NHL STENDEN
university of applied sciences

VOLUME 9 | ISSUE 2 | 2019

Research in Hospitality Management

Stenden
Hotel Management School

Academy of International Hospitality Research
aihr

NISC

Published by NISC (Pty) Ltd in association with
NHL Stenden University of Applied Sciences

Research in **Hospitality Management**

ISSN 2415–5152 Online | ISSN 2224–3534 Print

Published by NISC (Pty) Ltd in association with NHL Stenden University, The Netherlands

Aims and Scope

Research in Hospitality Management (*RHM*) is a peer-reviewed Open Access journal publishing articles that make an original contribution to the understanding of hospitality and to the theory and practice of international hospitality management.

The journal focusses on three main areas: (1) "Hospitality (Management) Studies" includes articles related to the study of and the study for hospitality. The study of hospitality refers to studies about the essence and ethics of hospitality from a social sciences perspective, while the study for hospitality refers to a more disciplinary approach according to the quintessential managerial areas of Finance, Human Resources, Operations, Marketing & Sales, and Technology; (2) "Hospitality Management Education" is devoted to articles about curriculum content and delivery methods for training and educating hospitality managers. Considering the size and scope of the hospitality industry, and the number of staff and students involved, studies on efficient, effective, and innovative ways of developing hospitality competencies are considered indispensable; (3) "Student Research Projects" allows excellent student work to be published. Student work can relate to excellent BA dissertations or MA theses.

RHM also accommodates short communications, working papers, book reviews and discussion papers.

Subscriptions (for print issues)
Annual subscription rates (including VAT and postage where applicable):
International: Institutional subscriber: USD 73 Personal subscriber: USD 51.10 **Africa:** Institutional subscriber: ZAR 470 Personal subscriber: ZAR 329
Research in Hospitality Management can be ordered directly from the publisher: NISC (Pty) Ltd, PO Box 377, 4 Speke Street, Grahamstown 6140, South Africa, Tel.: +27(0)46 622 9698, Fax: +27(0)46 622 9550, Email: journals@nisc.co.za, www.nisc.co.za
Copies of all back issues are available for purchase from the publisher.

Research in Hospitality Management is published by NISC (Pty) Ltd, 4 Speke Street, Grahamstown, 6139, South Africa, in association with NHL Stenden University, Leeuwarden, The Netherlands.

Research in **Hospitality Management**

VOLUME 9 | ISSUE 2 2019

EDITORIAL

Welcome to Issue 9(2) of the *Research in Hospitality Management* journal published by Stenden Hotel Management School (SHMS), NHL Stenden University of Applied Sciences (UAS). As this is my first issue as (Co-)Editor-in-Chief, I would like to take this opportunity to welcome everyone — contributors, readers, reviewers and editorial board members. You all play an important part in the continued success of this journal, which started almost a decade ago in 2011 with papers by scholars such as Paul Lynch, Alexander Grit, Tjeerd Zandberg, Radu Mihailescu and Sjoerd Gehrels in the first issue. The goal of the founding editors was to have an academically rigorous (we are double-blind peer-reviewed) yet also industry-relevant journal which appealed to early career researchers/doctoral students and established academics as well as reflective practitioners in the global hospitality industry. Finding the balance between these different audiences is never easy but we hope everyone will find something in this issue that makes them stop and reflect, or inspires them to look at the world around them through a new lens. Our aim is to stimulate new thinking, not to pour new knowledge into empty vessels!

This Issue reflects our aims very well and contains papers from academics stretching from Iceland through Denmark to the Netherlands and then onwards to Egypt before ending in New Zealand — truly a global effort. SHMS's own Wichard Zwaal starts this issue with a reflection of the contribution that problem-based learning can make to the development of conceptual skills and teamwork in students. This is followed by an exploration by a team of academics from Dania Academy in Denmark of what we currently know about the motivation of people to become Airbnb hosts. This thematic analysis of the literature should provide a valuable body of knowledge for others to build on. The fact that this paper came out of a chance encounter at the Council for Hospitality Management Education conference in Greenwich shows the value of international conferences.

Karam Zaki and Omar Quora then take us to Egypt for a discussion of hotel profitability and the surprising finding that city-centre hotels are not necessarily more profitable than those in more rural areas. This is followed by two academics spanning the globe in Iceland and New Zealand considering the very topical and controversial issue of cruise tourism. SHMS's Jan Schulp presents us with some challenging thinking on animal and plant rights and unpicks some of the consequences of our decisions in food service practice.

An important aim of this journal is to showcase excellent Bachelors, Masters and Doctoral student work and the next three papers are the result of student work which, with the support of Dr Bill Rowson of SHMS, has given these students the invaluable experience of writing, revising and submitting their work for an academic journal. Covering chatbots, robotics and artificial intelligence, these papers provide a glimpse of the future seen through the eyes of those who will be working in that environment. We conclude this issue with a brief discussion paper by two NHL Stenden UAS academics on work being done into developing intercultural competencies and the contribution that a research tool such as the Global Mind Monitor can make to separate fact from fiction.

If this eclectic collection of academic contributions has stimulated you to think about topics you or your BA/Masters/PhD students could submit for consideration in a future issue, then the deadline for the next issue is the end of January 2020 for publication in March 2020.

Finally we would like to invite you all to THE-INC2020 conference on 9–11 June 2020 which is being hosted by us at Stenden Hotel Management School, NHL Stenden University of Applied Sciences here in Leeuwarden in The Netherlands. Organised jointly with the University of Derby and the University of Sunderland, our conference theme is "Revisiting value co-creation and co-destruction in tourism, hospitality and events". More information is available on our conference website — www.theinc2020.wordpress.com.

Erwin Losekoot

Research in Hospitality Management 2019, 9(2): 77–82
https://doi.org/10.1080/22243534.2019.1689696

RHM
2019
Research in
Hospitality
Management

Assessment for problem-based learning

Wichard Zwaal

Stenden Hotel Management School, NHL Stenden University of Applied Sciences, Leeuwarden, The Netherlands
Email: wichard.zwaal@nhlstenden.com

ABSTRACT: When designing a new educational unit on organisational behaviour, special attention was paid to the constructive alignment of the assessment procedure with the learning outcomes and educational concept. In order to optimise the fit with the principles and philosophy of problem-based learning, the assessment was designed to support the process of constructive, collaborative, contextual and self-directed learning. In a final two-hour session, each problem-based learning team is required to analyse a case study and report their diagnosis and suggested interventions in a case study paper with an accompanying set of PowerPoint™ slides. Design and delivery of this innovative approach to summative team performance assessment are reported and results show that students appreciate the educational value of the approach and consider it enhances their conceptual skills and competence in contributing to constructive teamwork.

KEYWORDS: assessment design, assessment for learning, assessment mix, assessment session, constructive alignment, problem-based learning (PBL)

Introduction

Assessment for learning

Assessment is one of the major drivers in students' study activities (Gijbels, Dochy, Van den Bossche & Segers, 2005; Gijbels, Van de Watering & Dochy, 2005; Boud & Falchikov, 2007). The first thing students do when entering a new module or unit is figuring out how they will be graded and what case studies, assignments, tests and performances are most critical for passing. Students will check the relevant parts of the syllabus for information about assessment and grading, and will consult their fellow students for tips and tricks to improve their chances of success. The better informed they are, the better they can design an optimal strategy for success that would meet their preferred level of effort and output (Schuwirth & Van der Vleuten, 2011a; Cilliers, Schuwirth, Herman, Adendorff, & Van der Vleuten, 2012).

While students consider assessment as a hurdle that they need to take in order to pass a module, schools need tests and assessments to assure whether participants have obtained the necessary skills, knowledge and attitudes — together referred to as competencies — to warrant a particular qualification, certificate or diploma. In order to be able to make valid judgments about competence mastery of participants, the school uses tools and instruments with proven quality. In the context of assessment, quality is generally measured and expressed in terms of validity, reliability, utility and acceptability (Ebel & Frisbie, 1991).

During the latter decades, the focus of assessment has shifted from assessment *of* learning to assessment *for* learning (Boud & Falchikov, 2006). Assessment for learning is "an approach in which the assessment process is inextricably embedded within the educational process, which is maximally information rich and which serves to steer and foster the learning of each individual student to the maximum of his/her ability" (Schuwirth & Van der Vleuten, 2011a, p. 478). Assessment for learning provides information about the competency level and competence development of a student, obtained with various instruments at different assessment moments (Schuwirth & Van der Vleuten, 2011b). Peer and self-assessment is considered to be an essential element in the process of problem-based learning (Dochy, Segers, & Sluijsmans, 1999; Segers & Dochy, 2001; Gielen, Dochy, & Onghena, 2010; Sridharan & Boud, 2019).

