce the risk of losing key competencies.
- An agile structured system helps the organization to maintain momentum on the execution of long-range strategic plans through shorter, iterative implementation cycles, meeting both immediate and long-term needs.

5.2.2 Hospitality industry

The origins of the hospitality industry can be traced to Greece and some European countries, particularly Switzerland (Levy-Bonvin, 2003). The term "Hotel" first appeared around the year 1760 AD and is derived from the word "Hostel". In the United States, these locations were called Inns in the past. Real growth and development of the hotel industry began in 1794 in America with the opening of the "City Hotel" in New York (OGorman, 2010). Gradually, competition among shareholders in the hospitality industry increased, but the remarkable expansion of the hospitality industry dates back to the twentieth century. The hotel industry was selected in order to preserve a certain internal homogeneity (Gunasekaran et al., 2001) although it is understood that the culture of each country and region is likely to affect their approach towards innovation (Hofstede, 2001).

Today, the hospitality industry required to respond to the needs of customers, particularly as their expectations are changing continually and becoming more

complex. This factor (internal and external changing) has resulted in companies with outdated procedures and policies being unable to continue their activities successfully. An important factor that enables the ability to meet customer needs is “organizational agility”, which can be conceived as an firm’s potency and the ability to confront the unstable needs of customers, to understand the new requirements, the ability to analyze situations, and to design new and effective solutions to satisfy the customers (Breu et al., 2001).

5.3 Methodology

Qualitative research method using semi structured interviews was employed to gain a typology of organizational agility in the context of hospitality industry. The hospitality industry was chosen because it has been shown formerly that the strategic adoption process and agility management are very vital in this uncertain and complex industry (Tajeddini & Trueman, 2014). The research population includes owners and senior managers of hotels that are located in Mazandaran province in northern Iran. There are more than 640 hotels in Iran, of which four 5-star hotels and ten 4-star hotels located in north east of Iran. Northern Iran hosts the majority of national and international tourists due to moderate climate, beautiful nature, and proximity to the Caspian Sea. Owing to the large number of tourists, the hospitality industry in northern Iran has special significance impacts on the economy of the area. In order to increase the likelihood of data collection, both judgmental and snowball sampling techniques have been employed.

First, 17 hotel managers were contacted and explained the purpose of the research. After 2 days, 15 of the hotel managers replied, expressing their willingness to cooperate and participate in the research. Two were eliminated from the list because of lack of knowledge and experience regarding the topic. Therefore, a total of 13 participants were finally chosen who were considered to be appropriate based on the research purpose. Table 5.2 presents the profile of the informants.

After choosing the sample, some questions which included definitions and the relevant content of the topic and allowed them to consider and concentrate on the topic, were sent by email to each of the participants. Subsequently, interviews commenced one week later and stopped after gaining desired information from managers. Each interview started with general questions, and then the informant was encouraged to explain specific strategy for different stages of agility management. In order to analyze the data, the researcher focuses on patterns of key words and phrases used repeatedly across all interviews (Miles & Huberman, 1994).

Each interview lasted between 30 and 50 minutes, and all were audio taped and transcribed. Interviews were documented included note taking, with special attention to the main topics (Tajeddini, 2013). In this process, the text was divided into different parts with respect to the perception of the informants regarding organizational agility. Miles and Huberman’s (1994) recommendations were applied to analyze the statements.

TABLE 5.2 Interviewees profile

<i>Interviewees</i>	<i>Age</i>	<i>Education</i>	<i>Tenure</i>	<i>Position</i>
Interviewee 1	56	BA	23	Senior Manager
Interviewee 2	48	MBA	15	Senior Manager
Interviewee 3	50	PhD	28	Senior Manager
Interviewee 4	32	MA	10	Senior Manager
Interviewee 5	42	MA	8	Senior Manager
Interviewee 6	50	PhD	24	Senior Manager
Interviewee 7	49	MA	13	Senior Manager
Interviewee 8	39	MBA	14	Senior Manager
Interviewee 9	44	MBA	18	Senior Manager
Interviewee 10	63	BA	38	Senior Manager
Interviewee 11	54	MA	23	Senior Manager
Interviewee 12	38	PhD	9	Senior Manager
Interviewee 13	49	MBA	12	Senior Manager

5.4 Result

According to the preliminary findings that were extracted from previous relevant studies, and based on Maslow's hierarchy of needs model (Twining-Ward, 2009), an initial model of organizational agility is provided below (Figure 5.1).

There are three basic elements that are common to all organizational infrastructures: organizational structure, workplace and workforce (Nichols, 2012). Organizational structure depends on the company and/or the project. The structure helps to define the roles and responsibilities of the members of the department, work group, or organization. It is generally a system of tasks and reporting policies that are implemented to provide members of the group a direction when completing projects. An effective organizational structure will enable people and groups to work effectively together while developing hard work ethics and attitudes.

The second stage consists of enablers, referring to management fields such as change management, technology management, performance management and customer relation management (Charbonnier-Voirin, 2011). The third category is leverages. This category refers to the fact that leverages (accountability, flexibility and quickness) have an important role in organizational agility (Lin et al., 2006).

Enhancers are the next category. This category refers to several key factors (quality and cost) that organizations should focus on in order to achieve agility (Sull, 2009).



FIGURE 5.1 Organizational agility hierarchy model

The final stage of the pillars is called the delighter stage and is at the top of the pyramid. This stage is the ideal level for industries, and consists of various factors such as creativity, innovation and marketing (Barrand, 2006). This level is the flourishing stage for an agile system.

These five types of pillars are important areas that every company should concentrate on them in order to achieve organizational agility. If a company desires to exploit its existing capacity to create an agile system and ultimately a dynamic industry, it should take note of these areas and implement strategies to achieve them.

The 13 hotel managers were interviewed in order to recognize and provide a typology of organizational agility in the hospitality industry. According to their responses, a typology was identified that consists of five strategies for achieving organizational agility. These strategies imposed separate methods for each stage of organizational agility. As shown in Figure 5.2, there is a specific strategy related to each level. These strategies are: infrastructure agility, management agility, operational agility, growing agility and strategic agility.

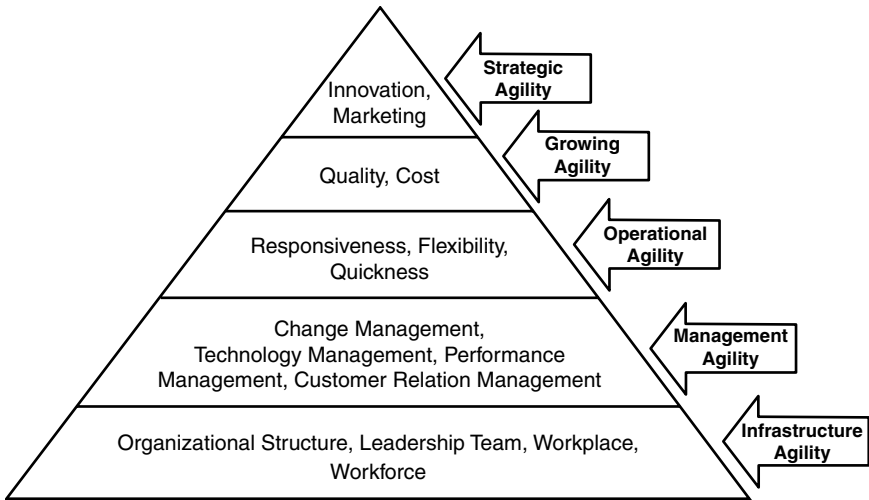


FIGURE 5.2 Typology of organizational agility

5.4.1 Infrastructure agility

In terms of Maslow's hierarchy of needs, the lowest level of needs is preconditions that, in terms of organizational agility, consist of organizational structure, leadership team, workplace and workforce. According to the results of the interviews, the majority of the hotel managers noted that organizational agility and structure are two inseparable concepts. Most informants noted that in order to achieve organizational goals, an agile system is required and, in order to have an agile system, infrastructural agility is necessary. Some informants expressed that companies can be successful under the situation balancing between adequate structure and environment changes in their organizations, particularly hospitality companies. The company structure should be based on an internal marketing plan (establishing a relationship between the company and employees) and interactive marketing (establishing appropriate communication between staff and customers). An appropriate physical environment and improvement services process have highly important roles in agility. Furthermore, some informants stated that the hardware aspects of the workplace are also important. Architecture, the building view, and hotel facilities have a significant impact on both employees and also the customers' choice. Respondent 4 argued that human resources are one of the prerequisites of an agile organization. By selecting, training and motivation the personnel, the organization can build a solid foundation for achieving agility. Staff morale at the time of service will have an impact on the quality of service. Additionally, some respondents noted that the workforce should have traits such as being committed, consistent, competent, loyal, etc., and should also be familiar with the culture and customs of various countries as well as other languages and local dialects.

5.4.2 Management agility

In order to achieve organizational agility, organizations should be able to react successfully to the emergence of new competitors, the development of new industry-changing technologies, or sudden shifts in overall market conditions. In agile systems, the role of the manager is to enable those doing the work to contribute their full talents and capabilities to generate value for customers and to eliminate any impediments that may be obstructing progress. The manager trusts in the judgment and wisdom of those who have contact with customers in terms of the work that must be completed. The manager also trusts in the talents and capacities of those doing the work to determine how the work can be done in the most effective manner. Agile is neither top-down nor bottom-up; it is outside-in. The focus is on delivering value to customers and the customer is the boss, not the manager (Denning, 2015). Interviewees 3 and 8 noted that managers should be able to identify the organization's strengths and weaknesses, and should also be aware of the opportunities and external threats, which enables them to make appropriate decisions in response to fluctuations. Interviewees 3 and 4 stressed on change management. They said that the public relations (PRs) in any organization, particularly in the hospitality industry, play a very important role in change management. In fact, PRs is an interface between the organization and the customer; thereby organizations can demonstrate their strengths to customers through PRs and it also reflects customer reaction to the organization on subsequent decisions.

The key for enabling hierarchies for agile development is sociocracy—particularly the two principles of shared decision making and double linking. Shared decision making (SDM) is a collaborative process that allows customers and service providers to make decisions together. It considers the best actionable evidence available, as well as the customer's values and preferences. Double linking is an organizing principle, as part of the so-called sociocratic circular method. In the sociocratic approach, decision-making is structured in circles. Each circle is connected to the next higher circle by way of a functional leader (appointed in the next higher circle) and a representative chosen in the circle. Both the functional leader and the representative participate in policy decisions taken in the lower as well as the higher circle (Romme, 1996).

Some interviews expressed that Interactive Voice Responding (IVR), databases, web sites and electronic journals can be public relations tools for communicating with customers. Other instruments can be mentioned, including various training programs, hospitality courses, housekeeping service, marketing principles, advertising and media techniques in relationship with customer, computer training, language training and culinary instruction. Performance management is another important factor that should be considered when aiming to have an agile organization. Efficient managers should be able to use the latest knowledge management and business knowledge in industrial countries and should also take into account local conditions, perform their duties in terms of planning, organization, coordination and control, leadership and human resource management, innovation and finally responding to

environment changes more effectively than before (the majority of informants). All of the informants emphasized customer relationship management (CRM), and expressed that one of the ways to succeed in a competitive market is to retain existing customers. Organizations must manage their relationships with customers and seek to create and build strong, deep and prolonged relations with these customers. Retaining existing customers is one of the most important competitive strategies, and can only be achieved through CRM. The goal of CRM is to empower the company to provide better service to customers in order to achieve success.

5.4.3 Operational agility

Operational agility is the ability to adapt and respond rapidly and precisely, with safety and poise, to maximize mission effectiveness. The capability to respond quickly and flexibility are two of basic and complementary items required for organizational agility. Operational agility is characterized by rapid and effective decision making, which allows organizations to allocate resources to new projects and is associated with cost reduction.

Respondents 2 and 3 stated that an organization must have a high capacity for responsiveness to clients and also noted recovery performance and extra role customer services. They stated that in the hospitality industry and service sector, employees should have these two features when providing services to customers. Respondents 5 and 7 said that quick response and reflection are achieved as a result of possible changes in processes and flexible relationships in the structure, which create opportunities for reorganization. According to informant 4, effective operational management requires efficiency (minimizing the cost) and effectiveness (achieving the desired result of the sale). In the hospitality industry, responsiveness to customer needs is particularly important. An agile organization should have a high action and reaction ability. Some interviews stated that the ability of high action can be linked to IT, services, strategies and new concepts in order to respond to market conditions and also for high reaction capability is linked to the used of the latest processes in the organization, the ability to listen to customers and to improve capabilities.

5.4.4 Growing agility

Hospitality service quality is highly changeable and is influenced by many factors, such as the mood and conditions of the service provider, time, place and manner of service. Interview 2 expressed that while intangible factors have a role in quality and service management, tangible factors are also involved. The quality of materials used, architecture, physical equipment, lighting, coloring, pleasant odors, the amount of various pollutants (including audio, visual, waste, health . . .), decorations, etc., are relevant factors that form quality of service for customers. The quality of the hospitality industry is a very broad concept. In order to create quality, some informants state that the focus should be on

functional areas such as customer satisfaction, employee morale, productivity, error reduction, costs, services, market share, growth in market share and competitive position. Interviewee 6 referred to the SERVQUAL model (1991), which proposes five factors for quality management: reliability (the potency and capability to render the promised service accurately and precisely), tangibles (appearance of physical facilities, equipment, crew and communications), response (supply according to customer demands on time), warranty and commitment (employees' knowledge, understanding and courtesy to transfer trust and intimacy) and empathy (special attention to every customer). The other concept in developing agility is cost management. Most of the informants referred to three purposes of cost management in a hotel: Fiscal discipline (cost control), which is the allocation of resources with the specified priorities and appropriate operational management. Some informants stated that the cost control is under the direction supervision of the cost control manager, who monitors all parts of the hotel to prevent the loss or damage to property, particularly in relation food. Finally, the fourth informant said that if we fail to control costs, we cannot manage effectively.

5.4.5 Strategic agility

According to Maslow's hierarchy of needs, the top level of the pyramid is known as the flourishing level. The condition for achieving this requires having and passing all four of the lower levels. If a company has been able to strengthen its business base with different strategies, at this stage, it must be able to show itself in a competitive market. Strategic agility is known as the highest level of agility in an organization. Strategic agility refers to the ability to use significant opportunities for providing service quality, innovation, initiative and also to enter into new markets.

The informants presented several ideas that related to strategic agility. Informant 1 considered innovation as a competitive advantage for an agile organization. A number of informants discussed market management and expressed that to succeed in marketing and to enter into new markets; the focus should be on four key points, which are data collection, analysis and classification of information, planning and control and finally, execution. Interviewee 9 stated that one of the important sectors in the hospitality industry is food and beverage. He believes that an organization must devote sufficient time for the customers in order to listen their opinions about food and the quality of service. The main objective is to have loyal customers, so an enjoyable experience should be created for every customer. Respondent 11 cited the invincibility factor of McDonalds and its success factors in competitive markets as follows: simplification of menu and harmonization of prices in all branches, benchmarking standards for all operational aspects and continual supervisory service, cleanliness and hygiene, intimacy of staff despite the large amount of work, use of equipment to transport food, wide promotions, particularly for families and children.

5.5 Discussion

The aim of this study is to provide a model of organizational agility to identify how organizations can survive themselves in the complex and dynamic environment of the hospitality industry. According to this model, the agility pillars are divided into five stages: preconditions, enablers, leverages, enhancers, and delighters. These five pillars are vital areas for those companies that are looking to achieve organizational agility. If companies desire to exploit their existing capacity to create an agile system, it should take note of these areas and implement strategies to achieve them.

Agility is the ability and willingness of an organization to learn from experience, renew itself, rapidly adapt to environmental changes in strategic ways. Today, managers are searching for different strategies to develop infrastructure agility in their organization, since they know that infrastructure agility is necessary for organizational innovation. Agile organizations are able to adapt themselves rapidly and successfully according to the environmental changes. Organizations with strategic agility are able to use significant opportunities to provide service quality, innovation, initiative and also to enter into new markets. In order to survive and grow among environmental changes, organizations need to adjust the right balance of standardization, flexibility, operational agility to create competitive strategies. Through strategic fit they can align themselves with emerging opportunities. By developing an agility plan—deepening understanding of organizational attributes like flexibility, speed, awareness, preparedness, and adaptability to take risk and tap opportunities—organizational leaders can confidently approach changes, whether they can predict it or not. They can make strategic decisions about customers and competitors based on their resources, capabilities and competencies. Agile organizations are able to create sustainable competitive advantages by using their ability to adapt quickly. In an agile organization, all members know how to use and capitalize on the opportunities emerging from complex and dynamic environments to strengthen themselves.

5.5.1 Theoretical contributions

Despite the significance of organizational agility, a minimal amount of research has been conducted on the structure of this important leverage within organizations. Particularly in the hospitality industry, there is no comprehensive conceptual framework of organizational agility. In this study, the researchers have attempted to provide a model of organizational agility for the hospitality industry. The qualitative method was used in order to achieve a deeper understanding and classification to provide a typology of organizational agility. The results are pictured in Figures 5.1 and 5.2, and can be a theoretical guide for future research in the same field.

5.5.2 Practical contributions

Hospitality industry is known as a dynamic industry which is continually faced with changes and, in order to succeed and grow, it has to show appropriate responses to this

complex environment, as well as for compatibility with changes in the external and internal environment. If an organization seeks to progress and achieve superiority in the currently competitive situation, undeniably, it cannot successfully achieve this without considering organizational agility. In this research, the basic and detailed needs of an agile system have been determined as well as the subsequent benefits for hospitality companies of all sizes and in all areas. This model can be a scale for those organizations that suffer from a lack of coordination or the inability to respond to environmental changes by enabling them to create an agile system. Furthermore, the results represent a program or guideline for organizations, and can also be useful for raising the quality of different parts of the organization, including the promotion of human resources, the strengthening of internal communication and personal empowerment.

5.6 Limitations

The results have revealed the significant role of employees in creating organizational agility. Employee partnership can come in different forms (Cotton, 1988), and also at different levels such as in the job, section, organization and market (Bakan, 2004). It would be beneficial for future research to provide a model of the employee's role (employee partnership in the processes of service improvement and creativity, or in the process of learning, particularly via knowledge subscription and skill developing) in organizational agility.

The size of the sample is another issue which was only 13 hoteliers. Therefore, it is recommended that for future studies in the same field, larger samples should be used and interviews with managers and supervisors in the hotel should be conducted.

Moreover, the 13 interviews were conducted with Iranian hoteliers in Iran, and therefore more comprehensive results could be achieved by using samples from different countries.

At the end, the methodology used in this study was a qualitative method, and most of the information was obtained through interviews, which means that the researcher's opinions could have affected the results. Therefore, it is recommended that future studies use different research methods.

References

- Bakan, I. S. (2004). The influence of financial participation and participation in decision making on employee job attitudes. *International Journal of Human Resource Management*, 15(3), 587–616.
- Barrand, J. (2006). *Le Manager agile, Vers un nouveau management pour affronter la turbulence*. Paris: Dunod.
- Breu, K., Hemingway, C. J., Strathern, M., & Bridger, D. (2001). Workforce agility: The new employee strategy for the knowledge economy. *Journal of Information Technology*, 17(1), 21–31.
- Charbonnier-Voirin, A. (2011). The development and partial testing of the psychometric properties of a measurement scale of organizational agility. *Management*, 14(2), 119–156.

- Cotton, J. L.-H. (1988). Employee participation: Diverse forms and different outcome. *Academy of Management Review*, 13(1), 8–22.
- D'Ortenzio, C. (2012). *Understanding change and change management processes: A case study*. Canberra: University of Canberra.
- Denning, S. (2015, July 22). *How to make the whole organization agile*. www.forbes.com/sites/stevedenning/2015/07/22/how-to-make-the-whole-organization-agile/#3b45999c5841
- Dove, R. (2001). *Responsibility: Language, structure & cultural of agiled enterprise*. New York: Wiley.
- Giap, T. K., Gopalan, S., & Ye, Y. (2016). Drivers of growth in the travel and tourism industry in Malaysia: A Geweke causality analysis. *Economies*, 4(1), 3–15.
- Glenn, M. (2009). *Organisational agility: How business can survive and thrive in turbulent times*. London: Economist Intelligence Unit.
- Goldman, S. L. (1991). *21st century manufacturing enterprise strategy: An industry-led view* (Vol. 2). Bethlehem, PA: Iacocca Institute at Lehigh University.
- Goldman, S. L., Nagel, R., & Preiss, K. (1995). *Agile competitors and virtual organizations*. New York: Van Nostran Reinhold.
- Gunasekaran, A., Mcgaughey, R. & Wolstencroft, V. (2001). Agile manufacturing: Concepts and framework. In *Agile manufacturing: The 21st Century Competitive Strategy* (pp. 25–49). Amsterdam: Elsevier.
- Hofstede, G. (2001). *Culture's consequences: Comparing values, behaviors, institutions, and organizations across nations*. Thousand Oaks, CA: Sage Publications.
- Kassim, N. M., Zain, M., & Bradish, P. (2004). Assessing the measurement of Organizational Agility. *American Academy of Business*, 174–177.
- Levy-Bonvin, J. (2003, December 15). *Hotels*. Hospitality Net: www.hospitalitynet.org/opinion/4017990.html
- Lin, C., Chiu, H., & Chu, P. (2006). Agility index in the supply chain. *International Journal of Production Economics*, 100, 285–299.
- Mehrabi, S. S. (2013). Examining the degree of organizational agility from employees' perspective (Agriculture – Jihad Organization of Shahrekord City). *Academic Research in Business and Social Sciences*, 9(3), 315–323.
- Miles, M., & Huberman, A. (1994). *Qualitative data analysis*. Beverly Hills, CA: Sage Publications.
- Mussalam, G. Q., & Tajeddini, K. (2016). Tourism and place branding in Switzerland: How perceptions of place attributes for short and long visits can influence destination choice. *Journal of Hospitality and Tourism Management*, 26(1), 18–26.
- Nabatchian, G. M. (2014). Review the relation between organizational agility and job satisfaction of staff in the Ministry of Youth Affairs and Sports Iran. *Modern Communication Technologies & Research (IJMCTR)*, 2(2), 10–13.
- Nichols, J. (2012). Management: Everything must change. But how? *Keeping Good Companies*, 64(2), 118–120.
- Nickpour, A., & Salajegheh, S. (2011). An investigation of the relationship between organizational agility and job satisfaction of employees' of Governmental Organization of Kerman. *Research in Management*, 15(1), 85–97.
- O'Gorman, K. D. (2010). *The origins of hospitality and tourism*. Oxford: Goodfellow Publishers.
- Romme, A. (1996). Making organizational learning work: Consent and double linking between circles. *European Management Journal*, 14(1), 69–75.
- Shafer, R. A., Dyer, L., Kilty, J., Amos, J., & Ericksen, J. (2001). Crafting a human resource strategy to foster organizational agility: A case study. *Human Resource Management*, 40(3), 197–211.

- Sharifi, H., Colquhoun, G., Barclay, I., & Dann, Z. (2001). Agile manufacturing: A management and operational framework. *Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture*, 215(6), 857–869.
- Sull, D. (2009). How to thrive in turbulent markets. *Harvard Business Review*, 87(2), 78–88.
- Tajeddini, K. (2013). Using grounded theory to model market orientation experiences at practice. *International Journal of Business Excellence*, 6(5), 553–571.
- Tajeddini, K., & Trueman, M. (2014). Perceptions of innovativeness among Iranian hotel managers. *Journal of Hospitality and Tourism Technology*, 5(1), 62–77.
- Twining-Ward, L. (2009). *Sub Saharan Africa tourism industry research*. Washington, DC: Africa Region's Finance and Private Sector Development.
- Yusuf, Y. Y., Sarhadi, M., & Gunasekaran, A. (1999). Agile manufacturing: The drivers, concepts and attributes. *International Journal of Production Economics*, 62(1–2), 33–43.

6

THE APPLICATION OF THEORIES ABOUT CAPITAL STRUCTURE

Pecking order, trade-off and signaling in the hotel units in Portugal

Aida Maria de Brito Martins, Joaquim Carlos da Costa Pinho and Graça Maria do Carmo Azevedo

6.1 Introduction

Decisions about the components of the capital structure, that is, how companies use their own and other capital to finance their assets, are critical to companies (Couto & Ferreira, 2010; Singh et al., 2014). Over the last few decades, several theories on capital structure have been developed, notably Trade-off (Kraus & Litzenberger, 1973; Scott, 1977; Kim, 1978), Pecking order (Myers, 1984) and Signaling (Leland & Pyle, 1977; Ross, 1977). According to the Trade-off theory, the companies aim to achieve an optimal level of debt, which takes into account the combination between tax benefits of debt and the costs of insolvency of the company, whereas for the theory Pecking order the changes in debt are a consequence of the financial needs of companies, which must exhaust domestic sources of financing first, followed by indebtedness and only in the last option the issuance of capital abroad. Signaling theory is based on the asymmetry of information between two parties (Connelly et al., 2011) and argues that the value of securities issued by companies will depend on how investors will interpret financial decisions as evidence of future corporate income streams; higher levels of debt issuance may be interpreted as positive signs.

The various studies carried out on the capital structure of companies have concluded that this is related to some business characteristics. These studies have been applied to different sectors of business activity in different countries, and the results obtained have been divergent (Titman & Wessels, 1988; Couto & Ferreira, 2010; Serrasqueiro & Nunes, 2012; Wellalage & Locke, 2013; Kühnhausen & Stieber, 2014; De Luca, 2015; Serrasqueiro & Caetano, 2015; Panagiotis, 2016).

With regard to the hospitality sector, most studies have highlighted the issues of business financing (Jang, Tang, & Chen, 2008; Torluccio, 2012; DeRoos et al., 2014;

Jareño & González, 2014; Kizildag, 2015), with a smaller number on the analysis of the determinants of the capital structure of companies belonging to the hotel sector (Karadeniz et al., 2009, 2011; Devesa & Esteban, 2011; Karadeniz et al., 2011; Torluccio, 2012; Wachilonga, 2013; DeRoos et al., 2014; Jareño & González, 2014; Singh et al., 2014; Kizildag, 2015; Serrasqueiro & Nunes, 2014; Pacheco & Tavares, 2017).

The present study aims to analyze the application of some theories on the capital structure of companies, namely the theories Pecking order, Trade-off and Signaling in hotel units in Portugal. In order to reach this objective, we analyzed the determinants of the capital structure of these companies and, consequently, the impact of these factors on total indebtedness. This option is justified by the economic growth and relevance that these establishments have been registering in recent years in Portugal.

In order to reach the proposed goal, a sample of 240 hotel units was used. Through the analysis of multiple linear regression, based on panel data, it was possible to verify that the variables considered in the different theories discussed exert an influence on the capital structure of said companies, but there are different effects. The variables of dimension, age, tangibility, profitability and extra-tax fiscal benefit have a positive impact on total indebtedness, while the growth and fiscal benefit of debt have a negative impact on total indebtedness.

After analyzing the results obtained, it will be possible to conclude that the hotel units in Portugal apply the Trade-off, Pecking order and Signaling theories, with special emphasis on the first one.

6.2 Importance of the accommodation sector

The sector in which the company operates (Kira & He, 2012), as well as the factors related to it (MacKay & Phillips, 2005) influence the capital structure of companies as well as their access to finance.

However, the sector in which a company operates does not directly influence its capital structure, but indirectly due to the composition and nature of its assets (Hall, Hutchinson, & Michealas, 2000), adding Barbosa and Moraes (2004) the sector is a substitute for business risk, and therefore there is an association between it and corporate indebtedness.

Firms in the service sector may differ from those in the production or construction sector in terms of financing needs and choices (Abdulsaleh & Worthington, 2013). Abor (2007) found some differences in the financing preferences of Ghanaian SMEs in all sectors, noting that agricultural and medical SMEs rely more on debt (long and short term) than companies belonging to the sector industrial, with short-term credit being more widely used in the wholesale and retail sectors than in production, while the construction, hospitality and housing and mining industries are more dependent on long-term financing.

Given that the lodging and restaurant sector is one of the main sectors of economic activity in Portugal, a subsector of that sector (hotel industry) was chosen to study the determinants of the capital structure, as well as the application of

the various theories – Pecking order, Trade-off and Signaling to the companies belonging to said subsector.

In 2016, the Portuguese housing and restaurant sector recorded a growth in terms of turnover (14.8%), Gross Value Added (21.4%) and Gross Operating Excess (41.5%) (INE, 2018). The number of tourist accommodation establishments (hotels, tourism in rural areas and housing and local accommodation) increased to 4,805 (+ 10.7%), with an offer of 166.4 thousand rooms (+ 4.8%) and 380.8 thousand beds (5.2%) (INE, 2017).

The choice of the sector of the hotel industry is due to the fact that it stands out from the rest in terms of the figures presented, and also showed an improvement in its main indicators in 2016. The number of guests reached 21.3 million, providing 59.4 million overnight stays, equivalent to increases of 11.1% and 11.6%, respectively, compared to the year 2015; total revenues increased 18.1%; the hotel sector reached a figure of 84.2% for guests and 86.5% for overnight stays, followed by local accommodation (12.7% and 11.1%, respectively) and tourism in rural and housing areas (3.1% and 2.4%) (Instituto Nacional de Estatística, 2017), thus highlighting the hotel units of all other types of accommodation.

In 2016, total revenues in hotels amounted to EUR 2.8 billion (+ 17.9%) and room revenues to EUR 2.0 billion (+ 18.9%), surpassing the previous year's performance (+ 13.5% and + 15.3%, respectively). The hotels contributed with 2.2 billion euros of total revenues and 1.6 billion euros of room revenues, corresponding to quotas of 77.6% and 76.6%, respectively. In terms of representativeness, hotel-apartments were followed, with 11.0% of total revenues and 11.1% of those in the room (Instituto Nacional de Estatística, 2017).

As of July 2016, 1,669 hotel establishments were in operation, 66.6% of the total lodging capacity being available, representing the four and three star categories, 45.5% and 24.6%, respectively, of the total typology (Instituto Nacional de Estatística, 2017).

In 2016, the net rate of bed occupancy in hotels reached 50.2% (+2.9 pp in 2015). The establishments with the highest occupancy rate were the Quintas da Madeira (74.6%) and the hotels (52.2%), where the categories were five stars (58.3%) and four (56.2%). In the summer months occupancy rates reached 75.9% in August, 67.4% in July and 63.7% in September (Instituto Nacional de Estatística, 2017).

The average income per room available (RevPAR) in 2016 in the hotel sector was 44.6 € (+ 14.2%), a growth that surpassed that of the previous year (+ 13.4%).

6.3 Literature review

According to the Pecking order theory, companies follow a sequence in the use of sources of financing, first using retained earnings, followed by recourse to debt and only the issue of capital abroad. Firms prefer internal financing since their costs are lower than those of debt (Myers, 1984; Myers & Majluf, 1984). According to this theory, the changes in debt are a function of the company's financial needs (Shyam-Sunder & Myers, 1999). According to Trade-off theory (Kraus & Litzenberger, 1973; Kim, 1978) firms adjust their optimal debt level by comparing the tax benefits of debt with the costs of insolvency.

The theory of Signaling (Spence, 1973; Ross, 1977; Leland & Pyle, 1977) describes behavior when two parties (individuals or organizations) have access to different information (Borges, Vieira, & Silva, 2011). The main goal of Signaling theory is to communicate positive information about the attributes of an organization to external stakeholders (Connelly et al., 2011). The theory of Signaling (Spence, 1973; Leland & Pyle, 1977; Ross, 1977) describes behavior when two parties (individuals or organizations) have access to different information (Borges, Vieira, & Silva, 2011). The main goal of Signaling theory is to communicate positive information about the attributes of an organization to external stakeholders (Connelly et al., 2011).

Regarding the specific sector of the hotel industry, Jareño and González (2014) report that this sector continues to resort to traditional sources of financing, adding Torluccio (2012) that mortgages and loans are the most widely used medium and long-term financial instruments. According to the same author, when bank financing is the biggest responsibility of companies, responsibility of companies, growth opportunities may be affected and consequently diminish. DeRoos et al. (2014) add that higher interest rate spreads are applied to hotels since they pose a greater risk.

Regarding the applicability of theories on capital structure, the conclusions of some studies, which also analyze the companies related to the hotel sector, are in accordance with the Pecking order theory (Karadeniz et al., 2011; Wachilonga, 2013; Kizildag, 2015). Other studies, in turn, present conclusions consistent with the Trade-off theory. Karadeniz et al. (2009) and Tsai, Pan and Lee (2011) report that the companies belonging to the hospitality industry have a high level of fixed assets, which can serve as collateral for creditors, thus enabling them to debt as a way to obtain tax benefits.

According to Serrasqueiro and Nunes (2014), on the one hand, the high level of fixed assets can contribute to the increase in the use of debt by hotel companies, with a view to increasing tax benefits, on the other, a high level of volatility of demand can increase the company's risk, leading to less recourse to debt in order to reduce the possibility of insolvency.

Karadeniz et al. (2011) also concluded, on the other hand, by a statistically significant relationship between firm dimension and the target debt ratio, which is in line with the Trade-off theory. Devesa and Esteban (2011) report that companies demonstrate a certain hierarchical preference when they decide to resort to greater indebtedness, and their objective is to achieve optimal capital structure, with the reeducation of associated costs being minimized.

In turn, Pacheco and Tavares (2017) concluded that Trade-off and Pecking order theories should not be considered in isolation to explain the capital structure of SMEs belonging to the housing sector.

6.4 Development of hypotheses

Consequently, the following variables are taken into account in the study of the application of Trade-off, Pecking order and Signaling theories.

6.4.1 Dimension

While some authors affirm that there is a significant statistical relationship between the dimension of the company and its capital structure (Karadeniz et al., 2011), there are significant differences in behavior regarding the use of credit by housing companies, based on their dimension (Singh et al., 2014), others point out that there is no significant relationship between the dimension of hotels and accommodation companies and the financing of initial investments as well as current operations (Wachilonga, 2013).

However, the dimension of the company is usually considered by investors as an indicator of their ability to take on bonds, and a positive relationship between them and their indebtedness is expected (Couto & Ferreira, 2010; Forte, Barros, & Nakamura, 2013; Kühnhausen & Stieber, 2014; De Luca, 2015). This relationship results from the lower probability of larger firms incurring insolvency costs (Titman & Wessels, 1988; Bhaird & Lucey, 2009), maximizing the tax benefits of debt (Rajan & Zingales, 1995), have less information asymmetry and higher credit rating (Subadar, 2011) and lower debt monitoring costs (Um, 2001).

The dimension factor is a form of Signaling to the market, since larger companies are perceived as having a lower risk and problems of information asymmetry. Thus, according to the Signalization theory, it is possible that the dimension factor is a stimulus to indebtedness (Semedo, 2015).

The study carried out analyzes the relationship between the dimension of the company and its capital structure, based on the most commonly used criterion identified in the literature review, namely turnover, within which the following hypothesis was established:

***Hypothesis 1:** The level of indebtedness is positively related to the dimension of the company.*

6.4.2 Age

As regards the age of the company, the model of the life cycle of financial growth, developed by Berger and Udell (1998), incorporates elements of the various theories and describes the order of business financing options throughout their life. Thus, it is generally assumed that start-up firms find it difficult to access external financing, mainly due to the opacity of information (Huyghebaert & Van De Gucht, 2007).

According to the Trade-off theory firms adjust their optimal capital structures over time, resulting from the balance between costs and benefits associated with leverage, due to the changing nature of the environments. As a result, older/experienced companies can use their knowledge and market power, as well as their reputation for lower-priced loans and tax benefits, without neglecting the bankruptcy costs rise as debt increases as well. Thus, the Trade-off theory advocates a positive relationship between business leverage and the age of the business (Ahsan, Wang & Qureshi, 2016).

The study analyzes the relationship between the age of the company and its capital structure, based on the number of years that the company is operating in the market. The following hypothesis is presented:

***Hypothesis 2:** The level of indebtedness is positively related to the age of the company.*

6.4.3 Tangibility

The tangible assets of the company can be used as debt guarantee, according to the Trade-off theory, thus reducing the financing costs related to information asymmetry (Titman & Wessels, 1988; Harris & Raviv, 1991). Thus, firms with more tangible assets have a higher level of indebtedness (Rajan & Zingales, 1995, Frank & Goyal, 2003; De Luca, 2015), particularly in the medium and long term (Couto & Ferreira, 2010). However, other studies concluded by a negative relationship between leverage and tangibility (Kühnhausen & Stieber, 2014; Panagiotis, 2016).

The study examines the relationship between the firm's degree of tangibility and its capital structure, based on the choice between the criteria identified in the literature review, namely the ratio of tangible assets to total assets (Wellalage & Locke, 2013; Panagiotis, 2016), thus establishing the following hypothesis:

***Hypothesis 3:** The level of indebtedness is positively related to the company's tangible assets.*

6.4.4 Growth

As for growth, while some studies have concluded a positive relationship (Booth et al., 2001; Forte, Barros, & Nakamura, 2013; Kühnhausen & Stieber, 2014), others have verified that growth is not determinant in the capital structure of companies (Couto & Ferreira, 2010). According to Pecking order theory, firms with high growth rates have a negative relationship with external financing (Myers & Majluf, 1984), a position also shared by the Trade-off theory (Myers, 1977; Al-Najjar & Taylor, 2008).

Based on the criteria identified in the literature review, the study uses the growth of net total assets (Titman & Wessels, 1988; Couto & Ferreira, 2010), in order to verify if growth is an important determinant of the structure of the companies' capital, and the following hypothesis is therefore identified:

***Hypothesis 4:** The level of indebtedness is negatively related to the growth of the company.*

6.4.5 Profitability

As for profitability, some studies concluded that there is a negative relationship between the level of indebtedness and that, a position that is consistent with the Pecking order theory (Couto & Ferreira, 2010; Forte, Barros, & Nakamura, 2013).

According to the Pecking order and Trade-off theories, high-risk firms can have a negative impact on firm leverage (Subadar, 2011; Forte, Barros, & Nakamura, 2013; Wellalage & Locke, 2013).

According to the Signaling theory, a positive relation between the level of capital and the market value of the company is expected, since companies that have a good financial performance can generate sufficient flows to pay interest and repay long-term debt term (Semedo, 2015). Companies with the greatest financial difficulties will have a lower level of other capital due to restricted access or very high costs.

In the work developed, profitability is measured through the profitability of capital (De Luca, 2015), thus the following hypothesis is presented:

***Hypothesis 5:** The level of indebtedness is negatively related to the profitability of the company.*

6.4.6 Debt tax benefit

As for the tax benefit of the debt, the Pecking order theory is ambivalent, whereas the Trade-off theory predicts a positive relationship between the tax benefit and the leverage ratios. The fiscal benefit of debt financing may have an impact on the amount of retained earnings and the company's dividend policy, tending to favor higher leverage ratios (Fan, Titman, & Twite, 2012; Feld, Heckemeyer, & Overesch, 2013; Kühnhausen & Stieber, 2014).

In this context, and based on De Luca (2015), the study considers the income tax (IRC) paid by Portuguese companies, based on a review of the literature and an important determinant of the capital structure of companies, thus formulating the following hypothesis:

***Hypothesis 6:** The level of indebtedness is positively related to corporate income tax*

6.4.7 Extra debt tax benefit

Other business items may also reduce the taxes payable (DeAngelo & Masulis, 1980), such as depreciation and amortization, which constitute the extra-debt tax benefit (Noulas & Genimakis, 2011). As a result, they lead companies to obtain lower levels of indebtedness (Fan, Titman, & Twite, 2012), thus finding a negative relationship between the extra-debt tax benefits and the leverage.

Based on the literature review, this study uses the annual depreciation and amortization indicator on total assets (Wellalage & Locke, 2013), in order to verify if the extra-debt tax benefit is an important determinant of the capital structure of the companies, being thus formulated the hypothesis:

***Hypothesis 7:** The level of indebtedness is negatively related to the extra fiscal debt benefits.*

6.5 Methodology

6.5.1 Sample

In order to carry out the present study, the AMADEUS database was used. The companies consulted (240) belong to the accommodation activity sector, more specifically to the economic activity code (CAE) 551 – Hotel Establishments, with the analysis falling between the years 2008 and 2017 (10 years). Regarding the start of activity, the average year of incorporation was 1994, with the oldest company being incorporated in 1910 and the most recent one in 2016.

The companies surveyed are located in Portugal (Continental and Islands) and their distribution can be observed through Table 6.1.

As far as the dimension of the companies in the sample is concerned, as can be seen from Table 6.2, the majority (68.75%) is micro, followed by small and medium companies, which together account for 28.75%. Large companies represent only 2.5% of the sample.

TABLE 6.1 Headquarters district of hotel establishments

<i>Headquarters District</i>	<i>N^o</i>	<i>%</i>
Aveiro	12	5.00
Beja	10	4.17
Braga	18	7.50
Bragança	7	2.92
Castelo Branco	7	2.92
Coimbra	13	5.42
Évora	9	3.75
Faro	12	5.00
Guarda	9	3.75
Leiria	17	7.08
Lisboa	14	5.83
Portalegre	6	2.50
Porto	8	3.33
Santrarém	11	4.58
Setúbal	15	6.25
Viana do Castelo	11	4.58
Vila Real	8	3.33
Viseu	14	5.83
RA Açores	18	7.50
RA Madeira	21	8.75
Total	240	100.00

TABLE 6.2 Hotel establishments' dimension

<i>Dimension</i>	<i>Obs.</i>	<i>%</i>
Micro enterprise	165	68.75
Small enterprise	36	15.00
Medium enterprise	33	13.75
Large enterprise	6	2.50
Total	240	100.00

6.5.2 Dependent and independent variables

Based on previously studies carried out (Devesa & Esteban, 2011; Wellalage & Locke, 2013; Kühnhausen and Stieber, 2014; Singh et al., 2014; Kizildag, 2015; De Luca, 2015), this work considers as dependent variable Total indebtedness, calculated through the short- and long-term debt ratio, that is, total debt, over total assets.

Table 6.3 presents a summary of the dependent and independent variables, the measures used for each of them, as well as the reference authors and their expected signal.

The variable dimension was estimated through the use of Turnover (VN) (Titman & Wessels, 1988; Couto & Ferreira, 2010).

The age was measured by the number of years intervened since the incorporation of the company to the last financial year in question (Bhaird & Lucey, 2009; Forte, Barros, & Nakamura, 2013).

In order to estimate the tangible asset variable was used the tangible assets weight indicator, given by the tangible asset and total assets quotient (Wellalage & Locke, 2013; Panagiotis, 2016).

TABLE 6.3 Dependent and independent variables

<i>Dependent</i>		<i>+ or -</i>
1. Total indebtedness	Total debt/total assets	
Independents	Turnover	+
1. Dimension		
2. Age	Number of years intervened since the incorporation of the company to the last	+
3. Tangible asset	Tangible asset/total assets	+
4. Growth	Total assets years N- Total assets year N-1/Total assets year N-!	-
5. Debt tax benefit	ROE = net income/equity	-
6. Extra debt tax benefit	Income tax (IRC) paid by Portuguese companies	+
7. Extra debt tax benefit	Annual depreciation and amortization/total assets	-

The growth variable was calculated through the annual growth indicator of total assets, calculated by the quotient between the total assets difference of years N and N-1 over the total assets of year N-1 (Couto & Ferreira, 2010).

As regards the variable profitability, this was calculated using the return on capital indicator, which is obtained by dividing net income (RL) on equity (CP) (De Luca, 2015).

The debt tax benefit is the income tax (IRC) paid by Portuguese companies, based on their accounting and fiscal policies (De Luca, 2015).

Regarding the extra tax debt benefit variable, it was estimated by the annual depreciation and amortization (APR) ratio on the total assets (TA) (Wellalage & Locke, 2013).

6.5.3 Pet model

The econometric analysis used to evaluate the hypotheses under study was supported by multiple linear regression techniques based on panel data.

Although the Pooled model is statistically significant, the fixed effects model was preferable when compared to this model. However, after the application of the Hausman test, which compares the models of the fixed effects with the random effects, the latter was chosen. Thus, regression was performed by estimating the following model:

$$ET = \beta_0 + \beta_1 \times VN + \beta_2 \frac{ATang}{AT} + \beta_3 \frac{(AT_N - AT_{N-1})}{AT_{N-1}} + \beta_4 \frac{RL}{CP} + \beta_5 IRC + \beta_6 \frac{DPA}{AT} \quad (1)$$

Where ET corresponds to the dependent variable, the total indebtedness of the firm, β_0 to the underlying error, β_1 to the coefficient associated with the dimension variable, given by the turnover (TN), β_2 to the coefficient associated with the asset tangibility variable, calculated by the quotient between the tangible asset (Tang A) and total assets (TA), β_3 to the coefficient associated with the growth variable, calculated by the quotient of the total assets difference of years N and N-1 over the total assets of year N-1, β_4 coefficient associated with the variable to the profitability, given by the quotient between the net income (NI) and the equity (E), β_5 to the coefficient associated to the variable debt tax benefit, given by the income tax (IT) paid or recovered by the companies, and β_6 to the associated coefficient to the fiscal variable extra debt tax benefits, calculated through the quotient between depreciation and amortization (DPA) on total assets (TA).

6.6 Results analysis

Table 6.4 shows the descriptive statistics of the variables, independent and dependent, considered in this study. It should be noted that the companies registered an average growth of 97%, although the minimum value was -89.8% and the maximum was 149,500%, which indicates a large range of variation of this variable. The average

TABLE 6.4 Descriptive statistics

<i>Variable</i>	<i>Obs</i>	<i>Mean</i>	<i>Std. Dev.</i>	<i>Min</i>	<i>Max</i>
Dimension	2400	1.5	.8217551	1	4
Age	2400	1994.988	13.03776	1910	2016
Tangibility	2400	.6426202	.318692	0	1
Growth	2399	.9701533	30.61609	−.8981717	1465.014
Profitability	2400	.1528505	19.11557	−525.2231	683.3895
Debt tax benefit	2400	36.7959	520.3382	−4605.958	15600.41
Extra debt tax benefit	2400	.051607	.0826267	−.1382558	2.951718
Total indebtedness	2399	.4442907	1.507297	0	50.08146

The table shows the averages of all variables, highlighting the growth and tangibility, as well as the minimum and maximum values presented by each of them.

profitability of hotel units in Portugal is also very satisfactory (15.3%), as well as tangibility (64.3%). The total indebtedness of the companies in question reached a high value (44.4%), varying between zero and 5,000%, which shows the extreme dependence of external debt of some hotel companies.

Through the application of linear regression, the Pooled model was excluded. Then the fixed effects model and the random effects model were tested. In order to select the model, the Hausman test was performed, obtaining the results shown in Table 6.5, accepting the null hypothesis and rejecting the alternative hypothesis, that is, the random effects model was selected.

As can be seen from Table 6.5, the variables Start of activity, Turnover, Tangibility, Profitability and Extra debt tax benefit have a positive impact on total indebtedness, while Growth and Debt tax benefit has a negative impact.