When teamwork and collaboration are key elements in the learning process, collaborative assessment seems the appropriate approach to enhance educational alignment (Sandahl, 2009; 2010; Bloom, 2011; Vogler & Robinson, 2016; Efu, 2018; Schmulian & Coetzee, 2018).

This article reports on the construction and implementation of an assessment format that was designed to be optimally aligned with the principles of problem-based learning (PBL), demonstrating the idea of constructive, collaborative, contextual and self-directed assessment for learning.

A case study in educational design

In the academic year (2013/2014), a new third-year unit was developed as part of a four-year Bachelor in Business Administration programme at a Dutch hotel school. The hotel school uses problem-based learning (PBL) as the primary educational approach. The main subject areas which had to be addressed in the new unit were "psychology of management" and "organisational behaviour", so the unit was called "Psychology of Management and Organisation" (PMO). The unit is scheduled as a four-week course for three European Credits. Each week, one key driver of organisational performance is addressed. In week 1, the impact of individual behaviour on organisational performance is studied; in week 2, the impact

of team behaviour; in week 3, managerial behaviour; and in the fourth week, the topic is the impact of systemic factors on organisational performance. Every week two PBL sessions are scheduled (see Table 1). The first PBL session each week takes 90 minutes and is devoted to discussing some designated chapters of the required textbook. This can be considered to be a study task. Theories and concepts from the book are summarised, discussed and evaluated using different methods like concept mapping, mini-lectures, discussing own work experiences and mutual testing. The second PBL session each week is a 135-minute trial of the final assessment session (referred to as the "Assession") that will take place in week 9 of the module.

Constructive alignment

When designing the unit, attention was given to constructive alignment (Biggs, 1996) between the three components of the educational configuration: (1) learning outcomes; (2) teaching and learning activities; and (3) assessment.

Learning outcomes

The unit's learning outcome was formulated as follows:

> *Upon successful completion, the student is able to describe, analyse, conceptualise, and explain organizational behaviour using appropriate theories that help generate viable and feasible interventions to enhance the organizational performance at individual, team and managerial level* (Unit syllabus PMO, 2018).

More specifically the following set of unit objectives were included:

Students are able to...

- analyse a problem with sufficient depth and breadth;
- identify and describe the issues to be addressed;
- construct a conceptual representation of the key issues, concepts and mechanisms;
- make an informed choice of theories to be applied to the case study;
- suggest viable, feasible and suitable interventions;
- outline the implementation plan;
- use key performance indicators and decide about contingency plans;
- produce a professional case study paper;
- prepare a professional PowerPoint™ presentation; and
- manage teamwork and deal with group dynamics.

TABLE 1: A regular week in the PMO unit

Day	Activity
Monday	Study indicated chapters of the textbook (read, summarise, analyse, explain, relate, compare, criticise, illustrate, apply). (Output: individual written summary reflecting a thorough and critical analysis as outlined above)
Tuesday	PBL1 Discuss the theory. (Input: individual written summary of the designated chapters)
Wednesday	Apply diagnostic approach to the case. (Output: individual written case paper)
Thursday	PBL2 Trial assessment session. (Output: Case study paper and PowerPoint™ presentation)
Friday	Start preparation for next week.
Weekend	Study indicated chapters of the textbook.

Teaching and learning activities

The hotel school where the unit was developed has used problem-based learning as their leading educational concept for more than 30 years (Zwaal & Otting, 2015). The core characteristics of PBL are:

1. Learning is student-centred;
2. Small group, constructive, collaborative and competence-based learning;
3. A tutor is present as a guide;
4. Real-world contextualised problems are presented as the trigger for learning;
5. The problems are used to achieve the required knowledge and problem-solving skills; and
6. New information is acquired through self-directed learning (Barrows, 1996; Schmidt, Van der Molen, Te Winkel, & Wijnen, 2009; Van Berkel, Scherpbier, Hillen & Van der Vleuten, 2010).

The total study load of the unit is three European credits (84 hours), or approximately 20 hours for each of the four weeks. The two PBL sessions per week will take up about four hours, leaving 16 hours for self-study and preparation for the PBL sessions. In order to keep up with reading the indicated chapters of the book, we assumed students should be able to read 10 pages per hour, considering the length and level of the textbook.

Assessment

As part of the educational design process, an approach to assessment was constructed that would support attaining the learning outcomes, match and enhance the principles of PBL, and satisfy psychometric standards. When, in the six characteristics of PBL listed above, the word "learning" is replaced with "assessment", an interesting set of potential criteria for assessment in PBL occurs:

- Assessment is student-centred;
- Small-group, constructive, collaborative and competence-based assessment;
- A tutor is present as assessor;
- Real-world contextualised problems are presented as the trigger for assessment;
- The assessment task enables students to demonstrate their mastery of required competences; and
- The assessment session might raise issues and interest for further self-directed learning.

These guidelines have all been included in the design of a new assessment method, called the assessment session or, shorter, the "Assession".

Assession

The assessment session or "Assession" is a summative team performance assessment that takes 135 minutes and includes the following activities.

Assessment case study

A case study is provided at the start of the session. Every module period, two new assessment case studies are constructed by members of the tutor team, one for the "assession" on Tuesday for the groups who had "Psychology of Management and Organisation" (PMO) in weeks 1 to 4, and another one for the "assession" on Thursday for the groups who do the unit PMO in weeks 5 to 8. Case studies can cover any mix of levels

(individual, team, managerial, systemic) and combination of topics and chapters from the mandatory textbook by Robbins and Judge (2018).

Guidelines for the construction of assessment case studies are:

- The case study includes three to five key issues;
- The case study covers at least two of the four levels of organisational behaviour (individual, team, managerial, systemic);
- The case study is two to four pages long;
- Exhibits are always included with a purpose; and
- The case study should be about an organisation from the hospitality industry.

Assessment case studies are always screened, reviewed and edited by two members of the PMO tutor team. An excerpt from an assessment case is shown in Box 1.

Case study paper and PowerPoint™ slides

The team has two hours to produce a case study paper of approximately 1 500 words, using a framework called the diagnostic approach (Gordon, 2001). This approach consists of eight parts, which also determine the sections of the case study paper (Figure 1): (1) Description; (2) Key Issues; (3) Diagnosis; (4) Conceptual model; (5) Interventions; (6) Informed choice; (7) Implementation plan; and (8) Contingency plan. Additional to the case study paper, the team has to prepare a set of PowerPoint™ slides that could be used for a presentation.

When writing the case study paper students can apply the set of guidelines shown in Box 2.

Script

In order to manage the task dimension as well as the team dimension of the process, students develop a script for the two-hour assessment session. This script includes the distribution of roles, a timeline, some rules of engagement and it is adapted, if necessary, after every trial assessment session (Table 2).

BOX 1: Excerpt from a case study

9 July 2014, a sunny Wednesday, early in the morning, Ellen and Louis, along with some other colleagues, were waiting for the meeting to start. The meeting was supposed to shed light on why their fellow sales rep, George, had been absent from work for a couple of days. A few moments later, Eddie, the manager of the sales team, walked in, along with Dianne, the secretary.

Eddie greeted everyone cheerfully. After a few polite exchanges concerning the weather, he said, "George is not with us anymore, we had to let him go. He was not making his sales numbers and things were simply not working out. It is the best for everybody this way. But I have good news as well. We have hired a new sales rep to replace George, his name is Jerry. He will be starting on Monday."

Some in the meeting seemed surprised by the news, but not Ellen and Louis. They had long known that Eddie did not like George and thought someday, given the opportunity, Eddie would try to get rid of George. But still, they felt upset that their teammate and friend George had been fired, and they were angry that Eddie tried to make it appear that it was the best for all involved. What made them even angrier was that in the same breath, Eddie announced that Jerry, the replacement for George, was starting the following Monday.

The way Eddie saw it...

Eddie was 33 years of age, single, holder of an MBA degree from a respectable business school. In early 2012, Eddie started working as the sales manager in this hotel and he hired Ellen, Louis, and George shortly thereafter. This was the first time he directly managed a group of employees. He was pleased to see that the team was functioning quite well initially. But gradually, he sensed that there was some tension and dissatisfaction in the team. Eddie attributed these negative emotions to George because it was usually George who would bring up complaints about sales policies or team management, and the team would normally back him up. George also often played the role of the devil's advocate. In Eddie's view, many group discussions were interrupted because of George's questions and remarks. George created a disruptive atmosphere within the sales team, Eddie thought.

By mid-2014, it seemed George would not be able to meet his seasonal revenue targets. Upon consulting with his supervisor, Eddie decided that this would be the right time to terminate George's contract. He had never fired an employee before and was therefore somewhat nervous about the thought. But Eddie believed that this was the best way to solve his problem. Although this would be a relief to him personally, he was concerned about how the team would take it. Based on what he had heard from other employees, Ellen, Louis, and George not only had a good business relationship, but were also friends outside the confines of the office. Eddie did not want the firing of George to negatively impact the morale of the sales team. But he still thought, for the long run, this was the right decision. He was just unsure how the team would react to his decision of letting George go.

1.1 Description	**2.1 Diagnosis**	**3.1 Interventions**	**4.1 Implementation plan**
• Company characteristics • Key stakeholders • Facts & figures	• Apply theories & concepts from the book to explain key issues • Use contemporary theories • Don't use too many theories	• At least 10 interventions • Some radical solutions could be included	• What • Who • How • When • KPI
1.2 Key issues	**2.2 Conceptual model**	**3.2 Informed choice**	**4.2 Monitoring & contingency plan**
• 3 to 5 • Formulated as problems	• Max 10 concepts • Use neutral concepts • Clearly distinguish (in) dependent variables • Indicate the mechanisms involved	• Select the 3–5 most promising interventions • List the criteria used • Score the interventions on the criteria • List your selection rule	• Clearly state the decision rule • Formulate plan B

FIGURE 1: The Diagnostic Approach Matrix

BOX 2: Guidelines for the case paper

1. Title page including group-code, names and student numbers, tutor, title of the case study, date.
2. The Description generally covers 200–300 words and can include a table with relevant facts & figures.
3. Most cases contain 3–5 Key Issues, which should be formulated in a concise but clear way as a problem to be solved.
4. The Diagnosis will cover about 800 words and contains 4–5 theories that are applied to explain the phenomena in the case and address the key issues.
5. The Conceptual Model includes a maximum of 10 key concepts, that are formulated in a neutral way, with the independent variables (drivers, causes, input) on the left side and the dependent variables (outcome, effects, output) on the right side. The CM is expected to cover the key issues and is the link between diagnosis and interventions.
6. The long list with Interventions should contain between 10–15 potential solutions, possibly including a few wild or radical ideas.
7. Informed choice. Students should explicitly and clearly list the criteria they applied when making a selection from the long list. The selection process should lead to 3–5 most viable or promising solutions. A justification should be provided as well.
8. For the Implementation Plan a table can be used with the following columns: What, How, Who (is involved (1) and responsible (2)), When, and a (measurable and quantified) KPI. If text does not fit into the table, it can be written below the table.
9. The Contingency Plan (also referred to as Plan B). If the interventions happen to be unsuccessful (include the decision rule), what alternative plan will be considered or implemented?

TABLE 2: Example of a script

Time	Action	Who	Typist 1	Typist 2	PP
12:30–12:40	Reading the case study	Group			
12:40–12:45	Description	Group	Description		1
12:45–12:55	Key issues	Group		Key issues	2
12:55–13:20	Diagnosis	Subgroups	Diagnosis (1, 3, 5)	Diagnosis (2, 4)	3
13:20–13:30	Conceptual model	Two specialists present it to team		Conceptual model	4
13:30–13:40	Interventions	Group; brainstorm	Interventions		5
13:40–14:00	Informed choice	Group		Informed choice	6
14:00–14:15	Implementation Plan	Subgroups	Implementation plan	7	
14:15–14:25	Plan B	Group	Plan B	Finalise PowerPoint™ slides	8
14:25–14:30	Review/editing	Together	Review and edit	SAVE FILE!	

Peer and self-assessment

The last 15 minutes of the assessment session are spent on peer and self-assessment, and completing an evaluation form about the unit. For the peer and self-assessment procedure, every student receives a form with the names of all students of their PBL group. All students score all team members (including themselves) with an A, B or C, according to the following condition: exactly one third of the team members should be categorised in A or C. That would imply that in a team of 12 students, four students (no more, no fewer) should be assigned to category A or C. This could be any combination of As and Cs as long as their sum is four. Peer and self-assessment scores are assigned anonymously and are further processed by the unit coordinator. They combine all scores (as shown in Table 3) and identify the (one-third of team size) highest numbers in A or C. The students that end up in category A will receive 80% of the team score, the ones in B 100%, and the ones in C will have the team score weighted (multiplied) by 120%.

Tutors will not interfere with the peer and self-assessment scores assigned by the students. Earlier research has shown very high agreement between student and tutor ratings. It is a powerful and consequential tool for students for mastering an important managerial skill: evaluating the performance of one's colleagues and oneself (Falchikov, 2005).

At the moment, there is no requirement to use both category A and C, so we often see that one third of the team is assigned to C and no one ends up in A. Since that is statistically and psychologically almost impossible, we are considering adding the extra condition to use both A and C when scoring the team members.

Grading

The case study paper and PowerPoint™ slides are independently graded by the assessor and the tutor. The average of their scores determines the team score.

The case study paper is graded with ten different criteria, as shown in Table 4. Each of the four steps in the diagnostic approach (description, diagnosis, interventions, implementation) is divided into two sections, representing the first eight grading

TABLE 3: Results of peer- and self-assessment and final individualised scores

PMO Group K						Team score: 6.1
	Name	Number	A	B	C	w	
1	Peter	1234		10		1	6.1
2	Marian	2341		12		1	6.1
3	Felix	3412	4	8		0.8	4.9
4	Jenny	4123		7	5	1.2	7.3
5	Hanliu	2134		4	8	1.2	7.3
6	Petra	3241		9	3	1	6.1
7	Jon	4312	2	10		1	6.1
8	Lesley	1423		10	2	1	6.1
9	Vasilev	2143		5	7	1.2	7.3
10	Bart	3214		10	2	1	6.1
11	Shannon	4321	1	11		1	6.1
12	Tatiana	3124		12		1	6.1

TABLE 4: Assessor scores and inter-rater agreement

	Group A		Group B		Group C		Group D		Group E		Group F	
	Tutor	Assessor	Tutor	Assessor	Tutor	Assessor	Tutor	Assessor	Tutor	Assessor	Tutor	Assessor
	A	B	C	D	D	C	B	E	F	A	E	F
Description												
Problem analysis	7	7	5.5	5	6.5	6.5	8	8	7.5	6	7	7
Key issues	7	5	6	5	6.5	6.5	7.5	6	7.5	7	5	7.5
Diagnosis												
Concepts & theories	6	5.5	4	5	6.5	4	4.5	6	6	6	7	6.5
Conceptual model	6	6.5	5	5	6	5	6	6	5.5	6	5	5.5
Interventions/solutions												
Interventions (longlist)	8	6.5	5.5	5	6	6.5	7.5	7	7.5	7	7	6
Informed choice	7	7	4	5	5.5	3	5.5	5	7.5	7	6	7.5
Implementation												
Implementation plan	7	7	6	5.5	6	7	5	3	6.5	6	6	6.5
Evaluation & plan B	7	6	5	5.5	6	5	5	5	4.5	6	4	5.5
Reporting												
Academic writing	6	7	5	5	6	7	6	6	8	7	7	8
PP-slides	7	8	6	6	7	6	7	6	7	7	6	7
	6.8	6.6	5.2	5.2	6.2	5.7	6.2	5.8	6.8	6.5	6.0	6.7
Difference	0.2		0		0.5		0.4		0.3		0.7	
Groupscore:	6.7		5.2		5.9		6.0		6.6		6.4	

criteria. Two further criteria are added: Academic writing and the PowerPoint™ slides. For every one of the ten criteria, a score between 1 and 10 is assigned by two independent raters: the assessor who was supervising the team during the assessment session, and the tutor who coached the team in the regular eight PBL sessions during the four weeks of the unit. The average of their grades is the team score, which is used as the point of reference when calculating the individualised final score.