TABLE 6.5 Multiple linear regression – random effects model results

<i>Total indebtedness</i>	<i>Coef.</i>	<i>Std. Err.</i>	<i>P>z</i>
Dimension	.0364155	.0575698	0.527
Age	.0020758	.0035695	0.561
Tangibility	.211,151	.1,230,284	0.086
Growth	−.0003729	.0009673	0.700
Profitability	.0001476	.0015473	0.924
Debt tax benefit	−.0000175	.0000606	0.772
Extra debt tax benefit	.00303	.3,878,386	0.994
Cons	−3.886,699	7.140,537	0.586

The variables Start of activity, Turnover, Tangibility, Profitability and Extra debt tax benefit have a positive impact, while Growth and Debt tax benefit have a negative impact on total indebtedness.

After analyzing the results obtained, one can verify the hypotheses 1, 2, 3 and 4, that is, the level of total indebtedness of the hotel units in Portugal is positively related to the dimension, age and tangible assets of the companies and negatively related to their growth.

In relation to Hypothesis 1, the level of indebtedness is positively related to the dimension of the company, corroborating the results of other studies previously developed (Titman & Wessels, 1988; Rajan & Zingales, 1995; Um, 2001; Bhaird & Lucey, 2009; Couto & Ferreira, 2010; Subadar, 2011; Forte, Barros, & Nakamura, 2013; Kühnhausen & Stieber, 2014; De Luca, 2015). Consequently, the Signaling theory is applied since, according to this, it is possible that the dimension factor is a stimulus to indebtedness (Semedo, 2015).

Regarding the age variable, the Hypothesis 2 is verified, that is, the age of the company is positively related to the level of total indebtedness of hotel units in Portugal. According to Trade-off theory older/experienced companies can use their knowledge and market power as well as their reputation for borrowing cheaper and getting tax benefits. Thus, Trade-off theory advocates a positive relationship between business leverage and business age (Ahsan, Wang & Qureshi, 2016). According to the data obtained in this study, the Trade-off theory is applied regarding the age variable.

The results obtained confirm the Hypothesis 3, that is, the level of total indebtedness of the hotel units is positively related to the tangible assets. The conclusions obtained corroborate other studies already carried out (Rajan & Zingales, 1995, One, 2001; Frank & Goyal, 2003; De Luca, 2015), particularly in the medium and long term (Couto & Ferreira, 2010). According to the Trade-off theory, the tangible assets of the company can be used as debt collateral reducing the financing costs related to information asymmetry (Titman & Wessels, 1988; Harris & Raviv, 1991). According to the results obtained in this study, the Trade-off theory regarding this variable is applied.

As to growth, the results obtained confirm the Hypothesis 4, corroborate some studies previously developed which concluded that growth is not determinant in the capital structure of companies (Couto & Ferreira, 2010). According to the Pecking order theory, firms with high growth rates have a negative relationship with external financing (Myers & Majluf, 1984), a position also shared by the Trade-off theory (Myers, 1977; Al-Najjar & Taylor, 2008).

With regard to profitability, the results obtained do not confirm the Hypothesis 5. According to the Trade-off theory, a positive relation between the level of capital and the market value of the company is expected, since companies that have a good financial performance can generate sufficient flows to pay interest and repay long-term debt term (Semedo, 2015). Companies with the greatest financial difficulties will have a lower level of foreign capital due to restricted access or very high costs. For Signaling theory, a positive relationship between debt and corporate financial performance is also expected (Semedo, 2015).

Regarding Hypothesis 6, this is also not the case, ie the level of indebtedness of hotel units in Portugal is not positively related to the debt tax benefit. The results obtained do not corroborate the conclusions of previous studies that point out that

the fiscal benefit of debt financing may favor higher leverage ratios (Fan, Titman, & Twite, 2012; Feld, Heckemeyer, & Overesch, 2013; Kühnhausen & Stieber, 2014). In this sense, the results obtained are partially in accordance with the Pecking order theory, and in contradiction with the Trade-off theory.

It can also be verified from the results obtained that there is no Hypothesis 7, that is, the level of indebtedness of the hotel units in Portugal is not negatively related to the extra-tax fiscal benefits, not being those in line with the data obtained in other studies already developed (Fan, Titman, & Twite, 2012).

6.7 Conclusions

The capital structure of companies is a critical issue for them, and several theories have emerged over the last decades, notably Trade-off, Pecking order and Signaling.

The studies carried out on this theme have been applied to different sectors of business activity in several countries. Although the results obtained are divergent (Titman & Wessels, 1988; Couto & Ferreira, 2010; Serrasqueiro & Nunes, 2012; Wellalage & Locke, 2013; Kühnhausen & Stieber, 2014; De Luca, 2015; Serrasqueiro & Caetano, 2015; Panagiotis, 2016), these studies have concluded that the capital structure is related to some business characteristics. In the hotel sector, some studies have also been developed, although in a smaller number, to analyze the determinants of the capital structure of the companies belonging to the sector.

The present study aims to analyze the application of some theories on the capital structure of companies, namely the theories Pecking order, Trade-off and Signaling in hotel units in Portugal.

In order to reach this objective, we analyzed the determinants of the capital structure of these companies and, consequently, the impact of these factors on total indebtedness. Through the analysis of multiple linear regression, based on panel data, it was possible to verify that the variables considered in the different theories discussed exert an influence on the capital structure of said companies, but there are different effects.

The results obtained show that the level of total indebtedness of the hotel units in Portugal is positively related to the dimension of the company, corroborating the results of other studies previously developed (Titman & Wessels, 1988; Rajan & Zingales, 1995; Um, 2001; Bhaird & Lucey, 2009; Couto & Ferreira, 2010; Subadar, 2011; Forte, Barros, & Nakamura, 2013; Kühnhausen & Stieber, 2014; De Luca, 2015). Consequently, the Signaling theory is applied (Semedo, 2015).

The age of the companies is positively related to the level of total indebtedness of hotel units. According to Trade-off theory older companies can use their knowledge, market power and reputation for borrowing cheaper and getting tax benefits. Thus, Trade-off theory advocates a positive relationship between business leverage and business age (Ahsan, Wang & Qureshi, 2016). According to the data obtained in this study, the Trade-off theory is applied.

The conclusions obtained about the relationship between the level of total indebtedness and the tangible assets, which is positive, corroborate other studies

already carried out (Rajan & Zingales, 1995, Frank & Goyal, 2003; De Luca, 2015). According to the Trade-off theory, the tangible assets of the company can be used as debt collateral (Titman & Wessels, 1988; Harris & Raviv, 1991), so the results obtained in this study confirm the application of this theory.

The growth of the companies have a negative relationship with the level of total indebtedness, corroborating some studies previously developed which concluded that growth is not determinant in the capital structure (Couto & Ferreira, 2010). According to the Pecking order theory, firms with high growth rates have a negative relationship with external financing (Myers & Majluf, 1984), a position also shared by the Trade-off theory (Myers, 1977; Al-Najjar & Taylor, 2008).

With regard to profitability, the results obtained show that there is a positive relationship between that and the total indebtedness, which is in accordance with the Trade-off theory (Semedo, 2015) and Signaling theory (Semedo, 2015).

The tax benefit of debt is negatively related to the level of indebtedness of hotel units in Portugal. The results obtained do not corroborate the conclusions of previous studies that point out that the tax benefit of debt financing may favor higher leverage ratios (Fan, Titman, & Twite, 2012; Feld, Heckemeyer, & Overesch, 2013; Kühnhausen & Stieber, 2014). In this sense, the results obtained are partially in accordance with the Pecking order theory, and in contradiction with the Trade-off theory.

The level of indebtedness of the hotel units in Portugal is not negatively related to the extra-tax fiscal benefits, not being those in line with the data obtained in other studies already developed (Fan, Titman, & Twite, 2012).

After analyzing the results obtained, it will be possible to conclude that the hotel units in Portugal apply the Trade-off, Pecking order and Signaling theories, with special emphasis on the first one.

This work stands out from those previously developed by the verification of the application of the different theories of capital structure to those companies, with emphasis on Signaling theory. However, the results obtained in the present study may, in some way, be conditioned by the sample, which should be broader. It is suggested that future research may be based on another tourism sector, namely restaurant, which also has a significant impact in terms of the national economy. Moreover, it would be equally interesting to analyze the application of the different theories of capital structure: Trade-off, Pecking order and Signaling, unfolding the debt in terms of the short and long term, given that sometimes there are behavioral differences.

References

- Abdulsaleh, A., & Worthington, A. (2013). Small and medium-sized enterprises financing: a review of literature. *International Journal of Business and Management*, 8 (14), 36–54.
- Abor, J. (2007). Industry classification and the capital structure of Ghanaian SMEs. *Studies in Economics and Finance*, 24 (3), 207–219.
- Ahsan, T., Wang, M. & Qureshi, M. (2016). Firm, industry, and country level determinants of capital structure: evidence from Pakistan. *South Asian Journal of Global Business Research*, 5 (3), 362–384.

- Al-Najjar, B. & Taylor, P. (2008). The relationship between capital structure and ownership structure. *Managerial Finance*, 34 (12), 919–933.
- Barbosa, E. & Moraes, C. (2004). Determinants of the firm's capital structure: the case of the very small enterprises. Accessed through the electronic address <http://econwpa.repec.org/eps/fin/papers/0302/0302001.pdf>, in May 2018.
- Berger, A. & Udell, G. (1998). The economics of small business finance: the roles of private equity and debt markets in the financial growth cycle. *Journal of Banking and Finance*, 22 (6), 613–673.
- Bhaird, C. & Lucey, B. (2009). Determinants of capital structure in Irish SMEs. *Small Business Economics*, 35 (5), 357–375.
- Booth, L., Avizian, V., Demirguc-Kunt, A., & Maksimovic, V. (2001). Capital structures in developing countries. *Journal of Finance*, 56 (1), 87–130.
- Borges, E., Vieira, E., & Silva, C. (2011). Sinalização no contexto contábil: práticas de screening na contratação de serviços profissionais. *Revista de Contabilidade do Mestrado em Ciências Contábeis da UERJ*, Rio de Janeiro, 16 (1), 97–114.
- Connelly, B., Certo, S., Ireland, R., & Reutzel, C. (2011). Signaling theory: a review and assessment. *Journal of Management*, 37 (1), 39–67.
- Couto, G. & Ferreira, S. (2010). Os determinantes da estrutura de capital de empresas do PSI 20. *Revista Portuguesa e Brasileira de Gestão*, 9 (1–2), 26–38.
- De Luca, P. (2015). The debt choice of the firms in developed countries: evidence from G-7. *International Journal of Economics and Finance*, 7 (4), 122–134.
- DeAngelo, H. & Masulis, W. (1980). Optimal capital structure under corporate and personal taxation. *Journal of Financial Economics*, 8 (1), 3–29.
- DeRoos, J., Liu, C., Quan, D., & Ukhov, A. (2014). The dynamics of credit spreads in hotel mortgages and signaling implications. *Journal of Real Estate Research*, 36 (2), 137–167.
- Devesa, M. & Esteban, L. (2011). Spanish hotel industry: indebtedness determinants. *Applied Economics*, 43, 4227–4238.
- Fan, J., Titman, S., & Twite, G. (2012). An international comparison of capital structure and debt maturity choices. *Journal of Financial and Quantitative Analysis*, 47 (1), 23–56.
- Feld, L., Heckemeyer, J., & Overesch, M. (2013). Capital structure choice and company taxation: a meta-study. *Journal of Banking & Finance*, 37, 2850–2866.
- Forte, D., Barros, L., & Nakamura, W. (2013). Determinants of the capital structure of small and medium sized Brazilian enterprises. *BAR-Brazilian Administration Review*, 10 (3), 347–369.
- Frank, Z. & Goyal, K. (2003). Testing the pecking order theory of capital structure. *Journal of Financial Economics*, 67 (2), 217–248.
- Hall, G., Hutchinson, P., & Michealas, N. (2000). Industry effect on the determinants of unquoted SMEs capital structure. *International Journal of the Economic of Business*, 7 (3), 297–312.
- Harris, M. & Raviv, A. (1991). The theory of capital structure. *Journal of Finance*, 49 (1), 297–355.
- Huyghebaert, N. & Van De Gucht, L. (2007). The determinants of financial structure: new insights from business start-ups. *European Financial Management*, 13 (1), 101–133.
- Instituto Nacional de Estatística. (2017). Estatísticas do Turismo 2016. Estatísticas Oficiais. Lisboa.
- Instituto Nacional de Estatística (2018). Empresas em Portugal 2016. Estatísticas Oficiais. Lisboa.
- Jareño, F. & González, C. (2014). Financial analysis of the main hotel chains of the Spanish tourism sector. *Regional and Sectoral Economic Studies*, 14 (2), 91–108.
- Jang, S., Tang, C. & Chen, M. (2008). Financing behaviors of hotel companies. *International Journal of Hospitality Management*, 27(3), 478–487.

- Karadeniz, E., Kandir, S., Balcilar, M., & Onal, Y. (2009). Determinants of capital structure: evidence from Turkish lodging companies. *International Journal of Contemporary Hospitality Management*, 21 (5), 594–609.
- Karadeniz, E., Kandir, S., Iskenderoglu, O., & Onal, Y. (2011). Firm size and capital structure decisions: evidence from Turkish lodging companies. *International Journal of Economics and Financial Issues*, 1 (1), 1–11.
- Kim, E. (1978). A mean-variance theory of optimal capital structure and corporate debt capacity. *Journal of Finance*, 33, 45–63.
- Kira, A. & He, Z. (2012). The impact of firm characteristics in access of financing by small and medium-sized enterprises in Tanzania. *International Journal of Business and Management*, 7 (24), 108–119.
- Kizildag, M. (2015). Financial leverage phenomenon in hospitality industry sub-sector portfolios. *International Journal of Contemporary Hospitality Management*, 27 (8), 1949–1978.
- Kraus, A.E. Litzenberger, R. (1973). A state-preference model of optimal financial leverage. *Journal of Finance*, 28, 911–922.
- Kühnhausen, F. & Stieber, H. (2014). Determinants of capital structure in non-financial companies. Disponível em www.econstor.eu/bitstream/10419/104436/1/lmu-mdp_2014-38.pdf (consultado em junho de 2016).
- Leland, H. & Pyle, D. (1977). Informational asymmetries, financial structure, and. *The Journal of Finance*, 32 (2), 371–387.
- MacKay, P. & Phillips, G. (2005). How does industry affect firm financial structure? *The Review of Financial Studies*, 18 (4), 1433–1466.
- Myers, S. (1977). Determinants of corporate borrowing. *Journal of Financial Economics*, 5, 147–175.
- Myers, S. (1984). The Capital Structure Puzzle. *The Journal of Finance*, 39(3), 574–592.
- Myers, S. & Majluf, N. (1984). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economics*, 13 (2), 187–221.
- Noulas, A. & Genimakis, G. (2011). The determinants of capital structure choice: evidence from Greek listed companies. *Applied Financial Economics*, 21 (6), 379–387.
- Pacheco, L. & Tavares, F. (2017). Capital structure determinants of hospitality sector SMEs. *Tourism Economics*, 23 (1), 113–132.
- Panagiotis, G. (2016). Determinants of financial structure of Greek companies. *Network Intelligenc Studies*, IV, 1 (7), 7–17.
- Rajan, R. & Zingales, L. (1995). What do we know about capital structure? Some evidence from international data. *Journal of Finance*, 50, 1421–1460.
- Ross, S. (1977). The determination of financial structure: the incentive-signalling approach. *The Bell Journal of Economics*, 8 (1), 23–40.
- Scott, J. (1977). Bankruptcy, secured debt, and optimal capital structure. *The Journal of Finance*, 32(1), 1–19.
- Semedo, I. (2015). Teorias da Estrutura de Capital das Empresas: Uma aplicação às empresas Portuguesas cotadas na Euronext Lisboa. Dissertação de Mestrado em Gestão Financeira. Instituto Superior de Gestão.
- Serrasqueiro, Z. & Caetano, A. (2015). Trade-off theory versus pecking order theory: capital structure decisions in a peripheral region of Portugal. *Journal of Business Economics and Management*, 16 (2), 445–466.
- Serrasqueiro, Z. & Nunes, P. (2012). Is age a determinant of financing decisions of SMEs? empirical evidence using panel data models. *Entrepreneurship Theory & Practice*, 36 (4), 627–654.
- Serrasqueiro, Z. & Nunes, P. (2014). Financing behaviour of Portuguese SMEs in hotel industry. *International Journal of Hospitality Management*, 43, 98–107.

- Shyam-Sunder, L. & Myers, S. (1999). Testing static tradeoff against pecking order models of capital structure 1. *Journal of Financial Economics*, 5 (2), 219–244.
- Singh, D., Raab, C., Mayer, K., & Singh, A. (2014). Credit fluctuations and lodging firms: an investigation of the differing capital structures in the US lodging industry. *International Journal of Hospitality & Tourism Administration*, 15 (4), 333–353.
- Spence, M. (1973). Job market signaling. *The Quarterly Journal of Economics*, 87 (3), 355–374.
- Subadar, U. (2011). Capital asset pricing model: evidence from the stock exchange of Mauritius. *The IUP Journal of Financial Economics*, 9 (1), 24–40.
- Titman, S. & Wessels, R. (1988). The determinants of capital structure choice. *The Journal of Finance*, 43 (1), 1–19.
- Torluccio, G (2012). Financials menu at European restaurants. *Tourismos: A Multidisciplinary Journal of Tourism*, 7 (2), 323–342.
- Tsai, H., Pan, S. & Lee, J. (2011). Recent research in hospitality financial management. *International Journal of Contemporary Hospitality Management*, 23, 941–971.
- Um, T. (2001). *Determination of capital structure and predictions of bankruptcy in Korea*. Cornell University.
- Wachilonga, L. (2013). Firm size and capital structure decisions: evidence from hotel and lodging SMEs in Eldoret municipality, Kenya. *International Journal of Academic Research in Business and Social Sciences*, 3 (8), 561–579.
- Wellalage, N. & Locke, S. (2013). Capital structure and its determinants in New Zealand firms. *Journal of Business Economics and Management*, 14 (5), 852–866.

7

DO CUSTOMERS REALLY MATTER? EFFECT OF CUSTOMER ORIENTATION ON INNOVATIVENESS

Evidence from the hotel industry in Poland

*Marcin Olszewski, Barbara Kowalczyk and
Łukasz Widła-Domaradzki*

7.1 Introduction

In the unstable economic conditions, being successful requires a constant development of new sources of the competitive advantage. The active exchange of ideas with external stakeholders may enhance innovation capacities and ultimately increase competitiveness (Hjalager & Nordin, 2011). According to Edvardsson et al. (2010) consumers play an important role in service innovation. Similar results were also found in the hospitality industry (Victorino et al., 2005; Hall & Williams, 2008; Hjalager, 2010). Previous empirical research (Orfila-Sintes, Crespi-Cladera, & Martinez-Ros, 2005; Orfila-Sintes & Mattsson, 2009; Tajeddini & Trueman, 2012; Grisseemann, Plank, & Brunner-Sperdin, 2013) indicate that hotels establishing and maintaining close relationships with customers, achieve better results, also in terms of innovativeness. On the other hand, some authors report that there is no link between customers orientation and innovation (Tajeddini, 2010) or hotel's business performance (Agarwal, Erramilli, & Dev, 2003). Taking this into account there is a need to clearly assess the role of customers' orientation for improving innovativeness. This chapter addresses that gap in the context of hotel market in the process of transition (i.e. Poland).

The overall objective of the study is therefore to identify the impact of the customer orientation on innovativeness of the hotel companies in Poland. The remainder of this chapter is organized as follows. In Section 7.2, we review the existing body of literature on effects of customer orientation on results of innovations process in hospitality industry, which leads us to the development of hypotheses tested in this chapter. Section 7.3 describes variables used in the study and methods of data collection and analysis. Section 7.4 reports the results of our empirical analysis. Finally, conclusions, implications, limitations and future research recommendations are discussed.

7.2 Literature review

7.2.1 *Customer orientation and its implications for innovativeness*

Due to constant change and fierce competition, the ability to innovate has become crucial in the hospitality industry. Innovativeness in hospitality and tourism is important in terms of competitive advantage (Sundbo, Orfila-Sintes, & Sørensen, 2007), quality of products (Chang, Gong, & Shum, 2011), profit goal achievement, and ROI achievement (Tajeddini, 2010), and finally long-term economic development (Nordin & Hjalager, 2017). Moreover, according to Sundbo, Orfila-Sintes and Sørensen (2007, p. 88) in tourism “innovating is often a condition for survival”. Despite the pivotal role of innovations on firms’ results, research on this issue in tourism have still been limited (Sundbo, Orfila-Sintes, & Sørensen, 2007; Hjalager, 2010; Tajeddini & Trueman, 2012).

At the same time, to achieve competitive advantage and successfully implement innovations, companies should focus on customers’ needs and expectations. According to Hjalager and Nordin (2011, p. 290) “user input plays a central role as a driving force determining the direction and extent of innovative activity”. Previous studies has examined the role of customers in innovations (von Hippel, 2005) but there is a gap in our knowledge, as few empirical studies link customer orientation and innovativeness in hospitality (Tajeddini & Trueman, 2012). As Hjalager (2010, p. 9) demonstrated “the inclusion of consumers in innovation processes, is a current topic that deserves attention” especially with reference to tourism sector, “where consumer-producer interaction is closer than for many other types of enterprises”.

According to Deshpandé, Farley and Webster (1993, p. 27) customer orientation is “the set of beliefs that puts the customer’s interest first”. On the individual level it refers to employees’ inclination to meet customer needs (Brown et al., 2002). In previous studies this concept was often linked with improving job performance and job satisfaction (Lee, Ok, & Hwang, 2016) or with decrease in burnout (Babakus, Yavas, & Ashill, 2009). On the company level customer orientation describes a general tendency to include customers’ voice in companies’ day-to-day routines. In these streams of research customer orientation was intercepted as a culture (Brockman, Jones, & Becherer, 2012), or organisation-wide process influencing organisational success (Hanzaee & Mirvaisi, 2011). This active engagement of customers in innovation process is described as co-design, user-driven innovations, collaborative, participatory or customer-centric innovation (Hjalager & Nordin, 2011). In his seminal paper, von Hippel (1978, p. 240) proposed new “customer-active” paradigm in which “customer develops the new product idea and takes the initiative to transfer it to an interested manufacturer”. As a consequence, a definition for user-driven could be developed as a “process of tapping users’ knowledge in order to develop new products, services and concepts” (Wise & Høgenhaven, 2008, p. 21).

In hospitality research, results on the role of customer orientation on innovativeness are inconclusive. According to Grisseemann, Plank, and Brunner-Sperdin (2013,

p. 347) “customer orientation is an important driver of innovation”. Analysing data from 203 hotel managers in the Alpine hospitality industry, they found that customer orientation influences both innovativeness and innovation behaviour of hotels. This could stem from the fact that companies that are customer-oriented are more likely to adopt services and products that meet customers’ expectations. Knowledge obtained from first-hand contact with customers leads to more effective utilisation of market information (Campbell & Cooper, 1999).

A study carried out by Sandvik and Sandvik (2003) in 298 Norwegian hotels demonstrated that market orientation had a significant and positive impact on product innovativeness. They found that “learning about customers’ current and future needs (. . .) leads to a better understanding of areas where new products could be developed and used” (Sandvik & Sandvik, 2003, p. 369). But considering the fact that in this study, market orientation explained only 10% of the variation in the firms’ ability to come up with products new to the market, firms “have several other avenues to success with product innovations” (Sandvik & Sandvik, 2003, p. 369). On the basis of data collected from senior managers and employees from 96 Swiss hospitality companies, Tajeddini and Trueman (2012) found that customer orientation is positively related to innovativeness. Agarwal, Erramilli, and Dev (2003) also found that there is the immediate impact of customer orientation on stimulating innovation.

On the other hand, Tajeddini (2010) in the study of 156 hotel managers and owners from German and French speaking cantons located in Switzerland has found no relationship between customer orientation and innovativeness. Results of the same study show customer orientation in the hotel industry significantly affects both profit goal achievement, sales goal achievement as well as ROI achievement (Tajeddini, 2010).

According to Belderbos, Carree, and Lokshin (2004) share of companies cooperating with customers in innovation process in Dutch hotel and catering industry is 15.9% and reaches the highest value from all analysed sectors. The role of user-driven innovations in hospitality industry could be explained by innate features of this sector. To understand innovation processes in tourism, distinctive models and frameworks should be implemented (Nordin & Hjalager, 2017). Service firms in general and tourism in particular “innovate in ways other than manufacturing firms on which innovation theories have traditionally been based” (Sundbo, Orfila-Sintes, & Sørensen, 2007, p. 92). According to Jensen et al. (2007) there are two basic models of innovations and its sources: “science, technology, and innovation” (STI) which is based on formal knowledge, and “doing, using, and interacting” (DUI), which refers to tacit and often highly localised knowledge. Considering that, “DUI appears to capture the essence of innovation in tourism enterprises better than STI” (Nordin & Hjalager, 2017, p. 165) understanding how customers’ knowledge is utilised for innovations in tourism is critical. As Jensen et al. (2007, p. 684) stated “closer interaction with users of products and services outside the organisation typically is a prerequisite for the experience-based learning that supports product innovation in the

DUI-mode”. Moreover, innovations in tourism are mainly not technological, but include change of behaviour (Sundbo, Orfila-Sintes, & Sørensen, 2007). Therefore, information coming from customers could easily be turned into new way of serving customers or into the product’s structure modification.

7.2.2 Dimensions of customer orientation

Customer orientation is not a homogeneous phenomenon but rather a multidimensional construct (Sandvik & Sandvik, 2003). Customers can lead to innovations because they possess distinctive knowledge and necessary expertise (Trott & Hartmann, 2013). Consequently, from the information’s processing perspective customer orientation could be split into three stages representing: customers’ knowledge acquisition, customers’ knowledge processing and customers’ knowledge exploitation.

7.2.3 Customers’ knowledge acquisition

The first aspect of customer orientation is connected with knowledge acquisition. This is the beginning stage, where the openness to customers’ voice is crucial. Several studies have shown the importance and methods for retrieving information of potential value for user-based innovation (Sørensen & Sundbo, 2014). Ottenbacher and Gnoth (2005, p. 215) found that “successful innovations require close customer contact, detailed consumer research”. Thus, companies should gather information on customers’ needs and wants, thru market research or observation. There are many other methods that can help to obtain information from existing and potential pools of users including: customer surveys, complaints collections and analysis, guest/books analysis or blog mining (Hjalager & Nordin, 2011).

Hjalager (2010) emphasises that in tourism search and knowledge acquisition processes for innovations are more complex and informal than in other industries. As a result “the involvement of customers as informants often seems to be coincidental and unsystematic” (Hjalager & Nordin, 2011, p. 291) and could not be a significant source of innovativeness. Taking this discussion into account, we hypothesise that:

H1. Customers’ knowledge acquisition is positively associated with innovativeness in the hospitality industry. In other words the more active the hotel is in gaining knowledge from clients the more innovative it becomes.

7.2.4 Customers’ knowledge processing

The second dimension of customer orientation is expressed in the ability to process customers’ knowledge. On the basis of internal procedures, technology and human capital, information from customers is being processed and turned into knowledge.

Hjalager (2010, p. 6) recognise that in order to influence innovation processes, knowledge has to be not only acquired but also “properly understood, interpreted, restored, adapted”.

Previous studies stressed critical role of employees in customers’ knowledge processing and utilisation (Nieves, Quintana, & Osorio, 2014). Despite the fact that, innovation activity can happen anywhere within the company (Braga & Braga, 2013), the front-line employees with closest contact with customers could have the possibility to interpret and store customers’ knowledge for services improvement. To do so employees’ training is necessary as a factor influencing hospitality innovation success in the employee-customer dimension (Ottenbacher, 2007). In line with this, Nieves, Quintana, and Osorio (2014) have found that human capital (individual employees’ knowledge, skills and abilities) influences product innovation and organisational innovation in hotels. Moreover, Ottenbacher and Gnoth (2005, p. 216) have found that “training and empowerment are important aspects of successful innovations”.

The next factor that allows efficient processing of customers’ knowledge in hotel enterprises is the formal organisation of this activity. This assumption was verified by the studies of López-Fernández, Serrano-Bedia, and Gómez-López (2011). Hospitality enterprises using procedures and other mechanisms supporting knowledge management turned out to be more innovative than enterprises whose activities were devoid of formal organisation.

The last aspect of customers’ knowledge processing is technology which, in business environments, seems to be crucial nowadays (Gërguri-Rashiti et al., 2017). Moreover, tourism is at the forefront of information communication technologies (Tsioutsou & Ratten, 2010, p. 537) and technology provides new tools to engage with customers and utilize their knowledge (Kandampully, Bilgihan, & Christina, 2016). Previous studies indicate that technology enables customers’ knowledge processing and leads to even better results in terms of innovativeness (Sundbo, Orfila-Sintes, & Sørensen, 2007; Aldebert, Dang, & Longhi, 2011). Information and communication technologies in tourism evolved rapidly and the development of the Internet has changed the market conditions for tourism organisations (Buhalis & Law, 2008). According to Wise and Høgenhaven (2008, p. 21) technology has given consumers “the possibility to communicate their demands and actually take part in development processes”.

On the basis of these findings, it can be argued that effective processing of customers’ knowledge, based both on employees’ engagement, formal procedures and technology is necessary for innovativeness. From the above considerations, we hypothesise that:

H2. Customers’ knowledge processing is positively associated with innovativeness in the hospitality industry. The more active the hotel is in creating internal procedures, technology solutions and human capital aiming to customers’ knowledge processing, the more innovative it becomes.

7.2.4 Exploitation of customers' knowledge

The third aspect of customer orientation is connected with final exploitation of clients' knowledge. This is the most advanced form of customer involvement assuming not only passive engagement but also involving users as active co-developers (Hjalager & Nordin, 2011; Trott & Hartmann, 2013). Customers can be involved not only in sharing knowledge but also in generating ideas for new products and co-creating them with companies (Nambisan, 2002). Customers' engagement in innovation refers to "the ways by which firms increase the scope, intensity, role and modes of customers' involvement in various stages of the service innovation process" (Sarmah, Kamboj, & Rahman, 2017). Previous studies in hospitality show that exploitation of knowledge has led to increased innovativeness (Nieves, Quintana, & Osorio, 2014) and that customers' direct involvement impacts their intention to adopt co-created services (Sarmah, Kamboj, & Rahman, 2017). We therefore expect exploitation of clients' knowledge to be positively associated with innovativeness and put forward our research hypothesis as follows:

H3. Customers' knowledge exploitation is positively associated with innovativeness in the hospitality industry. The more active the hotel is in turning customers' knowledge into action, the more innovative it becomes.

7.2.5 Proposed model

Based on the three research hypotheses mentioned above, the following research model is presented in Figure 7.1.

7.3 Methodology

7.3.1 Data collection

To test the hypotheses, data was collected from hotel companies in Poland. Respondents were asked to identify people in the company involved in innovative activities (hotel managers or management representative due to complete the questionnaire). This procedure was in line with the method identified by Hornby and Symon (1994). The sampling frame used for the survey was the contact database of the Central List of Hotel Facilities administered by the Polish Ministry of Sport and Tourism. An invitation with a link to the on-line survey questionnaire was sent to hotel managers or designated managerial staff at the end of 2015. If the surveys were not received within a two week period, a follow-up mail and survey form was sent out or an interview was carried out by telephone. To increase the response rate there was a personalised cover letter, a promise of feedback about the study and an emphasis on confidentiality. Three pilot interviews were carried out by telephone before the beginning of the main study on a sample.

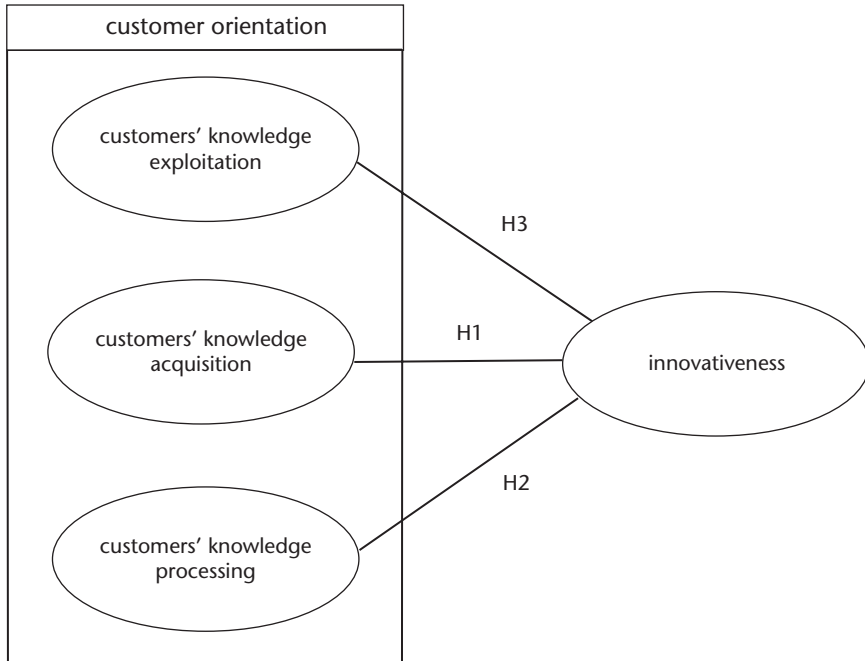


FIGURE 7.1 Proposed conceptual model and hypotheses

Finally, 400 completed surveys were received, representing a response rate of 15% (the population that met the assumption, consisted of 2.631 hotels). The sampling was random and non-proportionate (Bryman, 2008). In obtaining a representative sample of the population, a respondent's profile has been outlined according to belonging to international chains. The population was divided into two independent layers: hotels not belonging to international chains, and hotels that became members of such chains. This split made it possible to apply random and stratified sampling (Bryman, 2008). The survey covered 326 hotels operating outside international chains and 74 hotels operating within such structures. A booster was applied in the case of the latter category, which meant that chain hotels were overrepresented in the subset comparing to total population.

7.3.2 Measurement

To measure each concept, multi-item scales that had been validated by existing research were used.

Innovativeness was measured with seven items developed by OECD (2005) methodology from a Schumpeterian point of view (see Johannessen, Olsen, & Lumpkin, 2001; Camisón & Monfort-Mir, 2012). The question on innovations implemented in the enterprise within last three years of its business activity, i.e. in 2012–2014 was employed. The three-years period in innovation activity is crucial

due to the innovation diffusion (OECD, 2005). The construct is measured by seven observable variables.

Customers' knowledge acquisition was measured by respondent's assessment of significance of customers' knowledge as a source of information in the innovation process and the way of acquisition and exchange of information with customers about its range of products and services (suggested by Hjalager & Nordin, 2011).

Ordinal and categorical scales were used. The construct is measured by nine observable variables (see Table 7.1).

Customers' knowledge processing was measured by respondent's assessment of the enterprise's ability to process information obtained from the customers, employees' skills necessary to build relationships with customers and the level of their involvement in such relationships, employees' engagement in building relations with customers, use of IT systems or tools for promotional activities, for the collection and management of information obtained from customers, and for customer interactions. The importance of activities related to the collection of information and its further use for innovative activity in enterprises has been emphasised by (Enz, Canina, & Walsh, 2006; Sørensen, 2007; Nieves, Quintana, & Osorio, 2014). Human resources investments are another key activity in the area of knowledge management. Management of customer-derived knowledge is more effective if employees have the opportunity to improve their skills by participating in specialised training (Orfila-Sintes, Crespi-Cladera, & Martinez-Ros, 2005; Orfila-Sintes & Mattsson, 2009).

TABLE 7.1 Indicators of latent constructs: customers' knowledge acquisition. Variable names and item wordings

<i>Latent construct</i>	<i>Variable name</i>	<i>Item</i>
Customers' knowledge acquisition	Zp16r_2	Significance of customers' knowledge as a source of information in the innovation process
	Zp11r_01: social media	the way of acquisition and
	Zp11r_02: website	exchange of information with
	Zp11r_03: hotel questionnaire	customers about its range of
	Zp11r_04: marketing research	products and services
	Zp11r_05: staff interactions with customers	
	Zp11r_06: observation of customers during service and sales	
	Zp11r_07: individual meetings with customers	
	Zp11r_08: guestbook	

TABLE 7.2 Indicators of latent constructs: customers' knowledge processing. Variable names and item wordings

<i>latent construct</i>	<i>variable name</i>	<i>Item</i>
Customers' knowledge processing	Zp12r	Archiving information from customers in the enterprise and analysing them for the purpose of developing new products/services
	Zp13r	Measures the frequency of information on customer needs analysed during the last year in order to use it to develop new products and services
	Zp14r	Having guidelines for the collection and processing of information from customers
	Zp18r	Level of employees' skills in interactions with customers
	Zp19r	Staff training in the last three years to build relationships with customers
	Zp21r	Level of employee engagement in customer relations
	Zp22r_4	Use of IT systems or tools for promotion
	Zp22r_5	Use of IT systems or tools for the collection and management of information obtained from customers
	Zp22r_6	Use of IT systems or tools for customer interactions

Ordinal, categorical, and semantic scales were used. The construct is represented in the measurement model by nine observable variables (see Table 7.2).

Customers' knowledge exploitation was measured by respondents' assessment of frequency of events determining relations with enterprises with regard to changes made to the range of products and services offered by the enterprise and measuring the customers' involvement in the innovative activity of enterprises. Customers direct involvement in innovation processes is defined by the role of customers in innovation process (Flowers et al., 2010). Moreover, the importance of customers engagement in innovation activity was also defined by stages of the innovation process. In the study classification proposed by Fuller and Matzler (2007) was adopted.

Ordinal and categorical scales were used. The construct is measured by five observable variables (see Table 7.3).

Table 7.A2 from appendix presents the names of the variables and the exact wording of statements (translated from Polish) along with the corresponding dimensions of latent variables and selected descriptive statistics.

TABLE 7.3 Indicators of latent constructs: customers' knowledge exploitation. Variable names and item wordings

<i>Latent construct</i>	<i>Variable name</i>	<i>Item</i>
Customers' knowledge exploitation	Zp17r_1	Frequency of the customers' engagement in innovation indicate the statement: "customers share their ideas and we use their knowledge to create new products and services or to improve the current offering"
	Zp17r_2	Frequency of the customers' engagement in innovation indicate the statement: "customers co-create new products and services with us, we involve them in the work on our range of products and services"
	Zp17r_3	Frequency of the customers' engagement in innovation indicate the statement: "customers test our new products or services"
	Zp10_4	Measuring the customers' involvement in the innovative activity of enterprises, concerned the identification of customers in cooperation with employees as the most common originators of innovations introduced in the last three years of the company's business
	Zp10_6	Measuring the customers' involvement in the innovative activity of enterprises, concerned the identification of customers (by own) as the most common originators of innovations introduced in the last three years of the company's business

7.4 Data analysis

7.4.1 Sample characteristics

Table 7.4 provides the sample characteristics. Hotels operating within international chains represented 18.5% of the studied facilities. The sample consisted of 265 low- and mid-star category hotels (one-, two-, and three-star) and 135 high-star category hotels (four-, and five-star). As regards the sample structure in terms of the size of facilities measured by the number of rooms offered, the largest share in the sample was recorded for small hotels, with maximum of 50 rooms. Similar shares in the sample were held by facilities with 51–100 rooms, as well as by larger facilities, with 101 or more rooms.

7.4.2 Confirmatory factor analysis (CFA)

In order to answer the research question and assess the role of customers' orientation for improving innovativeness in Polish hotels one main statistical technique has been employed – structural equation modelling (SEM). It allows testing the theoretical

TABLE 7.4 Sample characteristics

<i>Hotel characteristics</i>	<i>n</i>	<i>%</i>
International hotel chains		
Yes	74	18,5
No	326	81,5
Star-categorisation		
Three-star or less	265	66,3
Four-star	98	24,5
Five-star	37	9,3
Number of rooms		
<50	223	55,8
51–100	93	23,3
>100	84	21,1

model of the innovativeness. The obtained results were evaluated to indicate how well the postulated model matches empirical data, and the model's parameters were interpreted to assess their consistency with theoretical assumptions. The structural equations model took the form of confirmatory factor analysis (CFA). Table 7.5 (see also Table 7.A3 from the appendix) shows the specific items of theoretical constructs used in the proposed model, in conjunction with their standardised factor loadings (Beta) and significance (p value). There is no statistical significance between customers' knowledge exploitation and innovativeness ($p=0.185$) and correlation with the latent variables: employees in cooperation with customers as a source of initiating and developing innovations, ZP10_4 ($p=0.287$). Other estimated factor loadings were significant at a level $p<0.05$, critical ratio > 1.96 . In addition, error variances all of the constructs (except for customers' knowledge exploitation) are low (see Table 7.A4 from the appendix).

Table 7.6 shows the descriptive statistics and associated measures for the proposed concepts. The convergent and discriminant validity of the proposed concepts were statistically supported, because the average variance extracted (AVE) was greater than the 0.50 standard for all of the constructs proposed with one exception: customers' knowledge exploitation (Bagozzi & Yi, 1988). In addition, according to theoretical expectations, customers' knowledge acquisition and customers' knowledge processing are positively correlated with innovativeness (see Table 7.6).

7.4.3 Structural model

The proposed model with six latent constructs was examined with structural equation modelling (SEM). Data were analysed using the IBM SPSS Statistics

TABLE 7.5 CFA model parameter estimates

<i>Factor loadings</i>		<i>b</i>	<i>Standard Error</i>	<i>Critical ratio</i>	<i>p value</i>	<i>Beta</i>	
Product and service innovation	<-	Innovativeness	1.434	0.319	4.499	***	0.983
Marketing and organisational innovation	<-	Innovativeness	1.129	0.289	3.910	***	0.586
Customers' knowledge acquisition	<-	Innovativeness	1.000				0.728
Customers' knowledge processing	<-	Innovativeness	0.500	0.102	4.838	***	0.491
Customers' knowledge exploitation	<-	Innovativeness	0.310	0.234	1.327	0.185	0.089
Zp2r_3	<-	Innovativeness	1.742	0.358	4.869	***	0.462
Zp2r_4	<-	Innovativeness	1.678	0.351	4.778	***	0.446
Zp2r_2	<-	Product and service innovation	1.000				0.387
Zp2r_7	<-	Product and service innovation	0.671	0.196	3.429	***	0.260
Zp2r_1	<-	Product and service innovation	0.415	0.178	2.336	0.020	0.161
Zp2r_6	<-	Marketing and organisational innovation	1.000				0.511
Zp2r_5	<-	Marketing and organisational innovation	0.750	0.241	3.105	0.002	0.383
Zp11r_07	<-	Customers' knowledge acquisition	1.859	0.276	6.733	***	0.676
Zp11r_05	<-	Customers' knowledge acquisition	1.813	0.271	6.683	***	0.660
Zp11r_04	<-	Customers' knowledge acquisition	1.688	0.259	6.529	***	0.615
Zp11r_06	<-	Customers' knowledge acquisition	1.303	0.222	5.862	***	0.475
Zp11r_08	<-	Customers' knowledge acquisition	1.152	0.21	5.501	***	0.420

Zp11r_03	<-	Customers' knowledge acquisition	1.075	0.203	5.289	***	0.392
Zp11r_01	<-	Customers' knowledge acquisition	1.000				0.358
Zp11r_02	<-	Customers' knowledge acquisition	0.556	0.169	3.280	0.001	0.203
Zp16r_2	<-	Customers' knowledge acquisition	0.375	0.162	2.313	0.021	0.137
Zp14r	<-	Customers' knowledge processing	2.157	0.404	5.347	***	0.588
Zp19r	<-	Customers' knowledge processing	1.819	0.361	5.043	***	0.494
Zp12r	<-	Customers' knowledge processing	1.724	0.349	4.940	***	0.469
Zp13r	<-	Customers' knowledge processing	1.548	0.329	4.710	***	0.421
Zp21r	<-	Customers' knowledge processing	1.398	0.313	4.468	***	0.379
Zp22r_6	<-	Customers' knowledge processing	1.090	0.283	3.856	***	0.295
Zp22r_5	<-	Customers' knowledge processing	1.000				0.276
Zp18r	<-	Customers' knowledge processing	0.926	0.271	3.423	***	0.251
Zp22r_4	<-	Customers' knowledge processing	0.71	0.253	2.808	0.005	0.192
Zp17r_2	<-	customers' knowledge exploitation	1.000				0.957
Zp17r_1	<-	Customers' knowledge exploitation	0.733	0.071	10.261	***	0.698
Zp17r_3	<-	Customers' knowledge exploitation	0.509	0.06	8.426	***	0.501
ZP10_6	<-	Customers' knowledge exploitation	0.275	0.058	4.723	***	0.255
ZP10_4	<-	Customers' knowledge exploitation	0.060	0.056	1.064	0.287	0.055

Note: Factor pattern coefficients of latent variables<- regression,

*** p<0.001.

TABLE 7.6 Descriptive statistics and associated measures (mean, standard deviation, AVE and correlations)

<i>Latent construct</i>	<i>No. of items</i>	<i>Mean</i>	<i>Standard deviation</i>	<i>AVE</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
(1) Innovativeness	7	-0.00003	0.210	0.930	1	0.877**	0.679**	0.113*	1.000**	0.806**
(2) Customers' knowledge acquisition	9	-0.00007	0.317	0.938	0.877**	1	0.522**	0.016	0.873**	0.635**
(3) Customers' knowledge processing	9	-0.00006	0.225	0.945	0.679**	0.522**	1	0.224**	0.677**	0.457**
(4) Customers' knowledge exploitation	5	0.00040	0.892	0.149	0.113*	0.016	0.224**	1	0.114*	-0.014
(5) Product and service innovation	3	-0.00004	0.303	0.995	1.000**	0.873**	0.677**	0.114*	1	0.803*
(6) Marketing and organisational innovation	2	-0.00003	0.340	0.829	0.806**	0.635**	0.457**	-0.014	0.803**	1

Note: sample size = 400

*correlation is significant at the 0.05 level (two-tailed),

**correlation is significant at the 0.01 level (two-tailed) AVE – Average Variance Extracted

version 24.0 and Amos version 7.0. The results indicate an acceptable fit for initial structural model ($\chi^2/df = 3.597$, $df = 399$, $p < 0.001$, $GFI = 0.783$, $AGFI = 0.747$, $RMSEA = 0.08$). The goodness-of-fit index indicates that over 78% of the observed variance/covariance matrix is predicted by the model (see Schumacker & Lomax, 2016, pp. 113–114), and root-mean-square error of approximation indicates an acceptable level (Byrne, 2010; Schumacker & Lomax, 2016, p. 76).

For each latent variable, one factor loading has been fixed in order to identify the model, and that variables' scale has been applied for respective latent variables (see Table 7.A5). This was marked on the path diagram using dashed lines (see Figure 7.2).

The parameters of the structural equation model were estimated using the maximum likelihood (ML) estimator. The ML method was chosen following Finney and DiStefano (2006), and indicating a reasonable sample size and accurate parameter estimates. Some measures were found as non-normality (see Table 7.A1. from the appendix). ML has been found to produce relatively accurate parameter estimates under conditions of non-normality (see Finch, West, & Mackinnon, 1997). However there is no clear consensus regarding an acceptable degree of non-normality (indicate skewness and univariate kurtosis approach values of 2 and 7) and it makes it difficult for a researcher to choose a cut-off value of multivariate kurtosis that indicates non-normality (Gao, Mokhtarian, & Johnston, 2008). West, Finch, and Curran (1995) consider rescaled univariate kurtosis values equal to or greater than 7 to be indicative of early departure from normality (see also Byrne, 2010).