The assessor scores (Table 4) are not shared with students, but are used to monitor the inter-rater agreement. If the difference in the final case study paper mark between two graders is 1 point or more, the unit coordinator will arrange for a third assessment to bring the difference within the set margin. To prevent substantial differences between assessors, calibration sessions are arranged for tutors several times a year to discuss the different grading criteria of the case study paper.

Individualised final score

An individualised score is subsequently calculated using the peer and self- assessment ratings of all members of the PBL group.

As shown in Table 8, the four highest numbers in columns A and C are linked to Jenny, Hanliu, Vasilev, and Felix. The first three will be awarded 120% of the team score, while Felix will end up with 80% of that team score, causing him to fail the unit, the only one in his team.

The example shows the potentially serious consequences of the peer and self-assessment procedure. To avoid the score coming as a surprise, the procedure is also used in the trial "assessions" in the four weeks of the unit. Should students receive As in that period, they can ask their peers what they could or should do to improve their performance.

Conclusion: Does the procedure meet the assessment criteria?

When looking at the desired constructive alignment between educational concept (PBL), learning outcomes, educational activities and assessment, the procedure satisfies many criteria. The assessment session is collaborative, constructive, contextual, student-centred and supportive of competence development (Segers & Dochy, 2001; Boud & Fachikov, 2007; Kemp, Atfield & Tong, 2010).

When looking at the psychometric criteria, the method scores very well on transparency, since not only are all grading criteria available from the start of the unit, but their application and interpretation is actively practised by having students grade their own case study papers four times, after every second PBL session in the unit. Students are even encouraged to compare their scoring with that of their tutor, all in an effort to generate better grading and a better grade.

Another great benefit of the method is the built-in veracity of the final products (case study paper and PowerPoint™ slides). Since all output is produced on the spot in the two-hour session, no further checks are needed to verify whether the work was done by the ones listed on the title page of the case study paper. And with no internet connection allowed during the assessment session, both plagiarism and ghost-writing can be firmly excluded.

To test validity and reliability of the method, additional research is needed in which a team should preferably participate in two assessment sessions, in order to measure the stability (test-retest) and transferability (domain-specificity) of their performance.

The assessment session approach is generally evaluated quite positively by students ($M > 7$ out of 10), although they sometimes express some resistance regarding the peer and self-assessment procedure. The two-hour high pressure assignment is appreciated and considered valuable for future real-world teamwork.

What is considered the strongest asset of the approach is what could best be referred to as its educational value or "educativity". The "assession" tests and trains students in essential competencies like managing teamwork, communication, planning, organising, academic reading and writing, conceptual thinking, practical acting, but most of all in

mastering the quintessential competency of assessing your own and other people's performance, whether using an absolute, relative or intra-individual standard.

Although team-testing has been applied in several formats before, like collaboratively answering multiple-choice tests, doing project work, or making group assignments, the current approach is different in several respects. Students do not have to choose a consensual answer to a multiple choice item (convergent), but are expected to choose relevant theories and concepts from the textbook to describe and explain what is happening in the case study, followed by an informed choice of interventions that may solve the key issues in the case study (divergent). Contrary to project work or group assignments, which are generally scheduled for an extended period of time, the assessment session is limited to two hours in an allocated room. The restriction in time and the fixed location most closely resembles the assessment centre approach. The difference with the group assignment in an assessment centre is that participants in an assessment centre have not met before and have had no opportunity to practise team and task management in advance.

All in all, we think that a summative PBL session where performance is dependent on managing both the team and task dimensions might be a promising innovation in assessment for learning in higher education.

ORCID

Wichard Zwaal https:orcid.org/0000-0001-9303-6800

References

Barrows, H. (1996). Problem-based learning in medicine and beyond: A brief overview. *New directions for teaching and learning, 68*(1996), 3–12. https://doi.org/10.1002/tl.37219966804

Biggs, J. B. (1996). Enhancing teaching through constructive alignment. *Higher Education*, *32*(3), 347–364. https://doi.org/10.1007/BF00138871

Bloom, D. (2011). Collaborative test taking: Benefits for learning and retention. *College Teaching, 57*(4), 216–220.

Boud, D., & Falchikov, N. (2006). Aligning assessment with long-term learning. *Assessment & Evaluation in Higher Education*, *31*(4), 399–413. https://doi.org/10.1080/02602930600679050

Boud, D., & Falchikov, N. (2007), *Rethinking assessment in higher education. Learning for the longer term*. New York: Routledge. https://doi.org/10.4324/9780203964309

Cilliers, F. J., Schuwirth, L. W. T., Herman, N., Adendorff, H. J. & Van der Vleuten, C. P. M. (2012). A model of the pre-assessment learning effects of summative assessment in medical education. *Advances in Health Sciences Education*, *17*(1), 39–53. https://doi.org/10.1007/s10459-011-9292-5

Dochy, F., Segers, M., & Sluijsmans, D. (1999). The use of self-, peer and co-assessment in higher education: a review. *Studies in Higher Education, 24*(3), 331–350. https://doi.org/10.1080/03075079912331379935

Ebel, R. L. & Frisbie, D. A. (1991). *Essentials of Educational Measurement* (5th edn). Englewood Cliffs: Prentice-Hall.

Efu, S. I. (2018). Exams as learning tools: A comparison of traditional and collaborative assessment in higher education. *College teaching*, *67*(1), 73–83. https://doi.org/10.1080/87567555.2018.1531282

Falchikov, N. (2005). *Improving assessment though student involvement*. London: Routledge.

Gielen, S., Dochy, F., & Onghena, P. (2010). Improving the effectiveness of peer feedback for learning. *Learning and Instruction, 20*(4), 304–315. https://doi.org/10.1016/j.learninstruc.2009.08.007

Gijbels, D., Dochy, F., Van den Bossche, P. & Segers, M. (2005). Effects of problem-based learning: A meta-analysis from the angle of assessment. *Review of Educational Research*, *75*(1), 27–61. https://doi.org/10.3102/00346543075001027

Gijbels, D., Van de Watering, G. A., & Dochy, F. (2005). Integrating assessment-tasks in a problem-based learning environment. *Assessment & Evaluation in Higher Education*, *30*(1), 73–86. https://doi.org/10.1080/0260293042003243913

Gordon, J. (2001). *Organizational Behaviour: A Diagnostic Approach*. Harlow: Pearson.

Kemp, P., Atfield, R., & Tong, R. (eds), (2010). *Enhancing learning though assessment in business and management, hospitality, leisure, sport, tourism*, Oxford: Threshold Press.

Robbins, S. P. & Judge, T. A. (2018). *Essentials of Organizational Behaviour*. (14th edn). Harlow: Pearson.

Sandahl, S. S. (2009). Collaborative testing as a learning strategy in nursing education: a review of the literature. *Nursing Education Perspective, 30*(3), 171–175.

Sandahl, S. S. (2010). Collaborative testing as a learning strategy in nursing education. *Nursing Education Perspective, 31*(3), 142–147.

Segers, M., & Dochy, F. (2001). New assessment forms in problem-based learning: the value-added of the students' perspective, *Studies in Higher Education*, *26*(3), 327–343. https://doi.org/10.1080/03075070120076291

Schmidt, H. G., Van der Molen, H. T., Te Winkel, W. W. R., & Wijnen, W. H. F. W. (2009). Constructivist, problem-based learning does work: A meta-analysis of curricular comparisons involving a single medical school, *Educational Psychologist*, *44*(4), 227–249. https://doi.org/10.1080/00461520903213592

Schmulian, A. & Coetzee, S. A. (2018). Students' experience of team assessment with immediate feedback in a large accounting class. *Assessment & Evaluation in Higher Education*, *44*(4), 516–532. https://doi.org/10.1080/02602938.2018.1522295

Schuwirth, L., & Van der Vleuten C. (2011a). Programmatic assessment: from assessment of learning to assessment for learning, *Medical Teacher, 33*(6), 478–485. https://doi.org/10.3109/0142159X.2011.565828

Schuwirth, L., & Van der Vleuten C. (2011b). General overview of the theories used in assessment, *Medical Teacher*, *33*(10), 783–797. https://doi.org/10.3109/0142159X.2011.611022

Sridharan, B. & Boud, D. (2019). The effects of peer judgements on teamwork and self-assessment ability in collaborative group work. *Assessment & Evaluation in Higher Education*, *44*(6), 894–909. https://doi.org/10.1080/02602938.2018.1545898