In addition, in the social sciences, the assumption of normality of the total distribution of observable variables is difficult to fulfil. In real-world data (including those from hospitality, travel or activity surveys) do not have even univariate, let alone multivariate, normal distributions (Gao, Mokhtarian, & Johnston, 2008). To ensure the accuracy of the data and minimize the error, the weighted average value of attributes to fill the missing value was used (Little & Rubin, 2002; Enders, 2010). Figure 7.2 provides the SEM results with standardised regression weights.

The analysis showed that the measurement model of innovativeness of hotels (a dependent variable) was well defined by indicator variables. The dependent variable is formed by two components. The first one consists of product and service innovation. The impact of this factor on innovation was estimated at $\beta=0.98$, $p<0.001$. Less important ($\beta=0.59$, $p<0.001$) were innovations that were identified by the second factor, consisting of managerial and marketing innovativeness.

The results showed that customers' knowledge acquisition has a significant and positive impact on innovation ($\beta=0.73$, $p<0.001$). In addition, customers' knowledge acquisition and innovativeness are positively strong correlated (0.877). Thus, hypothesis 1. was supported. More specifically, there are relatively strong and significant relationships between the latent variable of customers' knowledge

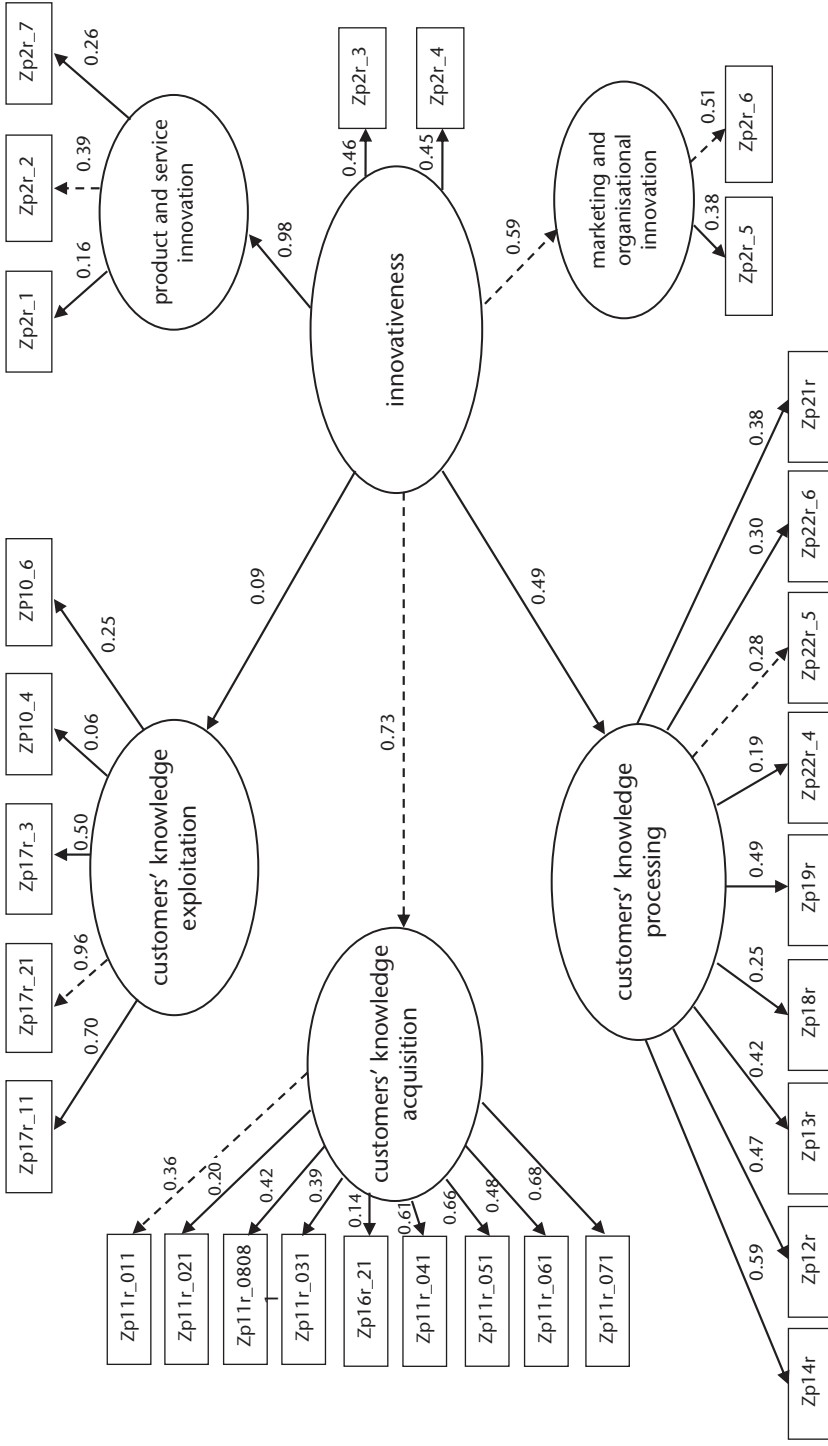


FIGURE 7.2 Structural standardised CFA model estimates

Note: Standardised CFA model estimates. The SEM allows not only to estimate the regression parameters but also the values of latent variables; one-headed arrow lines represent regressions and dashed lines represent fixed factor loadings employed to estimate the structural model. ML estimator, $\chi^2/df = 3.597$, $df = 399$, $p < 0.001$, GFI = 0.783, AGFI = 0.747, RMSEA = 0.08.

acquisition and its observable variables. This latent variable load strongly on the personal contact with customers: face-to-face meetings – Zp11r_07 ($\beta=0.68$, $p<0.001$) and personal interactions between employees, customers during service provision – Zp11r_05 ($\beta=0.66$, $p<0.001$) and also on marketing research – Zp11r_04 ($\beta=0.61$, $p<0.001$). Two factors loadings (Zp16r_2, Zp11r_02) were estimated $\beta<0.2$.

Customers' knowledge processing is positively related to innovativeness, according to SEM results ($\beta=0.49$, $t\text{-value}=4.838$, $p<0.001$). In addition, customers' knowledge processing and innovativeness are positively strong correlated (0.679). Hypothesis 2. was also supported. More specifically, there are relatively strong and significant relationships between the latent variable of customers' knowledge processing and its observable variables. In customers' knowledge processing, the most important role is played by the guidelines (instructions) which define how information obtained from customers will be collected, processed and stored – Zp14r ($\beta=0.59$, $p<0.001$). The obtained value means that the application of guidelines explains this latent variable to the greatest extent. High values of coefficients were estimated for variables, i.e. development of employees' skills through training – Zp19r ($\beta=0.49$, $p<0.001$) and archiving information from customers – Zp12r ($\beta=0.47$, $p<0.001$). One factor loading (Zp22r_4) was estimated $\beta<0.2$.

However, the results indicate that customers' knowledge exploitation does not have a significant effect on innovation ($\beta=0.09$, $t\text{-value}=1.327$, $p=0.185$). The factor loadings was low and correlation value indicates very weak relationship (0.113). Thus, hypothesis 3 was not supported.

7.5 Discussion and implications

Knowledge is the main factor affecting innovations. Surprisingly few studies on the role of external knowledge on innovations are dedicated to hospitality industry despite the fact that “knowledge is equally important for this sector of economic activity” (Nieves, Quintana, & Osorio, 2014, p. 65). The purpose of this study was to identify the role of customer orientation on innovativeness of hotel companies in Poland. The study has demonstrated that hotels do take actions aimed at interacting with customers which leads to knowledge creation and innovations. This is evidenced by the statistical significance of customers' knowledge acquisition ($\beta=0.73$, $p<0.001$) and customers' knowledge processing ($\beta=0.49$, $p<0.001$) on innovativeness. Thus, hypotheses 1 and 2 were supported. The data analysis results have the following important theoretical and managerial implications.

First, in our study we found that innovativeness of hotels is strongly determined by the customers' knowledge acquisition. The most important aspect of these activities include personal contacts with customers, which are conducive to building relations that are later used in the innovative activity undertaken by hotel companies. Moreover, in order to learn about the needs of users and to create

new value for customers through innovation, enterprises also implement marketing research. All these efforts have a positive influence on innovativeness. These results seem to confirm earlier findings by Ottenbacher and Gnoth (2005) and Hjalager and Nordin (2011).

Second, the results of the survey have proved that management of customer-derived knowledge (customers' knowledge processing) has a positive impact on innovation. The most important activities for this factor are related to collection of information and its further use for innovations. From the managerial perspective, it is important to equip employees with guidelines on how to collect, process and share information from customers as well as how to archive and prepare information for further analysis.

In line with previous studies (Ottenbacher & Gnoth, 2005), the research confirms that human resources are key aspect in the area of innovativeness. The study proved that the management of customer-derived knowledge is more effective if employees have the opportunity to improve their skills by participating in specialised training. Moreover, employees' involvement in customer relations also occurred to be important in the study. From the perspective of new product development, managers should favor long-term cooperation between employees and customers, since it turns out that innovations would not be created without employees' involvement as often as they are created with their participation. This is in line with previous studies which have shown that trained personnel is necessary in the process of acquiring and using external knowledge (Wong & Pang, 2003), and innovative hotels are characterised, among others, by ability to gain new competences (Orfila-Sintes, Crespi-Cladera, & Martinez-Ros, 2005; Orfila-Sintes & Mattsson, 2009). According to Ottenbacher and Gnoth (2005, p. 215) "innovation is most successful at establishments where managers allow employees to use their own judgment in solving problems".

Third, contrary to our expectations, we found no influence of customers' direct involvement on innovativeness. This relationship turned out to be insignificant ($\beta=0.09$, $p=0.185$). Polish hotel enterprises are not enough opened to involve their customers in innovation processes. They are still in the early stage (Hjalager & Nordin, 2011; Trott & Hartmann, 2013) where, the role of customers is still limited to passive engagement with little involvement in product co-creation. The surveyed enterprises do appreciate customers' involvement when it comes to generating ideas, but the transformation of ideas into innovations still becomes an internal process, where customers are rarely involved. This result can stem from the lack of readiness among Polish hotels to engage their resources in long-term relations with customers. Such innovation-oriented activities require a certain amount of work, financial resources, but also openness to more intensive relations with customers (Braga & Braga, 2013). Thus, the results of this study urge the management to actively employ customers in co-creation processes. Past research indicated that cooperation with clients reduces the risk associated with bringing an innovation to market and limits companies ignorance of customer needs (Tether, 2002).

7.6 Limitations and future research

This study provides some methodical limitations. A frequent practical problem is that in the social sciences, the assumption of normality of the distribution of variables is difficult to fulfil (Gao, Mokhtarian, & Johnston, 2008). This is due to the prevalence both non-normal data and categorical data in empirical social research. In consequence, some scales (i.e. ordinal and categorical) can distort the normal distributions. Special care should be taken in data collection, thus future research needs to use different types of data or larger scale to measure a construct (five point or more) in order to improve their distribution (Bagozzi & Yi, 2012). Another limitation relates to the model fit indicators (i.e. GFI, RAMSEA, Chi2) which might be improved significantly by greater sample size. In practice, larger scale survey indicates more acceptable level of factor loadings, error variances of construct and model fit statistics (Finney & DiStefano, 2006; Gao, Mokhtarian, & Johnston, 2008). It should be stressed that the result of study indicated the practical effects of innovative activity and relationships with customers in case of Polish hotels. Thus, this means that respondents were directly questioned about the actions aimed at interacting with customers where customers' knowledge may translate into innovation activity, so the results are practically rather than theoretically based. Moreover, we based our reasoning on the data collected at the single point in time so the findings should be interpreted with caution. Future research should take into account other groups of enterprises to capture how the role of customer orientation on innovativeness vary across industries. Moreover, deeper understanding of the process of customer knowledge utilisation is required, which involves qualitative approach.

According to Hjalager and Nordin (2011, p. 311) hospitality is the sector “where the value of user contributions could be exploited to a greater extent”. This study set out to explore the role of customers' orientation on the innovativeness of hotels and the applications of the results could be also suitable in other hotel markets in the process of transition.

References

- Agarwal, S., Erramilli, M. K., & Dev, C. S. (2003). Market orientation and performance in service firms: Role of innovation. *Journal of Services Marketing*, 17(1), 68–82. <https://doi.org/10.1108/08876040310461282>.
- Aldebert, B., Dang, R. J., & Longhi, C. (2011). Innovation in the tourism industry: The case of Tourism@. *Tourism Management*, 32(5), 1204–1213. <https://doi.org/10.1016/j.tourman.-2010.08.010>.
- Babakus, E., Yavas, U., & Ashill, N. J. (2009). The role of customer orientation as a moderator of the job demand–burnout–performance relationship: A surface-level trait perspective. *Journal of Retailing*, 85(4), 480–492. <https://doi.org/10.1016/j.jretai.2009.07.001>.
- Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science*, 16(1), 74–94. <https://doi.org/10.1007/BF02723327>.
- Bagozzi, R. P., & Yi, Y. (2012). Specification, evaluation, and interpretation of structural equation models. *Journal of the Academy of Marketing Science*, 40(1), 8–34. <https://doi.org/10.1007/s11747-011-0278-x>.

- Belderbos, R. Carree, M., & Lokshin, B. (2004). Cooperative R&D and firm performance. *Research Policy*, 33, 1477–1492. <https://doi.org/10.1016/j.respol.2004.07.003>.
- Braga, A., & Braga, V. (2013). Factors influencing innovation decision making in Portuguese firms. *International Journal of Innovation and Learning*, 14(3/4), 329–349. <https://doi.org/10.1504/IJIL.2013.056232>.
- Brockman, B. K., Jones, M. A., & Becherer, R. C. (2012). Customer orientation and performance in small firms: Examining the moderating influence of risk-taking, innovativeness, and opportunity focus. *Journal of Small Business Management*, 50(3), 429–446. <https://doi.org/10.1111/j.1540-627X.2012.00361>.
- Brown, T. J., Mowen, J. C., Donavan, T., & Licata, J. W. (2002). The customer orientation of service workers: Personality trait effects on self and supervisor performance ratings. *Journal of Marketing Research*, 39(1), 110–119. <https://doi.org/10.1509/jmkr.39.1.110.18928>.
- Bryman, A. (2008). *Social Research Methods* (3rd ed.). Oxford: Oxford University Press.
- Buhalis, D., & Law, R. (2008). Progress in information technology and tourism management: 20 years on and 10 years after the Internet – The state of eTourism research. *Tourism Management*, 29(4), 609–623. <https://doi.org/10.1016/j.tourman.2008.01.005>.
- Byrne, B. M. (2010). *Structural Equation Modeling with AMOS: Basic Concepts, Applications, and Programming* (2nd ed.). New York: Routledge/Taylor & Francis.
- Camisón, C., & Monfort-Mir, V. M. (2012). Measuring innovation in tourism from the Schumpeterian and the dynamic-capabilities perspectives. *Tourism Management*, 33, 4. <https://doi.org/10.1016/j.tourman.2011.08.012>.
- Campbell, A. J., Cooper, R. (1999). Do customer partnerships improve new product success rates? *Industrial Marketing Management*, 28(5), 507–519. [https://doi.org/10.1016/S0019-8501\(99\)00058-9](https://doi.org/10.1016/S0019-8501(99)00058-9).
- Chang, S., Gong, Y., & Shum, C. (2011). Promoting innovation in hospitality companies through human resource management practices. *International Journal of Hospitality Management*, 30(5), 812–818. <https://doi.org/10.1016/j.ijhm.2011.01.001>.
- Deshpandé, R., Farley, J., & Webster, F. (1993). Corporate culture, customer orientation, and innovativeness in Japanese companies: A quadrat analysis. *Journal of Marketing*, 57(1), 23–37. <https://doi.org/10.2307/1251521>.
- Edvardsson, B., Gustafsson, A., Kristensson, P., & Witell, L. (2010). Service innovation and customer co-development. In P. P. Maglio, C. A. Kieliszewski, & J. Spohrer (Eds.), *Handbook of Service Science* (pp. 561–577). New York: Springer. https://doi.org/10.1007/978-1-4419-1628-0_24.
- Enders, C. (2010). *Applied Missing Data Analysis*. London: Guilford Press.
- Enz, C. A., Canina, L., & Walsh, K. (2006). *Intellectual Capital: A Key Driver of Hotel Performance*. Report by Centre for Hospitality Research: Cornell University.
- Finch, J. F., West, S., & Mackinnon, D. (1997). Effects of sample size and nonnormality on the estimation of mediated effects in latent variable models. *Structural Equation Modeling*, 4(2), 87–107. <https://doi.org/10.1080/10705519709540063>.
- Finney, S. J., & DiStefano, C. (2006). Non-normal and categorical data in structural equation modeling. In G. R. Hancock & R. D. Mueller (Eds.), *Structural Equation Modeling: A Second Course* (pp. 269–314). Charlotte, NC: Information Age Publishing.
- Flowers, S., Von Hippel, E., De Jong, J., & Sinozic, T. (2010). *Measuring user innovation in the UK: The importance of product creation by users*, Report by NESTA.
- Fuller, J., & Matzler, K. (2007). Virtual product experience and customer participation – A chance for customer-centered, really new products. *Technovation*, 27(6–7), 378–387. <https://doi.org/10.1016/j.technovation.2006.09.005>.

- Gao, S., Mokhtarian, P., & Johnston, R. (2008). *Non-normality of Data in Structural Equation Models*. Research Report by Institute of Transportation Studies. Berkeley, CA: University of California Transportation Centre.
- Gërguri-Rashiti, S., Ramadani, V., Abazi-Alili, H., Dana, L.-P., & Ratten, V. (2017). ICT, innovation and firm performance: The transition economies context. *Thunderbird International Business Review*, 59(1), 93–102. <https://doi.org/10.1002/tie.21772>.
- Grissemann, U., Plank, A., & Brunner-Sperdin, A. (2013). International Journal of Hospitality Management Enhancing business performance of hotels: The role of innovation and customer orientation. *International Journal of Hospitality Management*, 33, 347–356. <https://doi.org/10.1016/j.ijhm.2012.10.005>.
- Hall, C. M., & Williams, A. M. (2008). *Tourism and Innovation*. London, New York: Routledge.
- Hanzaee, K. H., & Mirvaisi, M. (2011). Customer orientation of service employees: A case study of Iranian Islamic banking (based on COSE model). *International Journal of Marketing Studies*, 3(4), 130–145. <https://dx.doi.org/10.5539/ijms.v3n4p130>.
- Hjalager, A. M. (2010). A review of innovation research in tourism. *Tourism Management*, 31(1), 1–12. <http://doi.org/10.1016/j.tourman.2009.08.012>.
- Hjalager, A.-M., & Nordin, S. (2011). Journal of Quality Assurance in Hospitality & Tourism User-driven Innovation in Tourism – A review of methodologies. *Journal of Quality Assurance in Hospitality & Tourism*, 12(4), 289–315. <https://doi.org/10.1080/1528008X.2011.541837>.
- Hornby, P., & Symon, G. (1994). Tracer studies. In C. Cassell, & G. Symon (Eds.), *Qualitative Methods in Organisational Research: A Practical Guide* (pp. 167–188). London: Sage.
- Jensen, M. B., Johnson, B., Lorenz, E., & Lundvall, B. Å. (2007). Forms of knowledge and modes of innovation. *Research Policy*, 36, 680–693. <https://doi.org/10.1016/j.respol.2007.01.006>.
- Johannessen, J. A., Olsen, B., & Lumpkin, G. T. (2001). Innovation as newness: What is new, how new, and new to whom? *European Journal of Innovation Management*, 4(1), 20–31. <https://doi.org/10.1108/14601060110365547>.
- Kandampully, J., Bilgihan, A., & Christina, T. (2016). Journal of Hospitality and Tourism Management Developing a people-technology hybrids model to unleash innovation and creativity: The new hospitality frontier. *Journal of Hospitality and Tourism Management*, 29, 154–164. <http://doi.org/10.1016/j.jhtm.2016.07.003>.
- Lee, J. J., Ok, C. M., & Hwang, J. (2016). An emotional labor perspective on the relationship between customer orientation and job satisfaction. *International Journal of Hospitality Management*, 54, 139–150. <https://doi.org/10.1016/j.ijhm.2016.01.008>.
- Little, R. J. A., & Rubin, D. B. (2002). *Statistical Analysis with Missing Data*. Hoboken, NJ: Wiley.
- López-Fernández, M. C., Serrano-Bedia, A. M., & Gómez-López, R. (2011). Factors encouraging innovation in spanish hospitality firms. *Cornell Hospitality Quarterly*, 52(2), 144–152. <https://doi.org/10.1177/1938965510393723>.
- Nambisan, S. (2002). Designing virtual customer environments for new product development: Toward a theory. *Academy of Management Review*, 27(3), 392–413. <https://doi.org/10.5465/amr.2002.7389914>.
- Nieves, J., Quintana A., & Osorio, J. (2014). Knowledge-based resources and innovation in the hotel industry. *International Journal of Hospitality Management*, 38, 65–73. <https://doi.org/10.1016/j.ijhm.2014.01.001>.
- Nordin, S., & Hjalager, A.-M. (2017). Doing, using, interacting – Towards a new understanding of of tourism innovation processes. In A. Kiralova (Ed.), *Driving Tourism*

- Through Creative Destinations and Activities* (pp. 165–180). Hershey, PA: IGI Global. <https://doi.org/10.4018/978-1-5225-2016-0.ch008>.
- OECD. (2005). *Oslo Manual. The Measurement of Scientific and Technological Activities. Guidelines for Collecting and Interpreting Innovation Data* (3rd ed.). Brussels: OECD.
- Orfila-Sintes, F., Crespi-Cladera, R., & Martinez-Ros, E. (2005). Innovation activity in the hotel industry: Evidence from Balearic Islands. *Tourism Management*, 26, 851–865. <https://doi.org/10.1016/j.tourman.2004.05.005>.
- Orfila-Sintes, F., & Mattsson, J. (2009). Innovation behavior in the hotel industry. *Omega*, 37(2), 380–394. <https://doi.org/10.1016/j.omega.2007.04.002>.
- Ottbacher, M., & Gnoth, J. (2005). How to develop successful hospitality innovation. *Cornell Hospitality Quarterly*, 46(2), 205–222. <https://doi.org/10.1177/0010880404271097>.
- Ottbacher, M. C. (2007). Innovation management in the hospitality industry: Different strategies for achieving success. *Journal of Hospitality and Tourism Research*, 31(4), 431–454. <https://doi.org/10.1177/1096348007302352>.
- Sandvik, I. L., & Sandvik, K. (2003). The impact of market orientation on product innovativeness and business performance. *Journal of Product Innovation Management*, 20(4), 355–376. <https://doi.org/10.1016/j.ijresmar.2003.02.002>.
- Sarmah, B., Kamboj, S., & Rahman, Z. (2017). Co-creation in hotel service innovation using smart phone apps: An empirical study. *International Journal of Contemporary Hospitality Management Article information*, 29(10), 2647–2667. <http://doi.org/10.1108/IJCHM-12-2015-0681>.
- Schumacker, R. E., & Lomax, R. G. (2016). *A Beginner's Guide to Structural Equation Modeling* (3rd ed.). New York: Routledge/Taylor & Francis.
- Sørensen, F. (2007). The geographies of social networks and innovation in tourism. *Tourism Geographies*, 9(1), 22–48. <https://doi.org/10.1080/14616680601092857>.
- Sørensen, F., & Sundbo, J. (2014). The potential for user-based innovation in tourism: The example of GPS tracking of attraction visitors. In G. A. Alsos, D. Eide, & E. L. Madsen (Eds.), *Handbook of Research on Innovation in Tourism Industries* (pp. 132–153). Cheltenham: Edward Elgar Publishing. <https://doi.org/10.4337/9781782548416.00013>.
- Sundbo, J., Orfila-Sintes, F., & Sørensen, F. (2007). The innovative behaviour of tourism firms – Comparative studies of Denmark and Spain. *Research Policy*, 36(1), 88–106. <https://doi.org/10.1016/j.respol.2006.08.004>.
- Tajeddini, K. (2010). Effect of customer orientation and entrepreneurial orientation on innovativeness: Evidence from the hotel industry in Switzerland. *Tourism Management*, 31(2), 221–231. <https://doi.org/10.1016/j.tourman.2009.02.013>.
- Tajeddini, K., & Trueman, M. (2012). Managing Swiss Hospitality: How cultural antecedents of innovation and customer-oriented value systems can influence performance in the hotel industry. *International Journal of Hospitality Management*, 31(4), 1119–1129. <https://doi.org/10.1016/j.ijhm.2012.01.009>.
- Tether, B. S. (2002). Who co-operates for innovation, and why: An empirical analysis. *Research Policy*, 31, 947–967. [https://doi.org/10.1016/S0048-7333\(01\)00172-X](https://doi.org/10.1016/S0048-7333(01)00172-X).
- Trott, P., & Hartmann, D. (2013). Users as innovators? Exploring the limitations of user-driven innovation innovation. *Prometheus*, 31(2), 125–138. <http://doi.org/10.1080/08109028.2013.818790>.
- Tsioutsou, R., & Ratten, V. (2010). Future research directions in tourism marketing. *Marketing Intelligence & Planning*, 28(4), 533–544. <https://doi.org/10.1108/02634501011053702>.
- Victorino, L., Verma, R., Plaschka, G., & Dev, C. (2005). Service innovation and customer choices in the hospitality industry. *Managing Service Quality: An International Journal*, 15(6), 555–576. <https://doi.org/10.1108/09604520510634023>.

- von Hippel, E. (1978). Successful industrial products from customer ideas. Presentation of a new customer – Active paradigm with evidence and implications. *The Journal of Marketing*, 42(1), 39–49. <https://doi.org/10.1177/002224297804200109>.
- von Hippel, E. (2005). *Democratizing Innovation*. Boston, MA: MIT Press.
- West, S. G., Finch, J. F., & Curran, P. J. (1995). Structural equation models with nonnormal variables: Problems and remedies. In R. H. Hoyle (Ed.), *Structural Equation Modeling: Concepts, Issues, and Applications* (pp. 56–75). Thousand Oaks, CA: Sage.
- Wise, E., & Høgenhaven, C. (2008). *User-Driven Innovation. Context and Cases in the Nordic Region*. Oslo : Nordic Innovation Centre.
- Wong, S., & Pang, L. (2003). Motivators to creativity in the hotel industry – Perspectives of managers and supervisors. *Tourism Management*, 24(5), 551–559. [https://doi.org/10.1016/S0261-5177\(03\)00004-9](https://doi.org/10.1016/S0261-5177(03)00004-9).

Appendix

TABLE 7.A1 Assessment of normality

<i>Variable name</i>	<i>Minimum</i>	<i>Maximum</i>	<i>Skew</i>	<i>Critical ratio</i>	<i>Kurtosis</i>	<i>Critical ratio</i>
Zp11r_03	-1.035	0.964	-0.070	-0.570	-1.990	-8.124
Zp16r_2	-3.782	0.761	-1.010	-8.249	0.076	0.311
Zp11r_01	-1.105	0.903	-0.202	-1.648	-1.954	-7.978
Zp11r_02	-1.557	0.641	-0.920	-7.511	-1.149	-4.689
Zp11r_08	-0.785	1.271	0.487	3.974	-1.758	-7.177
Zp11r_04	-0.563	1.771	1.214	9.913	-0.522	-2.131
Zp11r_05	-0.720	1.386	0.669	5.464	-1.547	-6.316
Zp11r_06	-0.836	1.193	0.358	2.925	-1.867	-7.621
Zp11r_07	-0.524	1.902	1.384	11.298	-0.081	-0.330
Zp21r	-2.627	1.106	-0.067	-0.551	-1.094	-4.466
Zp14r	-1.991	0.501	-1.495	-12.206	0.241	0.983
Zp12r	-2.023	0.493	-1.534	-12.529	0.361	1.472
Zp13r	-2.329	1.553	0.002	0.014	-0.572	-2.334
Zp18r	-6.371	1.016	-0.607	-4.955	2.276	9.292
Zp19r	-1.685	0.592	-1.094	-8.935	-0.802	-3.276
Zp22r_4	-1.332	0.749	-0.583	-4.763	-1.660	-6.776
Zp22r_5	-0.650	1.535	0.886	7.233	-1.215	-4.961
Zp22r_6	-0.573	1.741	1.170	9.554	-0.631	-2.575
ZP10_6	-0.252	3.953	3.705	30.255	11.730	47.890
ZP10_4	-0.745	1.339	0.595	4.855	-1.646	-6.721
Zp17r_3	-1.638	2.087	-0.062	-0.502	-0.336	-1.372
Zp17r_2	-1.986	1.695	-0.093	-0.758	-0.342	-1.397
Zp17r_1	-2.112	1.308	-0.446	-3.644	-0.333	-1.361
Zp2r_5	-0.725	1.376	0.652	5.325	-1.575	-6.429
Zp2r_6	-0.420	2.377	1.960	16.007	1.843	7.525
Zp2r_7	-0.309	3.225	2.920	23.839	6.524	26.636
Zp2r_2	-0.820	1.217	0.398	3.247	-1.842	-7.519
Zp2r_1	-0.863	1.156	0.293	2.393	-1.914	-7.814
Zp2r_4	-0.476	2.096	1.622	13.247	0.632	2.582
Zp2r_3	-0.476	2.096	1.622	13.247	0.632	2.582
Multivariate					26.817	6.120

TABLE 7.A2 Indicators of latent constructs. Variable names, item wordings, means, standard deviations, skew and kurtosis

<i>Variable name</i>	<i>Latent construct</i>	<i>Item</i>	<i>N</i>	<i>Mean</i>	<i>Standard deviation</i>	<i>Skew</i>	<i>Kurtosis</i>
Zp2r_1	Innovativeness	The type of innovations occurring in the enterprise during the last three years of its business activity (2012–2014)	400	-0.00003	0.210	1.175	1.820
Zp2r_2							
Zp2r_3							
Zp2r_4	Product and service innovation occurring in the business activity	Product and service innovation occurring in the business activity	400	-0.00004	0.303	1.184	1.866
Zp2r_5							
Zp2r_6							
Zp2r_7	Marketing and organisational innovation	Marketing and organisational innovation occurring in the business activity	400	-0.00003	0.340	1.571	2.627
Zp16r_2							
Zp11r_01							
Zp11r_02	Customers' knowledge acquisition	Significance of information from customers and the way of acquisition and exchange of information with customers about its range of products and services	400	-0.00007	0.317	1.036	0.084
Zp11r_03							
Zp11r_04							
Zp11r_05	Customers' knowledge processing	Enterprise's ability to process information obtained from the customers, employees' skills necessary to build relationships with customers and the level of their involvement in such relationships, employees' engagement in building relations with customers, use of IT systems or tools	400	-0.00006	0.225	-0.673	-0.081
Zp11r_06							
Zp11r_07							
Zp11r_08	Customers' knowledge exploitation	Frequency of events determining relations with enterprises with regard to changes made to the range of products and services offered by the enterprise and measuring the customers' involvement in the innovative activity of enterprises	400	0.00040	0.892	-0.137	-0.230
Zp12r							
Zp13r							
Zp14r	Customers' knowledge exploitation	Frequency of events determining relations with enterprises with regard to changes made to the range of products and services offered by the enterprise and measuring the customers' involvement in the innovative activity of enterprises	400	0.00040	0.892	-0.137	-0.230
Zp18r							
Zp19r							
Zp22r_4	Customers' knowledge exploitation	Frequency of events determining relations with enterprises with regard to changes made to the range of products and services offered by the enterprise and measuring the customers' involvement in the innovative activity of enterprises	400	0.00040	0.892	-0.137	-0.230
Zp22r_5							
Zp22r_6							
Zp17r_1	Customers' knowledge exploitation	Frequency of events determining relations with enterprises with regard to changes made to the range of products and services offered by the enterprise and measuring the customers' involvement in the innovative activity of enterprises	400	0.00040	0.892	-0.137	-0.230
Zp17r_2							
Zp17r_3							
Zp10_4	Customers' knowledge exploitation	Frequency of events determining relations with enterprises with regard to changes made to the range of products and services offered by the enterprise and measuring the customers' involvement in the innovative activity of enterprises	400	0.00040	0.892	-0.137	-0.230
Zp10_6							

TABLE 7.A3 CFA model parameter estimates. Factor pattern coefficients of latent variables

<i>Factor loadings</i>			<i>b</i>	<i>Standard error</i>	<i>Critical ratio</i>	<i>p value</i>	<i>Beta</i>
Product and service innovation	<-	Innovativeness	1.434	0.319	4.499	***	0.983
Marketing and organisational innovation	<-	Innovativeness	1.129	0.289	3.910	***	0.586
Customers' knowledge acquisition	<-	Innovativeness	1.000				0.728
Customer's knowledge processing	<-	Innovativeness	0.500	0.102	4.838	***	0.491
Customers' knowledge exploitation	<-	Innovativeness	0.310	0.234	1.327	0.185	0.089
Zp2r_3	<-	Innovativeness	1.742	0.358	4.869	***	0.462
Zp2r_4	<-	Innovativeness	1.678	0.351	4.778	***	0.446
Zp2r_2	<-	Product and service innovation	1.000				0.387
Zp2r_7	<-	Product and service innovation	0.671	0.196	3.429	***	0.260
Zp2r_1	<-	Product and service innovation	0.415	0.178	2.336	0.020	0.161
Zp2r_6	<-	Marketing and organisational innovation	1.000				0.511
Zp2r_5	<-	Marketing and organisational innovation	0.750	0.241	3.105	0.002	0.383
Zp11r_07	<-	Customers' knowledge acquisition	1.859	0.276	6.733	***	0.676
Zp11r_05	<-	Customers' knowledge acquisition	1.813	0.271	6.683	***	0.660
Zp11r_04	<-	Customers' knowledge acquisition	1.688	0.259	6.529	***	0.615
Zp11r_06	<-	Customers' knowledge acquisition	1.303	0.222	5.862	***	0.475
Zp11r_08	<-	Customers' knowledge acquisition	1.152	0.21	5.501	***	0.420
Zp11r_03	<-	Customers' knowledge acquisition	1.075	0.203	5.289	***	0.392
Zp11r_01	<-	Customers' knowledge acquisition	1.000				0.358

(Continued)

<i>Factor loadings</i>		<i>b</i>	<i>Standard error</i>	<i>Critical ratio</i>	<i>p value</i>	<i>Beta</i>
Zp11r_02	<-	0.556	0.169	3.280	0.001	0.203
Zp16r_2	<-	0.375	0.162	2.313	0.021	0.137
Zp14r	<-	2.157	0.404	5.347	***	0.588
Zp19r	<-	1.819	0.361	5.043	***	0.494
Zp12r	<-	1.724	0.349	4.940	***	0.469
Zp13r	<-	1.548	0.329	4.710	***	0.421
Zp21r	<-	1.398	0.313	4.468	***	0.379
Zp22r_6	<-	1.090	0.283	3.856	***	0.295
Zp22r_5	<-	1.000				0.276
Zp18r	<-	0.926	0.271	3.423	***	0.251
Zp22r_4	<-	0.71	0.253	2.808	0.005	0.192
Zp17r_2	<-	1.000				0.957
Zp17r_1	<-	0.733	0.071	10.261	***	0.698
Zp17r_3	<-	0.509	0.06	8.426	***	0.501
ZP10_6	<-	0.275	0.058	4.723	***	0.255
ZP10_4	<-	0.060	0.056	1.064	0.287	0.055

Factor pattern coefficients of latent variables <- regression,

***p<0.001.

TABLE 7.A4 Measurement error variances

<i>Latent construct/variable name</i>	<i>Standardised estimates</i>	<i>Standard error</i>	<i>p value</i>
Innovativeness	0.070	0.021	***
Product and service innovation	0.005	0.061	0.933
Marketing and organisational innovation	0.171	0.088	0.053
Customers' knowledge acquisition	0.062	0.022	0.004
Customers' knowledge processing	0.055	0.020	0.006
Customers' knowledge exploitation	0.851	0.097	***
Zp2r_3	0.784	0.068	***
Zp2r_4	0.799	0.069	***
Zp2r_1	0.972	0.070	***
Zp2r_2	0.848	0.085	***
Zp2r_7	0.930	0.072	***
Zp2r_6	0.737	0.105	***
Zp2r_5	0.851	0.079	***
Zp17r_1	0.487	0.051	***
Zp17r_2	0.078	0.071	0.273
Zp17r_3	0.662	0.051	***
ZP10_4	0.994	0.070	***
ZP10_6	0.933	0.067	***
Zp22r_6	0.908	0.068	***
Zp22r_5	0.883	0.065	***
Zp22r_4	0.959	0.069	***
Zp19r	0.748	0.064	***
Zp18r	0.933	0.069	***
Zp13r	0.812	0.065	***
Zp12r	0.768	0.064	***
Zp14r	0.641	0.063	***
Zp21r	0.850	0.066	***
Zp11r_07	0.544	0.051	***
Zp11r_06	0.772	0.060	***
Zp11r_05	0.566	0.052	***
Zp11r_04	0.623	0.054	***
Zp11r_08	0.820	0.062	***
Zp11r_02	0.952	0.068	***
Zp11r_01	0.903	0.067	***
Zp16r_2	0.979	0.070	***
Zp11r_03	0.842	0.063	***

***p<0.001.

TABLE 7.A5 Factor structure coefficient matrix. Correlation coefficients of the observed and latent variables (validity measures)

<i>Variable name</i>	<i>Innovativeness</i>	<i>Marketing and</i>				
		<i>Product and service innovation</i>	<i>organisational innovation</i>	<i>Customers' knowledge acquisition</i>	<i>Customers' knowledge processing</i>	<i>Customers' knowledge exploitation</i>
Zp2r_4	0.044	0.063	0.037	0.018	0.010	0.001
Zp2r_1	0.016	0.025	0.013	0.006	0.003	0.000
Zp2r_2	0.044	0.068	0.037	0.018	0.009	0.001
Zp2r_7	0.027	0.042	0.023	0.011	0.006	0.001
Zp2r_6	0.030	0.042	0.198	0.012	0.006	0.001
Zp2r_5	0.019	0.028	0.128	0.008	0.004	0.000
Zp17r_2	0.008	0.011	0.007	0.003	0.002	0.823
Zp17r_3	0.000	0.001	0.000	0.000	0.000	0.049
ZP10_4	0.000	0.000	0.000	0.000	0.000	0.004
Zp22r_4	0.004	0.006	0.004	0.002	0.019	0.000
Zp19r	0.014	0.020	0.012	0.006	0.061	0.000
Zp18r	0.002	0.002	0.001	0.001	0.007	0.000
Zp2r_3	0.048	0.068	0.040	0.020	0.010	0.001
Zp16r_2	0.004	0.006	0.003	0.011	0.001	0.000
Zp11r_03	0.014	0.019	0.011	0.038	0.003	0.000
Zp17r_1	0.001	0.001	0.001	0.000	0.000	0.097
ZP10_6	0.000	0.000	0.000	0.000	0.000	0.019
Zp14r	0.019	0.027	0.016	0.008	0.084	0.000
Zp12r	0.013	0.018	0.011	0.005	0.056	0.000
Zp13r	0.011	0.015	0.009	0.004	0.048	0.000
Zp21r	0.008	0.012	0.007	0.003	0.038	0.000
Zp22r_6	0.007	0.010	0.006	0.003	0.030	0.000
Zp22r_5	0.006	0.009	0.005	0.003	0.028	0.000
Zp11r_02	0.006	0.009	0.005	0.017	0.001	0.000
Zp11r_08	0.015	0.021	0.013	0.042	0.003	0.000
Zp11r_04	0.029	0.041	0.024	0.080	0.006	0.001
Zp11r_05	0.034	0.048	0.029	0.095	0.007	0.001
Zp11r_06	0.018	0.026	0.015	0.050	0.004	0.000
Zp11r_07	0.036	0.052	0.031	0.101	0.008	0.001
Zp11r_01	0.012	0.017	0.010	0.033	0.003	0.000

8

DESTINATION FUNCTIONAL ATTRIBUTES AND TOURISTS' REVISIT INTENTION TO SRI LANKA'S PASIKUDA

A critical role of destination brand equity

Mohamed Ismail Mujahid Hilal and Kayhan Tajeddini

8.1 Introduction

Brand marketing is vital for any businesses in the world, irrespective of product, service and experience. Tourism marketing organizations should also focus on the brand building process in order to ensure the revisit intention of tourists who are exposed to the particular tourist attractions visited. Many marketers are now placing importance on destination branding (Kaplan et al., 2010). Pasikuda is one of the prominent tourist attractions situated on the East Coast of Sri Lanka. Pasikuda Beach is very famous in Sri Lanka, known for its white sand and clear sea for swimming. Most of the tourists arriving to the country and visiting the East part of Sri Lanka mainly visit Pasikuda in the Batticaloa district. Branding will make the destination more competitive as a tourist destination (Pike and Mason, 2011).

Although much more studies have been carried out in the field of tourism marketing and destination brand equity, study on destination brand equity is still in its infancy (Pike et al., 2010; Tajeddini, 2011). While there is stiff competition with many other destination brands all over the world, Sri Lanka is also competing with its own tourist destinations. Sri Lanka has also developed a strategic plan for 2017–2020, in order to promote Sri Lankan tourism and therefore, positioning itself as a destination is paramount for the country, and to create revisit intention. Therefore, it is necessary to investigate Pasikuda's brand equity as a destination, and how destination attributes influence the creation of brand equity. Further it is also important to examine how the brand equity affects the revisit intention to Sri Lanka's Pasikuda. This is important, because owing to increased competition with other destinations that are similar in nature and can be easily substituted,

branding destinations is a significant and excellent marketing tool to use in this era (Salehzadeh et al., 2016).

Furthermore, the strategic plan for 2017–2020 addresses the need to change the value proposition of Sri Lanka's tourism and position it well. According to the strategic plan, Sri Lanka's tourism needs to be transformed, enabling a global presence within the competitive travel market and matching it with sustainable development goals. This helps Sri Lanka to become a memorable, authentic and diverse tourism experience by 2025. In order to achieve this, Sri Lanka is planning to modify the value proposition that assists in securing the assets and discovering new markets with the help of local communities in tourism development activities. According to the strategic plan, the shortcomings of Sri Lanka tourism products are that they are not sufficiently diverse and have failed to add value within the supply chain (Sri Lanka Tourism Strategic Plan 2017–2020).

Promoting Pasikuda as one of the tourists' destination brand is vital to achieve the vision by 2025. A destination brand helps tourists by guaranteeing a pleasant tourism experience for their vacation (Blain et al., 2005). According to Balakrishnan (2009), the two main components of the process of destination branding are to position and differentiate the destination along with branding attributes, and communicating it to the target market. These can be done only through placing a clear and unique image in the mind of tourists along with the brand components of the destination. This will also help attracting tourists and create brand loyalty (Balakrishnan, 2009).

The success of the destination branding depends on the tourists' revisiting the destination. In spite of the fact that number of tourist visits also determines revisit intention, tourists' satisfaction is more important and is given more weight in determining revisit intention (Alegre and Cladera, 2009). Here, tourists' satisfaction means their satisfaction with all attributes of the destination and hence, it is confirmed that satisfaction is key in multiple aspects (Alegre and Cladera, 2009). While research in the areas of measuring the destination branding is lacking many attributes, it may give ambiguities in measuring a destination brand compared to a product brand (Pike et al., 2010).

Of total tourist arrivals, 85% of them are visiting for the purpose of participating in mainstream activities such as beach activities. Pasikuda, in the Baticaloa district of Sri Lanka is the most prominent place to visit in the country. Therefore, it is paramount to study the functional attributes of Pasikuda as a tourist destination and how it affects brand equity comprising brand awareness, brand image and brand loyalty, and how these brand equity components impact on the tourists' revisit intention to Pasikuda. Despite the fact that there are many studies in tourism related products and services in Sri Lanka, the studies on creation of brand equity, and its attributes and revisit intention to destinations are lacking. This has also been confirmed by Pike and Bianchi (2013). Therefore, the research questions for this study are do the functional attributes of Pasikuda impact on the brand equity? Does the created brand equity impact on the tourists' revisit intention to Pasikuda? Thus, the research objectives for this study are to investigate the impact of functional

attributes of Pasikuda and the creation of brand equity. Further, this study also helps examine the mediating role of the brand equity of Pasikuda between functional attributes and the revisit intention of tourists.

8.2 Review of literature and theoretical framework

8.2.1 Revisit intention and functional attributes

Intention to visit or revisit intention need to be explored by the destination marketers to understand whether tourists are satisfied with the functional attributes of the destination. It may also help destination marketing organizations to formulate strategies to ensure the repeated visits to the destination. There may be many attributes associated with a destination. Every attribute provides a different influence on destination image and intention to visit (Phau et al., 2014). Therefore, it provides a clue for the destination marketers on how to improve further in their destination marketing strategies. Destination marketers can also promote revisit intention of tourists by implementing echo tourism activities. This is also connected to attributes of the tourist destinations (Huang and Liu, 2017; Mussalam and Tajeddini, 2016). Moreover, revisit intention is largely determined by the brand personality of the destination and brand equity (Salehzadeh et al., 2016).

Functional Attributes and Destination Brand Equity Brand equity is defined as “*the differential effect that brand knowledge has on consumer response to the marketing that brand*” (Keller, 2009, p. 142). Brand equity is also defined “*as a set of brand assets and liabilities linked to a brand, its name and symbol that add to or subtract from the value provided by a product or service to a firm and/or to that firm’s customers*” (Aaker, 1991, p. 15). The definition given to destination brand equity starts from the image of the destination and it leads to brand awareness, brand quality, brand image, and brand loyalty that has cognitive, affective and conative effects on tourists and in turn creates brand equity (Konecnik and Gartner, 2007). As the brand image is playing a critical role in the destination brand equity, destination marketers need to give greater attention to measuring the tourists’ destination familiarity and improving image in order to increase the brand value (Tasci, 2018). Therefore, it is one of foremost actions of destination marketers to examine the effects of destination attributes on the brand equity and revisit intention. Further, when a destination has strengthened its brand equity, customers are giving priority to the brand and are ready to pay premium prices and become loyal to the particular destination (Keller and Lehmann, 2006). In order to be successful in destination marketing, tourists need to develop brand trust on the destination brand. Brand equity is a most important one to mediate the brand reputation and brand trust (Han et al., 2015). Moreover, in creating brand equity, social media plays an important role. Tourists need social media communication to act, and for that, brand equity is a mediator between social media marketing and tourists’ responses (Godey et al., 2016).

Brand awareness is an important component of the brand equity (Liu et al., 2017). Destination marketers need to ensure that the particular destination brand is

always remembered. When a brand is recalled and consumers are able to recognize it, the brand has awareness (Huang and Sarigollu, 2012). It is also worthwhile to note here that when a brand has more awareness, customers can make quicker purchasing decisions (Macdonald and Sharp, 2000). Similarly, it has been confirmed that tourists can make quicker travelling decisions when a destination brand has more awareness, and the tourists' risks associated with the destination are also reduced (Berry, 2000). Likewise, if a brand has more awareness, which reflects on the brand commitment and induce the customer to place the brand in the consideration sets and increase purchase intention of the brand (Erdem et al., 2006). When a destination brand has more awareness, tourists easily consider it as the destination to visit. Brand image is also one of the important components of brand equity. This also plays an important role in marketing (Dirsehan and Kurtuluş, 2018). Brand image is related to consumer memory (Keller, 1993; Tajeddini and Ratten, 2017). In the case of destination brand image, the attributes associated with the destination may create an image in the mind of tourists. This influences the revisit intention of the tourists. When tourists recognize unique and favourable attributes about the destination brand, it has achieved its brand image. Another important component of brand equity is brand loyalty. When a destination has competitiveness, it has brand loyalty (Wong and Teoh, 2015). When a destination has high brand loyalty, the customer revisit intention will be high. This is because of the fact that brand loyalty may improve the brand attitude and purchase intention (Liu et al., 2017). According to Konecnik and Gartner (2007), image plays a major role in determining brand equity. Therefore, the attributes that create the image of the destination developed by Konecnik and Gartner (2007) is used as functional attributes for this study as well. It is also important to point out here that same measurements have been used by Wong and Teoh (2015). Literature (for example Wong and Teoh, 2015; Konecnik and Gartner, 2007) suggests that the functional attributes of a destination positively influence its brand equity.

The discussion of the literature and the study by Tran et al. (2019) indicate that these brand equity components are positively contribute to the destination brand equity and create brand equity, which positively influences revisit intention. Hence, we propose that

H1: Functional attributes of Pasikuda as a destination positively affect the brand equity of Pasikuda.

H2: Brand equity of Pasikuda as a destination positively influences on the revisit intention to Pasikuda.

8.2.2 Functional attributes and revisit intention

Destination attributes is one of the most important aspects that destination marketers now focus on. Destination attributes largely affect the decision making process of travellers, and these attributes positively influence on the competitiveness of the

destinations (Crouch and Ritchie, 1999; Tajeddini and Nikdavoodi, 2014). A study on the effects of destination attributes emphasizes that the functional benefits of the associated tourism products such as accommodations and restaurants of the destination also enhance the revisit intention of the destination (Bonn et al., 2016). Destination loyalty is influenced by brand awareness and image. This relationship is mediated through perceived quality (Herrero et al., 2017). This perceived quality mainly depends on the attributes of the destinations. Therefore, functional needs should be judged by the tourists in order to encourage revisit intention. Thus, it is necessary to improve the brand quality of the destination, which addresses the functional needs of the destination (Bigne et al., 2005). Therefore, the researcher proposes that

H3: Functional attributes of Pasikuda as a destination positively influence on the intention to revisit to Pasikuda.

8.2.3 Method

To examine the relationship between functional attributes of Pasikuda and revisit intention, a study was conducted with a deductive approach. A conceptual model was created with the help of previous studies and hypotheses were also developed. The research strategy was survey methodology and time horizon was cross sectional.

8.2.3.1 Measurement development

The questionnaire for the study had two parts. The first part concerned the demographical characteristics such as sex and age. The second part concerned items measuring the functional attributes, brand equity, and revisit intention. Functional attributes were first developed by Konecnik and Gartner (2007), and were adopted for this study too. Functional attributes comprises 21 items. Brand equity dimensions such as brand awareness were adopted from Lu et al. (2014), the items to measure brand image were adopted from Boo et al. (2009), and the items to measure the brand loyalty were adopted from Chi and Qu (2008) and Boo et al. (2009). Hence, the brand equity dimension included 11 statements. Items to measure revisit intention had three items and were adopted from Ryu and Jang (2006).

8.2.3.2 Sample selection and data collection

Tourists arrive in Sri Lanka and visit Pasikuda as a destination to enjoy a clear beach. One hundred and eighty-two international tourists from various countries were selected for this study. The questionnaires were administered by the researcher who lives just 82 km away from Pasikuda. The researcher visited Pasikuda and met these tourists at Pasikuda beach surroundings, and asked them to complete the questionnaires. Occasionally, the researcher met some tourists at restaurants in the Pasikuda area. The researcher collected data during April–June 2018.

8.2.4 Results and findings

In the case of demographical characteristics, of the 182 respondents, 59% were male and 41% were female. According to the age distribution, 40% of them in the age group of 18–30, 38% of the respondents were between the ages of 31–50 years. The remainder were above 50 years of age.

2.4.1 Reliability analysis

Before the findings can be established, it is important to check the reliability and validity of the structural equation model. The model to be validated, Cronbach's Alpha, Composite Reliability and Average Variance Extracted (AVE) need to be checked. Table 8.1 provides all of the values that help analyze the reliability and validity.

Cronbach's Alpha values for all variables are more than 0.70, which is the minimum requirement for an internal consistency. In the case of Composite reliability, all values are more than 0.70 and therefore, the internal consistency is further confirmed. The average variance extracted also needs to be looked at and all AVEs are more than 0.50. Hence, convergent validity is also confirmed. Thus, requirements of Hair et al. (2014), are met with this model and is confirmed for accuracy.

After the confirming the internal consistency of the model, discriminant validity is also confirmed with Table 8.2 from Fornell and Larcker (1981).

Fornell and Larcker's criterion also providing evidences for discriminant validity. The values given in Table 8.2 for the criterion is not more than the square root of AVE.

The discriminant validity is further confirmed with Table 8.3 and Factorial cross loadings. It is also observed that all factorials loadings of observed variables are greater than the other in the loadings.

TABLE 8.1 Construct validity and reliability

	<i>Cronbach's Alpha</i>	<i>rho_A</i>	<i>Composite Reliability</i>	<i>Average Variance Extracted (AVE)</i>
Brand equity	0.887	0.901	0.914	0.605
Functional attributes	0.935	0.945	0.946	0.643
Revisit intention	0.808	0.809	0.912	0.839

TABLE 8.2 Fornell and Larcker criterion

	<i>Brand equity</i>	<i>Functional attributes</i>	<i>Revisit intention</i>
Brand equity	0.778		
Functional attributes	0.940	0.802	
Revisit intention	0.300	0.040	0.916

TABLE 8.3 Factorial cross loadings and T statistics

		<i>Brand equity</i>	<i>Functional attributes</i>	<i>Revisit intention</i>	<i>T Statistics</i>	<i>P Values</i>
BE1	Recalling	0.685	0.648	0.233	13.081	0.000
BE11	Comparison of destinations in Sri Lanka	0.667	0.712	-0.204	17.808	0.000
BE4	Matching by personality	0.841	0.718	0.537	43.468	0.000
BE5	What others think of me if I visit Pasikuda	0.890	0.766	0.429	55.967	0.000
BE6	Image fits with self-image	0.788	0.831	-0.124	26.386	0.000
BE7	Recognizing among competing destinations	0.657	0.530	0.511	12.680	0.000
BE8	Favourite destination	0.877	0.889	0.168	43.047	0.000
FA10	Cleanliness	0.751	0.909	-0.244	66.062	0.000
FA11	Suit family and adults	0.688	0.798	-0.001	33.803	0.000
FA13	Easiness of communication	0.712	0.681	0.390	26.560	0.000
FA14	Different cuisine and drink	0.873	0.874	0.005	66.476	0.000
FA16	Rest and relaxation	0.668	0.675	-0.022	22.955	0.000
FA20	Shopping facilities	0.776	0.814	-0.119	44.413	0.000
FA21	Fame	0.446	0.608	-0.145	10.442	0.000
FA6	Accommodation	0.873	0.905	0.132	64.958	0.000
FA7	Cost and price	0.773	0.738	0.187	20.726	0.000
FA8	Climate	0.845	0.940	0.046	87.598	0.000
IR2	Wish to visit	0.206	-0.033	0.912	68.958	0.000
IR3	Plan to visit	0.342	0.103	0.920	95.752	0.000

2.4.2 Path analysis and hypotheses testing

Table 8.4 provides two models describing the relationship between functional attributes and brand equity of Pasikuda, and the relationship between functional attributes of Pasikuda and revisit intention to the area based on the hypotheses developed in the theoretical frameworks. As per Model 1 in Table 8.4, functional attributes of Pasikuda positively influence the brand equity of Pasikuda as a destination ($t > 1.96, p > .05$).

Therefore, H1 is supported. This infers that functional attributes of Pasikuda as a destination are contributing to the brand equity of Pasikuda.

Model 2 of Table 8.4 does not support the H2. Although Model 2 is significant, the path coefficient is negative and therefore, the relationship between the functional attributes and revisit intention to Pasikuda cannot be supported in this study.

As per the guidelines of Wong (2013), the model should firstly be evaluated against target endogenous variable variance. In this model, the coefficient of determination, R^2 is 0.884 which means that 88.4% of the variance in brand equity of Pasikuda is explained by functional attributes of Pasikuda. In the case of f^2 value is 7.653 reflects a bigger effect size of the functional attributes of Pasikuda on the creation of brand equity for Pasikuda as a destination compared to the effect size of model 2 of Table 8.4. Q^2 is for the brand equity is 0.491 and Q^2 is for the revisit intention is 0.467 which are more than zero and therefore predictive relevance accuracy of the model is confirmed with this model.

In order to examine the mediation effect of the brand equity of Pasikuda, it is important to analyse the total effects of the model. Table 8.5 explains about the total effect and mediating role of Pasikuda's brand equity.

According to Table 8.5, brand equity of Pasikuda is positively influencing on the revisit intention to Pasikuda and hence, H3 is supported. Further, functional attributes do not support the revisit intention to Pasikuda ($t > 1.96, p > .05$). Therefore, the brand equity of Pasikuda is fully mediating between functional attributes of Pasikuda and revisit intention to Pasikuda.

The structural model is shown in Figure 8.1.

TABLE 8.4 Direct effect of functional attributes on brand equity and revisit intention

Variable	Model 1 Brand Equity			Model 2 Revisit Intention	
	Coefficient	t - value	f ²	Coefficient	t - value
Functional Attributes	0.940	215.351	7.653	-2.101	13.535
R ²	0.839			0.453	
Adj. R ²	0.835			0.449	
f ² for Brand equity → Revisit intention	1.276				

p<0.05

TABLE 8.5 Total effects and mediating role of brand equity

	Coefficient	T Statistics	P Values
Brand equity → Revisit intention	2.276	19.768	0.000
Functional attributes → Brand equity	0.940	215.351	0.000
Functional attributes → Revisit intention	0.040	0.407	0.684

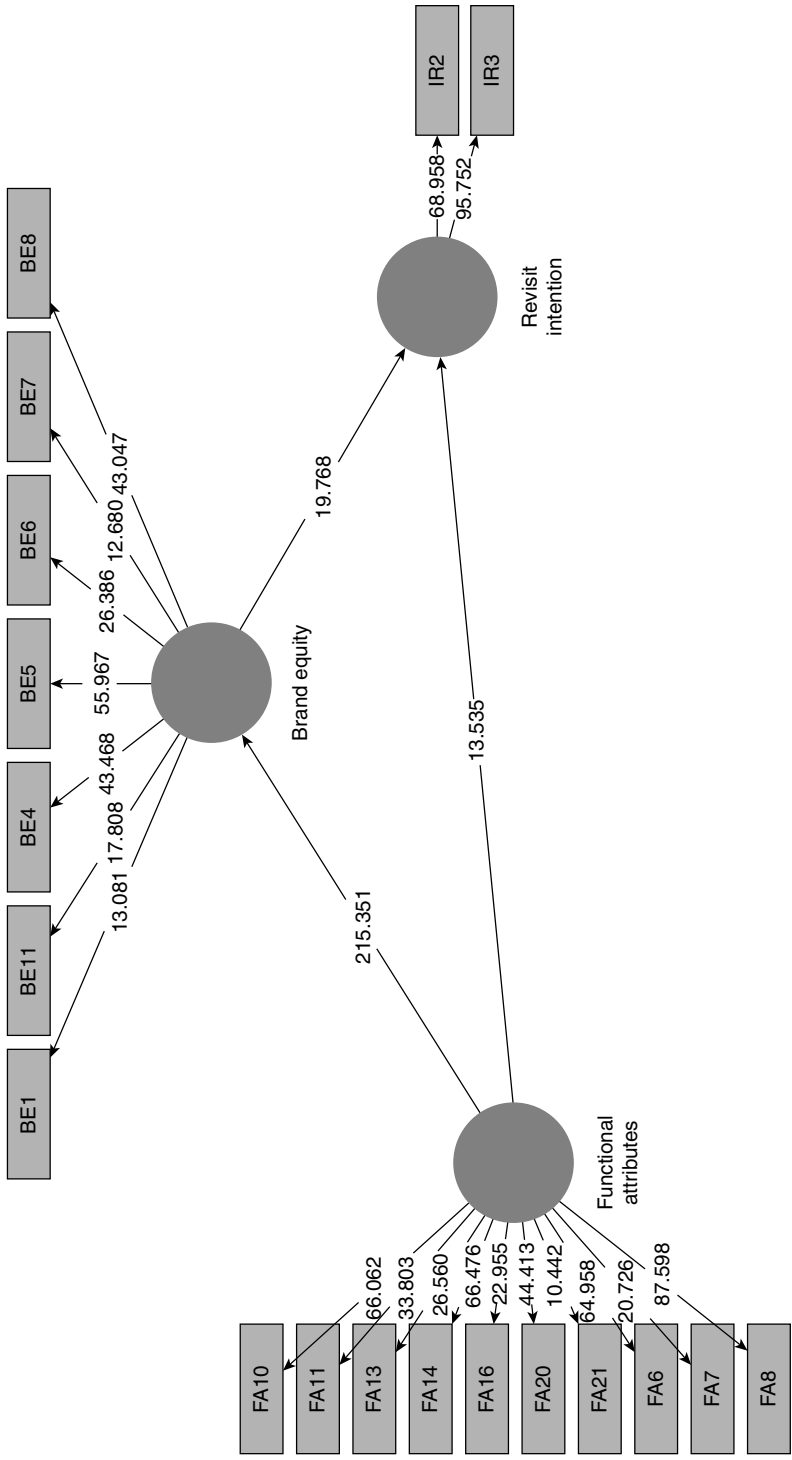


FIGURE 8.1 Structural model

8.3 Discussion of findings

The functional attributes of Pasikuda and its impact on the revisit intention to Pasikuda are examined in this study. Although the research model is significant in the study, functional attributes of the destination does not have direct impact on the revisit intention. However, functional attributes mediating through creation of brand equity and in turn, positively affects the revisit intention to Pasikuda. As the functional attributes of Pasikuda is very much essential and playing a pivotal role in creating destination brand equity, it has to be discussed in detail.

While examining the impact of the functional attributes of Pasikuda using the structural model, ten characteristics of the destination were found to be key sources of destination brand equity of Pasikuda. Availability of accommodation or restaurants around Pasikuda beach, affordability of cost for all activities, climatic conditions for leisure activities, cleanliness, ease of communicating anywhere, different types of cuisine and drink, restfulness and relaxation, suitable for family and adults, attractive natural beach scene and fame of Pasikuda. The main attribute that creates brand equity is the climate of Pasikuda. Tourists wish to enjoy the sunny climate at beach. This is taken by tourists at Pasikuda beach. Tourists also enjoy different varieties of cuisine and drink in hotels where they stay, and enjoy the hotels at Pasikuda. Cleanliness is another factor that mostly contributes to the functional attributes of a destination. Shopping facilities are also important for tourists in creating the brand equity for a destination. Tourists feel that shopping around Pasikuda is good and cost effective. Findings also suggest that Pasikuda is a destination that tourists can enjoy with their families and is well suited to adults. Another attribute that is important for destination brand equity is ease of communicating anywhere in the world. The area of Pasikuda is covered by all communication networks in Sri Lanka. Furthermore, it is also a good destination for taking rest and relaxation for people. The attribute of fame of Pasikuda also contributes to the functional attributes.

Despite the fact that all these attributes of Pasikuda contribute to the destination brand equity, the functional attributes do not significantly support the revisit intention of Pasikuda. However, all these functional attributes create brand equity for Pasikuda and that creates brand equity in turn, and positively influences on the revisit intention. The destination brand equity includes brand awareness, brand image and brand loyalty elements. Visits to Pasikuda and enjoying the beach and its scene leave tourists satisfied with their self-image and personality. Hence, when a tourist is visiting Pasikuda, their friends and family think highly of it. It is also seen that tourists choose Pasikuda as one of their preferred destinations among the other competing destinations.

8.4 Conclusion, limitations and direction for further studies

Pasikuda is a one of the most visited destinations in Sri Lanka by tourists. The major objective of the study was to investigate the impact of functional attributes of Pasikuda as a destination on destination brand equity and to investigate the mediating

role of the brand equity of Pasikuda between functional attributes and the revisit intention of tourists. Findings suggest that the functional attributes of Pasikuda as a destination contribute to the destination brand equity and in turn, significantly affect the revisit intention of tourists towards Pasikuda. According to the findings, ten functional attributes create Pasikuda's brand equity and positively influence the tourists' revisit intention. Therefore, destination marketing organizations can utilize these attributes while promoting Pasikuda as a destination. Furthermore, it is also recommended that hoteliers and other tourism service marketers use functional attributes of Pasikuda to position and promote their tourism attractions and services. It is also beneficial for the tourism marketing organizations to consider formulating the marketing strategies to increase the level of awareness, image and loyalty of Pasikuda in order to obtain economic benefits.

The contribution of this study theoretically supports Wong and Teoh (2015), Konecnik and Gartner (2007) and Tajeddini et al. (2017) by providing strong empirical evidences of creating destination brand equity by providing destination functional attributes to tourists. Finding a study of this nature in Sri Lankan context is very rare and therefore, the study about brand equity and revisit intention to Pasikuda may help practitioners and destination marketing organizations develop future strategies.

There are limitations for this study. Tourists from various countries speak a diversity of languages and hence, communication was difficult and some of the tourists speak little English, but it was manageable. Further, studies can be directed on how the brand personality of Pasikuda is being created and can be promoted among the tourists. Future studies can also be focused on how the surrounding businesses comprising hotels, restaurants and other businesses provide service to the tourists so that strategies can be developed to improve further the brand equity of Pasikuda.

References

- Aaker, D.A. (1991), *Managing Brand Equity*. New York: The Free Press.
- Alegre, J., Cladera, M. (2009), Analysing the Effect of Satisfaction and Previous Visits on Tourist Intentions to Return, *European Journal of Marketing*, 43, No. 5/6, pp. 670–685.
- Balakrishnan, M.S. (2009), Strategic Branding of Destinations: A Framework, *European Journal of Marketing*, Vol. 43, No. 5/6, pp. 611–629.
- Berry, L. (2000), Cultivating Service Brand Equity, *Journal of the Academy of Marketing Science*, Vol. 28, No. 1, pp. 128–137.
- Bigne, E. Sanchez, I., Sanz, S. (2005), Relationships among Residents' Image, Evaluation of the Stay and Post Purchase Behaviour, *Journal of Vacation Marketing*, Vol. 11, No. 4, pp. 291–302.
- Blain, C., Levy, S.E., Ritchie, J.R.B. (2005), Destination Branding: Insights and Practices from Destination Management Organizations, *Journal of Travel Research*, Vol. 43, pp. 328–338.
- Bonn, M.A., Cho, M., Lee, J.J., Kim, J.H. (2016), A Multilevel Analysis of the Effects of Wine Destination Attributes on Travel Constraints and Revisit Intention, *International Journal of Contemporary Hospitality Management*, Vol. 28, No. 11, pp. 2399–2421.

- Boo, S., Busser, J., Baloglu, S. (2009). A Model of Customer-based Brand Equity and its Application to Multiple Destinations. *Tourism Management*, Vol. 30, No. 2, pp. 219–231.
- Chi, C.G.Q., Qu, H. (2008). Examining the structural relationships of destination image, tourist satisfaction and destination loyalty: An integrated approach. *Tourism Management*, Vol. 29, pp. 624–636.
- Crouch, G.I., & Ritchie, J.R. (1999), Tourism, Competitiveness, and Societal Prosperity, *Journal of Business Research*, Vol. 44, No. 3, pp. 137–152.
- Dirsehan, T., Kurtuluş, S. (2018), Measuring Brand Image Using a Cognitive Approach: Representing Brands as a Network in the Turkish Airline industry, *Journal of Air Transport Management*, Vol. 67, pp. 85–93.
- Erdem, T., Swait, J., & Valenzuela, A. (2006). Brands as Signals: a Cross-Country Validation Study. *Journal of Marketing*, Vol. 70 (1), 34–49.
- Fornell, C., & Larcker, D.F. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research*, Vol. 18 (1), 39–50.
- Godey, B., Manthiou, A., Pederzoli, D., Rokka, J., Aiello, G., Donvito, R., Singh, R. (2016), Social Media Marketing Efforts of Luxury Brands: Influence on Brand Equity and Consumer Behavior, *Journal of Business Research*, Vol. 69, pp. 5833–5841.
- Hair, J.F.J., Hult, G.T.M., Ringle, C., Sarstedt, M. (2014), *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*, London, SAGE Publications.
- Han, S.O., Nguyen, B., Lee, T.J. (2015), Consumer Based Chain Restaurant Brand Equity, *Brand Reputation and Brand Trust*, *International Journal of Hospitality Management*, Vol. 50, pp. 84–93.
- Herrero, A., Martín, H.S., Salmones, M.M.G., Collado, J. (2017), Examining the Hierarchy of Destination Brands and the Chain of Effects Between Brand Equity Dimensions, *Journal of Destination Marketing & Management*, pp. 353–362.
- Huang, R., Sarigollu, E. (2012), How Brand Awareness Relates to Market Outcome, Brand Equity, and the Marketing Mix, *Journal of Business Research*, Vol. 65, No. 1, pp. 92–99.
- Huang, Y.C., Liu, C.H.S. (2017), Moderating and Mediating Roles of Environmental Concern and Ecotourism Experience for Revisit Intention, *International Journal of Contemporary Hospitality Management*, Vol. 29, No. 7, pp. 1854–1872.
- Kaplan, M., Yurt, O., Guneri, B., Kurtuluş, K. (2010), Branding Places: Applying Brand Personality Concept to Cities, *European Journal of Marketing*, Vol. 4, No. 9/10, pp. 1286–1304.
- Keller, K. (1993), Conceptualizing, Measuring, and Managing Customer-Based Brand Equity, *Journal of Marketing*, Vol. 57, No. 1, pp. 1–22.
- Keller, K. (2009), Building Strong Brands in a Modern Marketing Communications Environment, *Journal of Marketing Communication*, Vol. 15, No. 2–3, pp. 139–155.
- Keller, K.L., Lehmann, D. (2006), Brands and Branding, *Research Findings and Future Priorities*, *Marketing Science*, Vol. 25, No. 6, pp. 740–759.
- Konecnik, M., Gartner, W.C. (2007), Customer Based Brand Equity for a Destination, *Annals of Tourism Research*, Vol. 34, No. 2, pp. 400–421.
- Liu, M.T., Wong, I.A., Tseng, T.H., Chang, A.W.U., Phau, I. (2017), Applying Consumer Based Brand Equity in Luxury Hotel Branding, *Journal of Business Research*, Vol. 81, pp. 192–202.
- Lu, L.C., Chang, W.P., & Chang, H.H. (2014). Consumer attitudes toward blogger's sponsored recommendations and purchase intention: the effect of sponsorship type, product type, and brand awareness. *Computers in Human Behavior*, Vol. 34, 258–266.
- Macdonald, E.K., Sharp, B.M. (2000), Brand Awareness Effects on Consumer Decision Making for a Common, Repeat Purchase Product: A Replication, *Journal of Business Research*, Vol. 48, No. 1, pp. 5–15.

- Mussalam, G.Q., Tajeddini, K. (2016), Tourism and Place Branding in Switzerland: How Perceptions of Place Attributes for Short and Long Visits can Influence Destination Choice, *Journal of Hospitality and Tourism Management*, Vol. 26, No. 1, pp. 18–26.
- Phau, I., Quintal, V., Shanka, T. (2014), Examining a Consumption Values Theory Approach of Young Tourists toward Destination Choice Intentions, *International Journal of Culture, Tourism and Hospitality Research*, Vol. 8, No. 2, pp. 125–139.
- Pike, S., Bianchi, C. (2013), Destination Brand Equity for Australia: Testing a Model of CBBE in short Haul and Long Haul markets, *Journal of Hospitality and Tourism Research*, Vol. 10, No. 10, pp. 1–21.
- Pike, S., Bianchi, C., Kerr, G., Patti, C. (2010), Consumer-Based Brand Equity for Australia as a Long-haul Tourism Destination in an Emerging Market, *International Marketing Review*, Vol. 27, No. 4, pp. 434–449.
- Pike, S., Mason, R. (2011), Destination Competitiveness through the Lens of Brand Positioning: The Case of Australia's Sunshine Coast, *Current Issues in Tourism*, Vol. 14, No. 2, pp. 169–182.
- Ryu, K., Jang, S., (2006), Intention to experience local cuisine in a travel destination: the modified theory of reasonable action. *Journal of Hospitality and Tourism Research*, Vol. 30 (4), 507–516.
- Salehzadeh, R., Pool, J.K., & Soleimani, S. (2016), Brand Personality, Brand Equity and Revisit Intention: An Empirical Study of a Tourist Destination in Iran, *Tourism Review*, Vol. 71, No. 3, pp. 205–218.
- Tajeddini, K. (2011), The Effects of Innovativeness on Effectiveness and Efficiency, *Education, Business and Society: Contemporary Middle Eastern Issues*, Vol. 4, No. 1, pp. 6–18.
- Tajeddini, K., & Nikdavoodi, J.N. (2014), Cosmetic Buying Behavior: Examining the Effective Factors, *Journal of Global Scholars of Marketing Science*, Vol. 24, No. 4, pp. 395–410.
- Tajeddini, K., & Ratten, V. (2017), The Moderating Effect of Brand Orientation on Inter-firm Market Orientation and Performance, *Journal of Strategic Marketing*, pp. 1–31.
- Tajeddini, K., Walle, A.H., Denisa, M. (2017), Enterprising Women, Tourism, and Development: The Case of Bali, *International Journal of Hospitality & Tourism Administration*, Vol. 2, pp. 1–24.
- Tasci, A.D.A. (2018), Testing the Cross-Brand and Cross-Market Validity of a Consumer Based Brand Equity (CBBE) Model for Destination Brands, *Tourism Management*, Vol. 65, pp. 143–159.
- Tran, V.T., Nguyen, N.P., Tran, P.T.K., Tran, T.N., Huynh, T.T.P. (2019), Brand Equity in a Tourism Destination: A Case Study of Domestic Tourists in Hoi an city, Vietnam, *Tourism Review*, Vol. 74 No. 3, pp. 704–720.
- Wong, P.P.W., Teoh, K. (2015), The Influence of Destination Competitiveness on Customer-Based Brand Equity, *Journal of Destination Marketing & Management*, Vol. 4, pp. 206–212.

9

DIGITAL APPLICATION

Evidence from Zurich Airport

*Thorsten Merkle, Kayhan Tajeddini, Sven Mostberger,
Sarah Rohner, Kira Schmid and Eleanor Shaw*

9.1 Introduction

Over 3.8 billion passengers travelled in 2016 globally, with figures estimated to near double by 2035 (IATA, 2016). Prior research however suggests that a large number of international airports still fail to meet passengers' expectations well (e.g., Yang, Park, & Choi, 2015). A high level of competition exerts pressure on international airports management in order to enhance the passenger experience in order to remain competitive (Fodness & Murray, 2013). In this context, the non-aviation side of air travel plays a significant role in passenger satisfaction and experience, as it drives air travel growth (Castillo-Manzano, 2010; Schulz & Baumann, 2010).

Zurich Airport, located in Switzerland, reported that it achieved a new record of over 30 million passengers for the year 2018 (Flughafen Zürich AG 2019a), and has operated at the peak of its passenger capacity. Despite this good news being released, rapid guest growth *poses significant* notable *challenges* for the airport to develop customer capacity, while already struggling with service quality, security and satisfaction. In addition, the customer experience at Zurich Airport is further threatened by the retail offerings at the airport. Research in the field of commercial aviation has examined topics such as privatisation and commercialisation (Humphreys, Ison, & Francis, 2006), passenger waiting time and expenditure (Humphreys, 1999; Kratzsch & Sieg, 2011) and non-aviation revenues and airport regulation (Kratzsch & Sieg, 2011). Castillo-Manzano (2010) pointed out that non-aeronautical revenues remained under-researched and a poorly illustrated area of study.

Due to the highly competitive environment of airports, it is of high importance for Zurich Airport to address this issue seriously. Accordingly, one of the problems that arises at Zurich Airport is the possible customer dissatisfaction when confronted with long delays, as well as missed non-aeronautical revenue-earning potential from retail businesses. According to Bogicevica et al. (2017), passengers

are not very forgiving when confronted with service failures. This fact is intensified by the intense airport competition in Switzerland, with three international airports in the small country, meaning that passengers can easily use another airport with minimal trouble. This high level of competition exerts pressure on Zurich Airport's management in order to reduce these issues and enhance the passenger experience in order to remain competitive (Fodness & Murray, 2013). In this light, the study thus aims to critically discuss the potential of *gamification*¹ (an application game) using *BLE beacon technology*² (based on beacon technology) in terms of boosting customer satisfaction and enhancing the retail experience. In order to do so, semi-structured interviews with experts of their fields were conducted; the findings were discussed in combination with extant literature.

9.1.1 Zurich Airport, Switzerland

Zurich Airport is a state-owned airport and transport hub. Due to its unique location in the heart of Europe, it is an ideal transfer point for visitors around the world, but also a gateway from Switzerland to all continents (Flughafen Zürich AG, 2016). Zurich Airport is the largest airport in Switzerland. In 2018, 31.1 million passengers passed through the airport, representing a year-on-year increase of 5.8% (Flughafen Zürich AG, 2019a). Accordingly, Zurich Airport handled close to 300,000 flight departures and arrivals (Flughafen Zürich AG, 2019a). In addition, the airport is ranked third among the best airports in the world (Schweitzer, 2018). The runways at Zurich Airport provide a daily maximum capacity of flight movements, that is, both arrivals and departures, of just over 1,000 (Slot Coordination Switzerland, 2019). Nevertheless, this figure also varies depending on the weather conditions. Accordingly, the airport has been operating at its maximum capacity limits during peak times for several years. This, among other factors such as strikes, has had a significant impact on delays. In 2017, 22% of departing flights were delayed, (Flughafen Zürich AG, 2017), whereas this increased to 23.6% in 2018 (OAG, 2019). Only flights with at least a 15-minute delay are included in these statistics (Flughafen Zürich AG, 2017).

According to Tom and Lucey (1997), the length of time that a passenger has to wait for a service has a notable impact on their perception of the service. Empirical research shows that longer waiting times have a negative impact on customer satisfaction (Fodness & Murray, 2013). It can therefore be suggested that passengers experiencing a delay would be less satisfied with their experience at Zurich Airport than those who have smoother travel. It should nonetheless be noted that the perception of waiting times, which can be affected by numerous factors including

¹ Gamification is the process of taking something that already exists – a website, an enterprise application, an online community – and integrating game mechanics into it to motivate participation, engagement and loyalty.

² A beacon is a small Bluetooth radio transmitter, powered by batteries. Beacons are similar to a lighthouse in functionality. These small hardware devices incessantly transmit Bluetooth Low Energy (BLE) signals. The Bluetooth enabled smart phones are capable of scanning and displaying these signals.

the service received and ambiance, as well as other factors such as hunger, also plays a considerable role on satisfaction (Tom & Lucey, 1997). Referring to the Airport Service Quality Survey, which was conducted in 2017, out of a total of 2,941 transit passengers surveyed, 1,441 (49%) indicated that the waiting time for their connecting flight from Zurich Airport was between 30 to 90 minutes. Another 1,441 (49%) passengers responded with a waiting time of over 90 minutes. The remaining 2% of the surveyed passengers had a waiting time under 30 minutes. (Flughafen Zürich AG, 2017).

Considering that there is no possibility in the short term to significantly increase aeronautical revenues, due to the fact that the airport is currently operating at its maximum in terms of passenger arrivals, Zurich Airport thus can only look at expanding non-aeronautical revenues. Additionally, there is a growing amount of empirical studies that highlight the increasing importance of expanding non-aeronautical revenue (Castillo-Manzano, López-Valpuesta, & Sánchez-Braza, 2018; Fasone, Kofler, & Scuderi, 2016; Yokomi, Wheat, & Mizutani 2017). In the first half of 2018, approximately 43% of the airport's revenue resulted from non-aeronautical revenue streams (Flughafen Zürich AG, 2018). Whilst aeronautical revenue grew by 5.7% from the same period of the previous year, non-aeronautical grew by 17.7% (Flughafen Zürich AG, 2018). Since retail and Food and Beverage (F&B) contribute significantly to this figure, it can be suggested that this is an area that could be focused on in the future. Whilst there is an extensive offer of shops and restaurants available, that is, 127 shops, 49 restaurants and 174 other services at the airport (Flughafen Zürich AG, 2019b), there is nonetheless a lack of efficiency in terms of retail design. The retail experience received by passengers is less than satisfactory when compared to other major international airports. When going through departures, there is little incentive in terms of retail layout for passengers to visit the shops. Moreover, due to the design of the departures area, there is also little incentive for passengers to visit all shops, rather than the ones only located on their route to the gate. For this reason, we posit that the retail experience for passengers at Zurich Airport is one that should be considered in order to boost overall passenger experience and also non-aeronautical revenue. Figure 9.1 illustrates the distribution of departing passengers' waiting times at Zurich Airport in 2017.

9.1.2 Gamification

The term *Gamification* was first coined in 2008 and originates from the digital media industry (Deterding et al., 2011). The authors define the concept as using game design elements in a non-game context to motivate and increase user activity and retention, with the overall aim being to support and motivate users to undertake a specific activity promoted by the service (Deterding et al., 2011; Huotari & Hamari, 2012). Nevertheless, due to its mouldable and transferable characteristics, gamification has spread to being applied across multiple industries, hence is also a growing trend in the tourism industry (Xu, Weber, J, & Buhalis, 2014). In a tourism context, gamification has, among others, been used to facilitate designing memorable experiences and

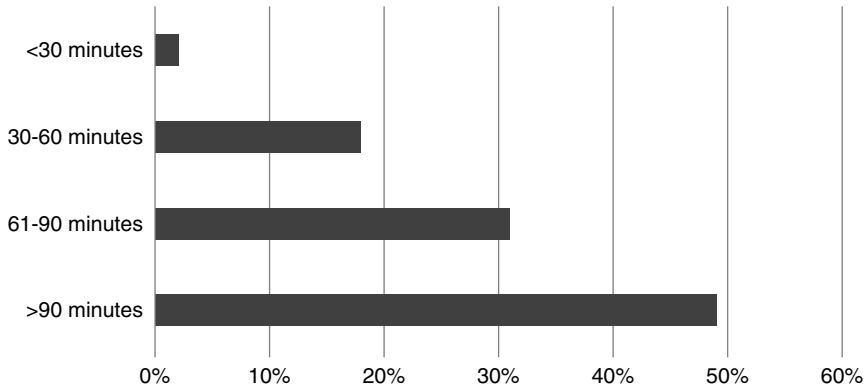


FIGURE 9.1 Waiting times of passengers at Zurich Airport in 2017

Source: Flughafen Zürich AG (2017). Total of departing passengers interviewed: 2941

boosting customer satisfaction (Bulencea & Egger, 2015), marketing communication (Hamari & Lehdonvirta, 2010; Sigala, 2015), encouraging sustainable consumption (Negrușă et al., 2015), as well as optimising mobility efficiency (Corcoba Magana & Munoz-Organero, 2015; Hannam, Butler, & Paris, 2014).

For its wide range of applications and its growing popularity across industries, we have chosen to investigate the potential viability for a gamification-based strategy to be implemented at Zurich Airport in order to firstly boost passenger satisfaction, particularly in the case of delays, and secondly, to investigate whether it could help provide customers with a superior retail experience. The game could be integrated into the already existing Zurich Airport app and use beacon technology to help relieve the boredom faced by passengers experiencing delays, hence improving their customer experience at the airport and their satisfaction; and also to improve the retail service provided at Zurich Airport, providing additional non-aeronautical revenue.

9.1.3 Practical application using Bluetooth low energy beacons

Conventional Bluetooth Low Energy (BLE) beacons are small Bluetooth radio transmitters that can be used by applications and mobile devices to determine the exact location of the device in question (Newman, 2014). The Bluetooth signal emitted by a BLE beacon can cover a distance of up to 50 meters and can be detected by compatible devices. Since BLE beacons usually do not consume much energy, they are often very small, and battery powered (Geddes, 2014). BLE beacons are becoming increasingly widespread in their application due to the superior performance when tracking the exact locations of devices in comparison to alternative technologies such as GPS or Wi-Fi (Dudhane & Pitambare, 2015). The use of this technology is particularly beneficial when considering indoor environments as, for example, GPS and other signals may be impeded (Dudhane & Pitambare, 2015). Even though it is most likely to find some Wi-Fi access points in indoor environments, it is

recommended to supplement those with BLE beacons for a higher accuracy of localization. The implementation of BLE beacons is thus used by entities to provide valuable data on the customer's position within a specified area (Kriz, Maly, & Kozel, 2016). Pinpointing the location of a customer is enhanced by the fact that mobile devices such as smartphones can detect various beacons at the same time as well as providing an element of location awareness through calculating its relative distance from each of the beacons (Newman, 2014). Dudhane and Pitambare (2015) state that beacon technology has the ability to enhance customers lives through ground-breaking services, as well as creating a new market for retailers who could use the technology to better target consumers. In addition, Geddes (2014) highlights that the characteristics of beacon technology enable a wide variety of applications, such as triggering information/offers upon entering a retail store, surfacing tickets at entry to a transit station and initiating a transaction at a retail point of sale. To give an example for the average consumer who is not aware of when and where beacons are used, widespread examples are Twint or Apple's iPay.

Rapid technological advancements in recent years, as well as large economies of scale, mean that BLE beacons are very affordable and are thus considered to be a cost-effective option for companies looking to innovate and shift alongside the industry 4.0 transformations (Geddes, 2014). Due to the aforementioned characteristics such as ability to be used indoors, accurate location tracking as well as being easily adaptable to different applications, beacons are thus highly effective in the operational implementation of gamification strategies.

9.1.4 Applications and benefits

Various impacts are expected to occur especially in the retail sector via BLE beacon implementation. In 2014, the US market research company Gartner predicted that by 2020, retail businesses that make use of targeted messaging combined with indoor positioning systems will see a 5 % increase in sales. In order to use the full potential of customer insight and targeted messaging from Bluetooth beacons, it is however inevitable that the customers have the game or app installed and Bluetooth turned on (Newman, 2014). If this is given, BLE beacons hold many opportunities for retailers, which Dudhane and Pitambare (2015) divide into *Customer Analytics*, *Operational Analytics* and *Revenue Improvement* as shown in Table 9.1.

Beacons can, for example, enhance the shopping experience for customers by facilitating their navigation (Newman, 2014). Thereby customers can save time and rely on ending up where they want. For an airport like Zurich Airport, this holds the opportunity of improving the customer experience with a solution integrated in an app, for example, by still getting the passengers to their gate on time for their flight, whilst also guiding their path via the shops so they receive a more complete retail experience. Customers can navigate quickly and easily via real-time mapping to the right gate or points of interest such as ATMs, toilets or specific shops and restaurants (InfoSoft GmbH, 2018). Through precise location information, it is even possible to lead customers to specific products themselves or use it for targeted ads and push notifications (Dudhane & Pitambare, 2015).

TABLE 9.1 Benefits of gamification for the retail industry

<i>Customer Analytics</i>	<i>Operational Analytics</i>	<i>Revenue Improvement</i>
<ul style="list-style-type: none"> • Identify and trigger real time offers • Identify and offer various loyalty programs • Identify personalized alerts and high-value rewards • Redeem rewards • Identify customized coupons. • Optimized in-store customer experience. • Purchase a product in real time in-store via a mobile device. • Pay without the need to join a checkout queue 	<ul style="list-style-type: none"> • Engage with customers in real time using their mobile phone and an app • Follow-up with the shopper after the shopping experience to provide additional information or receive offers based on the beacons they were near during their store visit • Optimize store layouts and product placement based on navigational patterns • Optimize website, merchandising zones on desktop and mobile • Help customers locate items in-store • Offer better in-store customer service • Inventory planning • Fraud detection: Loss prevention – both internal and external • Improve store traffic patterns to eliminate choke points 	<ul style="list-style-type: none"> • Empower sales associate • Improve business processes and generate more revenue • Identify peak traffic times, checkout line length, number of associates presently in-store and product location • Improve campaign management

Source: Dudhane and Pitambre (2015)

The benefit of highest importance for marketers according to Newman (2014), is that of gaining new customer insights, since personalization plays a huge role nowadays in order to instill trust and offer valued utility. As Newman (2014) states, the opportunity to gain valuable insights through Bluetooth beacons in terms of customer behavior is immense. Data surrounding the customers and their number, places and durations of stay, frequency of visits, or who did not enter a shop/restaurant but was close by, time and date, as well as the path of customers through the airport or stores, are extremely valuable information for marketers to individualize their offerings (Geddes, 2014). Aligned with the customer behavior insights from the gathered data, airport/retailers/restaurants can make improvements regarding their products and services, staff allocation etc. Furthermore, the opportunity to improve sales margins, customer satisfaction and frequency of visits to shops and restaurants increases with the willingness of customers to share information (Dudhane & Pitambare, 2015). The authors state that “By combining real-time, contextual information and advanced analytics, retailers can determine the ‘best offer’ to deliver in real time to the customer or

customer segments”. However, customers should be made aware of any such data gathering and receive an explicit added value from sharing their location like this (Geddes, 2014).

Newman (2014) names a distinct feature of BLE beacon—usage static point of interest (POI), which describes the generation of a reaction if a potential customer enters a given area of a distinct physical location, as visualized in Figure 9.2 (Newman, 2014). The communicated content of the reaction can, according to Geddes (2014), usually be either *an offer* in form of information or a coupon, *loyalty* by offering the possibility to collect points for sales or a visit, *a ticket* granting access to a place or event and or entertainment (typically in form of a QR code), *downloadable and streamable content*, some of which are: videos, audio, documents or apps, *information/guidance* with the aim of supporting the customer on his journey e.g. facilitate payment or informing him of something relevant to their time/location e.g. about a certain product a customer is currently looking at in their mother tongue or a delayed/cancelled flight (Geddes, 2014). However, Dudhane and Pitambare (2015) point out those retailers should not approach customers with real-time, customized offers until they are confident of having proper segmentation and behavioral analysis. Besides identifying the right customers, it is important that the offer matches the basic customer expectation (Dudhane & Pitambare, 2015; Tajeddini & Nikdavoodi, 2014; Mussalam & Tajeddini, 2016). Finally, it is also possible to transform the user’s device into a beacon. This opens the possibilities of locating friends, colleagues, store staff and customers. Actions or events can be triggered on one device that transmits the user’s ID and micro-location to another (Newman, 2014).

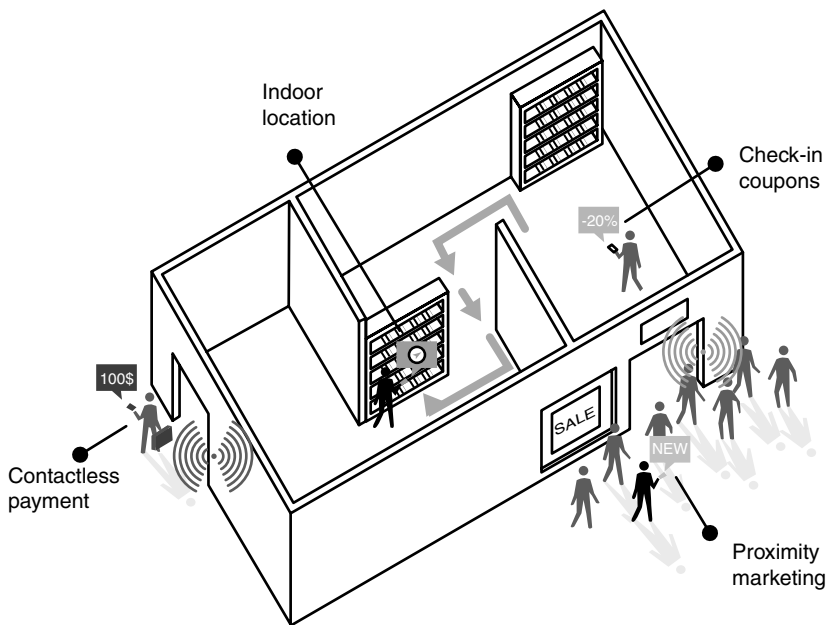


FIGURE 9.2 Beacon usage opportunities for retailers

Source: Geddes (2014)

9.1.5 Potential users

When considering how to attract passengers at Zurich Airport to use a gamification service, empirical research shows that age is an important determinant (Ha, Yoon, & Choi, 2007; Koivisto & Hamari, 2014). Nevertheless, there is little consensus in extant literature as to the target groups that gamification may have. Some scholars believe that since younger generations have grown up more with technology, they would be more willing to use such a service (Koivisto & Hamari, 2014; Thiel, Reisinger, & Röderer, 2016), whereas others argue that there is nonetheless a large potential for older generations, for example, with OAPs (Brauner et al., 2013; Kappen et al., 2016).

Prior studies show that amongst younger people, experience and enjoyment is a great contributor to the level of acceptance, and therefore a determinant of the usage of a game (Ha, Yoon, & Choi, 2007). Nevertheless, as younger generations have grown up more in a technological environment, they tend to be more willing to engage in a game (Koivisto & Hamari, 2014). Conversely, older generations are more open to acceptance when they receive a higher level of perceived usefulness from using the service and can clearly see the added value (Ha, Yoon, & Choi, 2007). Koivisto and Hamari (2014) suggest that this may be as a result of the trade-off that arises as the time taken to learn a new system increases with age. With regards to gender, studies suggest that generally, there may be a slightly higher chance for men to use such a gamification service than women (Koivisto & Hamari, 2014). Nevertheless, the roles of gender could raise suggestions as to how the game should be designed, such that men tend to be more goal and target driven, thus respond stronger to competitive designs, whereas women tend to be motivated more by social factors and immersion.

Zurich Airport has two parts. One part is dedicated for domestic and European travelers, and another one is designed for international (intercontinental) travelers, and their infrastructures are different. The first infrastructure for the ones departing the European and domestic flights, they usually use terminal and concourse A, partially concourse B, and the main area. That experience is quite standard with some upgrades. This has resulted in centralizing the securities, an acceptable contribution towards reducing queuing time, which implies improved service quality. The duty-free concept has been also integrated into the central security approach. In contrast, intercontinental travelers use Concourse E, which has been provided with a commuter service using an underground cable car.