Van Berkel, H., Scherpbier, A., Hillen, H. & Van der Vleuten, C. (eds). (2010). *Lessons from problem-based learning*. Oxford: Oxford University Press. https://doi.org/10.1093/acprof:oso/9780199583447.001.0001

Vogler, J. S. & Robinson, D. H. (2016). Team-based testing improves individual learning. *The Journal of Experimental Education, 84*(4), 787–803. https://doi.org/10.1080/00220973.2015.1134420

Zwaal, W., & Otting, H. (2015). Aligning principles and practice in problem-based hospitality management education. *Journal of Hospitality, Leisure, Sport, and Tourism Education, 16*, 22–29. https://doi.org/10.1016/j.jhlste.2015.01.001

Research in Hospitality Management 2019, 9(2): 83–88
https://doi.org/10.1080/22243534.2019.1689697

RHM
2019
Research in
Hospitality
Management

What motivates people to become Airbnb hosts – do we know enough? — an exploration of the literature

Simon Lind Fischer*, Henrik S Pahus & Anne Bager

Dania Academy, Randers, Denmark
**Corresponding author, email: sfi@eadania.dk*

ABSTRACT: Airbnb hosts open their doors to provide hospitality for strangers in 7 million homes in more than 100 000 cities around the world. On top of that, Airbnb hosts offer 40 000 guided local experiences across more than 1 000 cities around the world. Yet, in this article, we found that only a limited number of peer-reviewed studies exist on what motivates people to host. Sharing makes a great deal of sense for the consumer, the environment and for communities if managed and balanced fairly by companies and governments. The holistic and thematic map of Airbnb host motivators offered by this article provides hands-on value to those companies and governments and numerous other stakeholders affected by the sharing economy. The findings map a large span of motivational factors that hosts experience, ranging from financial, safety, and security risks of having to submit and renegotiate one's intimate, affective space and private sphere – to escaping loneliness, connecting with people, making new friends and earning money as a micro-entrepreneur. Finally, the article finds that the thematic categories are interrelated, as the existence of an assurance structure for financial transactions does seem to reduce uncertainty among hosts, allowing them to participate.

KEYWORDS: Airbnb host motivation, Airbnb micro-entrepreneurship, collaborative consumption, sharing economy

Introduction

On average, two million people sleep in a stranger's Airbnb bed each night (https://news.airbnb.com/fast-facts/). These strangers are 650 000 people who have become Airbnb hosts. The strangers are fundamental to the existence of Airbnb and the sharing economy that is transforming societies and the hospitality industry. That is why we need to conduct more research to uncover the mystery of what motives the strangers — the hosts — to supply hospitality experiences to a growing number of guests.

As some hosts offer multiple places to stay, the 650 000 hosts offer in total 7 million listings ready to welcome strangers around the world (https://news.airbnb.com/fast-facts/). This has been achieved in just 11 years since Airbnb was founded in 2008 (https://news.airbnb.com/about-us/).

Sharing makes a great deal of sense for the consumer, the environment and for communities if managed and balanced fairly by companies and governments. From an ecological, societal, and developmental point of view, the sharing economy has become popular (Belk, 2014b; Matzler, Veider & Kathan, 2015). In order to overcome economic and institutional issues, consumers embrace the development of a collaborative lifestyle through the sharing economy (Zhang, Bufquin & Lu, 2019). Airbnb offers have affected the tourism sector by increasing the number of destinations selected, the length of the stay as well as the number of activities pursued (Tussyadiah & Pesonen, 2015). Today's sharing economy has seen unimaginable growth rates. Pioneering companies such as Airbnb depend on their ability to motivate a large number of hosts to attract and deliver the experience to the guest, yet research to date has focused mostly on guest motivation, omitting host motivation (Guttentag, 2016; 2019).

Even though Airbnb enjoys enormous success, many potential hosts decide not to become hosts, just as many existing hosts refrain from hosting more often than a few weeks a year. It seems odd that Airbnb hosts often with no hospitality-, experience- or tourism management education or experience can compete so easily with the decades of experience that hotel chains possess. Even though Airbnb grows much faster than i.e. hotel chains, hotels are likely better at managing and monitoring service quality levels, and Airbnb hosts may struggle to compete with hotels' ability to perform standardized service quality and security. However, this seems apparently irrelevant to many guests, as Airbnb offers an alternative value proposition centred around cost-savings and a more authentic local experience (Guttentag, 2016; 2019).

As the sharing economy is a relatively new, growing field, some variations exist when it comes to which terms and definitions apply. This article applies the term *sharing economy*, other terms being applied by researchers are the *collaborative economy*, *peer-to-peer* or *platform economy*. Each term has its own associations and limitations. Sharing is a phenomenon as old as human kind, and sharing is a cultural institution in society exemplified by the fact that parents teach children to share from an early age to be able to function in society. What has fuelled the engine of the sharing economy and its rapid growth is the

widespread use of the internet (Belk, 2014a) combined with more and cheaper ways of travel. The sharing part of the sharing economy refers to the notion of value creation in collaboration with a broader range of stakeholders (Kramer & Porter, 2011). Digital media connects the stakeholders and their resources and needs, enabling the transaction to take place (Zhang et al., 2019). Sharing is perhaps a new paradigm — a radical new way of approaching value creation that might have an enormous potential, not just for tourism, but also for organisations and society in general. Botsman and Rogers (2011) propose that collaborative consumption could be as important as the Industrial Revolution in terms of how we conceptualise and strategise on ownership versus access in business and societal development (Belk, 2014a). The terms *guest* and *host* have been challenged by Slattery (2002), claiming that since an economic transaction is involved, the more accurate term should be *seller* and *buyer*. Even though the relationship is not philanthropic but economic, we find *guest* and *host* to be the most precise labels as these point to the fact that this is not just a physical product being sold, but an intangible service experience being delivered by a real person in the complex role of the host.

Methodology

As Guttentag's (2019) literature review of the progress of Airbnb research only identified two relevant peer-reviewed papers on host motivation, this article considers not only papers on the topic, but also papers relatively close to the topic of Airbnb host motivation. The key words "Airbnb host motivation", "Airbnb host drivers" and "Airbnb micro-entrepreneurship" were used. Each article was carefully examined to make a decision on its inclusion, utilising topic and theme as criteria. Eleven peer-reviewed papers were identified to be able to offer direct value to the aim of this article (see Figure 1). Only papers focusing on Airbnb explicitly but not necessarily exclusively were included (such as papers focusing on Airbnb and other companies).

A thematic content analysis establishing key categories from each paper was conducted. The objective was not to count or to compare the categories, but simply to provide an overview of host motivation with the identified thematic categories. We found that both the barriers and the motivators were relevant in the thematic categorisation of our findings to provide a clearer and more holistic model of host motivation.

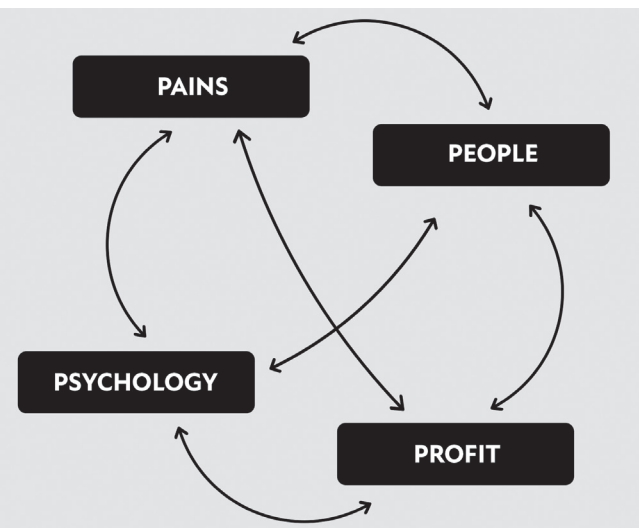

FIGURE 1: The four Ps of airbnb host motivation (Source: Fischer, Pahus & Bager, simple version)

Results

As anyone can become an Airbnb host, the motivational factors behind becoming a host are rich and diverse — which our thematic categorisation also demonstrates (Table 1). The division of the results into four separate categories provides an overview. However, it should be underlined that in reality the categories often appear as a cocktail, being more mixed and interrelated, which the arrows in Figure 1 illustrate.