9.2 Discussion

When considering the retail offer at Zurich airport, three main categories must be identified: (1) the Airport Centre, which is the retail offer in the public area before security; (2) the retail offer in the main concourses (A, B, D); (3) Concourse E has been identified and considered as its own entity and is only used by intercontinental travelers. In regard to the Airport Centre, as this area is open to the public and has

approximately 80 shops and restaurants, it is an area of opportunity. In addition to THE CIRCLE, which is a current construction project set to be completed in 2020 and will be an expansion of this area, it has great potential to increase non-aeronautical revenue for Zurich Airport, not only from tourists and travelers, but also from those live in the surrounding areas and from commuters.

Similarly, the main concourse area also has an extensive retail offer. With the majority of passengers flying from Gates A, B and D, the heaviest footfall lies in this area and thus, is highly attractive for retail enterprises to be present and show their brand. Conversely, due to the relatively smaller number of passengers flying out of Concourse E, as well as the fact that these passengers tend to consume less, it seems fewer businesses are interested in being present in Concourse E. Out of the 11 retail enterprises in Concourse E, there are only small cafes, bars, kiosks and souvenir shops. There are none of the luxury brands or restaurants available for passengers. As a result, whilst intercontinental passengers would, for example, like to enjoy a sit-down meal before their flight, under the current conditions, they are unable to do so. The problem thus lies in the fact that the limited interest in Concourse E from the perspective of businesses, and thus the limited retail offer there, means that there is a negative impact on the customer experience and perception of this area for intercontinental travelers.

9.2.1 Retail infrastructure

Despite the extensive number of retail enterprises in the main concourse area, the layout and basic infrastructure of this the airport poses significant limitations. It appears that building limitations as a result of the already existing airport meant that in the current building, the departure area in general, and thus also the retail offer, is split between two floors. Passengers arrive either on the top or bottom floor depending on where they went through security. Since gates can be reached from both floors, there is little incentive for passengers to go between floors and hence only tend to see the shops on the level that they initially enter on. This creates a problem of a missed opportunity for shops and restaurants in terms of revenue as only a fraction of the total passengers will pass by their business. Additionally, this problem is further intensified by the fact that on both floors, travelers enter in the middle of the concourse with shops and restaurants both on their left and on their right. Once the passengers make the decision as to which direction they turn- left or right- the retail offer in the opposite direction is consequently ignored. As passengers tend to turn in the direction of their gate, there is no incentive to go in the other direction. At other airports, for example, London Heathrow, when passengers go through security, they are guided through the shops like at a supermarket or at IKEA; however, this is not the case at Zurich Airport, thus leading to a missed potential. In relation to Concourse E, the space also raises certain architectural and security limitations in regard to the retail experience, due to building restrictions, other restrictions in terms of fire safety and the passenger/personnel capacity of the building, as well as the current space utilization for

example, for docking stations and seating, it is not currently possible to increase the number of shops and restaurants in Concourse E. With only 11 businesses present, Concourse E is thus at its maximum retail capacity.

Moreover, Concourse E is an entity separate to the main building. This means that for those flying intercontinentally, they must additionally travel to Concourse E from the main concourse area via an underground cable car. Whilst they have the potential to spend time in the main area and enjoy the retail offer there, the fact that they have to take an extra journey to travel to Concourse E has the tendency to unnerve passengers. For this reason, intercontinental travelers rarely spend much time making use of the expansive offer in the main area, instead choosing to go directly to Concourse E. This, once again, raises the problem of missed revenue-earning potential for retail enterprises, as well as has a negative impact on the customer perception of the airport.

9.2.2 Customer perception

The customer perception of the main concourse area is generally very high. In the recent past, Zurich Airport has taken measures to reduce waiting times at security by centralizing the process; this improved the quality perception by the travelers. In addition, Zurich Airport also integrated duty-free into the centralized security approach, also having a positive impact on the customer experience and thus perception. However, intercontinental passengers travelling from Concourse E often have a less than satisfactory experience and thus also have a lower perception of the airport.

It is also interesting to mention about the impact of delays on customer perception and behavior. In 2018, over 31 million travelers passed through Zurich Airport, which is at the maximum capacity of the airport. This causes congestion and increases delayed flights. Arguably, there is a notable difference between the effect that this has on business travelers and leisure travelers. When looking at leisure travelers, particularly in relation to their spending habits, and notably leisure travelers tend to spend more in the first 90 minutes of arriving at the airport. After this point, their satisfaction from consumption has been maximized and therefore do not consume anymore. If they then experience a delay after these 90 minutes, leisure travelers experience frustration in that they do not know what to do with their time. As a result of being unable to fill their idle time, they have a negative perception as a result of their experience. Conversely, business travelers tend to arrive at the airport relatively close to their departure time and thus have little opportunity to spend at the airport. If business travelers experience a delay, whilst they also become frustrated, they also tend to fill this time with consumption.

9.2.3 Gamification as a solution

It can be highlighted the need for improvement of the retail offer in Concourse E as well as for directing passenger flow in the main concourse area and the possibility for boosting revenue from business travelers in the case of delayed flights.

In relation to Concourse E, it can be argued that it will be highly challenging to change the retail offer under the current circumstances. However, implementing a gamification strategy could be a viable option to boosting last minute spending's by passengers. Push messages could be sent to passengers' phones when they are on the underground train, bringing their attention to the daily offers available. An alternative would be to also send push messages when passing by or entering the different shops. This would have the benefit of not only boosting sales revenue for enterprises in Concourse E, but it would also provide intercontinental travelers with a more complete airport experience in the case that the passengers do not utilize the offer in the main concourse area before arriving at Concourse E. Nevertheless, we can highlight the importance of creating value for the travelers in order to encourage consumption.

The layout of the retail experience in the main concourse is heavily divided with no real direction. As a result, each traveler only sees a proportion of the shops and therefore, for the retail stores, there is missed potential in terms of customers and revenue. For this reason, it can be noted that a gamification strategy could potentially be beneficial for the airport as well as in enhancing the passenger experience. Notably there would most likely be a clear generational variation in the interest and willingness of using such a service. Also, generations Y and Z would be the most likely users of such a game; however the interest would be limited among older generations, i.e. Baby Boomers and Generation X. In addition, the significance of attracting the potential user's attention and creating an immediate added value for them. Arguably in order to gain a traveler's attention early enough in advance for them to use the service, the airport should notify the travelers about it approximately 24 hours before their flight, for example, in an email in combination with a parking offer. The absolute latest the passengers should be made aware of the gamification service would be when they are entering security; and it would be too late as passengers would be more concerned with finding their gate than using the service. In reference to adding value, it can be noted that even if the airport was able to gain the passengers attention sufficiently ahead of time, the only way they would be able to encourage the passenger to use the service is if the airport would be able to provide an immediate added value to the passenger. An example of this could be that if they follow a provided path by the shops, they would be provided with a priority boarding pass.

9.2.4 Spending by business travelers

With an increasing number of delays at Zurich airport and the fact that business travelers are more inclined to spend when there is a delay (Castillo-Manzano & López-Valpuesta, 2013), there is the potential to further encourage spending by these passengers. Notwithstanding, some people might be skeptical about whether this would work under the name *Gamification*. They can argue that business travelers are unlikely to be interested in using a game, therefore would most likely be unsuccessful. Whilst business travelers would be the airports target for boosting

retail revenue, they would be unlikely to receive any relief from the delay by using a gamification service or having an improved retail experience. For this reason, a gamification strategy would most likely not be successful in this situation.

9.2.5 Boosting perception

The customer experience for passengers on intercontinental flights in Concourse E is lacking. In addition, leisure passengers experiencing a delay often have a negative experience and thus sub-par perception. As there is no possibility to expand the retail offer in Concourse E, a possibility to boost perception is to manage and promote the existing facilities more efficiently. It can be argued that gamification could be a viable option to doing this. There are four lounges in Concourse E, however, two of them require payment for access. If there was a competition to win free or a discounted lounge access via gamification, passengers would be motivated to use more of the available services whilst being provided with a more superior experience.

9.2.6 Leisure travelers experiencing delays

It can be suggested that a gamification strategy could also be implemented to boost the customer experience and perception of the airport, particularly in the case of delays for leisure travelers considering that they tend to become quickly dissatisfied in this situation. Nevertheless, it remains questionable whether this would bring real benefits to both the customer and the airport. With respect to the customer, it is important to keep in mind that perception is always a complete experience. Notably, even if the airport has the best infrastructure, facilities and other services, as soon as a passenger's flight is delayed, you will not gain anything by having all of the other benefits. Because delays are such a huge detractor from well-being, the airport would not gain anything extra in terms of boosting perception by delayed leisure travelers. An investment in such a strategy would be futile.

9.2.7 Main benefits and limitations of implementing a gamification strategy

From the information uncovered by primary research, a gamification strategy would most likely be successful in Concourse E in the context of boosting sales revenue and customer perception. Moreover, the additional benefit to the airport is data generation. If the airport were able to determine the movements of a passenger throughout the airport, for example, if they were circling in front of a shop 10 times before entering, then this would provide a tremendous benefit for the airport in terms of knowing the passengers better, which they would then be able to relay to the customers by providing them an added value, for example, in the form of a promotion. Considering how relatively

inexpensive the beacon technology necessary for the gamification would be, the main investments into such a strategy would thus more be for data analysis. In order to make meaningful deductions from the collected data, Zurich Airport would have to know a lot of other data and variables for each passenger that they may be challenging to achieve. As a result, attaining enough relevant and valuable data in order to make valuable conclusions may pose as a limitation to implementation for the airport. Furthermore, we can more emphasize the importance of conforming to data collection and privacy laws under the current regulations, and we believe the data currently being collected by Zurich Airport is probably already at the maximum, thus the airport may struggle to attain the full potential of a gamification strategy. A further limitation lies in the challenge of making the gamification service attractive for travelers. In order to raise awareness of passengers of this service, attention should be brought to them in advance, ideally approximately 24 hours ahead of their travel, but at the latest, on entering the security check. Additionally, the airport needs to find a way to create an immediate added value through the gamification in order for it to be successful. The added value could, for example, be priority boarding, a free coffee, a discount in a shop, or lounge access.

9.2.8 Summary of findings

According to the findings derived from the methodology, there are more limitations to implementing a gamification strategy than would be benefits. The main hindrances can be found in terms of attracting and acquiring users as well as in data collection and utilizing this data to create value. Nevertheless, if such a strategy were to be successful, this would most likely be in Concourse E and would provide a retail benefit. It can thus be suggested that if Zurich Airport were to pilot such a scheme, they should thus focus on retail and attracting intercontinental passengers. There is growing literature supporting evidence of the importance of growing non- aeronautical revenue of airports in order to achieve long run success (Castillo-Manzano, López-Valpuesta, & Sánchez-Braza, 2018; Fasone, Kofler, & Scuderi, 2016; Yokomi, Wheat, & Mizutani, 2017); retail and F&B are great contributors to non- aeronautical revenue. Space at Zurich Airport is limited, and whilst there are a great number of retail enterprises located at the airport, the airport infrastructure poses significant limitations such that potential to expand the retail offer in terms of quantity is restricted. Limitations can be found firstly in regard to the layout of the duty free and shopping area in the main departure lounge meaning that there is missed potential for retail stores, and secondly in Concourse E due to the limited retail offer. Both options mean that actual customer experience is below its potential and gamification has been suggested as a means to mitigate this gap. Nevertheless, statistics show that despite the layout, the retail area in the main concourse area achieve a high revenue whilst the revenue earned from the retail businesses in Concourse E is minimal (Flughafen Zürich AG, 2017). In addition, due to the fact

that intercontinental passengers travelling out of Concourse E consistently have the lowest perception and experience from the airport, this area is therefore having a higher priority in terms of requiring improvement. To this end, the likeliest form of implementation would be in Concourse E.

In 2018, approximately 23% of all outbound flights at Zurich Airport were delayed (OAG, 2019), a figure that experts predict to rise with increasing airport congestion and strain on passenger capacities. Research also shows that longer waiting times have an adverse effect on passenger satisfaction. Findings from empirical studies and expert interviews reveal that a gamification strategy could potentially be implemented to enhance the customer experience and thus provide a positive perception towards the airport (Bulencea & Egger, 2015).

Notwithstanding, to consider the potential success of implementing such a strategy, the types of travelers should be considered. Findings from interviews with an expert in consumer behavior revealed that business travelers, when confronted with additional waiting time such as in the case of a delay, fill their time with consumption. Conversely, when in the same situation, leisure travelers tend to be faced with a feeling of unknown; they do not know what to do with their time and thus feel discontentment. Nevertheless, despite the apparent need of Zurich Airport to implement a gamification service to boost customer perception of the airports in the case of a delay, it should be noted that customer perception is always a complete experience. Findings from the interviews revealed that even if the airport has the best infrastructure, facilities and other services, as soon as a passenger's flight is delayed, the airport will not gain anything by having all of the other benefits, including a game-based application to serve as a distraction. Hence, it can be said that the airport would not gain anything extra in terms of raising perception in delayed leisure travelers by implementing a gamification strategy; therefore there is no real need to invest in gamification in order to boost perception.

In order for a gamification strategy to be successful, it is imperative that it creates value for all involved. Firstly, with regards to passengers, in order to attract passengers to use such a service, the value that the airport can provide them with the game-based application must be clearly communicated in advance of arriving at the airport. We have already deduced that a gamification strategy is unlikely to be successful in improving customer perception, and the most promising avenue to pursue would be improving the retail experience for passengers. This is thus the area where value would be created, particularly for those travelling out of Concourse E. Value for passengers could be created in terms of providing a personalized retail offer in accordance to their movements throughout the airport. Secondly, with respects to the airport and retailers, research suggests that the most value created would be in terms of data. When using the game, data regarding the passenger's movements would be collected, for example, when their smartphone moves in range of a beacon. When analyzed, the data collected has the potential to provide valuable insights into what catches the attention of individual passengers, what interests them, where they have the potential for spending, and more importantly,

there are opportunities for the airport and retailers optimize processes by providing a more personalized service. Nevertheless, under the current data laws in Switzerland, it is questionable as to whether the Airport and thus also retailers would be able to make use of this valuable information. In order to make meaningful deductions and analysis, the airport would be required to collect a significant amount of data about each user; whilst it cannot be confirmed, experts believe that the airport is already collecting as much data as possible about its customers under the current regulations thus it would be highly unlikely that they would be able to collect any more, even through a gamification app, in order to make meaningful analysis and conclusions which could then provide a benefit.

Against this background, in answering the third research question, we can say that the benefit for the airport and retailers would lie in the additional last-minute revenue that could be earned in Concourse E by providing a more personalized offer. Nevertheless, as already discussed, the likelihood of being able to realize the full potential is limited due to the current Swiss data laws. With regards to the passengers, benefits would be able to be received by intercontinental travelers in terms of the retail offer they receive. Whilst the main objective of the gamification strategy would be in terms of encouraging last minute sales, it could be suggested that passengers would nonetheless also receive an additional benefit of having a better perception of Concourse E, which is currently lacking, due to the superior service being provided.

There is a growing trend in the aviation industry of providing a heavily weighted focus on growing the non-aeronautical side of the business and Zurich Airport is no exception. At the maximum in terms of passenger capacity with limited possibilities to expand aeronautical operations in the short term, Zurich Airport must thus look for ways to enhance and improve non-aeronautical activities. This chapter has thus sought to investigate whether gamification using contemporary beacon technologies would be an appropriate method in order to do this. Our research concludes that there could be a future and potential for gamification at Zurich Airport, albeit under very specific circumstances. Gamification is only interesting for passengers if it can provide them with an immediate added value and benefit in terms of gratifying them and enhancing the passenger experience at the airport. Gamification is also only interesting for the airport and retailers if it can provide them with an added benefit in terms of knowing their customers better and being able to earn a return from their endeavors. To this end, we believe that gamification has the potential to be successful if implemented in Concourse E to promote last-minute spending by passengers, providing them with a personalized retail experience whilst providing the airport and retailers with added revenue. Moreover, for any other purpose investigated in this chapter, such as promoting retail in the main concourse area, as well as boosting customer perception of the airport in the case of delayed flights, we believe that the benefit would not be substantial enough to warrant implementing such a strategy.

References

- Bogicevica, V., Bujisic, M., Bilgihan, A., Yang, W., & Cobanoglu, C. (2017). The Impact of Traveler-Focused Airport Technology on Traveler Satisfaction. *Technological Forecasting and Social Change*, 123, 351–361. 10.1016/J.TECHFORE.2017.03.038.
- Brauner, P., Valdez, A. C., Schroeder, U., & Ziefle, M. (2013). Increase Physical Fitness and Create Health Awareness through Exergames and Gamification. In *International Conference on Human Factors in Computing and Informatics* (pp. 349–362). Berlin: Springer. https://doi.org/10.1007/978-3-642-39062-3_22.
- Bulencea, P., & Egger, R. (2015). *Gamification in Tourism: Designing Memorable Experiences*. Retrieved from https://books.google.ch/books?hl=en&lr=&id=r3U-CgAAQBAJ&oi=fnd&pg=PA9&dq=gamification+in+tourism+&ots=JPFgis1hks&sig=6aWTI3BC4hQZi06xcGqYhoFO_6o#v=onepage&q=gamification+in+tourism&f=false
- Castillo-Manzano, J. I. (2010). Determinants of Commercial Revenues at Airports: Lessons Learned from Spanish Regional Airports. *Tourism Management*, 31(6), 788–796. 10.1016/j.tourman.2009.08.005.
- Castillo-Manzano, J. I., & López-Valpuesta, L. (2013). Analysing Passenger Behaviour towards the Catering Industry: Implications for Airport Management. *International Journal of Hospitality Management*, 35(1), 258–260. 10.1016/j.ijhm.2013.06.010.
- Castillo-Manzano, J. I., López-Valpuesta, L., & Sánchez-Braza, A. (2018). When the Mall is in the Airport: Measuring the Effect of the Airport Mall on Passengers' Consumer Behavior. *Journal of Air Transport Management*, 72, 32–38. 10.1016/J.JAIRTRAMAN.2018.07.003.
- Corcoba Magana, V., & Munoz-Organero, M. (2015). GAFU: Using a Gamification Tool to Save Fuel - IEEE Journals & Magazine. *IEEE Intelligent Transportation Systems Magazine*, 7(2), 58–70. Retrieved from <https://ieeexplore.ieee.org/abstract/document/7091134>.
- Deterding, S., Dixon, D., Khaled, R., & Nacke, L. (2011). *From Game Design Elements to Gamefulness: Defining "Gamification"*. Tampere. Retrieved from www.bunchball.com/nitro/
- Dudhane, N. A., & Pitambare, S. T. (2015). Location Based and Contextual Services using Bluetooth Beacons: New Way to Enhance Customer Experience. *Lecture Notes on Information Theory*, 3(1), 31–34. 10.18178/lnit.3.1.31-34
- Fasone, V., Kofler, L., & Scuderi, R. (2016). Business Performance of Airports: Non-Aviation Revenues and Their Determinants. *Journal of Air Transport Management*, 53, 35–45. <https://doi.org/10.1016/j.jairtraman.2015.12.012>
- Flughafen Zürich AG. (2016). Welcome to Zurich Airport Your Gateway to an Attractive Market Contents.
- Flughafen Zürich AG. (2017). *Facts and Figures 2017*. Retrieved from www.eep.gov.et/index.php?option=com_content&view=article&id=47&Itemid=264&lang=en
- Flughafen Zürich AG. (2018). Interim Financial Statements: Key Financial Data. Retrieved from https://report.flughafen-zuerich.ch/2018/hyr/en/hjb_02_00-kennzahlen-2/
- Flughafen Zürich AG. (2019a). More than 31 Million Passengers for the First Time – Flughafen Zürich. Retrieved from <https://zurich-airport.com/the-company/media/news-center/2019/jan/mm-20190110-verkehrstatistik-dezember-2018?cat=medienmitteilung>
- Flughafen Zürich AG. (2019b). StoreFinder - Flughafen Zürich. Retrieved from www.zurich-airport.com/passengers-and-visitors/shopping-and-attractions/storefinder-en#tiles
- Fodness, D., & Murray, B. (2013). Passengers' Expectations of Airport Service Quality. 10.1108/08876040710824852.
- Geddes, O. (2014). *A Guide to BLE Beacons a Guide to Bluetooth Beacons a Guide to BLE Beacons Introduction to Bluetooth Beacons 6*. Retrieved from www.gsma.com/digitalcommerce/wp-content/uploads/2013/10/A-guide-to-BLE-beacons-FINAL-18-Sept-14.pdf

- Ha, I., Yoon, Y., & Choi, M. (2007). Determinants of Adoption of Mobile Games under Mobile Broadband Wireless Access Environment. *Journal of Information & Management*, 44, 276–286. Retrieved from https://ac.els-cdn.com/S0378720607000055/1-s2.0-S0378720607000055-main.pdf?_tid=65a53369-fb9e-4947-920e852bd8b5514c&acd nat=1551188183_dddb12b2f2acc990a631eb8736aa576
- Hamari, J., & Lehdonvirta, V. (2010). Game Design as Marketing: How Game Mechanics Create Demand for Virtual Goods. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1443907
- Hannam, K., Butler, G., & Paris, C. M. (2014). Developments and Key Issues in Tourism Mobilities. *Annals of Tourism Research*, 44, 171–185. <https://doi.org/10.1016/J.ANNALS.2013.09.010>.
- Humphreys, I. (1999). Privatisation and Commercialisation: Changes in UK Airport Ownership Patterns. *Journal of Transport Geography*, 7(2), 121–134. 10.1016/S0966-6923(98)00038-6.
- Humphreys, I., Ison, S., & Francis, G. (2006). A Review of the Airport-Low Cost Airline Relationship. *Review of network economics*, 5(4), 413–420.
- Huotari, K., & Hamari, J. (2012). *Defining Gamification-A Service Marketing Perspective*. Retrieved from http://delivery.acm.org/10.1145/2400000/2393137/p17-huotari.pdf?ip=193.5.58.254&id=2393137&acc=ACTIVE SERVICE&key=FC66C24E42F07228.89BA465B3F8E8007.4D4702B0C3E38B35.4D4702B0C3E38B35&acm=1551185073_1fb16925670075470f07be126724ab95
- IATA. (2016). *Air Passenger Market Analysis, December 2015*. Retrieved from www.iata.org/whatwedo/Documents/economics/passenger-analysis-dec-2015.pdf
- Infsoft GmbH. (2018). Indoor Navigation Mit Bluetooth Beacons. Retrieved February 27, 2019, from www.infsoft.com/de/technologie/sensorik/bluetooth-low-energy-beacons
- Kappen, D. L., Nacke, L. E., Gerling, K. M., & Tsotsos, L. E. (2016). Design Strategies for Gamified Physical Activity Applications for Older Adults. *Proceedings of the 49th Annual Hawaii International Conference on System Sciences 5-8 January 2016, Kauai, Hawaii*. Hawaii. <https://doi.org/10.1109/HICSS.2016.166>
- Koivisto, J., & Hamari, J. (2014). Demographic Differences in Perceived Benefits from Gamification. *Computers in Human Behavior*, 35, 179–188. 10.1016/J.CHB.2014.03.007.
- Kratzsch, U., & Sieg, G. (2011). Non-Aviation Revenues and Their Implications for Airport Regulation. *Transportation Research: Part E*, 47(5), 755–763. 10.1016/j.tre.2011.02.010.
- Kriz, P., Maly, F., & Kozel, T. (2016). Improving Indoor Localization using Bluetooth Low Energy Beacons. *Mobile Information Systems, 2016*, 1–11. <https://doi.org/10.1155/2016/2083094>.
- Mussalam, G. Q., & Tajeddini, K. (2016). Tourism and Place Branding in Switzerland: How Perceptions of Place Attributes for Short and Long Visits can Influence Destination Choice. *Journal of Hospitality and Tourism Management*, 26(1), 18–26.
- Negrușă, A. L., Toader, V., Sofică, A., Tutunea, M. F., Rus, R. V., Negrușă, A. L., . . . Rus, R. V. (2015). Exploring Gamification Techniques and Applications for Sustainable Tourism. *Sustainability*, 7(8), 11160–11189. <https://doi.org/10.3390/SU70811160>.
- Newman, N. (2014). Apple iBeacon Technology Briefing. *Journal of Direct, Data and Digital Marketing Practice*, 15(3), 222–225. 10.1057/dddmp.2014.7.
- OAG. (2019). On-Time Performance Star Ratings. Retrieved from www.oag.com/on-time-performance-star-ratings-2018?airport_name=zurich
- Schulz, A., & Baumann, S. (2010). *Flughafen Management*. Munich: Oldenbourg.
- Schweitzer, C. (2018). «HZ»-Ranking: Flughafen Zürich unter den Top-Drei der Welt – Handelszeitung. Retrieved from www.handelszeitung.ch/unternehmen/flughafen-zurich-unter-den-top-drei-der-welt#

- Sigala, M. (2015). Gamification for Crowdsourcing Marketing Practices: Applications and Benefits in Tourism. In Garrigos-Simon E, Gil-Pechuán I., & Estelles-Miguel S. (eds) *Advances in Crowdsourcing* (pp. 129–145). Cham: Springer International Publishing. https://doi.org/10.1007/978-3-319-18341-1_11.
- Slot Coordination Switzerland. (2019). Zurich: Declared Capacities. Retrieved from www.slotcoordination.ch/xml_1/internet/en/application/d4/d52/f53.cfm
- Tajeddini, K., & Nikdavoodi, J.N. (2014). Cosmetic Buying Behavior: Examining the Effective Factors. *Journal of Global Scholars of Marketing Science*, 24(4), 395–410.
- Thiel, S.-K., Reisinger, M., & Röderer, K. (2016). “I’m Too Old for This!”: Influence of Age on Perception of Gamified Public Participation. <https://doi.org/10.1145/3012709.3016073>
- Tom, G., & Lucey, S. (1997). A Field Study Investigating the Effect of Waiting Time on Customer Satisfaction. *The Journal of Psychology*, 131(6), 655–660. <https://doi.org/10.1080/00223989709603847>.
- Xu, F., Weber, J., & Buhalis, D. (2014). Gamification in Tourism. In Xiang, Z., & Tussyadiah, I. (eds) *Information and Communication Technologies in Tourism 2014* (pp. 525–537). Cham: Springer International Publishing. https://doi.org/10.1007/978-3-319-03973-2_38.
- Yang, J.-S., Park, J.-W., & Choi, Y.-J. (2015). Passengers’ Expectations of Airport Service Quality: A Case Study of Jeju International Airport. *International Journal of Business and Social Research*, 5(7), 30–37. <https://doi.org/10.18533/IJBSR.V5I7.797>.
- Yokomi, M., Wheat, P., & Mizutani, J. (2017). The Impact of Low Cost Carriers on Non-Aeronautical Revenues in Airport: An Empirical Study of UK Airports. *Journal of Air Transport Management*, 64, 77–85. [10.1016/j.jairtraman.2017.06.028](https://doi.org/10.1016/j.jairtraman.2017.06.028).

10

INNOVATION IN TOURISM DESTINATION MARKETING

Gretel Qumsieh-Mussalam and Kayhan Tajeddini

10.1 Introduction

Innovation in its broad sense refers to improvements or new ways of practices that help companies and organizations gain or maintain competitiveness. Innovation has various forms and may be found in both the manufacturing and service industries. Yet, it could be argued that developing innovative products may not have the same process for developing innovative services due to the difference in characteristics of both industries. Most of the research undertaken on innovation has mainly addressed innovation in the manufacturing industry with less focus in the service industry and even scarce in the tourism and hospitality industry (Alsos, Eide, Madsen, Rønningen, & Lien, 2014; Tajeddini, Altinay, & Ratten, 2017). Developing innovation in the service industry such as tourism and hospitality would be more challenging due to its intangible characteristics. Nonetheless, innovation would be an appealing concept that the tourism and hospitality industry could benefit from particularly that this industry continues to grow and undergo changes where customers are becoming more experienced and looking for new ideas and new solutions. In tourism destination marketing, innovation can be an important element as it could help destination marketing organizations (DMOs) survive the competitive environment. Destinations need to develop innovative ideas to satisfy tourists and add value to their visiting experience. This could be done through various means such as smart technologies. The aim of this chapter is to explore innovation in the context of the tourism and hospitality industry. It will begin by introducing the concept of innovation and innovation in Tourism, more precisely innovations in destination marketing, followed by innovation in tourism and its relevance to tourism destination marketing leading to a discussion on the future of destination marketing in the example of Smart Destinations before concluding the chapter.

10.2 The concept of innovation

The term innovation comes from the Latin “innovatio,” which means to create something new. It is a concept that drew interest as early as 1934 when Schumpeter introduced his theory of entrepreneurship and economic development. He referred to innovation as the lifeblood of organizational success to introduce a new good or service, to enter a new market, or to gain a monopoly. Further, in 1995, the European Commission defined innovation as “*the new or improved product, equipment or service which is successful on the market, the emphasis is on the result of the process.*” (Parlamento Europeu, 1995 p.4). Following studies presented varied theoretical definitions of innovation which emphasize that innovation is about the creation of new solutions or the improvement of previous solutions, at least for those involved in or affected by the innovation process (Ronningen & Gudbrand, 2014, p.28). Schumpeter (1934) distinguishes five main categories of innovation: (1) the creation of new products, (2) introduction of new production processes, (3) development or penetration of new sales markets, (4) development of new supply markets, and (5) reorganization or restructuring of an industry. Additionally, Aldebert, Dang, and Longhi (2011) discuss the types of innovation in tourism focusing on information and communication technologies (ICT). Those types could be considered in understanding innovation in general and include:

- Market innovation; product innovation that is new to the company and market.
- Firm innovation; introducing products or services that are new to the firm but already exist in the market.
- Process innovation; the implementation of a new or significantly improved production or delivery method.
- Organizational innovation; the creation or adoption of an idea or behavior new to the organization.
- Marketing innovation; the implementation of a new marketing method involving significant changes to product design or packaging, product placement, product promotion or pricing.

10.3 Innovation in the service industry

The body of knowledge on innovation is on the increase (Durst, Mention, & Poutanen, 2015). Its importance in hospitality is highlighted by Gomezelj (2016) who stresses that “*innovative tourist products bring a high degree of added value*” (p.521). This implies that added value is an important factor for tourists and could influence their visiting behavior. Most of the literature on innovation is in the manufacturing industry (Alsos, Eide, & Madsen, 2014) so it can be said that most of the definitions apply to the manufacturing industry. It is important, however, to understand innovation in the service industry, more precisely in the tourism industry. Various attempts have been made to define service innovation. For example Den Hertog

(2000) model consists of four dimensions of service innovation: (1) Service concept, which is a new service in the market; (2) Client interface, which refers to new ways as to which clients are involved in the service production; (3) Service delivery system, which encompasses new ways the actual services are delivered to the customers; and (4) Technology, which has to make sure that the services can be provided efficiently. As a matter of innovation in services, it is not the same as in manufacturing since competence in the service industry relies on personal skills and experience. In addition, knowledge of professionals in the field is necessary for innovation in a heterogeneous, varied and multi actor sector. Hence, due to the main characteristics of the tourism industry (intangibility, inseparability, interactivity and variability of services), innovation is difficult to measure (Gomezelj, 2016) and should not be dealt with the same way as in other industries. The tourism industry is unique and is information based where it is possible to innovate on how information and knowledge is disseminated to tourists. Since service innovation is unclear, Durst et al. (2015) maintain that “*service innovation may simultaneously refer to innovation in service industries, whatever form the novelties may take, and to new services, irrespective of their degree of novelty and of the industry in which the innovation occurs*” (p.2). Here comes the role of information and communication technology in facilitating access to information.

Abernathy and Clark (1985) state a model identifying innovation in tourism being regular, niche, revolutionary and architectural. First of all, regular is mainly concerned with investments to foster productivity amongst staff to raise standards. Second, niche relates to attracting entrepreneurs for business opportunities, encourage networking and develop new products. Third, revolutionary would utilize new technologies to implement new methods on the market. Finally, architectural links to the development of new attractions, infrastructure and efficient use of new research-based knowledge. Hjalager (2010) categorized innovation into (1) product or service innovations; refer to changes related to customers identifying new or never seen before product or service (2) process innovations; investments in technology to develop efficiency, productivity and flow in work operation (3) managerial innovations; developing new ways for collaboration, empowering employees and compensating them for their work, and (4) management innovations; changing the overall way of communicating with customers and building relationship between service providers and customers. and (5) Institutional innovations; embracing organizational collaboration and networking between the different players. Differentiating the five types is not easy as they are interlinked and one type of innovation may not be possible without another type of innovation.

10.4 The tourist destination

Leiper's (1979) model of a destination is largely influential in much current research work (Pike & Page, 2014). Nonetheless, most of the studies that tried to define the tourist destination have no agreement on the definition (Qumsieh, 2001) in spite of the key role that destinations have in modeling the tourism system (Pike & Page, 2014). Some of the main characteristics of a destination include:

- a place, an area, a resort, a region or a country, a location;
- a reason for traveling;
- generates the visit;
- one product but also an amalgam of products, services, and facilities; and
- a mental concept in the mind of tourists (Qumsieh, 2001, p.67).

From the supply side,

“the destination is defined by a political boundary, ranging from a continent, a country, a state, a province, to a city or town or even a specific micro scale place where there may also be competing industry-led groups seeking to promote a place or product-focus for a place”.

(Pike & Page, 2014, p.204)

In this context, a tourist destination is “*a place in the mind of a traveler that generates a visit using various marketing techniques which causes a reason for traveling. The destination is looked at a single product composed of many tourism products, facilities, and services*” (Qumsieh, 2001, p.15). This definition encompasses the complexity of marketing the tourist destination. A destination is not a homogeneous place because the activities are diverse and controlling these activities can be difficult. Accordingly, one of the main problems of city marketing lies in the many actors who need to be part of this activity for the destination embodies a mix of a diverse and heterogeneous range of businesses and people (Pike & Page, 2014). Palmer and Bejou (1995) also emphasize the complexity of the tourism destination product bearing in mind the two dimensions of tangibility and intangibility. Qumsieh (2001) mentioned that the same product may be both tangible and intangible where the intangible aspect of the quality of the service at a restaurant may not be predicted prior trying it out; *Customer service makes an attractive destination and a pleasant experience* (Qumsieh, 2001, p.28).

Lately, the tourism industry has been influenced by several factors. For example, Carvalho and Sarkar (2014, p.158) identified three of which relate to innovation in tourism:

- *First, globalization implies deregulation and increased competition in the tourism sector (Weiermair, 2006). The number of tourists has steadily increased, and they have easy access to more regions/markets. Tourism consumption has grown, extending the sector to new economies. Therefore, in this context, firms and tourist destinations have to adapt to the new situation and develop strategies to improve or maintain a competitive advantage.*
- *Second, the tourist profile has changed. Tourists are more experienced and informed. Information and communications technology (ICT) facilitate access to information and contributes to the demand for alternative and more sophisticated products (Stamboulis and Skayannis, 2003). Tourists nowadays are more independent, and they tend to organize their holidays themselves.*
- *Third, sustainability is essential to gaining a competitive advantage. Tourism firms must be managed with attention to the economic, social and environmental dimensions.*

Based on this, and due to the changes in consumers, tourist destinations face many challenges in maintaining a competitive advantage. To remain successful, destinations need to recognize the continuous changes of today's consumers and the environment. Today's consumers are more experienced than in the past. Destinations are obliged to consider an organization's strategy to be competitive (Carvalho & Sarkar, 2014) and are required to plan and implement innovative tactics to attract customers (Scheidegger, 2006; Santos, 2014) as the "*destination is a provider of experience*" (Soteriades, 2012). Therefore, innovation could be part of this experience where destinations could respond to the changing needs of the market and consumers in a new and innovative manner.

In her review on innovation in the hospitality and tourism industry, Gomezelj (2016) summarized authors' acknowledgment that innovation in tourism is particularly beneficial in creating an advantage for tourism destinations in competition with other destinations but this is not an easy task to do. Unlike innovation for products, innovation for services may not be protected as it is not easy to patent innovation ideas for services. For example, if a destination would provide a visiting guide mobile App, the idea can be copied by other destinations. It is true however, that certain aspects of the App could be protected or patented such as the part of the writing code or design. This leads to the discussion of innovation in destination marketing organizations.

10.5 Innovation within destination marketing organisations (DMOs)

The marketer of a destination needs to adopt a holistic approach where the components and facilities of the destination are presented as one package (Qumsieh, 2001). This is obviously not a straight forward process and the role of DMOs is considered essential. Innovation in this respect can play a role in developing new methods for promoting the destination for tourism activities. Zavattaro and Daspit (2016) provide three examples of innovation in DMOs: (a) organizational culture; (b) external knowledge acquisition; and (c) internal knowledge exploitation. In the first example, they highlight the role culture plays in supporting innovative ideas, policies, and practices where the role of leaders at DMOs becomes important in fostering the culture of innovation, open communication, creativity and sharing knowledge. In the second example, the focus is on the role of stakeholder collaboration in marketing destinations, where stakeholders can gain through their networks. This external knowledge could allow DMO managers reallocate resources towards sharing information through and with networks feeding information into the overall organizational culture of innovation. This helps them as well to remain informed of current industry trends. Organizations with an innovation-centered culture are likely to engage in the acquisition of external knowledge through stakeholders. The final example on internal knowledge exploitation refers to how organizations use information gained through networking, conferences, and research and turning it into action. It is important to allow employees to take the time from work to learn about trends, marketing strategies and have open communication between line employees and managers.

Furthermore, some scholars such as Gomezelj (2016), and Schofield, Crowther, Jago, Heeley, and Taylor (2018) acknowledge the importance of knowledge and resources sharing between network members as it can increase innovation activity and could lead to competitive advantage in the tourism industry. Gomezelj (2016) identifies the ability as well to acquire and utilize external knowledge as another dimension of innovation. This can be applied on destination marketing, where DMOs regardless of their size can benefit from sharing knowledge to be more innovative and creative in the way they promote the tourist destination. With the advancement of technology, this can be more easily done. As a result, the collaboration between the various stakeholders at the destination is important to stay competitive as through knowledge share and transfer the innovative capacity could increase. This is supported by a number of research on the importance of collaboration for the development of new products and services due to fierce destination competitiveness (Marasco, De Martino, Magnotti, & Morvillo, 2018).

In marketing the destination such forms of collaborative and cooperative marketing are particularly efficient. Effective collaboration necessitates not only strong leadership and administrative support but also take into consideration factors such as a shared vision, goal accomplishment, and open communication between members. Furthermore, there is an increased demand for destination marketing, due to rising customer expectations and growing competition between destinations (Middleton, Fyall, Morgan, & Ranchhod, 2009; Pike, 2014).

Pike and Page (2014) summarize a model of the critical success factors in managing the destination: an attractive environment, Profitable industry, Positive visitor experiences, Ongoing investments in new product development, A sustainable community, Supportive host community, Ease of access, and Effective organization. These were based on an analysis of internal and external DMOs performance in terms of the effectiveness of activities and impact in relation to market competitiveness.

10.6 Smart destinations as an example of innovation

Development in technologies, such as smartphones, mobile technologies, mobile Apps, smart cards, latest generation websites, social networks, chatbots GPS, sensors, near-field-communication, augmented and virtual reality, connectivity through Wi-Fi, online review blogs and sites, search engines, social media allow destinations to be innovative in the way they function and operate as they can impact the way tourist behave. In a world that is changing continuously, and is influenced by the evolution of these technologies, destinations have become complex and competitive (Tajeddini & Trueman, 2014; Tajeddini et al., 2017; Liberato, Alen, & Liberato, 2018). Therefore, the organization of activities and services at the destination using smart technologies could be more attractive to tourists. It is important that destinations use such technology in an innovative way to be able to attract tourists and meet their expectations or as (Liberato et al., 2018, p.7) explains “*to make it attractive and capable of generating emotions.*” He goes further to elaborate that tourists today do not

select a destination based only its components. They look to be surprised by the “*unknown of the destination*” and want information on the place using technologies. This leads to the emergent of smart destinations where the amalgam of the tourism products and services are managed using the latest technologies. This means that DMOs have a new style in managing the destination using advancements in technology where it would have a technological infrastructure that makes the destination accessed by tourists and is available to interact with them to improve their experience. Further, and based on the literature Femenia-Serra, Perles-Ribes, and Ivars-Baidal (2019) synthesize that Smart Destinations means the use of the latest technological infrastructure to improve tourists’ experiences and competitiveness. Several authors agree that the tourist experience could be enhanced by the use of recent advancement in the use of technology (Tussyadiah & Fesenmaier, 2009; Neuhofer, Buhalis, & Ladkin, 2012; Buhalis & Amaranggana, 2015) where tourists become a central place and their relationship with the destination and behaviors are vital in terms of (a) the use of mobile technology; (b) data sharing for personalized experience; and (c) smart technologies for enhanced experiences (Femenia-Serra et al., 2019). Tourists nowadays are connected through various mobile technologies such as smartwatches, smart glasses and destinations could manage and develop their services to meet the expectations of tourists. Tourists always expect to have timely and accurate information accessible while on the travel and this is feasible using available smart technologies. Such smart technologies could add value to tourist experiences in a precise style encouraging a higher level of interaction that is personalized (Neuhofer, Buhalis, & Ladkin, 2015). In addition, destinations could benefit from the data shared by tourists to personalize and enhance experiences (Buhalis & Amaranggana, 2015). Yet, some argue that tourists are not always apt to interact with destination and share their data unlike what destinations assume. There is a limit to the type of information shared due to privacy concerns, age, and travel experience (Femenia-Serra et al., 2019). Although tourists may not like to share private data, they still have information on their experiences which might be used by DMO for management and efficiency. So, it can still be said that the use of smart technologies could improve tourists experience depending on the destination’s planning and implementation strategy.

10.7 Discussion and conclusion

Destinations cannot afford to use traditional means for promotion and marketing. To attract tourists, they need to differentiate themselves from their competitors (Mussalam & Tajeddini, 2016). Innovation can serve this purpose to satisfy tourists needs and enhance their visiting experience. From this discourse, it is understood that there is no consensus on the definition of innovation in tourism management, so it is difficult to characterize it by using different taxonomies. Furthermore, the literature reveals several ambiguities in the terminology used. Although various authors agree on the features that are unique in innovation and innovativeness

(Tajeddini & Tajeddini, 2012a, 2012b) they often use different terms to express themselves. For example, Alsos et al. (2014); Tajeddini et al. (2017) argue that innovation in the tourism and hospitality industry management such as in hotels and restaurants is rarely studied. In fact, in the European community innovation survey, showed that tourism and hotel companies were the second least innovative businesses after the retail industry (Robson & Achur, 2012). This results from the high turnover and unskilled labour within the tourism and hospitality industry, which could prevent some companies in this sector from fully exploiting investments in innovative technologies. Tourist firms often claim to be too short-staffed to innovate possibly they do not have time or budget or argue that innovation does not offer a return on investment; it is too costly and not recognizable by customers. Nonetheless, in the context of marketing the tourist destination, innovation can be beneficial and is important to remain competitive. The different actors involved need to collaborate to build innovative processes that would meet the demanding customers who constantly seek new experiences. Consequently, this chapter's contribution has been to review and integrate much of the previous research and the recommendation that innovativeness can be divided into two key, interrelated dimensions at a personal and organizational level. In conclusion, it is not possible to cover every aspect of innovation, since this is such a broad subject and each aspect can be investigated in considerable depth. However, an integration of the innovativeness concept is recommended, and there is a need for further research to conceptualize and measure innovativeness in practice.

References

- Abernathy, W. J., & Clark, K. (1985). Innovation: Mapping the winds of creative destruction. *Research Policy, 14*, 3–22.
- Aldebert, B., Dang, R. J., & Longhi, C. (2011). Innovation in the tourism industry: The case of Tourism@. *Tourism Management, 32*(5), 1204–1213. <https://doi.org/10.1016/j.tourman.2010.08.010>.
- Alsos, G., Eide, D., & Madsen, E. (2014). Innovation in tourism. In E. L. Alsos, G. A. Eide, & D. Madsen (Eds.), *Handbook of Research on Innovation in Tourism Industries* (pp. 25–26). <https://doi.org/10.4337/9781782548416.00007>.
- Alsos, G., Eide, D., Madsen, E., Rønningen, M., & Lien, G. (2014). The importance of systemic features for innovation orientation in tourism firms. In E. L. Alsos, G. A. Eide, & D. Madsen (Eds.), *Handbook of Research on Innovation in Tourism Industries* (pp. 27–55). <https://doi.org/10.4337/9781782548416.00008>.
- Buhalis, D., & Amaranggana, A. (2015). Smart tourism destinations enhancing tourism experience through personalisation of services. In A. Tussyadiah & I. Inversini (Eds.), *Information and Communication Technologies in Tourism 2015* (pp. 377–389). https://doi.org/10.1007/978-3-319-14343-9_28.
- Carvalho, L. M. C., & Sarkar, S. (2014). Market structures, strategy and innovation in tourism sector. *International Journal of Culture, Tourism, and Hospitality Research, 8*(2), 153–172. <https://doi.org/10.1108/IJCTHR-05-2013-0031>.
- Den Hertog, P. (2000). Knowledge-intensive business services as co-producers of innovation. *International Journal of Innovation Management, 4*(4), 491–528.

- Durst, S., Mention, A. L., & Poutanen, P. (2015). Service innovation and its impact: What do we know about? *Investigaciones Europeas de Direccion y Economia de La Empresa*, 21(2), 65–72. <https://doi.org/10.1016/j.iiedee.2014.07.003>
- Femenia-Serra, F., Perles-Ribes, J. F., & Ivars-Baidal, J. A. (2019). Smart destinations and tech-savvy millennial tourists: Hype versus reality. *Tourism Review*, 74(1), 63–81. <https://doi.org/10.1108/TR-02-2018-0018>.
- Gomezelj, D. G. (2016). A systematic review of research on innovation in hospitality and tourism. *International Journal of Contemporary Hospitality Management*, 28(3), 516–558. <https://doi.org/10.1108/IJCHM-10-2014-0510>.
- Hjalager, A. M. (2010). A review of innovation research in tourism. *Tourism Management*, 31(1), 1–12. <https://doi.org/10.1016/j.tourman.2009.08.012>.
- Leiper, N. (1979). The framework of tourism: Towards a definition of tourism, tourist, and the tourist industry. *Annals of Tourism Research*, 6(4), 390–407.
- Liberato, P., Alen, E., & Liberato, D. (2018). Smart tourism destination triggers consumer experience: The case of Porto. *European Journal of Management and Business Economics*, 27(1), 6–25. <https://doi.org/10.1108/EJMBE-11-2017-0051>.
- Marasco, A., De Martino, M., Magnotti, F., & Morvillo, A. (2018). Collaborative innovation in tourism and hospitality: A systematic review of the literature. *International Journal of Contemporary Hospitality Management*, 30(6), 2364–2395. <https://doi.org/10.1108/IJCHM-01-2018-0043>.
- Middleton, V. T. C., Fyall, A., Morgan, M., & Ranchhod, A. (2009). *Marketing in Travel and Tourism* (4th ed.). Oxford: Elsevier.
- Mussalam, G. Q., & Tajeddini, K. (2016). Tourism in Switzerland: How perceptions of place attributes for short and long holiday can influence destination choice. *Journal of Hospitality and Tourism Management*, 26, 18–26. <https://doi.org/10.1016/j.jhtm.2015.09.003>.
- Neuhofner, B., Buhalis, D., & Ladkin, A. (2012). Conceptualising technology enhanced destination experiences. *Journal of Destination Marketing and Management*, 1(1–2), 36–46. <https://doi.org/10.1016/j.jdmm.2012.08.001>.
- Neuhofner, B., Buhalis, D., & Ladkin, A. (2015). Smart technologies for personalized experiences: A case study in the hospitality domain. *Electronic Markets*, 25(3), 243–254. <https://doi.org/10.1007/s12525-015-0182-1>.
- Palmer, A., & Bejou, D. (1995). Tourism destination marketing alliances. *Annals of Tourism Research*, 22(3), 616–629. [https://doi.org/10.1016/0160-7383\(95\)00010-4](https://doi.org/10.1016/0160-7383(95)00010-4).
- Parlamento Europeu. (1995). Green Paper on Innovation. COM (95) 688 final, 20 December 1995. [Bulletin of the European Union Supplement 5/95].
- Pike, S. (2014). *Destination Marketing Organizations*. Oxford: Elsevier.
- Pike, S., & Page, S. J. (2014). Destination marketing organizations and destination marketing: Anarrative analysis of the literature. *Tourism Management*, 41, 202–227. <https://doi.org/10.1016/j.tourman.2013.09.009>
- Qumsieh, G. (2001). *The Use of Conferences in Destination Marketing: Case Studies of Glasgow and Edinburgh*. Glasgow: University of Strathclyde.
- Robson, S., & Achur, J. (2012). First findings from the UK innovation survey 2011. In *Innovation Skills*. London: Department for Business, Innovation and Skills.
- Rønningen, M., & Gudbrand, L. (2014). The importance of systemic features for innovation orientation in tourism firms. In *Handbook of Research on Innovation in Tourism Industries* (pp. 27–55). Cheltenham: Edward Elgar Publishing.
- Santos, E. R. M. dos. (2014). Destination mutant brands: An empirical perspective of tourism professionals and host community to create mutant brand Cape Verde. *Journal of Destination Marketing and Management*, 3(1), 68–78. <https://doi.org/10.1016/j.jdmm.2013.12.008>

- Scheidegger, D. E. (2006). Can the state promote innovation in tourism? Should it? *Innovation and Growth in Tourism*, 11–16. <https://doi.org/10.1787/9789264025028-en>.
- Schofield, P., Crowther, P., Jago, L., Heeley, J., & Taylor, S. (2018). Collaborative innovation: Catalyst for a destination's event success. *International Journal of Contemporary Hospitality Management*, 30(6), 2499–2516. <https://doi.org/10.1108/IJCHM-07-2016-0396>.
- Schumpeter, J. A. (1934). *The Theory of Economic Development: An Inquiry into Profits, Capital, Credit, Interest and the Business Cycle*.
- Stamboulis, Y., & Skayannis, P. (2003). Innovation strategies and technology for experience-based tourism. *Tourism Management*, 24, 35–43.
- Soteriades, M. (2012). Tourism destination marketing: Approaches improving effectiveness and efficiency. *Journal of Hospitality and Tourism Technology*, 3(2), 107–120. <https://doi.org/10.1108/17579881211248781>.
- Tajeddini, K., Altınay, L., & Ratten, V. (2017). Service innovativeness and the structuring of organizations: The moderating roles of learning orientation and inter-functional coordination. *International Journal of Hospitality Management*, 65(August), 100–114. <https://doi.org/10.1016/j.ijhm.2017.06.010>.
- Tajeddini, K., & Tajeddini, K. (2012a). A synthesis of contemporary organisational innovativeness perspectives. *International Journal of Business Innovation and Research*, 6(5), 532. <https://doi.org/10.1504/ijbir.2012.048785>.
- Tajeddini, K., & Tajeddini, K. (2012b). Organizational and Personal Innovativeness. In J. Zhao & T. G. Bas (Eds.), *Comparing High Technology Firms in Developed and Developing Countries* (pp. 217–225). <https://doi.org/10.4018/978-1-4666-1646-2.ch016>.
- Tajeddini, K., & Trueman, M. (2014). Perceptions of innovativeness among Iranian hotel managers. *Journal of Hospitality and Tourism Technology*, 5(1), 62–77. <https://doi.org/10.1108/JHTT-12-2012-0036>.
- Tussyadiah, I. P., & Fesenmaier, D. R. (2009). Mediating Tourist Experiences. *Annals of Tourism Research*, 36(1), 24–40. <https://doi.org/10.1016/j.annals.2008.10.001>
- Weiermeir, K. (2006). Product improvement or innovation: What is the key to success in tourism? In *Innovation and Growth in Tourism*. Paris: OECD Publishing. <https://doi.org/10.1787/9789264025028-5-en>.
- Zavattaro, S. M., & Daspit, J. J. (2016). A grounded theoretical approach to understanding innovation in destination marketing organizations. *Journal of Vacation Marketing*, 22(4), 349–364. <https://doi.org/10.1177/1356766715623826>.

11

SURF TOURISM KNOWLEDGE SYSTEM

A conceptual approach

*Roberto Martín-González, Ana María Luque-Gil and
Kamilla Swart*

11.1 Introduction

Surfing and surfers' lifestyle, and the sports and tourism industries, are distinctive elements of contemporary western society (Anderson, 2016). Surf tourism destinations are not only found outdoors in most marine or coastal areas worldwide, but also, man-made spaces have been equipped with the required technology to create wave-pools (Borne, 2017). Besides, there is a common recognition that the number of active surf participants has grown steadily worldwide from the beginning of the millennium, and that they are highly mobile (Barbieri & Sotomayor, 2013) and intensive users of technology and innovations (e.g. surf-related equipment, clothes and weather forecast tools) (Booth, 2017). These innovations can cause both positive and negative impacts on economic, social and environmental realms (Borne, 2018; Mach, 2017) and has attracted the attention of public governments, sports and tourism industries (Laderman, 2014), and academic researchers from distinct fields of science (Martin & Assenov, 2012). Regarding the academic sphere, Martin and Assenov (2012) have claimed that surf tourism has emerged as a field of enquiry within the wider sport tourism literature, conforming an expanding 'new body of research' characterised by the 'interdisciplinary' nature of tourism research. Disciplines include those related to social science such as economics, human geography, anthropology or political science. Despite this flourishing of research and the number of disciplines involved, it seems that there is a lack of clarity regarding the limits of STK. It is further argued that greater conceptualisation is needed (Borne, 2017; Martin & Assenov, 2012). Here, we will attempt to explore the boundaries of STK, considering the expansion of surf tourism research and the necessity to clarify: (1) activities (e.g. are kitesurfing or Stand-up Paddle-surf (SUP) part of surf tourism?), (2) innovations (e.g. weather forecast tools, new sports, innovative environmental organisations, etc.), (3) the corresponding field of science

(e.g. social sciences) and (4) meanings and boundaries of surf tourism (Martin & Assenov, 2012).

This chapter follows a conceptual and single-case study approach in order to interrogate an alternative theory in tourism studies as an illustrative example about its suitability in surf tourism research.

11.2 Method

First, a short conceptualisation of epistemology and surf tourism is provided, with an analysis of surf/-ing as a sport and recent literature reviews about surfing and surf tourism research. Then the concept of innovation is interrogated to deliver theoretical grounding and examples. Subsequently, a version of the ‘tourism knowledge system’ framework suggested by Tribe and Liburd (2016) is presented, in order to provide the reader with the alternative theory and the propositions thereof. Afterwards, a conceptual cross-examination about sources of knowledge is deployed following a process of scope, comparison, reflection and abstraction of concepts following quality conditions and protocols suggested by Xin, Tribe, and Chambers (2013) who highlighted the role of conceptual approaches in tourism studies. In addition, empirical evidence of STK from the Scopus database has been analysed.

On the other hand, a case study based on evidence from CT as an important urban surf destination in the Global South might help conceptualisation and theory building (Eisenhardt, 1989; Siggelkow, 2007), providing real examples, which are based on collection of empirical data of a particular phenomenon (Eisenhardt & Graebner, 2007). Innovation examples in the ‘world of surf tourism’ through the lens of system’s theory (Pearce, 2014) are provided employing an ‘economic geography-oriented research’ (Saraniemi & Kylänen, 2011) across the different elements of the proposed model. Additionally, we offer a view about the knowledge creation process in surf tourism adapting Tribe’s (2006) ‘Truth about tourism’ model. Finally, a conclusion and limitations of the present chapter, findings and procedures is provided.

3 Epistemology and STK

Epistemology, broadly, refers to ‘the study or a theory of the nature and grounds of knowledge especially with reference to its limits and validity’ (Merriam-Webster, 2019a). It is not the objective of this paper to debate the philosophical aspect of epistemology, instead we will try to frame surf tourism research in the current context of increasingly digitalised and codified knowledge of surf tourism across the complex ecosystems where surf occurs (Scarfe, Healy, & Rennie, 2009) and tourism operates (Gretzel, Werthner, Koo, & Lamsfus, 2015).

Briefly, epistemology inquiries about the relationship between ‘who’ produce knowledge and ‘what’ knowledge (distinguishing between ‘valid’ or not) (Xin, 2017). Responding to the latter question, there are diverse types and perspectives about knowledge (see Alavi & Leidner, 2001, pp. 111–113). For the purpose of

this chapter, knowledge is conceptualised as a social object that is created by and inherent in collective actions of a group, that is possible to be articulated and codified in order to be stored and manipulated. Following the model proposed by Tribe (2006) two modes of knowledge creation in tourism studies can be identified: Mode 1 (academic knowledge) and Mode 2 (problem-centred), being knowledge Mode 2 the more suitable to understand innovation in tourism (World Tourism Organization, 2017).

11.2.1 *Surf and surfing-related sports (SRSs)*

Surf is broadly referred to ‘the swell of the sea that breaks upon the shore’, as an adjective can be defined as ‘to ride the surf (as on a surfboard)’ (Merriam-Webster, 2019b). Its origin puts the roots in Pacific cultures (e.g. Hawaii, Polynesia or Peru), considered an important cultural activity for thousands of years with religious and spiritual meanings (Lazarow, 2007). Nevertheless, modern surfing has experienced a commodification process from the beginning of the last century (Nendel, 2009), creating confusion about its definition as remarked by Poizat-Newcomb (1999, p. 9) since it can be conceived as ‘sport, a recreation, a form of meditation, a religion, or a lifestyle’. In this vein, Augustin (1994, p. 16), defined under a European definition of sport (no differentiation between sport and recreation) and a geographic perspective, remarking some critical aspects of the activity: focused on wave-based surfing, individuality, that is practised in the natural environment where weather conditions are uncertain, and the lack of institutional control over the activity. Nonetheless, as Martin (2013, p. 3) noted, it is possible to practice other non-wave dependent SRSs (e.g. windsurfing (Wheaton, 2010), kitesurfing (Smits, 2018) and SUP (Schram, Hing, & Climstein, 2016)) which are challenging ‘the conventional interpretation and definition of surfing’ since they have distinct weather and spatial requirements (see Exadaktylos et al., 2005). Moreover, SRSs could include other non-water-based SRSs such as sandboarding, skateboarding or snowboarding that are considered innovations derived from classic surfing, and labelled as boardsports, with similar lifestyle characteristics (Buckley, 2010, p. 179). As noted by Buckley (2002, p. 407) the ‘3-fin foam-and-fibreglass shortboard (...) was first ridden in 1981’ while other accessories like ‘wetsuits (...) are even more recent in origin’. Moreover, Buckley added that ‘sailboards were invented in the 1970s, and kitesurfing not until the 1990s’ while soft boards ‘have rendered learning to surf largely risk-free and have led to a boom in backpacker surf schools’. Thus, it seems clear that the modern surfing and tourism industries have been shaped by innovations and technological advancements in surfing science. Conversely, the authenticity, a key characteristic of surf and lifestyle, is also under interrogation due to recent advancements in technologies (e.g. wave-pools) (Roberts & Ponting, 2018). Furthermore, SRSs are increasingly being organised, controlled and institutionalised, challenging the original lifestyle aspect of surfing (Wheaton & Thorpe, 2018).

Regarding the demand, in 2002 it was estimated around 10 million SRSs participants worldwide, and an interannual growth of 15%, in 2007 that figure

was doubled to 20 million (Hritz & Franzidis, 2016), and in 2013 the projected figure reached 35 million (O'Brien & Eddie, 2013). Nonetheless, the latter figure has been criticised; reduced to 2.7 million and limited to 1% growth annually (Bradstreet, 2016; cited in Porter & Usher, 2018, p. 1). In contrast, the *Surf Industry Manufacturers Association*, suggest that the figure could be more similar to that one offered by O'Brien and Eddie (2013), given that their 2017 report, according to *Surfer Today*, cite 66.5 million surf-inspired consumers in the United States (2017). Similarly, the recent inclusion of surfing in the 2020 Olympic Games (see Aguerre, 2015) could boost these figures since it will be held in Asia (Japan) a territory where surfing is not that popular, although there are iconic destinations (Doering, 2018). Additionally, women are engaging with SRs worldwide (Wheaton & Thorpe, 2018). All these elements can cause positive and negative social, economic, and environmental impacts that have pushed society to understand and to transform the reality researching about surfing.

11.2.2 Surfing research

As noted by Borne (2017), surfing research is a relatively novel pursuit. Scarfe et al. (2009) were the first authors who tried a 'serious' attempt to identify disciplines, issues and research in surfing. They identified 12 categories concerning research-based surfing literature, recognising disciplines (e.g. sociology), concepts (e.g. industry) and fields of research (e.g. coastal management). Borne (2017) has recently re-structured and updated it in the context of the book *Sustainable surfing*, identifying 12 sub-categories too (although adding new categories, merging some and dividing others) and similar criteria (see Table 11.1). Both classifications highlight the importance of tourism but Borne's (2017) adaptation of Scarfe et al.'s (2009) cataloguing provided a specific category for tourism studies.

TABLE 11.1 Surfing and sustainability related subcategories and themes

<i>Category</i>	<i>New/same/merged/divided category with respect to Scarfe et al. (2009) categories</i>	<i>Criteria</i>	<i>New/same criteria with respect to Scarfe et al. (2009) criteria</i>
Surfers and the wave	Same	Stoke and affect Describing waves, relating surfers to waves including skill levels, surfboard types, manoeuvres performed, surfability	New Same
Surf history	New	Co-evolving historical narrative	New

(Continued)

TABLE 11.1 (Cont.)

<i>Category</i>	<i>New/same/merged/divided category with respect to Scarfe et al. (2009) categories</i>	<i>Criteria</i>	<i>New/same criteria with respect to Scarfe et al. (2009) criteria</i>
Tourism	Previously merged (Tourism and economics)	Impacts of surf tourism on local communities The character or value of surf tourism Transportation – carbon footprint	Same Same New
Economics	Previously merged (Tourism and economics)	Economic value of surfbreaks The blue economy The circular economy	Same New New
Sociology	Same	Sociological aspects of surfing including surfing culture, social protocols at surfing breaks, gender and surfing, localism	Same
Industry	Same	Governance, industry growth and transition, surfing equipment, technology, merchandise, marketing, clothing, surfing films and magazines and clothing	Adapted
Coastal management	Same	Coastal management theory, protecting surfing breaks, recreational coastal amenities, environmental impact assessments, surfers and coastal use conflict, examples of impacts to surfing breaks	Same
Sport management	New	Theories of sport management, governance and practice	New

(Continued)

TABLE 11.1 (Cont.)

<i>Category</i>	<i>New/same/merged/ divided category with respect to Scarfe et al. (2009) categories</i>	<i>Criteria</i>	<i>New/same criteria with respect to Scarfe et al. (2009) criteria</i>
Physical processes	Same	Oceanographic and sedimentary conditions; around surfing breaks including artificial breaks, hydrography, measurements, surfing science	Same
Numerical and physical modelling	Same	Modelling of theoretical and real surfing breaks	Same
Artificial surfing reefs (ASR) – sediment dynamics, design and monitoring, constriction (sic)	Merged four categories related to ASR from Scarfe et al. (2009): (ASR sediment dynamics, ASR design, ASR monitoring, ASR construction)	Sediment and morphological response to an ASR, design of ASR Monitoring of effects to surfing amenities, coastal stability, habitat, navigation, swimming safety Construction techniques and monitoring	Same
Biomechanics	Same	Fitness, surfing techniques, sporting injuries	Same

Source: Borne (2017, pp. 10–11) adapted from Scarfe et al. (2009)

11.2.3 Surf tourism, research and boundaries

The concept of surf tourism is controversial. Buckley (2002, p. 407) considers surf tourism ‘when surfers travel at least 40 km and stay overnight with surfing as the primary purpose for travel’ differentiating between ‘commercial’ and ‘recreational’ surf tourism under the ‘adventure tourism’ perspective. Fluker (2003, p. 7) extends the definition setting the maximum time (12 months for international travel and 6 months for domestic), both with the objective of measuring the phenomenon. On the other hand, Towner, (2016, p. 63) defines it in a more subjective manner stating that ‘surfing becomes tourism as soon as surfers travel away from their local surf break, with riding waves as the primary purpose for travel’. In addition, Orams

and Towner (2012) reconceptualise it similarly with the label ‘surf-riding tourism’. While other studies have revealed passive participants in surfing events (Ntloko & Swart, 2008) and families travelling with surfers (Porter & Usher, 2018). On the other hand, studies regarding market segmentation focused on active surf tourists have been already explored (e.g. Barbieri & Sotomayor, 2013; Dolnicar & Fluker, 2003). In addition, the serious leisure perspective seems to be very popular amongst surfing researchers (e.g. Cheng & Tsaur, 2012; Wheaton, 2017) and the linkages between surf tourists, serious leisure and entrepreneurship have been underscored too (Ratten, 2018a). Conversely, European institutions for the promotion of imports from developing countries (CBI) have suggested that a differentiation between wind- and wave-SRSs should help to commercialise surf tourism (Netherlands Enterprise Agency, 2012).

For the purpose of this chapter, a broad perspective is taken considering commercialised surf tourism products (see Buckley, 2002) in particular destinations as elements that should be taken into account when trying to define the phenomenon as indicated by Hinch, Higham, and Sant (2014). In addition, we acknowledge the different perspectives, market niches or ‘new’ types of tourism like adventure tourism, marine tourism or ecotourism (Mowforth & Munt, 1998) employed in surf tourism academic research (Martin & Assenov, 2012), although we consider sport tourism to covers the full spectrum of SRSs in terms of participants (active and passive) (Standeven & DeKnop, 1999) and products or motivations (active sport tourism, events and nostalgia) (Gibson, 1998).

Surf tourism research was systematically analysed by Martin and Assenov (2012), announcing the ‘genesis’ of a new ‘discipline’ in the field of sport tourism. The authors collected ‘over 5.000’ documents using the keywords ‘surf’ and ‘tour’ including ‘books, journal articles, conference proceedings, and Master’s and PhD theses’ from 2007 to 2011 (Martin & Assenov, 2012, pp. 5–6). They also included ‘non-academic’ materials such as government and NGOs reports. Conversely, the authors excluded travel guides, the history of surfing, other languages papers, articles in newspapers and magazines, ‘surfing literature’, ‘ASR literature’ and the ‘surf science literature’. Nonetheless, they included some works belonging to excluded categories based on their links with tourism.

This is an example of how difficult is to determine the surf tourism and research boundaries, since it involves many different perspectives and disciplines, additionally, extra-disciplinary knowledge seems to be more influential in practice and innovations (Cooper, 2017).

11.3 Innovation

Innovations are drivers for converting disadvantages into competitive advantages, which are supposed to provide welfare, economic development to societies and nations (Porter, 1991). The notion of innovation is based in Schumpeter’s (1934) work and the role that the author gave to entrepreneurs in the process, although is a controversial concept (Hjalager, 2010). The main characteristic of an innovation

is its applicability and they occur in all sectors of an economy, the OECD/Eurostat (2018, p. 20) defined it as follows:

‘a new or improved product or process (or combination thereof) that differs significantly from the unit’s previous products or processes and that has been made available to potential user (product) or brought into use by the unit (process)’.

In the context of tourism, innovations ‘are often classified as product, process, organizational/managerial, market innovations’ (Weidenfeld & Hall, 2014, p. 582). They can also be differentiated by the place from where the source of knowledge is collected, being internal or external, and individual or collective user-driven (Hjalager & Nordin, 2011).

Information and communication technology (ICT) products like software is a typical example of ‘user-driven’ and ‘collective’ innovations (Hippel, 2005). The author highlighted the development of modern kiteboards and windsurfing ‘footraps’ as processes of innovation in manufacturing. Moreover, surf tourists as potential lifestyle entrepreneurs can be considered drivers of innovations in surf tourism too (Ratten, 2018a). Hjalager and Nordin (2011) distinguished between ‘passive suppliers of information’ and ‘active co-developers’ in the processes of ‘user-driven’ innovations. That information can be analysed and converted into ‘new’ knowledge in tourism through different innovative methodologies like Big Data (Baggio, 2016; Miah, Vu, Gammack, & McGrath, 2017) if the amount of data is considerably big, while ‘wearables’ devices are trends in the sports industry (James & Lee, 2016) and in surfing too (Caselli, Ferreira, & Gonçalves, 2017). Nevertheless, the use of this data and the ethics and privacy elements around its use is under interrogation since it can be used in distinct manners (see Dario, Morrow, Wooditch, & Vickovic, 2015) that can, eventually, be harmful (Rubinstein, Lee, & Schwartz, 2008).

A suitable scale for analysing innovations in the tourism sector is at a destination level, which ‘includes myriad changes in product, service and experience offers, as well as improvements in marketing and relationship building’ (Zach & Hill, 2017, p. 197), as has happened with social innovations (e.g. surfing reserves) in the Santa Cruz surfing industry (see Ratten, 2018b). Additionally, it is important to highlight that innovations use to appear in groups (Schumpeter, 1934). Moreover, it seems significant to note that tourism innovations in SA (Booyens & Rogerson, 2017b) and WC (Booyens, 2016; Booyens & Rogerson, 2016, 2017a) have been recently approached, although surf tourism innovations have not been analysed despite its cultural importance in SA. For the purpose of this chapter, products (new SRSs), processes (new forms of payment and customer relationships), services (information about weather conditions and surf spots) and social innovations (new forms of safety provision) are highlighted.

11.4 STK system (STKS)

For a better understanding of surf tourism’s knowledge, production and distribution and its links with innovations in the field, the current chapter proposes the adaptation of Tribe and Liburd’s ‘tourism knowledge system’ (2016) as being a

suitable ontological and epistemological framework for the field of surf tourism. The system counts in respect of two main areas. On the one hand, we describe the different modes of STK including Mode 1: Disciplines of surf tourism and Mode 2: Extra-disciplinary knowledge. On the other hand, a wider area that contains, (1) the knowledge inputs (the world of surf tourism) and (2) outputs (representations of STK). Besides, the factors influencing knowledge representations and the gaze of the researcher, or 'knowledge force fields', englobe both areas and include the following elements: person, position, ideology, the government and global capital (Tribe & Liburd, 2016, p. 46). The proposal introduced here draws the complex relationships and flows that can occur within the STKS amongst the different elements.

11.5 Modes of STK

Mode 1 (academic knowledge) refers to knowledge produced in academic institutions that are ruled by norms, traditions and communities to produce science (Kuhn, 1970). Surf tourism research is seen as part of tourism and the wider disciplinary area of social sciences, where distinct and legitimate epistemological perspectives (e.g. positivism and interpretivism) are accepted (Xin, 2017). Additionally, Mode 2: Extra-disciplinary knowledge represents knowledge produced out of the boundaries from the academic environment and will be analysed in the following sections.

11.5.1 Mode 1: disciplines of surf tourism

Considering that surf tourism can be regarded as a branch of sport tourism, and the latter as a subset of tourism studies (Martin & Assenov, 2012), similar disciplinary areas of tourism should be involved. Tribe and Liburd (2016) made a distinction amongst four different disciplines as sources of tourism knowledge in Mode 1: (1) Business studies; (2) Social sciences; (3) Humanities and the arts; and (4) Science. On the contrary, surfing history was one of the subjects excluded in Martin and Assenov's (2012) review, and we will try to cover the gap in the following sections.

11.5.1.1 Surf tourism and surfing history research outputs in numbers

An interrogation about the disciplines or subject areas involved in surf tourism research was taken introducing the term 'surf' AND 'tourism' in the Scopus database as a concept included in the title, abstract or keywords to retrieve targeted research outputs. Scopus identified 122 research outputs from 1969 to 2018 in a first search. Then, a refinement (based on an abstract reading) was applied in order to exclude those studies that were not concerned to surf tourism obtaining 87 research outputs. Additionally, a search of 'surfing' AND 'history' retrieved 187 documents. After a refinement by limiting results to the social sciences subject area, 44 research outputs were obtained, and 16 were rejected after an abstract reading, leaving 28 'valid' documents (see Table 11.2).

TABLE 11.2 'surf' AND 'tourism' and 'surfing' AND 'history' concepts search in title, abstract, and keywords in Scopus database (08/02/19)

<i>Year</i>	<i>'surf' AND 'tourism'</i>	<i>'surfing' AND 'history'</i>	<i>Total</i>
2018	14	7	21
2017	5	1	6
2016	8	2	10
2015	6	2	8
2014	13	5	18
2013	9	2	11
2012	4	0	4
2011	2	4	6
2009	7	0	7
2008	2	1	3
2007	3	0	3
2006	1	0	1
2005	2	0	2
2004	0	1	1
2003	3	0	3
2002	5	0	5
2000	1	0	1
1997	1	0	1
1986	0	1	1
1981	0	1	1
1973	0	1	1
1969	1	0	1
Total	87	28	115

Finally, 115 documents (see Tables 11.A1 and 11.A2 in appendices to consult the complete lists) were included in the study, which illustrates a decline in document production after 2014 with a valley in 2017, then in 2018 it has experienced an important growth, setting a record in production, which could indicate that the field is growing and gaining in importance.

11.5.1.2 *Subject and disciplinary areas in surf tourism research*

Social sciences, followed by business, management and accounting summed up close to the 62% (103) of the subject areas involved in each research output obtained through the search 'surf' AND 'tourism' (see Table 11.3). These results

TABLE 11.3 Surf tourism research outputs by subject and disciplinary areas

<i>Subject area</i>	<i>'surf' AND 'tourism'</i>	<i>'surfing' AND 'history'</i>	<i>Total subject areas</i>	<i>Disciplinary areas</i>
Business, Management and Accounting	52	3	55	Business studies
Social Sciences	51	28	79	Social sciences
Environmental Science	19	1	20	Science
Earth and Planetary Sciences	14	0	14	Science
Agricultural and Biological Sciences	8	0	8	Science
Economics, Econometrics and Finance	4	1	5	Social sciences
Engineering	3	0	3	Science
Medicine	3	2	5	Science
Psychology	3	2	5	Social sciences
Arts and Humanities	2	12	14	Humanities and the arts
Decision Sciences	2	0	2	Social sciences
Materials Science	2	0	2	Science
Computer Science	1	0	1	Science
Health Professions	1	1	2	Science
Nursing	1	1	2	Science
Physics and Astronomy	1	0	1	Science
Total	167	51	218	

are consistent with Tribe and Liburd (2016) and Tribe's (2006) understanding and results of Mode 1 knowledge, and the prominent role of social sciences and business studies disciplinary areas in tourism studies.

Grouping the results in the four areas suggested by Tribe and Liburd (2016), the 'surf' AND 'tourism' showed an underrepresentation of the humanities and the arts (1%) and a certain balance amongst the rest of areas (around 30% each). In addition, the subject areas distribution of 'surfing' AND 'history' presents a pre-eminence of social sciences (61%), which is in part due to the filter applied to Scopus (only social sciences research outputs were analysed in order to be consistent with Martin and Assenov (2012) statement). On the other hand, disciplinary areas of combined results are depicted with the social sciences being the major contributor (see Figure 11.1).

Humanities and the arts (14) 6%

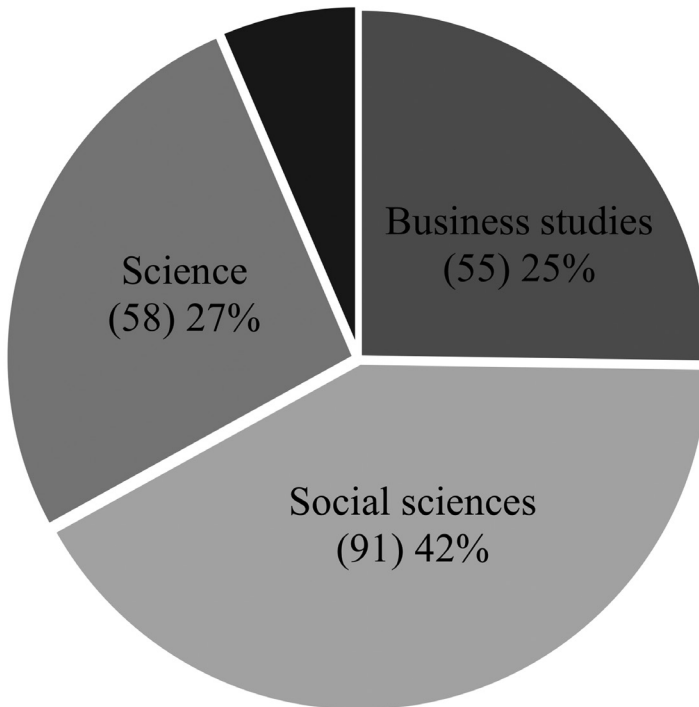


Figure 11.1 Combined disciplinary areas ('surf' AND 'tourism' and 'surfing' AND 'history') (Mode 1 Knowledge)

Additionally, the inner zone located within the borders of Mode 1 zone represents the interdisciplinarity of surf tourism and its potential (Tribe & Liburd, 2016, p. 49), the adoption of such an approach is most desirable for tourism studies in general (Oviedo-García, 2016) which seems to be reflected in the number of subject areas (218) involved, compared to research outputs retrieved (115).

11.5.2 Mode 2: extra-disciplinary knowledge of surf tourism

Mode 2 is knowledge produced outside the academic boundaries which was pointed out as a new form of knowledge in sciences (Gibbons et al., 1994), suitable for tourism studies and transdisciplinary in nature (Tribe & Liburd, 2016). Furthermore, Arroyo, Levine, and Espejel (2019) suggest that a transdisciplinary view is needed to approach the complex issues related to the surfing-related activities that concern both, human and natural environments. Additionally, Tribe and Liburd (2016) added three types of knowledge to Mode 2 (apart from (1) problem-centred): (2) value-based; (3) local/indigenous; and (4) Web 2.0-related as presented next.

11.5.2.1 *Problem-centred knowledge*

Problem-centred knowledge is also known as practice knowledge, with its objective being to understand and change an existing practice. Knowledge is created through projects that are focused on existing problems that require solving (Tribe & Liburd, 2016). The projects are managed and sourced by international and governmental institutions (e.g. sports federations, research councils, DMOs (Destination Marketing Organisations), charities, NGOs (Non-Governmental Organisations), etc.), by the industry or by society in general. This knowledge is transferred using reports, presentations, and other means.

As an example, in CT, the Shark Spotting Programme (see <https://sharkspotters.org.za/page/history/>), exists as a pioneer project that is charged with securing the safety of water recreationists and white shark preservation in terms of the city's beaches by, among other activities, publishing reports and articles, and giving related presentations. Moreover, signs regarding shark safety protocols are deployed around selected beaches, and on-line platforms offer information about current state of the beaches, research documents and news, amongst others. Initiated in 2004, due to the increase of shark incidents and sightings, the programme has its origin in the form of a company specialising in surf tourism (the owners were professional surfers and lifestyle entrepreneurs) that issues warnings about the increasing presence of white sharks off the Muizenberg coastline. In terms of technological innovations, they have tested recently a new computerised shark detector, funded in partnership with the Institute for Communities and Wildlife in Africa at the University of Cape Town (UCT), PatternLab SaRL, and the European Union (EU) under the EUROSTARS programme (see <https://sharkspotters.org.za/shark-spotters-and-patternlab-launch-new-automated-shark-detection-project/>) illustrating the transdisciplinary character of surf tourism research.

11.5.2.2 *Value-based knowledge*

While disciplinary knowledge has objectivity and neutrality as its key characteristics, value-based knowledge is focused on certain values and interpretations (Tribe & Liburd, 2016). For example, Christian Surfers International (see www.christiansurfers.net/about/) is a religion-based organisation that promotes certain behaviour according to their beliefs. Additionally, Surfrider Foundation, Save The Waves Coalition, SurfAid International, Surfers Against Sewage, Surfer's Medical Association, Surfers for Cetaceans, Waves for Development or Surfers Without Borders, are amongst the most visible and influential NGOs (see www.surfertoday.com/surfing/the-best-non-governmental-surf-organizations). This kind of knowledge is linked to an increasing interest in moralism in tourism (Caton, 2012).

11.5.2.3 *Local/indigenous knowledge*

Indigenous knowledge is sourced in the local communities. Frequently, this knowledge is 'embedded in oral traditions' and 'passed on from generations through

cosmologies, diaspora, storytelling, arts, crafts, spirituality, language and classification systems' (Tribe & Liburd, 2016, p. 49). It is important to highlight the role that local surfers can play in the knowledge generation process (Reineman, 2016; Reineman, Thomas, & Caldwell, 2017) as well as the potential role that local and neighbouring communities have in knowledge production. For instance, local artists have a distinct viewpoint that can be very valuable from a marketing perspective (see <https://sachaspecker.com/>) but also as a source of data to perform qualitative research.

11.5.2.4 Web 2.0-related knowledge

According to Tribe and Liburd (2016, p. 49), the Web 2.0 knowledge system represents

a network of actors who form a coalition of participants working together on a common task. Creating a demand-pull as well as a supply-push for knowledge, research is exchanged within and across different domains enabled by tools such as blogs, wikis, social networks and open access.

Wikis like *Wannasurf.com* offer the possibility to read, comment, write, upload pictures, map spots and share that knowledge in the Internet, offering subjective, but valuable information about the surf spots for surfers, although credibility should be considered, since there are differences amongst different types of wikis (Nofrina, Viswanathan, Poorisat, Detenber, & Chen, 2009). Additionally, the development of surf forecasting and ICTs allowed companies to 'transmit up-to-the-minute reports via telephones, faxes, pagers and live video feeds on the Internet' (Rinehart & Sydnor, 2003, p. 310). Nowadays, *Magicseaweed.com*, a popular weather forecast tool, allows users to rate surf sessions, wave heights and upload pictures. It has scored more than 3 million visits monthly (see www.similarweb.com/website/magicseaweed.com) and it is updated based on users' feedback from smartphones to provide an information product (Borne, 2017), which is a common product amongst other companies (see www.windguru.cz/directory.php).

In addition, SRSs companies very often use websites, blogs and social media for marketing their products, generating a flow of data that could be potentially used by companies that employ Big Data techniques to understand, for instance, consumers' behaviours.

11.6 Knowledge representations of the world of surf tourism in CT

In order to understand the processes of knowledge creation and representation, we have adapted Tribe's (2006) 'Truth about tourism' and we detail the knowledge force fields (person, ideology, position, global capital and government) influencing the research suggested by Tribe and Liburd (2016). In the model, the researcher has to choose the object to study from amongst the different phenomena occurring according to the chosen 'view' (in the 'case study' we use the political economy)

of the world of surf tourism. Once the object of the study is chosen, the results of the research are likely to be in accordance with the dominant canon. The result is determined by the influence of the elements of the knowledge force field. In contrast, an alternative result of the research that is not under the canon of the 'legitimate' subjects (e.g. surfing history) could be eventually included, although with the probability that it will be significantly less cited than the rest (due to a lower exposure).

11.6.1 Factors influencing knowledge representation in surf tourism

The factors or elements influencing the researcher's gaze and the results thereof are outlined next.

11.6.1.1 Person

Objectivity/subjectivity plays a central role, in that the researcher cannot be fully objective, as age, gender, class, race, ethnicity and sexual orientation are significant aspects influencing the research process (Tribe, 2006). Table 11.4 lists the most prolific authors in terms of research outputs in 'surf' AND 'tourism' and 'surfing' AND 'history' searches. We noticed that Chris Gibson, Ralf Buckley, Jess Ponting and Andrew Warren scored in both areas.

TABLE 11.4 Authors

<i>Authors</i>	<i>Research outputs</i>	<i>Search</i>
Ponting, J.	10	'surf' AND 'tourism'
Martin, S.A.	5	'surf' AND 'tourism'
Towner, N.	5	'surf' AND 'tourism'
Assenov, I.	4	'surf' AND 'tourism'
Usher, L.E.	4	'surf' AND 'tourism'
Buckley, R.	3	'surf' AND 'tourism'
Lazarow, N.	3	'surf' AND 'tourism'
O'Brien, D.	3	'surf' AND 'tourism'
Lisahunter	3	'surfing' AND 'history'
Arford-Granholm, M.	2	'surf' AND 'tourism'
Barbieri, C.	2	'surf' AND 'tourism'
Bicudo, P.	2	'surf' AND 'tourism'
Cowan, P.	2	'surf' AND 'tourism'
Guitart, D.	2	'surf' AND 'tourism'
Kerstetter, D.	2	'surf' AND 'tourism'

(Continued)

TABLE 11.4 (Cont.)

<i>Authors</i>	<i>Research outputs</i>	<i>Search</i>
Mach, L.	2	'surf' AND 'tourism'
Orams, M.B.	2	'surf' AND 'tourism'
Porter, B.A.	2	'surf' AND 'tourism'
Puleo, J.A.	2	'surf' AND 'tourism'
Shakeela, A.	2	'surf' AND 'tourism'
Sotomayor, S.	2	'surf' AND 'tourism'
Wilks, J.	2	'surf' AND 'tourism'
Booth, D.	2	'surfing' AND 'history'
Gibson, C.	2	'surfing' AND 'history'
Thompson, G.	2	'surfing' AND 'history'
Warren, A.	2	'surfing' AND 'history'
Other authors with one research output ('surf' AND 'tourism')	129	'surf' AND 'tourism'
Other authors with one research output ('surfing' AND 'history')	27	'surfing' AND 'history'

The adoption of the feminist approach in surf tourism, which is 'limited but growing' (see Roy, 2014), led in this case by Lisa Hunter, could serve as an example of how researchers, on the basis of a single personal characteristic (e.g. gender), can study surf tourism in terms of one determined perspective (e.g. feminism). In contrast, South African researcher Glenn Thompson, interrogates SA surfing history about gender and masculinity issues. What many of the researchers have in common is their careers as surfers (e.g. Jess Ponting, Nick Towner, Ralf Buckley and Glenn Thompson) thus, potentially impacting in their gaze when choosing the object of study and reflected in the final research output (Buckley, 2018).

11.6.1.2 *Position*

The geographical position of the researcher relates to their residence within a physical location (i.e. in terms of a university department, an academic community, or the surrounding cultural and language community) (Tribe, 2006). It seems there is a dominance of English-speaking countries in STK production with an old tradition (and culture) in SRSs like the United States (26%), Australia (25%), New Zealand (10%) and the United Kingdom (6%) followed by countries like Portugal (5%) and Thailand (4%) with less surfing-related history behind (see Table 11.5).

TABLE 11.5 Country of the authors' institutions

<i>Country</i>	<i>'surf' AND 'tourism'</i>	<i>'surfing' AND 'history'</i>	<i>Total</i>
United States	28	7	35
Australia	25	9	34
New Zealand	10	3	13
United Kingdom	7	1	8
Portugal	7	0	7
Thailand	6	0	6
Undefined	4	1	5
France	4	0	4
South Africa	2	2	4
Japan	1	2	3
Brazil	0	3	3
Spain	2	0	2
Peru	2	0	2
Costa Rica	1	0	1
Federated States of Micronesia	1	0	1
Germany	0	1	1
Ireland	1	0	1
Mexico	1	0	1
Panama	1	0	1
Philippines	1	0	1
Romania	1	0	1
Denmark	0	1	1
Oman	1	0	1
Total	106	30	136

11.6.1.3 Ideology

According to Tribe (2006, p. 12), ideology, on the one hand, refers to 'the common sense set of beliefs (. . .) permeating society which guides thought and action', whereas, on the other hand, it refers to the 'specific, coherent subsets of beliefs (generally "-isms", or faith systems)'. Amongst ideological institutions in surf tourism it is important to highlight the NGOs that have the power to influence the direction of the research object and output mentioned earlier in Section 6.2.2.

On the other hand, in the academic field of surf tourism research, Ruttenberg and Brosius (2017) suggested the existence of two epistemic communities, criticising, under 'political ecology lenses' the existence of 'sustainable surf tourism scholars'

who propose a series of recommendations for sustainable surf tourism development (under neoliberal lenses), promoting processes, planning for obtaining surf tourism certificates, etc. In addition, Zavalza Hough-snee and Sotelo Eastman, editors of the book *The critical surf studies reader* (2017, p. 8) claimed for 'the appropriation of surfing studies within corporate university models' and called to 'resist surfing's academic institutionalization in profit-driven fields' adding that also responds to 'recent trends in competitive surfing, manufacturing, media, tourism, non-profit sectors, and higher education that champion surfing as an unquestionable, categorical social good'. Buckley (2018, p. 635) questions the 'critical' contribution and issues concerning the book since it reflects 'seem to be rather obvious'; colonialism, individual privilege ('well-off young white male surfers from wealthy nations are privileged, relative to women, people of other colours and ethnicities, and people without the money to buy surfboards'), power and politics, 'Big surfing brands', the power of the World Surf League (WSL) and the control over 'surf industry revenues', the paradox of 'lifestyle' and mass consumption, etc.

11.6.1.4 *The government*

Tribe and Liburd (2016) highlight the role that governments play in research processes and in the obtaining of results, as they set the research agendas through the objectives that are established by research councils. Intergovernmental institutions (e.g. The United Nations World Tourism Organisation or the Organisation for Economic Co-operation and Development) are in charge (amongst other tasks) of the development of tourism statistics at an international level (see Hall & Page, 2009). At a lower level, supranational institutions like the UE, the African Union and other intermediate institutions like the Southern African Development Community influence research with their funding. Naturally, national, regional and local governments are key drivers of research and innovation and will be listed in Section 7.3.4. Therefore, the independence of the academic institutions (i.e. primarily the universities) is undergoing interrogation (Tribe & Liburd, 2016).

11.6.1.5 *Global capital*

Such capital refers to the material element that is owned, like accommodation or transport infrastructures since those 'things have the power to bend thoughts and actions towards them', being money and influence direct and indirect powers respectively (Tribe & Liburd, 2016, p. 55). Importantly, companies like Google, Amazon, Facebook, Apple, have gained in importance globally since they manage information and knowledge, and are acting as intermediaries between producers and consumers (Taplin, 2017) in the tourism industry (Oskam & Zandberg, 2016) and in the surf manufactures industry (e.g. Amazon). Similarly, Airbnb has entered in the market of 'surf experiences' with the acquisition of the Spanish company Trip4Real (Anwar, 2018), a platform that allows local individuals or companies to

sell tours and experiences and now integrated in the Airbnb platform. Additionally, the Big Three, Australian companies Rip Curl, Quiksilver and Billabong have been pointed out as drivers of the global economy (Gibson & Warren, 2018). Furthermore Laderman (2014, 2015) provides historical narratives about global forces in the surf industry highlighting (amongst other concerns) how the growth of SRSs business has broken the historical connections with local communities and the provision of decent jobs with the relocation of surf manufacturers in Australia to developing countries in Asia.

11.6.2 Representations of STK

STK representations composed by academic journals, books, articles, book chapters and conference papers configure the ‘academic canon of tourism’ (Tribe & Liburd, 2016, p. 57). Most of the research outputs were articles (91 including those in-press) (see Table 11.6).

Tourism, marine sciences, gender studies, sport history, history and leisure journals appear as the most active channels in the spread of STK based on our search results (see Table 11.7).

TABLE 11.6 Type of document

<i>Document type</i>	<i>‘surf’ AND ‘tourism’</i>	<i>‘surfing’ AND ‘history’</i>	<i>Total</i>
Article	71	13	84
Article in Press	5	2	7
Conference Paper	4	0	4
Book	3	3	6
Book Chapter	2	4	6
Review	1	6	7
Short Survey	1	0	1
Total	87	28	115

TABLE 11.7 Source title

<i>Source title</i>	<i>Number of research outputs</i>
Tourism in Marine Environments	6
Journal of Coastal Research	5
Journal of Sustainable Tourism	5
Surfing Sex Genders and Sexualities	5
Tourism Planning and Development	5
Annals of Leisure Research	4
Annals of Tourism Research	4

(Continued)

TABLE 11.7 (Cont.)

<i>Source title</i>	<i>Number of research outputs</i>
Journal of Sport and Tourism	4
European Journal of Tourism Research	3
International Journal of the History of Sport	3
Ocean and Coastal Management	3
Tourism Management	3
Journal of Sport History	2
Contemporary Pacific	2
Geographie et Cultures	2
International Journal of Tourism Research	2
Journal of Pacific History	2
Other sources (1 research output)	55

On the other hand, Mode 2 is much more heterogeneous in the representation of knowledge and will be discussed in the following section.

11.6.3 The world of surf tourism in Cape Town

Cape Town (CT) is the capital of the province of Western Cape (WC), SA, it counts with 294 km of coastline which 'is valued for its contribution to recreation and tourism, its ecological diversity and endemism' (Colenbrander, Cartwright, & Taylor, 2015). It is the second most populated city in SA, with an extension of 2.455 km² and an estimated population in 2019 of 4.094.582 inhabitants (Western Cape Government, 2017).

Regarding the tourism industry, in general, using the political economic lenses about development and geographical aspects, SA can be considered a peripheric nation, as it is located far from the main tourist generating markets (e.g. USA, Europe, Australia, China, India) and as a 'tourist receiving region', since less than 10% South Africans can afford international travels (Ferreira, 2018). Likewise, CT is an internationally acclaimed top tourism destination (Frey & George, 2010), inter alia, because SA, WC and CT governments have, especially from the 90's when SA embraced democracy, highlighted tourism as a key for the socio-economic development (Cornelissen, 2005; Rogerson & Visser, 2011).

Surfing has a rich (and controversial) cultural history in SA (see Thompson, 2015), with a considerable surf population that was estimated at about 60.000 surfers in 2007 (Pike, 2007, p. 37), but with a wider audience driven by radio, television, newspapers, specialised magazines, websites and blogs, which seems to indicate that surfing is more than a simple 'lifestyle' in SA (Thompson, 2008).

SRSs are practised and watched in certain locations commonly named surf spots. This surfing occurs in local spots of CT, which compete with other spots in other surf destinations (e.g. Jeffreys Bay or Langebaan) as well as within CT. Weather conditions and climate, wildlife, infrastructures and competitors (e.g. surf visitors' countries of origin) are important elements of the physical environment (and the proposed 'world of surf tourism' system) too.