In the following part, we explain four categories of host motivation and summarise the categories in our model called "The four Ps model of Airbnb host motivation: Pains, people, psychology, profit".

Pains

This part of the findings categorises the pains to host participation and motivation. The fact that many hosts only make their private space available for booking a few weeks a year is not necessarily a problem as overuse of Airbnb can result in negative effects for other stakeholders such as neighbours, other tenants and, of course, for Airbnb's image. However, to understand what motivates hosts, we argue that knowledge of the pains of hosting also need to be made clear as the four categories are interconnected in practice.

We can see from Malazizi, Alipour and Olya's (2018) research, which argues that host satisfaction is negatively influenced by financial, safety and security risks, that the financial aspect functions both as a gain and a pain. However, most pain themes are related to the two other motivational categories of this article — the social and psychological categories.

Roelofsen and Mincas's (2018) article "The Superhost. Biopolitics, home and community in the Airbnb dream-world of global hospitality" takes on a unique perspective investigating the deeper host pains and sociological and psychological costs of participating in peer-to-peer activities. On a similar path, Roelofsen explores and discusses home as a place of belonging versus the Airbnb world as a place of performing (Roelofsen, 2018). The positive emotions of hosting go hand-in-hand with submitting and renegotiating one's most intimate, affective space and private sphere. "Hospitality in the Airbnb sharing economy allows for turning the inside (the home) out, since it is also the outsider who contributes to (re-)determine the borders of the home while sharing the spaces of intimacy with the host" (Roelofsen & Minca, 2018, p. 178). Furthermore, Airbnb hosts run the very likely risk that their personal intimacy will be published to the world through direct and perhaps very personal ratings and public descriptions that might in turn become centre of public debate among several former guests. The ratings and public descriptions will not only focus on tangibles such as square metres or number of beds, but also — and increasingly so — on the intangibles that function as an integral part of the unique, authentic and personal experiences that many guests are looking for (Milanova & Maas, 2017). These intangibles could, for example, be senses, emotions and conversations — which the host might have considered private. It could, most likely, also be selfies and social media posts from the growing millenial

TABLE 1: The four ps model of airbnb host motivation, extended version

The four Ps of Airbnb host motivation	Example/source
Pains	Financial, safety and security risks (Malazizi et al., 2018) Stress from guest expectations and guest reviews (Zhang et al., 2019) The sacrifice of the "proper" privacy and intimacy (Roelofsen & Minca, 2018) Renegotiating one's most intimate, affective space and practices (Roelofsen & Minca, 2018) Sharing the spaces of intimacy (Roelofsen, 2018) Guests expect deep homely, intimate experiences from the hosts' personal space (Roelofsen & Minca, 2018)
People	Cultural learning (Zhang et al., 2019) Ease of operations (Zhang et al., 2019) Allows people who have a desire for stronger communities to create and maintain social connections (Tussyadiah & Pesonen, 2015) Guest reviews both motivate hosts to share more information and give hosts a sense of pride; Social interaction and friendship (Malazizi et al., 2018) Perceived credibility of peer online profile, peer-to-peer (P2P) face-to-face interaction reciprocity, P2P rapport and P2P dyadic trust were particularly important factors in determining the positive perception (Moon, Miao, Hanks, & Line, 2018) The monetary aspect serves as a gateway to the social interaction and many of the "most valued" intrinsic benefits of hosting such as the gratification of being a good host and several "ancillary benefits" (Lampinen & Cheshire, 2016) Enjoying the freedom of working as a micro-entrepreneur without (or with less) hierarchies (Zhang et al., 2019).
Psychology	Freedom, flexibility, personal growth, feeling of achievement (Zhang et al., 2019) Hosting might create social connectedness and thus less social and emotional loneliness (Malazizi et al., 2018) It feels good to see spare rooms or vacant houses as resources that should not be wasted (Zhang et al., 2019) Hosts' attachment and psychological ownership positively influences organisational citizenship behaviour toward Airbnb (Lee et al., 2018).
Profit	Financial gains (Lampinen & Cheshire, 2016) and the economic independence of being a micro-entrepreneur in the sharing economy (Zhang et al., 2019) The existence of an assurance structure for financial transactions seems to reduce uncertainty and a sense of risk among Airbnb hosts, ultimately paving the way for them to become hosts (Lampinen & Cheshire, 2016) When money is involved, the host feels more motivated to act like a host and vice versa, making both more comfortable with rules for the social exchange (Lampinen & Cheshire, 2016).

generation that in turn might not only invade the private sphere, but also lead to burglary if the hosts' design furniture and valuable belongings become visible online.

Personalisation and authenticity are big consumer trends, and the nature of the Airbnb platform design is to market the human beings delivering the authentic, local and personal service experience, while more conventional forms of tourism tend to use faces of unnamed models in their promotional materials (Roelofsen & Minca, 2018). This puts constraints on the personal space or the private versus public sphere of the host. One can argue that this is just part of the game and not necessarily unfair as this also goes for the guest who by using personal photos and description increases his/her chances of having the booking accepted by the host. However, Roelofsen and Minca (2018) emphasise that guests having homely, intimate experiences, nonetheless, represents a pervasive way of interfering with the hosts' daily living spaces (Roelofsen & Minca, 2018).

In the article "Motivators behind information disclosure: Evidence from Airbnb hosts", Liang, Li, Liu, & Schuckert (2019) argue that receiving more reviews and getting higher ratings in a prior period can motivate hosts to disclose more information in the subsequent period. Moreover, hosts are also motivated to offer more information by higher review volume and valence. It is not just about the quantity of reviews because more informative and readable reviews could further motivate sellers to upload information to their profiles (Liang et al., 2019). If hosts add more information, chances are that it will benefit the platform and its guests, ideally contributing to a more trustworthy platform experience and more returning guests.

People

This category concerns the motivational factors to do with the social interaction with guests. Some of the most powerful motivators among hosts have their roots in a need to socialise and establish an emotional bond with others. The people motivator can take place face-to-face during the experience or after the experience online during, for example, reading a guest review.

In "Exploring the effect of Airbnb hosts' attachment and psychological ownership in the sharing economy" (2018), Lee, Yang and Koo find that attachment to a platform plays a vital role in achieving a sense of psychological ownership that ultimately influences host behaviours toward the organisation as well as toward peer hosts. Psychological ownership is defined as "the identification of a particular object as 'mine' or 'ours'" (Van Dyne & Pierce, 2004, in Lee et al., 2018, p. 285), thus being significantly connected to a person's "attitude, motivation and behaviour", especially — but not exclusively — in an employee organisation-related context. The study by Lee et al. (2018) proves a link between psychological ownership and organisational citizen behaviour in Airbnb hosts. Lee et al. (2018, p. 285) further explain psychological ownership as a concept that "can be derived from a sense of emotional attachment to other individuals in the firm as well as the firm". This definition underlines the potential advantages for the organisation that has employees who demonstrate psychological ownership. Similarly, employees who exhibit psychological ownership are likely to engage in organisational citizen behaviour, which is defined as "employee behaviour that is not essential in completing job

tasks but supports organizational operation, such as helping co-workers and participating in roles that are not formally required" (Lee & Allen, 2002, in Lee et al., 2018, p. 285). In a traditional organisational context, psychological ownership and organisational citizen behaviour are relevant as both concepts serve to establish an emotional bond between the employee and the organisation, hence providing the organisation with an important human resource advantage. Even though Airbnb hosts cannot be viewed as conventional employees, the existence of a bond between Airbnb and the hosts may hint at traditional ways of motivating them. In their article, Lee et al. (2018) arrive at the following findings:

- Information sharing and outcome expectations positively influence attachment to Airbnb;
- Self-disclosure and similarity (among peer hosts) positively influence attachment to peer hosts (a combination of the psychological and people motivator);
- Hosts' attachment to Airbnb positively influences psychological ownership; and
- Psychological ownership positively influences organisational citizenship behaviour toward peer hosts.

The article thus also supports the notion of our proposed model of host motivations that the categories, in this case People and Psychology, are interrelated, which calls for a holistic and inter-thematic perspective on Airbnb host motivation. Sharing economy platforms have been found to positively influence socialisation and a sense of belonging (Möhlmann, 2015). These social and psychological perspectives are rich and complex and deserve further attention from researchers.