11.6.3.1 Physical environment

Many concepts have been developed in order to define the physical aspect of SRSs, ranging from surf zone, surf sites, surf breaks or surf spots. In the world of surf tourism, the surf spots, are in the core of the activity following Leiper's (1990) tourist attraction systems theory. Surf spots comprise natural aspects, which include 'the sea, waves, sand bars, the reefs and biodiversity, the adjacent terrestrial environment and a number of physical processes', as well as built infrastructures (Martin & O'Brien, 2017, p. 24). According to these conceptualisations, the physical environment in surf tourism comprise natural elements (weather/climate, wildlife), man-made infrastructures and other competitors (urban and rural destinations) which are the origin of visitors. Nonetheless, we will only review the main attraction.

11.6.3.1.1 The surf spot

Generally, these spots are in the beach or more generally in marine environments, although it is possible to find wave-pools, lakes and rivers where it is possible to surf waves (Booth, 2017). Moreover, it is possible to distinguish between different concepts such as surfing sites (referred to land and marine environments), surfing reserves (iconic surfing sites preserved by governments) (Farmer & Short, 2007), surf breaks (common name used by engineers) (Scarfe et al., 2009) or, in a more broader and abstract sense, the surf spot, which will serve us to describe any place where is possible to practice any SRS.

When trying to obtain information about surf spots (e.g. weather conditions), apart from local surfers and communities and specialised surfing guides (e.g. Pike, 2007), those media located in the Internet like weather forecast tools, seem to be the more relevant sources for tourists and visitors (Martín, 2005). They may range from national (e.g. *Wavescape.com* with its headquarters located in Muizenberg, CT) to international scale, either European based companies like *Surfforecast.com*, *Windguru.com*, *Magicseaweed.com* or American ones like *Surfline.com*. Wikis (e.g. *Wannasurf.com/Wannakitesurf.com*) do not provide with updated weather forecast conditions, but informs about accessibility, localism, tourism, etc. In the case of CT, the most exhaustive source seems to be the wiki *Wannasurf.com* that includes 150 surf spots in CT and surroundings.

An analysis of the surf spots 'markers' has been done resulting in more than 456 references in 118 confirmed surf spots in CT from 12 different sources of the Web 2.0 (after a refinement contrasting data) (see Table 11.A3 in appendices). Most of

the Web 2.0 surf spots ‘markers’ were related to wave-based surfing tools (75%; 336). On the other hand, Web 2.0 wind-based surf spot markers counted slightly over the 25% (120) of the total number of references.

11.6.3.2 Supply

This section is devoted to the specific offer related to the sector of sport and recreational activities, specifically to SRS companies (surf schools, surf shops, surfboard manufacturers and travel agencies that offer SRS products), using the tools provided by the Web 2.0.

An Internet search, through Google Maps from 30th November 2017 to 10th December 2017 (using the companies’ keywords mentioned earlier), resulted in a collection of 61 SRSs companies.

Then, an analysis of products offered was deployed following Buckley’s (2002) classification about commercial surf tourism related products (rental equipment, lessons and sales equipment as well as surf trips, surf camps/parties and surfboats), in order to obtain a vision about surf tourism products in CT (see Table 11.8).

Three main products were found; rental equipment, lessons and sales equipment. Most of the companies offer, at least, sales equipment about a single SRS. From those companies, the 44% are only SRSs retailers (they do not offer any lesson or rentals). The rest (56%) are companies that allow rentals and/or provide visitors and locals with lessons, offering the most basic surf tourism product (one-hour lesson or rental equipment). Although one company published information about the availability of boat trips, and others organise surf trips, these products seemed to be on-demand or launched sporadically. Surf camps/parties were also important products too.

TABLE 11.8 Surf tourism-related products

<i>N° of SRSs offered by company</i>	<i>N° Companies offering rentals, lessons and sales equipment</i>			<i>N° Companies offering surf trips, surf camps/parties and/or surf boats</i>		
	<i>Rentals</i>	<i>Lessons</i>	<i>Sales equipment</i>	<i>Surf trips</i>	<i>Surf camps/parties</i>	<i>Surfboats</i>
5	1	0	1	0	0	0
4	2	0	4	0	0	0
3	9	6	11	0	0	0
2	4	6	14	0	0	0
1	11	16	16	11	15	1
At least 1	27	28	46	11	15	1
None	34	33	15	50	46	60
Total	61	61	61	61	61	61

TABLE 11.9 Type of surf tourism-related products by SRS

<i>Type of product/sport</i>	<i>Surf</i>	<i>SUP</i>	<i>Body-boarding</i>	<i>Kitesurfing</i>	<i>Windsurfing</i>
Rentals (n° companies)	24	15	8	12	2
% (Total=27)	89%	56%	30%	44%	7%
Lessons (n° companies)	22	14	0	11	0
% (Total=28)	79%	50%	0%	39%	0%
Sales (n° companies)	42	20	20	14	2
% (Total=46)	91%	43%	43%	30%	4%

In addition, the type of SRS has been analysed for each group of products (sales, rentals and lessons). It is important to note the perceived hegemony that classic surfing (surf) has across the groups (see Table 11.9) followed by SUP which occupies the second position.

Recent innovations of inflatable SUP boards (see Bell, 2018) have acted like an incremental innovation, spreading the product throughout the companies. In addition, it seems important to highlight the lack (at least about its availability in the Internet) of lessons about windsurfing and bodyboarding, which could indicate that those sports are less popular in relation to the demand. Moreover, the number of companies that rent and sale equipment and provides lessons of kitesurfing suggests that a displacement from windsurfing to kitesurfing has taken place in CT.

Additionally, an analysis of social media channels was undertaken in order to obtain a list with the most used social media by SRSs companies, showing that Facebook (42) and Instagram (38) (both considered as platforms more focused on images and video posts) are very popular, then Twitter (30), and the intermediary TripAdvisor (12) are also appearing in certain companies' websites together with 'other social media' (8) like the old Google+.

Finally, a brief analysis about e-commerce was also deployed based on internet websites and the availability of payment methods, differentiating between those who provide electronic payment 'online' (23; 38%), those who provide with a 'form' for ordering the purchase (14; 23%), by 'email' (10; 16%) or without any kind of online connection (14; 23%).

Although the majority (86%) have some kind of electronic method to sale products through the Internet, only 38% of the companies have a real online payment method. Interestingly, all the companies that do not have any online payment option (only through main corporate website located in Europe or Australia) are local surf retailers that operate to sell surf equipment or/and accessories (e.g. Billabong and Rip Curl shops, amongst others).

These figures suggest a weak e-commerce strategy of the system, and could indicate that e-commerce is not well developed and needs of improvement to reduce threats and commissions against highly competitive intermediaries (e.g. Amazon in the case of selling surf equipment and accessories, and Airbnb in the

case of surf lessons and experiences) in a sector that many often is formed by Small, Micro and Medium Enterprises (SMME) and lifestyle entrepreneurs (Marchant & Mottiar, 2011) with a lack of financial power (amongst other issues like gender or economic inequity) of many entrepreneurs (e.g. food stalls) in surfing destinations in periphery areas such as Bali (Tajeddini, Ratten, & Denisa, 2017).

11.6.4 Demand

The tourism demand is commonly divided between domestic and international, being the Tourism National Satellite Account the institutional instrument that provides of primary data about both, offered as an open source tool by Statistics South Africa (see www.statssa.gov.za/). Conversely, specific demand for surf spots or surf tourism seems to be more complex to identify, since the sport is practiced (most of the times) in open and public spaces like the beach (Augustin, 1994), where counting individuals participating (practising or watching) presents several challenges (Kammler & Schernewski, 2004). On the other hand, surf participants are even more difficult to identify as noted before in Section 7.2. Nevertheless, surf clubs and surf lifesavers are common users of the surf spots, together with the local community and beach goers. Added to them, the surf visitors configure the potential demand of the surf spot, that have been recently targeted in order to attract international tourists in general to Africa (World Travel Market, 2014) as well as to CT in particular in a recent tourism marketing strategy of the local DMO (Wesgro) to stimulate the demand, due to the effects on the destination arrivals of the recent water supply restrictions experienced in the territory (see Zietsman, 2018).

11.6.4.1 Surf visitors

In the context of SA, Preston-Whyte (2002) acknowledged the existence of differences within the surfers (e.g. bodyboarders) and the presence of watchers along the seaside walk of Durban (SA). Ntloko and Swart (2008) investigated the local community perception of surf events in CT during the Big Wave Red Bull Africa (a surf event held in Dungeons, a popular and Big Wave spot in Hout Bay), showing the existence of surf event tourists in CT. More recently, Kruger and Saayman (2017) segmented the active surf tourists in Muizenberg (CT), differentiating amongst demographic, behavioural and motivational characteristics (ranging from 'beginner' to 'professional'). Although there are several academic outputs regarding active surf participants, non-active participants and the effect of surf events seem to be understudied in the area.

11.6.4.2 Surf clubs, surf lifesaving clubs and local community

CT has a large surfer community which is reflected in the number of surf clubs (21) that represents the 37% of the total surf clubs at the national level (57). It is

TABLE 11.10 Surf clubs in CT

<i>Name</i>	<i>Website or Social media</i>
9 Miles Surf Club	www.facebook.com/9MilesProject
Cape Peninsula University & Technikon Surf Club	-
Century City SUP Club	http://centurycitysupclub.co.za
Christian Surf Club	www.christiansurfers.net/south-africa
Earthwave Tandem Surf Club	www.facebook.com/EarthwaveTandemSurfingClub
Eden Longboard Club	-
Hout Bay Surf Club	-
Isiqalo Waves 4 Change Surf Club	www.waves-for-change.org/
Kommetjie Surf Club	-
Llandudno Boardriders Club	http://capetownsurfing.com/
Muizenberg Beach Surf Club	http://muizenbergbeachclub.org/
Natural Energy Surf Club	www.naturalenergysurfstore.co.za/
Share the Stoke Surf Club	www.sharethestokefoundation.co.za
Son Surf Club	www.facebook.com/SonSurfSchool
SUP Hout Bay	www.suphoutbay.com
Surf Emporium Surf Club	https://surfemporium.co.za/
S.W.O.T Surf Club	-
University of Cape Town Surf Club	www.facebook.com/UCT-Surf-Club-1531708780393251/
West Coast Boardriders	www.facebook.com/West-Coast-Boardriders-112401858838776/
WP Longboard Club	http://wplsa.co.za/
Xpression SUP Tribe Surf Club	https://xpressiononthebeach.com/

important to note the heterogeneous nature of the clubs (see Table 11.10), from private SRS companies (e.g. Surf Emporium), to higher education institutions (e.g. UCT Surf Club) and NGOs (e.g. Isiqalo Waves 4 Change Surf Club) that suggest potential to mix educational and volunteer tourism (amongst other types of tourism). Very often, these clubs and companies work together in order to innovate in terms of product development, as is the case of adaptive surfing (see www.facebook.com/adaptivesurfersincapetown/).

In addition, surf lifesaving clubs, which are closely related to professional surfing (Booth, 1995), are very popular and located in the most important beaches of CT (see Table 11.11).

TABLE 11.11 Surf lifesaving clubs

<i>Surf lifesaving clubs</i>	<i>Area</i>	<i>Web</i>
Strandfontein	False Bay	-
Strand	False Bay	www.strandlifesaving.co.za
Monwabisi	False Bay	www.monwabisisurf.wordpress.com
Mnandi	False Bay	-
Milnerton	Atlantic	www.milnertonlifesaving.co.za/
Llandudno	Atlantic	-
Kogelbay	False Bay	-
Fish Hoek	False Bay	www.fishhoeksurf.co.za/
False Bay	False Bay	www.fbslc.org.za
Clifton	Atlantic	-
Big Bay	Atlantic	www.bigbaylifesaving.co.za/

Source: <https://ilsf.org/about/members/lsa>

Finally, the local communities around the surf spots are key actors, since they make use of the resource in different and sometimes competing ways (fishing in the same spot, or swimming, etc.).

The different activities (15) undertaken in the beaches listed in the CoCT's official website, (that has been adapted (11), due to similarities found in activities (e.g. Fishing/angling)) (see Table 11.12) is indicative of the heterogeneous nature of beach users and the complexity of surf tourism spaces in CT.

TABLE 11.12 Beach activities

<i>Activity</i>	<i>Number of beaches where is possible to practice the activity</i>	<i>% of beaches</i>
Watersports	52	74%
Safe swimming	50	71%
Dogwalking	37	53%
Lifeguards saving	24	34%
Fishing/angling	23	33%
Picnic	18	26%
Diving	4	6%
Running	4	6%
Horsriding	2	3%
Camping	2	3%
Other	1	1%
Total beaches	70	

Source: Adapted from City of Cape Town's (CoCT) official website: www.capetown.gov.za/

11.6.5 Regulatory bodies

In this section, regulatory bodies refer to those institutions (public or private) that have the power to regulate the surf tourism phenomenon. Amongst them, local, regional, national, supranational and global institutions are included and already mentioned in the Sections 7.1.4 and 7.1.5. Nonetheless, it is important to highlight some of the most influential regulatory bodies in tourism, innovation and SRSs in SA, WC and CT (see Table 11.13).

On the other hand, investors like Red Bull (who organise ‘The King of the Air’, a yearly kitesurfing event) are also important key players. Moreover, international

TABLE 11.13 Regulatory bodies

<i>Regulatory bodies</i>	<i>Level and nature</i>	<i>Website</i>
Business Process Enabling South Africa	National Public-private	http://www.bpesa.org.za
Association of Southern African Travel Agents	National Professional Association	www.asata.co.za
South Africa Tourism Services Association	National Professional Association	www.satsa.com
Surfing South Africa	National Professional Association	www.surfingsouthafrica.co.za
Department of Tourism of South Africa.	National Government	www.tourism.gov.za
Tourism Grading Council	National Government	www.tourismgrading.co.za
Department of Sport and Recreation of South Africa.	National Government	www.srsa.gov.za
Department of Environmental Affairs	National Government	www.environment.gov.za
Wesgro	Regional Public-private	www.wesgro.co.za
Western Cape Provincial Government	Regional Government	www.westerncape.gov.za
Cape Town Tourism	Local Public-private	www.capetown.travel
The Cape IT Initiative	Local Public-private	www.citi.org.za
Accelerate Cape Town	Local Public-private	http://acceleratecapetown.co.za
The Cape Chamber of Commerce and Industry	Local Professional Association	http://capechamber.co.za
The Cape Town Heritage Trust	Local NGO	https://heritage.org.za
City of Cape Town	Local Government	www.capetown.gov.za
TDA Cape Town	Local Government	www.tda.gov.za

NGOs (Christian Surfers and Save Our Seas Foundation, amongst others) and Trade Unions (e.g. South African Federation for Trade Unions) should be included within this group since their actions have the power to regulate the phenomenon. Additionally, the International Surfing Association, the WSL and the South African Kitesurfing Association are key actors of the system too. Universities, like UCT, Stellenbosch University, Western Cape University and Cape Peninsula University of Technology also play a key role in knowledge production constituting The Cape Higher Education Consortium.

11.7 Discussion and conclusions

This paper has tried to fill some of the gaps identified by Martin and Assenov (2012) in the field of surf tourism research. First, we have tried to understand the nature of surfing as a sport, suggesting an expansion of the number of SRSs involved in surf tourism (SUP and kitesurfing). Second, updated surfing research trends and topics have been also exposed. Third, Martin and Assenov's review (2012) has been analysed in terms of inclusion or exclusion of research outputs and sources, in order to cover the gaps of the field. Consequently, we included humanities and the arts and science as legitimate disciplinary areas. Fourth, product innovations like SUP and kitesurfing as well as services and social innovations in safety provision like the Shark Spotters Programme have been highlighted, providing evidence of knowledge creation outside of academic boundaries of surf tourism through 'transdisciplinary' research.

Fifth, an alternative epistemological and ontological model based on the assumption that there are 'new' forms of doing knowledge and science, has been proposed to obtain a different perspective allowing us to distinguish between Mode 1 (disciplinary) and Mode 2 (transdisciplinary) knowledge.

Sixth, Mode 1 surf tourism research has been analysed using the Scopus database, showing a recent increase in the academic production, and providing evidence of the four disciplinary areas suggested by Tribe and Liburd (2016). Furthermore, the significance of surf tourism as a field within the limits of social sciences have been proved besides the importance of including humanities and the arts to reveal critical views of surf tourism, including gender and feminist perspectives, as well as critical political economy or political ecology perspectives. Moreover, the number of subject areas involved in the research outputs obtained suggested the 'interdisciplinarity' of Mode 1 knowledge. Additionally, we have tried to provide evidence from Mode 2 forms of knowledge, albeit difficult to identify clearly and differentiate between the four forms proposed by Tribe and Liburd (2016). Nonetheless, we have reviewed each element bringing some examples that could help to understand the field.

Seventh, the representations of Mode 1 knowledge have been studied, with tourism and marine sciences journals being the most active channels, while gender studies, sport history, history and leisure journals have less weight although legitimately belonging to the surf tourism Mode 1 knowledge. Then an analysis of the knowledge force fields has been deployed. Contemporary approaches applied

seem to indicate the importance of personal issues like gender when deciding the object of study and the consequent research output. Furthermore, many surf tourism researchers are surfers, which also indicates a conflict when talking about objectivity. The position of the researcher (country, university and department) plays a critical role in knowledge production too, with the most prolific countries being Australia, USA and New Zealand. While European countries like UK and Portugal, as well as Thailand, occupy a second group of countries, more focused on surf tourism economic development than in surfing history. In another vein, the importance of the ideology in research production has been pointed out. NGOs (in the case of Mode 2 knowledge) and the epistemic communities in surf tourism research (sustainable surf tourism development and critical theory surfing research) were provided as evidences of such influence. Additionally, the government has been reviewed showing a wide range of regulatory bodies at any level (global, supra-national, national, regional and local) that influence the research agenda which seems confusing and complex. Moreover, global capital was also reviewed, and new companies were listed like important players in research and production (e.g. Google, Amazon and Facebook) as well as Airbnb (currently selling ‘surf experiences’) as they collect data and provide services to surf participants. Moreover, global surf companies play a major role in the system too, often impacting negatively following critical theorists’ perspectives.

Finally, the ‘world of surf tourism in CT’ has been interrogated using available tools from the Web 2.0. In analysing the physical environment, we have highlighted the central aspect of the surf spot and the role that the wikis, and weather forecast tools play in the system. On the supply analysis, we found that classic surfing, SUP and kitesurfing are marketed more intensively than others, confirming the suggestion made previously about the extension of SRSs involved in surf tourism and the need to obtain empirical evidence in each destination. Moreover, we found a lack of innovation in terms of payment methods. Regarding the demand, the findings suggest a lack of a clear methodology and certain obsolescence of surfing participants figures. On the other hand, we found that the serious leisure perspective is a popular theory amongst researchers, but there is a lack of studies about non-active participants. To conclude, we listed some of the institutions with power to influence regulations in CT, showing a high complexity and in certain aspects confusing regulatory bodies.

11.8 Limitations

The limitations of this study are several. First, it is a conceptual and descriptive chapter in nature. Additionally, we have not reviewed other epistemological and ontological frameworks. Second, we have employed secondary data mainly, in addition, the samples of surf tourism literature were only searched in Scopus, therefore, they are not representative, but served as evidence of the inter- and multi-disciplinary of surf tourism research since it is ‘one of the most comprehensive repository of the world’s research output across a wide range of fields’ (Baggio, 2016,

p. 12). Third, cultural aspects were not considered, although we acknowledged the importance of humanities and the arts in the production of knowledge. Fourth, we found serious problems investigating surf tourism products and the nature of the companies, therefore, primary data and a normalised methodology (e.g. Oslo Manual) should solve such problem. Fifth, we have not reviewed all the elements of the proposed 'world of surf tourism', that should be carried out in future works. Lastly, networks, and flows of knowledge depicted in the Tribe and Liburd's tourism knowledge system were not analysed and should be investigated in future studies.

Acknowledgements

This study was funded by the European Commission through the Erasmus Mundus Action 2 Partnerships scholarship programme (EUROSA).

References

- Aguerre, F. (2015). Surfing, sustainability, and the pursuit of happiness. In G. Borne & J. Ponting (Eds.), *Sustainable stoke: Transitions to sustainability in the surfing world* (pp. 34–43). Plymouth: University of Plymouth Press.
- Alavi, M., & Leidner, D. E. (2001). Review: Knowledge management and knowledge management systems: Conceptual foundations and research issues. *MIS Quarterly*, 25(1), 107–136.
- Anderson, J. (2016). On trend and on the wave: Carving cultural identity through active surf dress. *Annals of Leisure Research*, 19(2), 212–234.
- Anwar, S. T. (2018). Growing global in the sharing economy: Lessons from Uber and Airbnb. *Global Business and Organizational Excellence*, 37(6), 59–68. 10.1002/joe.21890.
- Arroyo, M., Levine, A., & Espejel, I. (2019). A transdisciplinary framework proposal for surf break conservation and management: Bahía de Todos Santos World Surfing Reserve. *Ocean & Coastal Management*, 168, 197–211. 10.1016/J.OCECOAMAN.2018.10.022
- Augustin, J. P. (Ed.). (1994). *Surf Atlantique, les territoires de l'éphémère*. Talence: Maison des Sciences de l'Homme d'Aquitaine.
- Baggio, R. (2016). Big Data, Business Intelligence and tourism: A brief analysis of the literature. In M. L. Fuchs & W. Höpken (Eds.), *M. IFITT workshop on Big Data & business intelligence in the travel & tourism domain* (pp. 9–17). Östersund, SE: European Tourism Research Institute (ETOUR), Mid-Sweden University.
- Barbieri, C., & Sotomayor, S. (2013). Surf travel behavior and destination preferences: An application of the serious leisure inventory and measure. *Tourism Management*, 35, 111–121.
- Bell, L. (2018). Paddle boarding tech: How the sport is evolving thanks to inflatable board innovations. *Forbes*. Accessed 26 February 2019 from www.forbes.com/sites/leebelltech/2018/02/15/paddle-boarding-tech-how-the-sport-is-evolving-thanks-to-innovations-in-inflatable-board-designs/#78d6376c147f
- Booth, D. (1995). Ambiguities in pleasure and discipline: The development of competitive surfing. *Journal of Sport History*, 22(3), 189–206.
- Booth, D. (2017). Surfing: A global phenomenon. In R. Edelman & W. Wilson (Eds.), *The Oxford handbook of sports history* (p. 561). New York: Oxford University Press.
- Booyens, I. (2016). Global–Local trajectories for regional competitiveness: Tourism innovation in the Western Cape. *Local Economy*, 31(1–2), 142–157. 10.1177/0269094215618598.

- Booyens, I., & Rogerson, C. M. (2016). Unpacking the geography of tourism innovation in Western Cape Province, South Africa. *Bulletin of Geography. Socio-economic Series*, 31(31), 19–36.
- Booyens, I., & Rogerson, C. M. (2017a). Networking and learning for tourism innovation: Evidence from the Western Cape. *Tourism Geographies*, 19(3), 340–361. 10.1080/14616688.2016.1183142.
- Booyens, I., & Rogerson, C. M. (2017b). *Policy support for innovation in the South African tourism sector*. (HSRC Policy Brief, March). Accessed 26 February 2019 from <http://repository.hsrc.ac.za/handle/20.500.11910/10800>
- Borne, G. (2017). Sustainability and surfing in a risk society. In G. Borne & J. Ponting (Eds.), *Sustainable surfing* (pp. 3–20). New York: Routledge.
- Borne, G. (2018). *Surfing and sustainability*. London: Routledge.
- Buckley, R. (2002). Surf tourism and sustainable development in Indo-Pacific Islands. The industry and the islands. *Journal of Sustainable Tourism*, 10, 405–424.
- Buckley, R. (2010). *Adventure tourism management*. Oxford: Elsevier.
- Buckley, R. (2018). The critical surf studies reader. *Annals of Leisure Research*, 21(5), 635–637.
- Caselli, R., Ferreira, M., & Gonçalves, B. (2017). Analysis of tools to measure the user experience during the sports practice of recreational surfing. In: Salmon, P., Macquet, A. C. (eds) *Advances in human factors in sports and outdoor recreation* (pp. 71–83). Cham: Springer. 10.1007/978-3-319-41953-4_7.
- Caton, K. (2012). Taking the moral turn in tourism studies. *Annals of Tourism Research*, 39(4), 1906–1928.
- Cheng, T.-M., & Tsaor, S.-H. (2012). The relationship between serious leisure characteristics and recreation involvement: A case study of Taiwan's surfing activities. *Leisure Studies*, 31(1), 53–68.
- Colenbrander, D., Cartwright, A., & Taylor, A. (2015). Drawing a line in the sand: Managing coastal risks in the City of Cape Town. *South African Geographical Journal*, 97(1), 1–17. 10.1080/03736245.2014.924865.
- Cooper, C. (2017). Innovation in tourism: An introduction. In *Innovation in tourism – bridging theory and practice* (pp. 27–45). Madrid: UNWTO.
- Cornelissen, S. (2005). *The global tourism system: Governance, development, and lessons from South Africa*. Aldershot: Ashgate.
- Dario, L. M., Morrow, W. J., Wooditch, A., & Vickovic, S. G. (2015). The point break effect: An examination of surf, crime, and transitory opportunities. *Criminal Justice Studies*, 28(3), 257–279. 10.1080/1478601X.2015.1032409.
- Doering, A. (2018). Mobilising stoke: A genealogy of surf tourism development in Miyazaki, Japan. *Tourism Planning & Development*, 15(1), 68–81.
- Dolnicar, S., & Fluker, M. (2003). Behavioural market segments among surf tourists: Investigating past destination choice. *Journal of Sport Tourism*, 8, 186–196.
- Eisenhardt, K. M. (1989). Building theories from case study research. *Academy of Management Review*, 14(4), 532–550.
- Eisenhardt, K. M., & Graebner, M. E. (2007). Theory building from cases: Opportunities and challenges. *The Academy of Management Journal*, 50(1), 25–32.
- Exadaktylos, A. K., Sclabas, G. M., Blake, I., Swemmer, K., McCormick, G., & Erasmus, P. (2005). The kick with the kite: An analysis of kite surfing related off shore rescue missions in Cape Town, South Africa. *British Journal of Sports Medicine*, 39(5), discussion e26.
- Farmer, B., & Short, A. D. (2007). Australian national surfing reserves rationale and process for recognising iconic surfing locations. *Journal of Coastal Research*, 50(SI), 99–103.
- Ferreira, S. (2018). Tourism through the lens of a human geographer: A view from the South. *Tourism Geographies*, 20(1), 178–181. 10.1080/14616688.2017.1399439.

- Fluker, M. (2003). Riding the wave: Defining surf tourism (Online). In R. L. Braithwaite & R. W. Braithwaite (Eds.), *CAUTHE 2003: Riding the wave of tourism and hospitality research* (pp. 398–406). Lismore: Southern Cross University.
- Frey, N., & George, R. (2010). Responsible tourism management: The missing link between business owners' attitudes and behaviour in the Cape Town tourism industry. *Tourism Management, 31*(5), 621–628.
- Gibbons, M., Limoges, C., Nowotny, H., Schwartzman, S., Scott, P., & Trow, M. A. (1994). *The new production of knowledge: The dynamics of science and research in contemporary societies*. London: Sage.
- Gibson, C., & Warren, A. (2018). Creative industries, global restructuring, and new forms of subcapitalism: The experience of Australia's surf industry. *Australian Geographer, 49*(3), 455–467. 10.1080/00049182.2017.1385118.
- Gibson, H. J. (1998). Sport tourism: A critical analysis of research. *Sport Management Review, 1*(1), 45–76.
- Gretzel, U., Werthner, H., Koo, C., & Lamsfus, C. (2015). Conceptual foundations for understanding smart tourism ecosystems. *Computers in Human Behavior, 50*, 558–563.
- Hall, C. M., & Page, S. J. (2009). Progress in tourism management: From the geography of tourism to geographies of tourism – A review. *Tourism Management, 30*(1), 3–16.
- Hinch, T., Higham, J., & Sant, S.-L. (2014). Taking stock of sport tourism research. In A. A. Lew, C. M. Hall, & A. M. Williams (Eds.), *The Wiley Blackwell companion to tourism* (pp. 413–424). Oxford: John Wiley & Sons.
- Hippel, E. V. (2005). *Democratizing innovation*. Boston: MIT Press.
- Hjalager, A.-M. (2010). A review of innovation research in tourism. *Tourism Management, 31*(1), 1–12. 10.1016/J.TOURMAN.2009.08.012.
- Hjalager, A.-M., & Nordin, S. (2011). User-driven innovation in tourism—A review of methodologies. *Journal of Quality Assurance in Hospitality & Tourism, 12*(4), 289–315. 10.1080/1528008X.2011.541837.
- Hritz, N., & Franzidis, A. F. (2016). Exploring the economic significance of the surf tourism market by experience level. *Journal of Destination Marketing & Management, 7*, 164–169.
- James, D., & Lee, J. (2016). The increasing adoption of consumer grade wearables: Comparing the apples and oranges of sport science. *Journal of Fitness Research, 5*(1), 3–4.
- Kammler, M., & Schernewski, G. (2004). Spatial and temporal analysis of beach tourism using webcam and aerial photographs. *Managing the Baltic Sea. Coastline reports, 2*, 121–128.
- Kruger, M., & Saayman, M. (2017). Sand, sea and surf : Segmenting South African surfers. *South African Journal for Research in Sport, Physical Education and Recreation, 39*(2), 115–135.
- Kuhn, T. S. (1970). *The structure of scientific revolutions* (2nd ed., enlarged). Chicago: The University of Chicago Press.
- Laderman, S. (2014). *Empire in waves: A political history of surfing*. Berkeley: University of California Press.
- Laderman, S. (2015). Beyond green: Sustainability, freedom and labour of the surf industry. In G. Borne & J. Ponting (Eds.), *Sustainable stoke: Transitions to sustainability in the surfing world* (pp. 80–83). Plymouth: University of Plymouth Press.
- Lazarow, N. (2007). The value of coastal recreational resources: A case study approach to examine the value of recreational surfing to specific locales. *Journal of Coastal Research, Special Issue 50*, 12–20.
- Leiper, N. (1990). Tourist attraction systems. *Annals of Tourism Research, 17*(3), 367–384. 10.1016/0160-7383(90)90004-B.
- Mach, L. (2017). Surfing in the technological era. In G. Borne & J. Ponting (Eds.), *Sustainable surfing* (pp. 41–71). New York: Routledge.

- Marchant, B., & Mottiar, Z. (2011). Understanding lifestyle entrepreneurs and digging beneath the issue of profits: Profiling surf tourism lifestyle entrepreneurs in Ireland. *Tourism Planning & Development*, 8(2), 171–183.
- Martín, M. B. G. (2005). Weather, climate and tourism a geographical perspective. *Annals of Tourism Research*, 32(3), 571–591.
- Martin, S. A. (2013). *A surf resource sustainability index for surf site conservation and tourism management* (Doctoral dissertation). Prince of Songkla University, Hat Yai, Thailand.
- Martin, S. A., & Assenov, I. (2012). The genesis of a new body of sport tourism literature: A systematic review of surf tourism research (1997–2011). *Journal of Sport & Tourism*, 17(4), 257–287.
- Martin, S. A., & O'Brien, D. (2017). Surf resource system boundaries. In G. Borne & J. Ponting (Eds.), *Sustainable surfing* (pp. 23–38). New York: Routledge.
- Merriam Webster. (2019a). *Epistemology*. Accessed 26 February 2019 from www.merriam-webster.com/dictionary/epistemology
- Merriam Webster. (2019b). *Surf*. Accessed 26 February 2019 from www.merriam-webster.com/dictionary/surf
- Miah, S. J., Vu, H. Q., Gammack, J., & McGrath, M. (2017). A Big Data analytics method for tourist behaviour analysis. *Information & Management*, 54(6), 771–785. 10.1016/J.IM.2016.11.011.
- Mowforth, M., & Munt, I. (1998). *Tourism and sustainability: Development, globalisation and new tourism in the third world* (3rd ed.). New York: Routledge.
- Nendel, J. (2009). Surfing in early twentieth-century Hawai'i: The appropriation of a transcendent experience to competitive American sport. *The International Journal of the History of Sport*, 26(16), 2432–2446.
- Netherlands Enterprise Agency. (2012). *CBI Product Factsheet: Surf tourism from Europe*. The Hague. Accessed 26 February 2019 from www.cbi.eu/sites/default/files/market_information/researches/product-factsheet-europe-surf-tourism-2015.pdf
- Nofrina, H., Viswanathan, V., Poorisat, T., Detenber, B. H., & Chen, P. (2009). Why some wikis are more credible than others: Structural attributes of collaborative websites as credibility cues. *Observatorio (OBS*)*, 3(2). 10.15847/obsobs322009261
- Ntloko, N. J., & Swart, K. (2008). Sport tourism event impacts on the host community: A case study of Red Bull Big Wave Africa. *South African Journal for Research in Sport, Physical Education and Recreation*, 30(2), 79–93.
- O'Brien, D., & Eddie, I. (2013). Benchmarking global best practice: Innovation and leadership in the, surf city tourism and industry development. Keynote presentation at the Global Surf Cities Conference, Kirra Hill Community and Cultural Centre (Gold Coast, Queensland, Australia).
- OECD/Eurostat. (2018). *Oslo Manual 2018: Guidelines for collecting, reporting and using data on innovation*. Paris: OECD.
- Orams, M. B., & Towner, N. (2012). Riding the wave: History, definitions, and a proposed typology of surf-riding tourism. *Tourism in Marine Environments*, 8(4), 173–188.
- Oskam, J., & Zandberg, T. (2016). Who will sell your rooms? Hotel distribution scenarios. *Journal of Vacation Marketing*, 22(3), 265–278. 10.1177/1356766715626965.
- Oviedo-García, M. Á. (2016). Tourism research quality: Reviewing and assessing interdisciplinarity. *Tourism Management*, 52, 586–592.
- Pearce, D. G. (2014). Toward an integrative conceptual framework of destinations. *Journal of Travel Research*, 53(2), 141–153.
- Pike, S. (2007). *Surfing South Africa*. Cape Town: Double Storey Books.
- Poizat-Newcomb, S. (1999). The genesis of a sports tourism activity-surfing (part I). *Journal of Sport Tourism*, 5(4), 5–14.

- Porter, B. A., & Usher, L. E. (2018). Sole surfers?: Exploring family status and travel behaviour among surf travellers. *Annals of Leisure Research*, 22, 1–20.
- Porter, M. (1991). The competitive advantage of nations. *Harvard Business Review*, 12(7), 73–93.
- Preston-Whyte, R. (2002). Constructions of surfing space at Durban, South Africa. *Tourism Geographies*, 4(3), 307–328. 10.1080/14616680210147445.
- Ratten, V. (2018a). Entrepreneurial intentions of surf tourists. *Tourism Review*, 73(2), 262–276. 10.1108/TR-05-2017-0095.
- Ratten, V. (2018b). Social innovation in sport: The creation of Santa Cruz as a world surfing reserve. *International Journal of Innovation Science*, IJIS-12-2017-0135. 10.1108/IJIS-12-2017-0135
- Reineman, D. R. (2016). The utility of surfers' wave knowledge for coastal management. *Marine Policy*, 67, 139–147. 10.1016/J.MARPOL.2016.01.023
- Reineman, D. R., Thomas, L. N., & Caldwell, M. R. (2017). Using local knowledge to project sea level rise impacts on wave resources in California. *Ocean & Coastal Management*, 138, 181–191. 10.1016/J.OCECOAMAN.2017.01.020
- Rinehart, R. E., & Sydnor, S. (2003). *To the extreme: Alternative sports, inside and out*. Albany: State University of New York Press.
- Roberts, M., & Ponting, J. (2018). Waves of simulation: Arguing authenticity in an era of surfing the hyperreal. *International Review for the Sociology of Sport*, 1–17.
- Rogerson, C. M., & Visser, G. (2011). African tourism geographies: Existing paths and new directions. *Tijdschrift Voor Economische En Sociale Geografie*, 102(3), 251–259.
- Roy, G. (2014). 'Taking emotions seriously': Feeling female and becoming-surfer through UK Surf Space. *Emotion, Space and Society*, 12, 41–48. 10.1016/J.EMOSPA.2013.07.004
- Rubinstein, I. S., Lee, R. D., & Schwartz, P. M. (2008). Data Mining and Internet profiling: Emerging regulatory and technological approaches. *University of Chicago Law Review*, 75, 261–285.
- Ruttenberg, T., & Brosius, P. (2017). Decolonizing sustainable surf tourism. In Z. Houghsnee & A. S. Eastman (Eds.), *The critical surf studies reader* (pp. 109–134). Durham: Duke University Press.
- Saraniemi, S., & Kylänen, M. (2011). Problematizing the concept of tourism destination: An analysis of different theoretical approaches. *Journal of Travel Research*, 50(2), 133–143.
- Scarfe, B. E., Healy, T. R., & Rennie, H. G. (2009). Research-based surfing literature for coastal management and the science of surfing—A review. *Journal of Coastal Research*, 253, 539–557.
- Schram, B., Hing, W., & Climstein, M. (2016). Profiling the sport of stand-up paddle boarding. *Journal of Sports Sciences*, 34(10), 937–944.
- Schumpeter, J. A. (1934). *Theory of economic development*. Cambridge, MA: Harvard University Press.
- Siggelkow, N. (2007). Persuasion with case studies. *Academy of Management Journal*, 50(1), 20–24.
- Smits, F. (2018). Young Dutch commercially sponsored kite surfers: Free as a bird? *Sport in Society*, 1–17.
- Standeven, J., & DeKnop, P. D. (1999). *Sport of tourism*. Champaign: Human Kinetics.
- Surfer Today. The United States has 66.5 million surf-inspired consumers. (2017). Accessed 26 February 2019 from www.surfertoday.com/surfing/the-united-states-has-66-5-million-surf-inspired-consumers.
- Tajeddini, K., Ratten, V., & Denisa, M. (2017). Female tourism entrepreneurs in Bali, Indonesia. *Journal of Hospitality and Tourism Management*, 31, 52–58. 10.1016/J.JHTM.2016.10.004

- Taplin, J. T. (2017). *Move fast and break things: How Facebook, Google, and Amazon have cornered culture and what it means for all of us*. London: Macmillan.
- Thompson, G. (2008). Judging surf culture: The making of a white exemplar masculinity during the 1966 Natal and South African surfing championships held in Durban. *Journal of Natal and Zulu History*, 26(1), 80–107. 10.1080/02590123.2008.11964148.
- Thompson, G. (2015). *Surfing, gender and politics: Identity and society in the history of South African surfing culture in the twentieth-century* (Doctoral dissertation). Stellenbosch University, Stellenbosch, South Africa.
- Towner, N. (2016). Searching for the perfect wave: Profiling surf tourists who visit the Mentawai Islands. *Journal of Hospitality and Tourism Management*, 26, 63–71.
- Tribe, J. (2006). The truth about tourism. *Annals of Tourism Research*, 33(2), 360–381.
- Tribe, J., & Liburd, J. (2016). The tourism knowledge system. *Annals of Tourism Research*, 57, 44–61.
- Weidenfeld, A., & Hall, C. M. (2014). Tourism in the development of regional and sectoral innovation systems. In A. A. Lew, C. M. Hall, & A. M. Williams (Eds.), *The Wiley Blackwell companion to tourism* (pp. 580–588). Oxford: John Wiley & Sons.
- Western Cape Government. (2017). *Socio-economic profile – City of Cape Town*. Cape Town. Accessed 26 February 2019 from www.westerncape.gov.za/assets/departments/treasury/Documents/Socio-economic-profiles/2017/city_of_cape_town_2017_socio-economic_profile_sep-lg_26_january_2018.pdf
- Wheaton, B. (2010). Introducing the consumption and representation of lifestyle sports. *Sport in Society: Cultures, Commerce, Media, Politics*, 13(7–8), 1057–1081.
- Wheaton, B. (2017). Surfing through the life-course: Silver surfers' negotiation of ageing. *Annals of Leisure Research*, 20(1), 96–116.
- Wheaton, B., & Thorpe, H. (2018). Action sports, the Olympic Games, and the opportunities and challenges for gender equity: The cases of surfing and skateboarding. *Journal of Sport and Social Issues*, 42(5), 315–342.
- World Tourism Organization. (2017). *Innovation in tourism – Bridging theory and practice*. Madrid: UNWTO.
- World Travel Market. (2014). *World travel market global trends report 2014*. London. Accessed 26 February 2019 from www.globalwellnesssummit.com/wp-content/uploads/Industry-Research/Global/2014-wtm-global-trends-report.pdf
- Xin, S. (2017). *The theory and practice of conceptual research in tourism* (Doctoral dissertation). University of Surrey, Surrey.
- Xin, S., Tribe, J., & Chambers, D. (2013). Conceptual research in tourism. *Annals of Tourism Research*, 41, 66–88.
- Zach, F. J., & Hill, T. L. (2017). Network, knowledge and relationship impacts on innovation in tourism destinations. *Tourism Management*, 62, 196–207. 10.1016/j.TOURMAN.2017.04.001
- Zavalza Hough-snee, D., & Sotelo Eastman, A. (2017). Introduction. In D. Zavalza Hough-snee & A. Sotelo Eastman (Eds.), *The critical surf studies reader* (p. 430). Durham: Duke University Press.
- Zietsman, G. (2018). #ItsAllStillHere: Cape Town dropping into surf tourism + best waves in SA. *Traveller24*. Accessed 26 February 2019 from <https://m.traveller24.com/FindYourEscape/CapeTown/itsallstillhere-cape-town-dropping-into-surf-tourism-best-waves-in-sa-20180911>

Appendices

TABLE 11.A1 'surf' AND 'tourism' research outputs (10/02/19)

<i>Authors</i>	<i>Title</i>	<i>Year</i>
Brochado A., Stoleriu O., Lupu C.,	Surf camp experiences	2018
Doelp M.B., Puleo J.A., Cowan P., Arford-Granholm M.,	Delaware coast Delaware surf zone injury demographics	2018
Doering A.,	Mobilising Stoke: A Genealogy of Surf Tourism Development in Miyazaki, Japan	2018
Higgins-Desbiolles F.,	Event tourism and event imposition: A critical case study from Kangaroo Island, South Australia	2018
Hritz N., Franzidis A.F.,	Exploring the economic significance of the surf tourism market by experience level	2018
Mach L., Ponting J.,	Governmentality and surf tourism destination governance	2018
Mach L., Ponting J., Brown J., Savage J.,	Riding waves of intra-seasonal demand in surf tourism: analysing the nexus of seasonality and 21st century surf forecasting technology	2018
Machado V., Carrasco P., Conreiras J.P., Duarte A.P., Gouveia D.,	Governing Locally for Sustainability: Public and Private Organizations' Perspective in Surf Tourism at Aljezur, Costa Vicentina, Portugal	2018
Martin S.A., Ritchie R.,	A Social Science Index and Conceptual Framework for Assigning Weights in Surf Tourism Planning and Development	2018
Onat Y., Francis O.P., Kim K.,	Vulnerability assessment and adaptation to sea level rise in high-wave environments: A case study on O'ahu, Hawai'i	2018
Porter B.A., Usher L.E.,	Sole surfers? Exploring family status and travel behaviour among surf travellers	2018
Ratten V.,	Entrepreneurial intentions of surf tourists	2018
Reineman D.R., Ardoin N.M.,	Sustainable tourism and the management of nearshore coastal places: place attachment and disruption to surf-spots	2018
Towner N., Davies S.,	Surfing tourism and community in Indonesia	2018
Borne G., Ponting J.,	Sustainable surfing	2017
Buckley R.C., Guitart D., Shakeela A.,	Contested surf tourism resources in the Maldives	2017

(Continued)

TABLE 11.A1 (Cont.)

<i>Authors</i>	<i>Title</i>	<i>Year</i>
Lopes J.T., Bicudo P.,	Surfing tourism plan: Madeira Island case study	2017
Mahler-Coetzee J.D.,	From fringe to core: Contemplating surfing's potential contribution to sustainable tourism development in South Africa	2017
Portugal A.C., Campos F., Martins F., Melo R.,	Understanding the relation between serious surfing, surfing profile, surf travel behaviour and destination attributes preferences	2017
Guyonnard V., Vacher L.,	Definition of surf spot as a practice space in the tourist and sporty coastal system in Charente-Maritime [Définition d'un espace de pratique du système littoral touristique et sportif charentais: Le spot de surf]	2016
Mateos M.R.,	Landscape, heritage and surf tourism: Attraction and motivation factors in the natural Park of the Strait (Spain) [Paisaje, patrimonio y turismo de surf: Factores de atracción y motivación en el parque natural del estrecho (España)]	2016
Puleo J.A., Hutschenreuter K., Cowan P., Carey W., Arford-Granholm M., McKenna K.K.,	Delaware surf zone injuries and associated environmental conditions	2016
Sotomayor S., Barbieri C.,	An Exploratory Examination of Serious Surfers: Implications for the Surf Tourism Industry	2016
Thomsen J.M., Taylor L.L., Hughes M.D.,	Personality traits of surf voluntourists	2016
Towner N.,	How to manage the perfect wave: Surfing tourism management in the Mentawai Islands, Indonesia	2016
Towner N.,	Searching for the perfect wave: Profiling surf tourists who visit the Mentawai Islands	2016
Usher L.E., Gómez E.,	Surf localism in Costa Rica: exploring territoriality among Costa Rican and foreign resident surfers	2016
Martin S.A., Assenov I.,	Measuring the conservation aptitude of surf beaches in Phuket, Thailand: An application of the surf resource sustainability index	2015
Mills B., Cummins A.,	An estimation of the economic impact of surfing in the United Kingdom	2015

(Continued)

TABLE 11.A1 (Cont.)

<i>Authors</i>	<i>Title</i>	<i>Year</i>
Ponting J., O'Brien D.,	Regulating Nirvana: Sustainable surf tourism in a climate of increasing regulation	2015
Porter B.A., Orams M.B., Lück M.,	Surf-riding tourism in coastal fishing communities: A comparative case study of two projects from the Philippines	2015
Towner N.,	Surf tourism and sustainable community development in the Mentawai Islands, Indonesia: A multiple stakeholder perspective	2015
Usher L.E., Kerstetter D.,	Surfistas Locales: Transnationalism and the Construction of Surfer Identity in Nicaragua	2015
Buckley R., Shakeela A., Guitart D.,	Adventure tourism and local livelihoods	2014
Espejo A., Losada I.J., Méndez F.J.,	Surfing wave climate variability	2014
Laderman S.,	Empire in waves: A political history of surfing	2014
Mackellar J.,	Surfing the fringe: An examination of event tourism strategies of the bleach festival – Coolangatta Queensland	2014
Martin S.A., Assenov I.,	Developing a Surf Resource Sustainability Index as a Global Model for Surf Beach Conservation and Tourism Research	2014
Martin S.A., Assenov I.,	Investigating the Importance of Surf Resource Sustainability Indicators: Stakeholder Perspectives for Surf Tourism Planning and Development	2014
McKay C., Brander R.W., Goff J.,	Putting tourists in harm's way – Coastal tourist parks and hazardous unpatrolled surf beaches in New South Wales, Australia	2014
Ponting J.,	Comparing modes of surf tourism delivery in the Maldives	2014
Ponting J., O'Brien D.,	Liberalizing Nirvana: an analysis of the consequences of common pool resource deregulation for the sustainability of Fiji's surf tourism industry	2014
Rendle E.J., Rodwell L.D.,	Artificial surf reefs: A preliminary assessment of the potential to enhance a coastal economy	2014

(Continued)

TABLE 11.A1 (Cont.)

<i>Authors</i>	<i>Title</i>	<i>Year</i>
Stokes C., Beaumont E., Russell P., Greaves D.,	Coastal impacts of marine renewables: Perception of breaker characteristics by beach water users	2014
Usher L.E., Kerstetter D.,	Residents' perceptions of quality of life in a surf tourism destination: A case study of Las Salinas, Nicaragua	2014
West P.,	'Such a site for play, this Edge': Surfing, tourism, and modernist fantasy in Papua New Guinea	2014
Barbieri C., Sotomayor S.,	Surf travel behavior and destination preferences: An application of the Serious Leisure Inventory and Measure	2013
Clifton C.A., Ware D., Coverdale S., Hanson-Boyd C.,	Climate change risks for Victoria's Surf Coast	2013
Guibert C., Taunay B.,	From Political Pressure to Cultural Constraints: The Prime Dissemination of Surfing in Hainan	2013
Lazarow N., Raybould M., Anning D.,	Beach, sun and surf tourism	2013
Ng K., Phillips M.R., Calado H., Borges P., Veloso-Gomes F.,	Seeking harmony in coastal development for small islands: Exploring multifunctional artificial reefs for São Miguel Island, the Azores	2013
O'Brien D., Ponting J.,	Sustainable surf tourism: A community centered approach in Papua new Guinea	2013
Orams M.B., Towner N.,	Riding the wave: History, definitions, and a proposed typology of surf-riding tourism	2013
Ponting J., McDonald M.G.,	Performance, agency and change in surfing tourist space	2013
Warren A., Gibson C.,	Crafting Regional Cultural Production: Emergence, crisis and consolidation in the Gold Coast surfboard industry	2013
Fendt L.S., Wilson E.,	'I just push through the barriers because I live for surfing': How women negotiate their constraints to surf tourism	2012
Krause S.M.,	Pilgrimage to the Playas: Surf tourism in Costa Rica	2012
Martin S.A., Assenov I.,	The genesis of a new body of sport tourism literature: A systematic review of surf tourism research (1997–2011)	2012

(Continued)

TABLE 11.A1 (Cont.)

<i>Authors</i>	<i>Title</i>	<i>Year</i>
Holmes K., Smith K.,	Managing volunteers in tourism: Attractions, destinations and events	2012
Fletcher S., Bateman P., Emery A.,	The governance of the Boscombe Artificial Surf Reef, UK	2011
Marchant B., Mottiar Z.,	Understanding lifestyle entrepreneurs and digging beneath the issue of profits: Profiling surf tourism lifestyle entrepreneurs in Ireland	2011
Bicudo P., Horta A.,	Integrating surfing in the socio-economic and morphology and coastal dynamic impacts of the environmental evaluation of coastal projects	2009
Nogrady B.,	Sun, surf and sutures with medical tourism booming worldwide, can Australian providers get in on the game?	2009
Ponting J.,	Projecting paradise: The surf media and the hermeneutic circle in surfing tourism	2009
Scarfed B.E., Healy T.R., Rennie H.G.,	Research-based surfing literature for coastal management and the science of surfing a review	2009
Slotkin M.H., Chambliss K., Vamosi A.R., Lindo C.,	Surf tourism, artificial surfing reefs, and environmental sustainability	2009
Cline S., Seidl A.,	Surf and turf: Tourists' values for multifunctional working landscapes and water quality in Colorado	2009
Ten Voorde M., Antunes Do Carmo J.S., Neves M.G.,	Designing a preliminary multifunctional artificial reef to protect the Portuguese coast	2009
Lazarow N., Miller M.L., Blackwell B.,	The value of recreational surfing to society	2008
Martín K.R., Martín González W.A.,	Embracing community: An alternative tourism for Yucatán	2008
de Nardi M., Wilks J.,	Tourist water safety: Surf Life Saving initiatives for the Japanese inbound market	2007
Lazarow N.,	The value of coastal recreational resources: A case study approach to examine the value of recreational surfing to specific locales	2007
Wilks J., De Nardi M., Wodarski R.,	Close is not close enough: Drowning and rescues outside flagged beach patrol areas in Australia	2007

(Continued)

TABLE 11.A1 (Cont.)

<i>Authors</i>	<i>Title</i>	<i>Year</i>
Palafox A., Pineda V., Godínez J., Martínez M.,	Sustainable tourism in Holbox through local development	2006
Lafferty G., Van Fossen A.,	The role of clusters in preventing tourism decline: A conceptual and empirical examination	2005
Ponting J., McDonald M., Wearing S.,	De-Constructing Wonderland: Surfing Tourism in the Mentawai Islands, Indonesia	2005
Dolnicar S., Fluker M.,	Behavioural market segments among surf tourists: Investigating past destination choice	2003
Jędrusik M.,	Natural potential for tourism and forms of its use in tropical and subtropical islands [Przyrodniczy potencjał turystyczny oraz formy jego wykorzystania na wyspach tropikalnych i subtropikalnych]	2003
Spagnolo J.C., De Dear R.J.,	A human thermal climatology of subtropical Sydney	2003
Buckley R.,	Surf tourism and sustainable development in Indo-Pacific islands. I. The industry and the islands	2002
Buckley R.,	Surf tourism and sustainable development in Indo-Pacific islands. II. Recreational capacity management and case study	2002
Dubucs H.,	Jack London and the South Seas [Jack London et les Mers du Sud]	2002
Vaughan L.,	Fleece, fibreglass, myths and legends: Leveraging cultural icons and connections for market development	2002
Brown A.C., McLachlan A.,	Sandy shore ecosystems and the threats facing them: Some predictions for the year 2025	2002
Boak L., McGrath J., Jackson L.A.,	IENCE – A case study – The northern gold coast beach protection strategy	2000
Augustin J.-P., Malaurie C.,	Le territoire-monde du surf (Diffusion, médias et énonciation)	1997
Thornton R.L.,	Tourism—west from Europe. The enticement of the foreign visitor	1969

TABLE 11.A2 'surfing' AND 'history' research outputs (10/02/19)

<i>Authors</i>	<i>Title</i>	<i>Year</i>
Gibson M., Frost M.,	Surfing and ocean-based death ritual: the paddle-out ceremony	2018
Lisahunter,	Surfing, sex, genders and sexualities (Introduction)	2018
Lisahunter,	(Counter)cultural changes in surfing and surfing scholarship: Towards diverse, intersectional, liminal, complex and queer activism dialogues	2018
Lisahunter,	Queering surfing from its heteronormative malaise: Public visual pedagogy of circa 2014	2018
Masterson I.A.,	Surfing ali'i, kahuna, kupua and akua: Female presence in surfing's past	2018
Mizuno E.,	Multiple marginalization? Representation and experience of bodyboarding in Japan	2018
Roberts M., Ponting J.,	Waves of simulation: Arguing authenticity in an era of surfing the hyperreal	2018
Alves V.Z., Melo V.A.,	Surfing and counter culture in the 1970s Rio de Janeiro [Um novo barato: surf e contracultura no Rio de Janeiro dos anos 1970] [Surf y contracultura en Río de Janeiro durante la década de 1970]	2017
Booth D.,	The Bondi surfer: An underdeveloped history	2016
Moser P.,	The endurance of surfing in 19th-century Hawai'i	2016
Andersen P.D.,	The Hollywood Beach Party Genre and the Exotification of Youthful White Masculinity in Early 1960s America	2015
Caddick N., Smith B., Phoenix C.,	Male combat veterans' narratives of PTSD, masculinity, and health	2015
Dias C.,	Sport and environment in Brazil: A historical overview	2014
Fortes R.,	Making surf media in Brazil: Social agents and the organization of surfing in the 1980s	2014
Gibson C., Warren A.,	Making surfboards: Emergence of a trans-Pacific cultural industry	2014
Thompson G.,	Otelo Burning and Zulu surfing histories	2014
Warren A., Gibson C.,	Surfing places, surfboard makers: Craft, creativity, and cultural heritage in Hawai'i, California, and Australia	2014
Booth D.,	History, culture, surfing: Exploring historiographical relationships	2013
Canniford R., Karababa E.,	Partly primitive: Discursive constructions of the domestic surfer	2013
Clark J.R.K.,	Hawaiian surfing: Traditions from the past	2011
Osmond G.,	The surfing Tommy Tanna	2011

(Continued)

TABLE 11.A2 (Cont.)

<i>Authors</i>	<i>Title</i>	<i>Year</i>
Thompson G.,	Reimagining Surf City: Surfing and the making of the post-apartheid beach in South Africa	2011
Yao R., Kaval P.,	Non-market valuation in New Zealand: 1974 to 2005	2011
Walker I.H.,	Hui Nalu, beachboys, and the surfing boarder-lands of Hawai'i	2008
Tanigawa N.,	Life history of migrants, life story of a community: A case study of the Osumi-shoto Islands	2004
Johnson J.C., Orbach M.K.,	The role of cultural context in the development of low-capital ocean leisure activities	1986
Plueckhahn V.D.,	Alcohol and Drowning—The Geelong Experience, 1957–1980	1981
Irwin J.,	Surfing: The Natural History of an Urban Scene	1973

TABLE 11.A3 Surf spots and Web 2.0 surf spots' markers (wave-based and wind-based)

<i>Spot</i>	<i>Total_waves</i>	<i>Total_wind</i>	<i>Total spots' markers</i>
Big Bay	5	11	16
Muizenberg/Surfer's Corner	7	6	13
Milnerton	5	8	13
Strand/Pipe	7	5	12
Witsands	4	6	10
Table View/Kite Beach	2	8	10
Kommetjie/Long Beach	7	2	9
Dunes	5	4	9
Platboom	5	4	9
Misty Cliffs	4	5	9
Noordhoek Beach	4	5	9
Derde Steen	4	5	9
Dungeons	6	2	8
Doodles/Blaauwberg	3	5	8
Haakgat	3	5	8
The Wedge/Cape Town	5	2	7
Scarborough	4	3	7
Fish Hoek	2	5	7
Sunset Beach	2	5	7
Thermopylae	6	0	6

(Continued)

TABLE 11.A3 (Cont.)

<i>Spot</i>	<i>Total_waves</i>	<i>Total_wind</i>	<i>Total spots' markers</i>
Sunset	5	1	6
Llandudno	5	1	6
Koeel Bay (Main Beach)	5	1	6
Glencairn	4	2	6
The Hoek	5	0	5
Bali Bay/Cannonball Reef/ Secret spot	5	0	5
Glen Beach	5	0	5
Solly's	5	0	5
Inner Kom	4	1	5
Sandy Bay	4	1	5
Kamer van Sewentien	4	1	5
Scarborough Point	4	0	4
Crayfish Factory	4	0	4
365	4	0	4
Outer Kom	4	0	4
Sections	4	0	4
Cemetery/Strandfontein	4	0	4
Black Rocks	4	0	4
Buffels Bay	4	0	4
Dias Beach	4	0	4
Queens	4	0	4
Danger Reef	4	0	4
Kalk Bay Reef	4	0	4
Bikini Beach	4	0	4
Dumps/Lagoon Mouth	4	0	4
Horse Trails	4	0	4
Hout Bay	3	1	4
Hout Bay (Harbour Wall)	2	2	4
Silwerstroom	2	2	4
Dolphin Beach	0	4	4
I&J's	3	0	3
Battery	3	0	3
The Boiler	3	0	3

(Continued)

TABLE 11.A3 (Cont.)

<i>Spot</i>	<i>Total_waves</i>	<i>Total_wind</i>	<i>Total spots' markers</i>
Krans	3	0	3
Kakapo	3	0	3
Monwabisi	3	0	3
Olifantsbos	3	0	3
Extensions	3	0	3
Underwater Point	3	0	3
Cherry Rock	3	0	3
Rocklands	3	0	3
Off The Wall	3	0	3
St. James/Electrics	3	0	3
Clovelly	3	0	3
Bailey's Reef/Bailey's Cottage	3	0	3
Koeel Bay (Caves)	3	0	3
Paranoia (1)	3	0	3
Selis/The Wreck	3	0	3
Van Riebeeckstrand	3	0	3
Camps Bay (Shorey)	2	1	3
Milton Pool Left	2	1	3
Gas Chambers	2	1	3
Macassar	0	3	3
Conveyor Belts	2	0	2
Mysto Freight Trains	2	0	2
364	2	0	2
The Ledge	2	0	2
Pebbles Shorey	2	0	2
Chapman's Peak Mystery Lefts	2	0	2
Nine Miles Reef	2	0	2
Southwest Reef	2	0	2
The Bluff Left	2	0	2
Bakoven	2	0	2
Clifton Third Beach	2	0	2
Gasworks	2	0	2

(Continued)

TABLE 11.A3 (Cont.)

<i>Spot</i>	<i>Total_waves</i>	<i>Total_wind</i>	<i>Total spots' markers</i>
Little Bay	2	0	2
Eerste Steen	2	0	2
Tweede Steed	2	0	2
Kreefte Reef	2	0	2
Holbaai	2	0	2
Captains/Shark Bay	2	0	2
Tubewave/Beach Road	2	0	2
Slabberts	2	0	2
Sunrise/SUP Beach	1	1	2
Baby Pipe	1	0	1
Rivermouth	1	0	1
Paranoia	1	0	1
Barley Bay	1	0	1
Tidals	1	0	1
Clifton Fourth Beach	1	0	1
Clifton First Beach	1	0	1
Moses Beach	1	0	1
Boat Bay	1	0	1
Pitzmah	1	0	1
Bellows	1	0	1
Koeel Bay (Ledges)	1	0	1
Virgin Point	1	0	1
Greenways	1	0	1
Die Poort	1	0	1
Silkies	1	0	1
Duckies Reef/Strand Reef	1	0	1
Duckeis	1	0	1
Blinkklip Reef	1	0	1
Seconds	1	0	1
AECI	1	0	1
Madiba's Right	1	0	1
Madiba's Hat	1	0	1
Matroosbaai	1	0	1
Total	336	120	456

INDEX

- ability 28, 30, 50, 76, 77, 82–84, 92, 106–108, 112, 122, 129, 151, 170
- academic 47, 52, 53, 63, 70, 86, 104, 175, 177, 181, 183, 186, 190–193, 198, 202
- accelerate 22, 201
- accommodation 2, 6, 48–51, 55, 59, 63–65, 72, 89, 90, 92, 95, 140, 143, 192
- acquisition 108, 111, 112, 115–121, 129–133, 169, 192
- adaptability 84
- adoption 26, 27, 67, 77, 163, 166, 186, 190, 206
- advancements 27, 29, 151, 171, 177
- aeronautical 149, 159, 161
- affordability 2, 143
- Africa 87, 187, 191, 198, 201, 205, 207–209, 211, 217
- Agarwal 105, 107, 123
- agile 11, 13, 21, 26, 30, 73–76, 79–87
- agility 3, 27, 73–75, 77–86
- Airbnb 1, 27, 43, 47–51, 53, 55, 57, 62–64, 192, 193, 197, 203, 204
- American 36, 37, 39, 86, 195, 207
- Anderson 67, 71, 175, 204
- antecedents 47, 48, 51, 63–67, 69–71, 126
- application 3, 4, 6, 8, 20, 21, 88, 89, 91, 97, 98, 100, 101, 121, 145, 147, 148, 150, 160, 164, 204, 211, 213
- architecture 11, 69, 80, 82
- artificial intelligence 3, 12, 20, 22, 26, 29, 44
- assets 51, 88, 89, 91, 93, 94, 96, 97, 99–101, 135, 136, 209
- Athanasopoulou 47, 49, 53, 64, 67
- attachment 32, 51, 52, 63, 65, 66, 69, 70, 72, 210
- attitude 2, 11, 63, 72, 137
- attractive 57, 70, 143, 155, 159, 162, 168, 170
- attributes 4, 67, 84, 86, 87, 91, 119, 134–144, 146, 163, 173, 207, 211
- augmented reality 27, 29, 70
- Australia 146, 190, 191, 193, 194, 197, 203, 207, 210, 212, 214, 216
- authenticity 69, 177, 208, 216
- automation 3, 7–9
- awareness 32, 33, 35, 40, 45, 74, 75, 84, 135–138, 143–145, 151, 159, 162
- balance 32, 84, 92, 185
- Bali 5, 146, 198, 208, 218
- bargaining power 28, 31
- Batra 47, 51–53, 63, 65
- behavior 8, 9, 11, 13, 15, 22, 47–51, 53, 54, 64–66, 71, 72, 91, 92, 126, 145, 146, 152, 156, 160, 162–164, 166, 204, 206, 213
- behavioral 36, 71, 72, 101, 153
- beliefs 37, 106, 187, 191
- belonging 39, 89–91, 100, 111, 181, 202
- benevolence 3, 47, 49–51, 54, 55, 57, 59–63
- big data 9, 12, 20, 21, 26, 27, 182, 188, 204, 207
- booking 2, 6, 10, 11, 13–15, 27, 49, 65, 71
- Braga 95, 109, 122, 124
- brand awareness 135, 136, 138, 143, 145
- brand equity 4, 68–70, 72, 134–146
- brand experience 48, 49, 65, 67, 68, 71, 72
- brand identity 65, 67, 69, 70

- brand image 135–138, 145
branding 65, 68, 86, 134, 135, 144–146, 163
branding destinations 135
brand loyalty 47, 52–54, 66, 68, 69,
135–138, 143
brand personality 68, 69, 144–146
Buckley 177, 180, 181, 189, 190, 192, 205,
210, 212, 215
Buer 3, 6, 8, 20, 23
business leverage 92, 99
business research 65–72, 101, 145
Busser 50, 51, 65, 66, 145
- capabilities 30, 31, 75, 76, 81, 82, 84
capacity 79, 82, 84, 90, 103, 147, 148, 155,
156, 161, 170, 215
capital structure 3, 88, 89, 91–94, 99–104
Castillo-Manzano 147, 149, 157, 159, 162
challenge 8–10, 12–14, 19, 21, 37, 62, 159
change management 3, 8, 12, 13, 21, 25,
29–32, 34, 40, 45, 78–81, 86
characteristic 21, 34, 36, 177, 181, 190
Chen 50, 57, 66, 69, 70, 72, 88, 102, 188,
207
classification 70, 83, 84, 101, 113, 188, 196
co-creation 4, 47, 48, 52–55, 58–62, 64–72,
122, 126
co-creation behavior 47, 48, 53, 54, 72
collaboration 30, 41, 46, 75, 167, 169, 170
collaborative 31, 43, 44, 81, 106, 170, 173,
174, 207
communication 2, 7–19, 22, 27, 30, 33, 48,
75, 80, 85, 86, 109, 136, 140, 143–145,
150, 164, 166, 167, 169, 170, 172, 182
communication technologies 109, 164, 166,
172
competition 2, 30, 47, 73–76, 86, 106, 134,
147, 148, 158, 168–170
competitive 20, 25, 27–29, 36, 42, 50, 51,
56, 68, 73, 74, 76, 82–86, 105, 106, 134,
135, 147, 148, 154, 165, 168–170, 172,
181, 192, 197, 204, 207, 208
competitiveness 4, 65, 75, 105, 137, 145,
146, 165, 170, 171, 204
competitors 48, 49, 58, 62, 73, 84, 86, 171,
195
conceptual 4, 7, 33, 48, 54, 65, 84, 111, 138,
175, 176, 203, 204, 206, 207, 209, 210,
215
conceptual approach 4, 175
conceptual framework 48, 207
conceptual research 54, 209
consumer 9, 12, 18, 23, 26, 29, 48, 65–72,
108, 136, 137, 145, 146, 151, 160, 162,
173, 206
- cooperative 74, 75, 124, 170
creativity 2, 33, 74–76, 79, 85, 125, 127,
169, 216
cross-functional 30, 40, 45
cultural 3–5, 12, 26, 65, 69, 86, 126, 177,
182, 190, 194, 204, 207, 213, 215–217
culture 32, 36–40, 64, 76, 80, 106, 124, 146,
169, 172, 179, 190, 209, 216
customer-brand 50, 52
customer-derived 112, 122
customer experience 10, 11, 22, 48, 50,
63, 67, 69, 147, 150–152, 155, 156,
158–160, 162
customer loyalty 11, 65, 71
customer-oriented 49, 107, 126
customer perception 156, 158, 160
customer relationship management 70, 82
customer satisfaction 50–52, 63, 67, 68, 70,
71, 83, 148, 150, 152, 164
- Darvishmotevali 3, 73
decentralized 21, 76
decision 34, 51, 56, 57, 81, 82, 124, 137,
145, 155, 185
decision behavior 51
decision-making 33, 40, 44, 81
Denisa 1, 5, 146, 198, 208
destination attributes 134, 137, 138, 144, 211
destination brand 4, 134–137, 143, 144, 146
destination branding 134, 135, 144
destination choice 86, 146, 173, 205, 215
destination competitiveness 146, 170
destination functional 4, 134
destination loyalty 65, 66, 68, 72, 138, 145
destination marketers 136, 137
destination marketing 4, 136, 144–146, 165,
169, 170, 173, 174, 187, 206
destination marketing organizations 136,
144, 165, 169, 173, 174
development 1–3, 5, 7, 9, 12–14, 19, 21,
25, 26, 38, 39, 42, 65, 66, 68, 69, 71, 72,
74–76, 81, 85, 87, 91, 105, 106, 109, 121,
122, 125, 135, 138, 146, 166, 167, 170,
174, 181, 182, 187, 188, 192–194, 199,
203–205, 207–213, 215, 217
digital 1–4, 7, 8, 10–15, 18, 20, 22, 23, 26,
30, 31, 41, 46, 66, 147, 149, 163
digital application 4, 147
digital businesses 1
digital communication 7, 8
digital innovation 2
digital innovators 2
digital transformation 1–3, 23
dimension 74, 89, 91, 92, 95–100, 108, 109,
138, 170

- disruption 4, 27, 28, 32, 210
 disruptive customer 41
 disruptive innovation 48
 disruptive strategy 27
 distribution channels 21, 69
 divergent 88, 100
 DMOs 165, 169–171, 187
 domestic tourism 2
 dynamic collaboration 41, 46
 dynamic environment 84
- economic 2, 7, 26, 32, 33, 89, 95, 102, 105,
 106, 121, 144, 166, 168, 174–176, 178,
 179, 181, 192, 194, 198, 203, 206, 208,
 210, 211
 economic development 7, 106, 166, 174,
 181, 203, 208
 efficiency 3, 4, 18, 56, 82, 146, 149, 150,
 167, 171, 174
 efficient 22, 27, 81, 109, 167, 170
 empathy 27, 32, 33, 40, 44, 83
 employee 8, 9, 15, 18–22, 71, 74, 75, 83, 85,
 86, 113
 empowerment 43, 74, 85, 109
 engagement 54, 68, 69, 106, 109, 110,
 112–114, 122, 129, 148
 enterprises 73, 101–103, 106, 107, 109,
 112–114, 122, 123, 129, 155–157, 159,
 198
 entrepreneurial 5, 126, 208, 210
 entrepreneurial intentions 5, 208, 210
 entrepreneurs 4, 5, 167, 181, 182, 187, 198,
 207, 208, 214
 entrepreneurship 2–5, 103, 166, 181
 environment 3, 8, 29, 62, 70, 71, 73–76, 80,
 81, 84, 85, 145, 147, 154, 163, 165, 169,
 170, 177, 183, 195, 201, 203, 216
 environmental 73, 74, 76, 84, 85, 145, 168,
 175, 178, 179, 185, 201, 211, 214
 environmental changes 74, 76, 84
 European 23, 54, 65, 67–69, 71, 76, 86, 102,
 104, 125, 144, 145, 154, 166, 172, 173,
 177, 181, 187, 194, 195, 203, 204
 extra-disciplinary knowledge 181, 183, 186
- Facebook 12, 13, 17, 18, 23, 70, 192, 197,
 199, 203, 209
 factor 49, 51, 59, 61, 63, 70, 77, 81, 83, 92,
 99, 109, 114–117, 119–123, 130, 131,
 133, 143, 166
 factor loadings 61, 115, 116, 120, 121, 123,
 130, 131
 financial 50, 65, 70, 85, 88, 90–92, 94, 96,
 99, 102–104, 122, 162, 198
 financial performance 50, 70, 94, 99
- financing 88–94, 99–103
 first-mover technology 26
 fiscal 83, 89, 94, 97, 100, 101
 flexibility 1, 73, 75, 78–80, 82, 84
 flughafen Zürich 147–150, 159, 162, 163
 functional attributes 4, 135–139, 141–144
 functional leader 81
- gamification 71, 148, 149, 151, 152, 154,
 156–164
 Gartner 136–138, 144, 145, 151
 Geddes 150–153, 162
 gender 67, 154, 179, 189, 190, 193, 198,
 202, 203, 209
 generations 7, 26, 154, 157, 187
 Gibson 181, 189, 190, 193, 206, 213, 216
 Giovanis 47, 49, 53, 64, 67
 global business 72, 101, 204
 global capital 183, 188, 192, 203
 global economy 1, 193
 Gomezelj 166, 167, 169, 170, 173
 González 89, 91, 102, 214
 growing agility 79, 80, 82
 guest behavior 11, 13
 guest experience 10, 22, 23, 40, 45
 guest journey 10, 11, 15
 guest profile 13–17
 guest service 9, 11, 13, 15, 16, 18, 19
 Gunasekaran 75, 76, 86, 87
- Hofstede 76, 86
 hospitality 1–6, 21, 23, 25–32, 35–37, 40,
 41, 45, 66, 68, 69, 71, 72, 74, 76, 77,
 79–89, 91, 102–110, 119, 121, 123–126,
 144–146, 162, 163, 165, 166, 169,
 172–174, 206, 208, 209
 hospitality and tourism 5, 25, 27, 30, 32, 35,
 36, 40, 41, 69, 72, 86, 87, 106, 125, 126,
 146, 163, 169, 174, 208, 209
 hotel 2, 3, 6–16, 18–23, 30, 42, 66, 68, 69,
 71, 73, 76, 77, 79, 80, 83, 85, 87–91,
 95, 96, 98–105, 107–110, 112, 115,
 121–127, 145, 172, 174, 207
 hotel industry 3, 6, 8–13, 18, 20–22, 73, 76,
 89–91, 102, 105, 107, 125–127
 Hotellerie Suisse 6, 8
 hotel managers 77, 79, 80, 107, 110, 174
 hotel sector 89–91, 100
 humanities and the arts 183, 185, 202, 204
 hypothesis 50, 51, 53, 61, 62, 92–94,
 98–100, 110, 119, 121
- identity 3, 7, 10, 21, 47–49, 54, 55, 59,
 61–63, 65, 67, 69, 70, 204, 209, 212
 ideology 183, 188, 191, 203

- implementation 8, 12, 26, 43, 49, 76, 151, 159, 160, 166, 171
 implications 23, 25, 34, 44, 68, 69, 102, 105, 106, 121, 127, 162, 163, 211
 indebtedness 88, 89, 91–94, 96–102
 independent 9, 13, 96, 97, 111, 168
 industrial revolution 3, 7, 22, 25–29, 31, 32, 34, 35, 40–43
 informants 55, 77, 80, 82, 83, 108
 information 1, 9, 11, 13–20, 22, 29, 43, 44, 51, 53, 62, 70, 74–77, 83, 85, 88, 91–93, 99, 103, 107–109, 112, 113, 121, 122, 124, 126, 129, 151–153, 158, 161–164, 166–169, 171, 172, 182, 187, 188, 192, 195, 196, 207
 infrastructure 1, 79, 80, 84, 154, 155, 158–160, 167, 171
 infrastructure agility 79, 80, 84
 innovation 1–5, 26–28, 34, 43, 48, 66, 67, 74–76, 79–81, 83, 84, 105–114, 116, 118–127, 129, 130, 132, 133, 165–174, 176, 177, 181, 182, 192, 197, 201, 203–209
 innovation management 5, 125, 126, 172
 innovation-oriented 122
 innovation process 106, 107, 110, 112, 113, 166
 innovative 7, 11, 106, 108–110, 112–114, 121–123, 126, 129, 165, 166, 169, 170, 172, 175, 182
 innovative activity 106, 112–114, 121, 129
 innovativeness 3, 87, 105–111, 114–116, 118–124, 126, 129, 130, 132, 133, 146, 171, 172, 174
 Instagram 27, 197
 intangibility 167, 168
 intelligence 3, 5, 12, 20, 22, 26, 29, 34, 44, 70, 71, 86, 126, 204
 intention 4, 54, 66, 69, 70, 72, 110, 134–146
 intercontinental 154–161
 internal ecosystem 41, 46
 internal procedures 108, 109
 international 4–6, 35, 37, 42, 43, 54, 65–72, 77, 85–87, 101–104, 111, 114, 115, 124–126, 138, 144–149, 154, 162–164, 172–174, 180, 187, 192, 194, 195, 198, 201, 202, 207, 208
 international tourists 77, 138, 198
 internet 7–13, 27, 40, 49, 66, 68, 109, 124, 164, 188, 195–197, 208
 internet-based 7
 internet-based applications 7
 interviews 35, 55, 77, 80–82, 85, 110, 148, 160
 investments 92, 112, 159, 167, 170, 172
 investors 88, 92, 103, 201
 Iran 73, 77, 85, 86, 146
 Iranian 85, 87, 125, 174
 Jang 88, 102, 138, 146
 Japan 178, 191, 205, 210, 216
 Jensen 54, 71, 107, 125
 June 42, 65, 66, 70, 72
 Karadeniz 89, 91, 92, 103
 Kim 49–51, 53, 58, 67–69, 71, 88, 90, 103, 144, 210
 knowledge 4, 8, 45, 49, 51, 53, 63, 66, 69–71, 75, 77, 81, 83, 85, 92, 99, 100, 106–123, 125, 129–133, 136, 166, 167, 169, 170, 175–177, 181–183, 185–189, 192, 194, 202–204, 206, 208, 209
 knowledge acquisition 108, 112, 115–117, 119, 121, 130–132, 169
 knowledge creation 121, 176, 177, 188, 202
 knowledge exploitation 108, 110, 113–115, 117, 121, 130–132, 169
 knowledge force fields 183, 202
 knowledge management 81, 109, 112, 204
 knowledge processing 108, 109, 112, 113, 115, 117, 121, 122, 130–132
 knowledge production 188, 202, 203
 knowledge system 175, 176, 182, 188, 204, 209
 Konecnik 136–138, 144, 145
 Kühnhausen 88, 92–94, 96, 99–101, 103
 law 11, 43, 66, 67, 109, 124, 208
 Lazarow 177, 189, 206, 213, 214
 leadership 3, 13, 21, 22, 25, 26, 29, 31, 32, 34, 40–43, 45, 76, 80, 81, 170, 207
 Lee 49, 51, 68–71, 91, 104, 106, 125, 144, 145, 182, 206, 208
 leisure 15, 16, 68, 143, 156, 158, 160, 181, 193, 202–205, 208, 209, 213, 217
 leisure travelers 156, 158, 160
 leverage ratios 94, 100, 101
 Liburd 176, 183, 185–188, 192, 193, 202, 209
 lifestyle 69, 175, 177, 182, 187, 192, 194, 198, 207, 209, 214
 lifestyle entrepreneurs 182, 187, 198, 207, 214
 literature 47, 52, 53, 55, 63, 64, 70, 71, 74, 90, 92–94, 101, 105, 106, 136, 137, 148, 154, 159, 166, 171, 173, 175, 176, 178, 181, 203, 204, 207, 208, 213, 214
 literature review 70, 71, 90, 92–94, 106
 local 30, 32, 80, 81, 90, 135, 146, 179, 180, 186–188, 192, 193, 195, 197, 198, 200, 201, 203, 204, 208, 212, 215

- local communities 30, 135, 187, 193, 200
 lodging 37, 69, 89, 90, 103, 104
 López-Valpuesta 149, 157, 159, 162
 loyalty 3, 11, 14, 47, 52–55, 58–62, 64–69,
 71, 72, 135–138, 143–145, 148, 152, 153

 Majluf 90, 93, 99, 101, 103
 management 3–6, 8–14, 16–23, 25, 29–32,
 34, 40, 41, 43, 45, 65–74, 77–83, 85–87,
 101–104, 109, 110, 112, 113, 122–127,
 144–148, 152, 162–164, 167, 171–174,
 178, 179, 184, 185, 194, 204–211, 214,
 215
 management system 14, 16, 17, 19
 managerial 48, 102, 110, 119, 121, 122, 167,
 182
 marketing organizations 134, 136, 144, 165,
 169, 173, 174
 marketing perspective 163, 188
 marketing strategies 136, 144, 169
 marketing tool 7, 9, 135
 marketplace 21, 28, 29, 56
 Martin 175–177, 181, 183, 185, 189, 195,
 202, 207, 210–213
 Maslow's hierarchy 78, 80, 83
 methodology 35, 42, 48, 54, 75, 77, 85, 95,
 110, 111, 138, 159, 203, 204
 modular structure 12–14
 motivation 53, 72, 80, 211
 Muizenberg 187, 195, 198, 199, 217
 Myers 88, 90, 93, 99, 101, 103, 104

 Nakamura 92–94, 96, 99, 100, 102
 Newman 150–153, 163
 New York 42, 43, 70, 72, 76, 86, 124–126,
 144, 204–208
 New Zealand 104, 190, 191, 203, 217
 NGOs 181, 187, 191, 199, 202, 203
 Nikdavoodi 138, 146, 153, 164
 Nordin 105–108, 110, 112, 122, 123, 125,
 182, 206
 Nunes 88, 89, 91, 100, 103

 O'Brien 178, 189, 195, 207, 212, 213
 Olszewski 3, 105
 online booking 2, 6
 online marketing 6, 8, 9
 operational 6, 7, 9, 79, 80, 82–84, 87, 151, 152
 operational agility 79, 82, 84
 operational management 6, 82, 83
 opportunities 28, 29, 32, 73, 76, 81–84, 91,
 151, 153, 161, 167, 205, 209
 optimal capital structure 91, 102, 103
 organization 34, 36–46, 73–76, 78, 80–86,
 91, 166, 170, 177, 209, 216

 organizational agility 3, 73–75, 77–82, 84–86
 organizational learning 69, 86
 organizational performance 25, 40
 organizational structure 78–80
 organization's strategy 169
 organization's strengths 28, 81
 organization's survival 32
 Osorio 109, 110, 112, 121, 125
 Ottenbacher 108, 109, 122, 126

 Pacheco 89, 91, 103
 Panagiotis 88, 93, 96, 100, 103
 Pasikuda 4, 134–138, 140, 141, 143, 144
 passenger capacity 147, 161
 passenger experience 147–149, 161
 pecking order 88–91, 93, 94, 99–101, 103,
 104
 peer-to-peer 47–51, 54, 55, 63–65, 72
 perceptions 41, 65, 67, 86, 87, 146, 163, 173,
 174, 213
 performance 3, 25, 39–42, 50, 51, 53, 54, 66,
 67, 70, 74, 75, 78–82, 90, 94, 99, 105, 106,
 123–126, 146, 150, 162, 163, 170, 213
 personality 42, 55, 59, 60, 68, 69, 71, 124,
 136, 140, 143–146, 211
 perspective 5, 27, 41, 44, 52, 63, 69, 73, 86,
 108, 122, 123, 125, 155, 163, 173, 177,
 180, 181, 188, 190, 202, 203, 207, 210,
 212
 persuasion 32–34, 36, 45, 208
 physical environment 80, 195, 203
 Pitambare 150–153, 162
 platform 6, 11, 29, 40, 192, 193
 political 7, 32, 62, 168, 175, 188, 191, 194,
 202, 206, 212, 213
 political ecology 191, 202
 political economy 188, 202
 politics 7, 192, 209
 Ponting 177, 189, 190, 204–208, 210,
 212–216
 population 2, 64, 77, 111, 194
 Porter 28, 31, 42, 178, 181, 190, 208, 210,
 212
 Portugal 3, 68, 69, 88, 89, 95, 98–103, 190,
 191, 203, 210, 211
 Portuguese 90, 94, 96, 97, 103, 124, 214
 positioning 20, 56, 59, 60, 70, 71, 134, 146,
 151
 potential 1–3, 25, 27, 29, 33, 35, 40, 45,
 108, 126, 147, 148, 150, 151, 153–157,
 159–161, 182, 186, 188, 198, 199, 211,
 212, 215
 power 28, 31, 33, 34, 42, 45, 46, 53, 74, 75,
 92, 99, 100, 191, 192, 198, 201–203
 preferences 7, 10, 81, 89, 204, 211, 213

- privacy 20, 159, 171, 182
 privatisation and commercialisation 147, 163
 product 11–14, 48–51, 53, 54, 56, 65, 66, 68, 69, 72, 106, 107, 109, 116, 118–120, 122, 124–126, 129, 130, 132–136, 145, 152, 153, 166–168, 170, 174, 182, 188, 196, 197, 199, 202, 207
 product innovation 107, 109, 126, 166
 production 6, 7, 54, 86, 87, 89, 166, 167, 182, 184, 188, 190, 202–204, 206, 213
 professional 34, 46, 187, 198, 199, 201
 professional growth 34, 46
 profitability 75, 89, 93, 94, 97–99, 101
 promotion 85, 113, 158, 166, 171, 181
 psychological 33, 48, 49, 71
 psychology 41–43, 66, 68–72, 164, 185
 psychometric 59, 70, 75, 85
- qualitative 35, 42, 43, 55, 77, 84–86, 123, 125, 188
 quality 8, 13, 18, 38, 50, 67, 68, 70–72, 78–80, 82–85, 106, 125, 126, 136, 138, 147, 149, 154, 156, 162, 164, 168, 176, 206, 207, 213, 214
 quantitative 61, 102
 questionnaire 110, 112, 138
 Quintana 109, 110, 112, 121, 125
 Qumsieh-Mussalam 4, 165
 Qureshi 92, 99–101
- Ratten 1, 2, 4, 5, 109, 125, 126, 137, 146, 165, 174, 181, 182, 198, 208, 210
 recognition 33, 41, 48, 175
 recreation 177, 194, 201, 205–207
 recreational 179, 180, 196, 205, 206, 214, 215
 regression 70, 89, 97, 98, 100, 117, 119, 120, 131
 reinvention 28, 30, 32, 46
 relationship management 70, 82
 reliability 55–59, 61, 83, 139
 reorganization 82, 166
 reputation 37, 67–69, 72, 92, 99, 100, 136, 145
 respondents 11, 59, 80, 82, 110, 113, 123, 139
 responsibility 9–12, 18, 22, 32, 34, 46, 75, 86, 91
 responsiveness 73, 75, 79, 80, 82
 revenue 9, 12–14, 22, 73, 74, 149–152, 155–159, 161
 Routledge 124–126, 205–207
- Sage 42, 66, 86, 125, 127, 145, 206
 sampling 55, 77, 110, 111
- satisfaction 11, 47–52, 54, 55, 57, 59–63, 65–72, 83, 86, 106, 125, 135, 144, 145, 147–150, 152, 156, 160, 162, 164
 Scarfe 176, 178–180, 195, 208
 Schwab 26–28, 31, 32, 42
 Scopus 176, 183–185, 202, 203
 segmentation 153, 181
 servant-leader 33, 34, 40, 45, 46
 servant-leadership 25, 30–41, 43–45
 sharing 6, 27, 64, 68, 72, 110, 153, 169–171, 204
 sharing-economy 47–55, 62, 63
 sharing knowledge 110, 169, 170
 skills 8, 15, 43, 76, 109, 112, 113, 121, 122, 129, 167, 173
 smart destinations 165, 170, 171, 173
 smartphones 22, 151, 170, 188
 smart technologies 165, 171, 173
 smart tourism 172, 173, 206
 social 1–3, 7, 12, 13, 15, 17, 18, 23, 26, 27, 32, 33, 41, 66, 68–71, 86, 104, 112, 119, 123, 124, 126, 136, 145, 154, 162, 164, 168, 170, 175–179, 182–185, 188, 192, 197, 199, 202, 208–210, 216
 social change 7, 12, 162
 social innovations 182, 202
 social media 2, 7, 12, 13, 15, 17, 18, 68, 70, 112, 136, 145, 170, 188, 197, 199
 social networks 126, 170, 188
 social sciences 86, 104, 119, 123, 176, 183–185, 202
 socio-economic 194, 205, 209, 214
 Sotomayor 175, 181, 190, 204, 211, 213
 sovereignty 13, 14, 20
 Springer 22, 23, 66, 124, 162, 164, 205
 Sri Lanka 4, 134, 135, 138, 140, 143
 SRSs 177, 178, 181, 182, 188, 190, 193, 195–197, 201–203
 stakeholders 1, 28, 30, 31, 91, 105, 169, 170
 start-ups 2, 4, 102
 statistical 44, 92, 114, 115, 121, 125
 statistics 72, 97, 98, 113, 115, 118, 123, 140, 141, 148, 159, 192, 198
 stewardship 32, 34, 36, 41, 46
 Stieber 88, 92–94, 96, 99–101, 103
 Stokburger-Sauer 53, 58, 59, 67
 strategic agility 79, 83, 84
 strategic plan 134, 135
 strategic thinking 34, 45
 strategy 27, 29–32, 42–44, 49, 56, 63, 69, 73, 76, 77, 79, 85, 86, 138, 150, 157–161, 169, 171, 172, 197, 198, 215
 strategy-driven decision-making 40, 44
 structural equation 70, 114, 119, 123, 124, 126, 127, 139, 145

- structural model 72, 115, 119, 120, 141–143
 structure 3, 12–14, 61, 72, 76–80, 82, 84, 86, 88, 89, 91–94, 99–104, 108, 114, 133, 206
 supply 73, 83, 86, 135, 166, 168, 196, 198, 203
 sustainability 27–30, 40, 41, 44, 46, 163, 168, 178, 204–207, 210–212, 214
 sustainable community 170, 212
 sustainable surf 191, 192, 203, 208, 212, 213
 Swart 4, 175, 181, 198, 207
 Switzerland 15, 76, 86, 107, 126, 146–148, 161, 163, 164, 173
 system 4, 11, 13–22, 31, 76, 78–80, 84, 85, 154, 163, 167, 175, 176, 182, 183, 188, 195, 197, 202–205, 207, 209, 211
 systemic change 28, 40, 45
 Sørensen 54, 71, 106–109, 112, 126
- Tajeddini 1, 3–5, 73, 77, 86, 87, 105–107, 126, 134, 136–138, 144, 146, 147, 153, 163–165, 170–174, 198, 208
 tangibility 89, 93, 97, 98, 168
 tangible assets 93, 96, 99–101
 Tavares 89, 91, 103
 Taylor 93, 99, 101, 102, 124, 126, 170, 174, 194, 205, 211
 teamwork 34, 36, 38
 technological 3, 4, 13, 25, 27, 28, 40, 73, 108, 126, 151, 154, 162, 171, 177, 187, 206, 208
 technological advancements 27, 177
 technological innovations 73, 187
 technology 1–4, 8, 14, 21–23, 26, 27, 29, 31, 40, 41, 45, 46, 54, 74, 78–80, 85, 87, 107–109, 124, 148, 150, 151, 154, 159, 162, 163, 167, 168, 170, 171, 173–175, 179, 182, 202, 210
 technology management 78–80
 Thailand 190, 191, 203, 207, 211
 theoretical 28, 44, 48, 61, 74, 84, 114, 115, 121, 136, 140, 166, 174, 176, 180, 208
 Thompson 190, 194, 209, 216, 217
 Titanic syndrome 31, 32, 43
 Titman 88, 92–94, 96, 99–102, 104
 tourism 1–6, 25–32, 35, 36, 40, 41, 43, 45, 47, 48, 50, 51, 53, 55, 62–74, 86, 87, 90, 101–104, 106–110, 123–127, 134–136, 138, 144–146, 149, 162–196, 198–215
 tourism destination 4, 68, 146, 165, 168, 173, 174, 194, 208, 213
 tourism industry 2, 27, 47, 50, 51, 62, 64, 67, 73, 74, 87, 123, 149, 166–170, 172, 192, 194, 206, 212
 tourism knowledge 4, 175, 182, 183, 204, 209
 tourism management 5, 41, 65–72, 86, 123–127, 145, 146, 162, 163, 171–174, 194, 204–209, 211
 tourism marketing 4, 5, 126, 134, 144, 198
 tourism products 68, 135, 138, 168, 181, 196, 204
 tourism research 51, 66, 68, 70–72, 126, 145, 146, 163, 173, 175, 176, 181, 183–185, 187, 191, 193, 194, 202, 203, 205–207, 209, 212, 213
 tourism services 1–3, 201
 tourist 41, 54, 55, 62, 66, 70, 90, 134–136, 143–146, 166–174, 194, 195, 206, 207, 211–214
 tourist destination 55, 134, 135, 146, 167, 168, 170, 172
 tourists 4, 5, 48, 51, 55, 62–64, 66, 68, 70, 72, 74, 77, 134–138, 143, 144, 146, 155, 165–168, 170, 171, 173, 181, 182, 195, 198, 205, 208–212, 214, 215
 trade-off 3, 88–94, 99–101, 103, 154
 traditional marketing 10, 22
 transdisciplinary 186, 187, 202, 204
 transformation 1–4, 10, 11, 23, 26, 73, 76, 122
 transparency 18, 21, 39, 48, 70
 travel agencies 6, 48, 196
 travelers 3, 26, 27, 47–52, 54, 55, 62–64, 67, 154–161
 Tripadvisor 27, 49, 53, 197
 Trueman 77, 87, 105–107, 126, 170, 174
 turnover 65, 73, 90, 92, 96–98, 172
 Tussyadiah 48, 51, 57, 59, 72, 164, 171, 172, 174
 typology 3, 74, 77, 79, 80, 84, 90, 207, 213
- Uber 1, 27, 42, 204
 United Kingdom 38, 54, 190, 191, 211
 United States 38, 76, 178, 190, 191, 208
 UNWTO 54, 72, 205, 209
 user-driven 106, 107, 125–127, 182, 206
 user-driven innovation 125–127, 206
- vacation 70, 135, 144, 174, 207
 velocity 25, 27–29
 virtual 29, 48, 66, 69, 86, 124, 125, 163, 170
 virtual brand experience 48
 virtual reality 29, 170
 visionary 33, 34, 42, 45
- Wachilonga 89, 91, 92, 104
 Wang 69, 92, 99–101

Warren 189, 190, 193, 206, 213, 216
wave 178, 188, 198, 204, 206–209,
211–213
wave-based surfing 177, 196
Wellalage 88, 93, 94, 96, 97, 100, 104
Wessels 88, 92, 93, 96, 99–101, 104
Wyer 3, 25, 43

Xin 176, 183, 209

Yuksel 54, 56, 59, 72

Zabkar 58, 59, 69

Zingales 92, 93, 99–101, 103

Zurich 4, 147–151, 154–157, 159–164