Social interaction and connectedness are potentially some of the beneficial outcomes of the sharing economy (Malazizi et al., 2018). Knowing this can motivate hosts to invest or live with the psychological risk they take to run their business, which leads us to the next category about the psychological aspect of host motivation.

Psychology

According to Malazizi et al. (2018), the hosting experience can lead to social connectedness and thus less social and emotional loneliness. Specifically, Airbnb provides an opportunity to improve the hosts' social interactions and connectedness with other people. The study by Farmarki and Stergiou (2019) "Escaping loneliness through Airbnb host-guest interactions" supports not only that hosts are motivated by social and psychological factors, but also argues that these factors are increasingly important in a time when loneliness troubles more and more people. The perspective that one of the fundamental appeals of the hosting experience are its social and psychological elements, which contributes to countering loneliness and social isolation, is quite new in the field of the sharing economy. However, in tourism research, the idea of understanding tourism from social and psychological perspectives is not new. According to Larsen (2007), tourism as a social force can often function as a means of escaping loneliness, just as tourism may have the potential to strengthen familial relationships and social interactions. Farmaki and Stergiou's article puts an entirely new perspective on the guest-host relationship and host drivers. First, Farmaki and Stergiou highlight Perlman and Peplau's definition of loneliness as "the unpleasant experience that occurs when a person's network of social relationships is significantly deficient in either quality or quantity" (as cited in Farmaki & Stergiou, 2019, p. 1), and Weiss argues that loneliness may stem from either emotional or social isolation (cited in Farmarki & Stergiou, 2019). According to Ditommaso et al. (1993, as cited in Farmaki & Stergiou, 2019), emotional loneliness derives from the absence of close relationships and is concerned with the quality of social interactions, whereas social loneliness emerges from having inadequate social networks. Similarly, it is worth mentioning that although some people are at a high risk of feeling lonely, no age group or part of society is safe from feeling lonely at times — 30 million adults in Europe feel frequently lonely, with 75 million people meeting friends and family at most once a month (Farmaki & Stergiou, 2019).

The fact that loneliness and psychological needs in general can function as key drivers for host participation must be very relevant knowledge for governments and policy makers as this puts a different perspective on understanding and defining the societal value of Airbnb and the sharing economy. Also, the findings offer value to Airbnb and the opportunity to redesign and improve the platform to ensure a better compatibility between hosts and guests who are experiencing loneliness and social isolation. We recommend that Airbnb considers the pairing of its users to specific types of people experiencing different physical or psychological needs, thus tailoring practices to a more personal experience with a better match for each host and guest. This pairing may contribute to more social forms of tourism and in turn have a beneficial effect on the general well-being of society. At first, this might come across as a quite alternative business opportunity for Airbnb, but Airbnb has the size and the skills to capitalise on this exact need for connectedness through appropriate segmentation adjustments on the platform without disturbing those hosts and guests who are on the platform for other reasons. This venture might make even more sense in a time when Airbnb is often the victim of negative press in the media. Perhaps this focus on social and psychological needs might also improve Airbnb's image among sceptical stakeholders such as locals or politicians representing local residents who do not get their slice of the pie but merely experience the negative consequences of the rise of Airbnb (Farmaki & Stergiou, 2019). Finally, hosts can obtain a new identity as micro-entrepreneurs enjoying the feelings of freedom, flexibility, achievement and personal growth (Zhang et al., 2019).

Profit

The fourth and final P concerns profit as a host motivator. As is the case with the other Ps, profit has a separate effect on host motivation together with an effect on the other Ps. In "Hosting via Airbnb – Motivations and assurances in monetized network hospitality" (2016), Lampinen and Cheshire study the area of host motivations by investigating how financial assurance structures such as the Airbnb application may reduce uncertainty for Airbnb hosts and guests. Furthermore, the article put focus on extrinsic versus intrinsic motivations among hosts.

As we mentioned in our category about pains, various forms of risk can demotivate hosts. Lampinen and Cheshire (2016) also take the stance that risk and uncertainty are factors that have the potential to demotivate, but also to motivate hosts and potential hosts. Focusing on the peer-to-peer (P2P) exchange, Lampinen and Cheshire then discuss social exchange theory, host motivation for participating in P2P exchanges and, lastly, the area of network hospitality.

Based on the research question, *How does the primary, negotiated exchange of money for space and hospitality create opportunities for other exchanges between hosts and guests?*, the study itself is founded on 12 in-depth, semi-structured interviews with future/current/former Airbnb hosts based in the area around San Francisco Bay in California. The twelve interviewees represent a varied segment of hosts — both men and women (3 and 9, respectively), aged from 27 to 65 years. Nine of the 12 interviewees had experience as both hosts and guests, whereas four of them also had experience as couch-surfing hosts as a non-financial alternative to Airbnb.

Among the primary findings, Lampinen and Cheshire (2016) conclude that the existence of an assurance structure for financial transactions seems to reduce uncertainty and a sense of risk among Airbnb hosts, ultimately providing potential hosts with the necessary certainty to decide to become hosts. In fact, even though many of the interviewees mention financial gains as a motivation factor, the study shows that, "[from] the perspective of hosts...the concept of 'sharing' in a system like Airbnb encompasses social interactions that are facilitated by the initial financial exchange" (Lampinen & Cheshire, 2016, p. 1677). In other words, the monetary aspect serves as a gateway into the world of P2P social exchange. The study thus shows how the financial motivation exists side by side with often surprising — but highly rewarding — intrinsic motivations.

The monetary exchange (as a contrast to couch-surfing, which is free) may have the implication that "guests have higher expectations" and are "more willing to ask for things" (Lampinen & Cheshire, 2016, p. 1677), thus to a higher extent turning them into traditional customers. This, however, may also help provide a relatively clear set of expectations for both guests and hosts.

One implication of this is the importance of the service provider (in the study this is often referred to as the "trusted third party" besides the guest and the host, in this case Airbnb) to provide a reliable platform that can manage the monetary exchange, thus providing the gateway to both financial as well as intrinsic benefits for the hosts. The study's relevance to us lies primarily in its investigation of extrinsic/financial versus intrinsic motivations of the hosts.

We have now thematically categorised and explained the identified categories of host motivation. Our proposed model of Airbnb host motivation — The four Ps of Airbnb host motivation — summarises and highlights the findings.

Discussion

This article's ambition to provide a clear, thematic overview of Airbnb host motivation, which resulted in the four Ps model, was both enriched and challenged by the multi-faceted and complex elements that co-exist and co-influence the host experience. Overall, we find that there is a pressing need to focus more primary research on the role of the host rather than the current focus on the guest. As is the nature of service encounters, the interaction between customer (guest) and service provider (in this case the host) is of a reciprocal nature, which means that in order for Airbnb to continue to have satisfied guests, a deeper understanding of the motives of the hosts is required. The guest might either leave a negative review or choose not to use Airbnb for their next stay, which in turn, according to Liang et al. (2019), decreases the motivation for the hosts to use Airbnb for the purpose of lending out their facilities.

Bearing this in mind, in future studies, we intend to delve deeper into the balance between extrinsic/financial versus intrinsic motivations of the hosts as suggested by Lampinen and Cheshire (2016). Especially the relation between the monetary motivators *("I am renting out my apartment on Airbnb to make money")* versus the "softer" motivators *("I am renting out my apartment on Airbnb to meet new people...")* seems obvious.

Our main focus in the upcoming research project will be the city of Aarhus in Denmark. The reason for choosing Aarhus is that Airbnb recently entered into a partnership with the regional municipality and tourism organisation, which would suggest an increasing number of guests using Airbnb as their accommodation provider. Subsequently, the hosts in Aarhus are highly likely to experience an increase in activity, which forms the basis of our assumption that the newfound collaboration will increase the number of service providers (hosts) in the city. Both the increase in activity and the number of hosts, combined with partnership between Airbnb and the municipality, make Aarhus an ideal site for further research into motivational factors of hosts. Our research will be conducted with relevant stakeholders and take place in 2020–2021, and will investigate the motivational factors that concern the hosts.

Conclusion

A thematic map of host motivational factors illustrated by this article's four Ps model of Airbnb host motivation will have solid value for Airbnb's future strategic development of its platform, and clear societal value. National and local governments can use these findings to understand the fundamental driving forces behind the sharing economy and thus navigate better in the complex challenge of making policies and strategies that make the most of the huge power and historical potential that the sharing economy offers to a large number of different stakeholders. As the amount of relevant research into hosts was found to be scarce, we had to broaden the reach of our literature search, which meant including research articles that dealt with peripheral but still relevant topics regarding host motivation. Subsequently, that led us to thematically map out four main motivational elements: Pains, People, Psychology, and Profit.

Dealing with elements that concerned the demotivating factors, concerns about one's privacy and the intimacy of the home were accentuated. When studying the People and Psychology categories, a strong connection between the two was identified in the sense that they both address the socialising element in the sharing economy. Social interaction made it possible for hosts to gain new friends, whereas the psychological motivators dealt with the sharing economy as a means to alleviate loneliness. Finally, the Profit category dealt with elements of trust and security in financial transactions between host and guest, but also with the balance between extrinsic/financial versus intrinsic motivations of the hosts, as suggested by Lampinen and Cheshire (2016). This last element will be the focal point for our research project concerning hosts in the city of Aarhus, Denmark, in 2020–2021.

References

Belk, R. (2014a). You are what you can access – Sharing and collaborative consumption online. *Journal of Business Research*, *67*(8), 1595–1600. https://doi.org/10.1016/j.jbusres.2013.10.001

Belk, R. (2014b). Sharing vs. pseudo-sharing in web 2.0. *The Anthropologist, 18*(1), 7–23. https://doi.org/10.1080/09720073.2014.11891518

Benkler, Y. (2004). Sharing nicely: On shareable goods and the emergence of sharing as a modality of economic production. *The Yale Law Journal, 114*(2), 273–358. https://doi.org/10.2307/4135731

Botsman, R. & Rogers, R. (2011). *What's mine is yours: How collaborative consumption is changing the way we live*. New York: Collins.

Farmaki, A. & Stergiou, D. P. (2019). Escaping loneliness through Airbnb host-guest interactions. *Tourism Management, 74*, 331–333. https://doi.org/10.1016/j.tourman.2019.04.006

Guttentag, D. (2016). Why tourists choose Airbnb: A motivation-based segmentation study underpinned by innovation concepts. UWSpace. https://uwspace.uwaterloo.ca/handle/10012/10684

Guttentag, D. (2019). Progress on Airbnb – A literature review. *Journal of Hospitality and Tourism Review, 10*(4), 814–844. https://doi.org/10.1108/JHTT-08-2018-0075

Kramer, M.R. & Porter, M. (2011). Creating shared value. *Harvard Business Review, 89*(1/2), 62–77.

Lampinen, A. & Cheshire, C. (2016). Hosting via Airbnb – Motivations and Assurances in Monetized Network Hospitality. *SIGCHI Conference on Human Factors in Computing Systems*. https://www.researchgate.net/publication/299352345_Hosting_via_Airbnb_Motivations_and_Financial_Assurances_in_Monetized_Network_Hospitality

Larsen, S. (2007). Aspects of a psychology of tourism experience. *Scandinavian Journal of Hospitality and Tourism, 7*(1), 7–18. https://doi.org/10.1080/15022250701226014

Lee, H., Yang, S-B., & Koo, C. (2018). Exploring the effect of Airbnb hosts' attachment and psychological ownership in the sharing economy. *Tourism Management, 70*(February), 284–294. https://doi.org/10.1016/j.tourman.2018.08.017

Liang, S., Li, H., Liu, X. & Schuckert, M. (2019). Motivators behind information disclosure: Evidence from Airbnb hosts. *Annals of Tourism Research, 76*(May), 305–319. https://doi.org/10.1016/j.annals.2019.03.001

Malazizi, N., Alipour, H., & Olya, H. (2018). Risk perceptions of Airbnb hosts: Evidence from a Mediterranean island. *Sustainability, 10*(5), 1–23.

Matzler, K., Veider, V., & Kathan, W. (2015). Adapting to the sharing economy. *Massachusetts Institute of Technology Sloan Management Review, 56*, 71–77.

Milanova, V., & Maas, P. (2017). Sharing intangibles: Uncovering individual motives for engagement in a sharing service setting. *Journal of Business Research 75*, 159–171. https://doi.org/10.1016/j.jbusres.2017.02.002

Möhlmann, M. (2015). Collaborative Consumption: determinants of satisfaction and the likelihood of using a sharing economy option again. Wiley Online Library. https://doi.org/10.1002/cb.1512

Moon, H. G., Miao, L., Hanks, L. & Line, N. D. (2018). Peer-to-peer interactions: Perspectives of Airbnb guests and hosts. *International Journal of Hospitality Management 77*, 405–414. https://doi.org/10.1016/j.ijhm.2018.08.004

Roelofsen, M. (2018). Performing "home" in the sharing economies of tourism: the Airbnb experience in Sofia, Bulgaria. *Fennia, 196*(1), 24–42.

Roelofsen, M. & Minca, C. (2018). The Superhost. Biopolitics, the home and the community in the Airbnb-dream world of global hospitality. *Geoforum 91*, 170–181. https://doi.org/10.1016/j.geoforum.2018.02.021

Slattery, P. (2002). Finding the hospitality industry. *Journal of Hospitality, Leisure, Sport & Tourism Education, 1*(1), 19–28. https://doi.org/10.3794/johlste.11.7

Tussyadiah, I. & Pesonen, J. A. (2015). Impact of peer-to-peer accommodation use on travel patterns. *Journal of Travel Research, 55*(8), 1022–1040. https://doi.org/10.1177/0047287515608505

Zhang, T., Bufquin, D., & Lu, C. (2019). A qualitative investigation of micro-entrepreneurship in the sharing economy. *International Journal of Hospitality Management, 79*(May), 148–157. https://doi.org/10.1016/j.ijhm.2019.01.010

Research in Hospitality Management 2019, 9(2): 89–97
https://doi.org/10.1080/22243534.2019.1689698

RHM
2019
Research in
Hospitality
Management

Profitability in Egyptian hotels: business model and sustainability impact

Karam Zaki* & **Omar Qoura**

Hotel Studies Department, Faculty of Tourism and Hotels, Fayoum University Fayoum, Egypt
**Corresponding author, e-mail: kgm00@fayoum.edu.eg*

ABSTRACT: The goals of this research are: first, to identify factors impacting hotel profitability; second, to explore the profitability ratios most commonly used by Egyptian hotel managers; third, to examine whether the hotel profitability is considered an issue of control or not. Questionnaires were collected from a convenience sample of hotels at different locations in Egypt. Two-stage analysis was performed, involving the hotel profitability estimation in the first stage using a sophisticated frontier analysis technique (LIMDEP), and the determination of hotel profitability determinants during the second stage using regression analysis. Results showed that hotels' ability to succeed is not only determined by their business model attributes of size or location, but by their type, brand, and some controlled factors such as sustainability practices. The importance/performance analysis (IPA) showed that occupancy rate as a profitability indicator was situated in the second IPA quadrant, meaning similarity between importance and performance perceptions. Furthermore, measuring efficiency is a useful tool to identify factors impacting profitability. This research found that hotels located in the capital city do not show higher profitability values than hotels locating in remote areas. Hotels' size, capacity, star rating, type, managers' experience and sustainability factors were found to be the main profitability determinants. To date, this study is one of the first attempts to identify hotel profitability determinants in Egyptian hotels.

KEYWORDS: business model, Egyptian hotels, frontier technique, profitability, sustainability

Introduction

The service sector is a critical component in the majority of developed economies, it accounts for approximately 70 per cent of 2017's value added in the UK (Crespi, Criscuolo, Haskel, & Hawkes, 2006; Statista, 2018b). Similarly, it contributes around 55 per cent to Egyptian GDP growth (Statista, 2018a), while, 50 per cent of Egyptian employment benefit from the service organisations in general and nearly 2.5 per cent are engaged at hotels in particular. Although the service sector provides the most potential for improving profitability, the available profitability measures related to the relationship between outputs and inputs are still tricky and reflect a big challenge in which measure to consider (Zaki, Jones, Morsy, & Abdelmabood, 2013).

Proof from various research studies suggests that hotels' profitability is, to a large extent, affected by many factors, either controlled or beyond management control. This article questions this suspicion by testing the relationship between hotel business model variables, sustainable practices and hotel profitability using a financial data set.

It has been argued that profitability is one of the main pillars for any hotel to survive in the long run. Even though profitability is a prime goal for all business leaders, it is suggested that insufficient attention has been paid to exploring drivers of profitability, especially in developing countries (Alarussi & Alhaderi, 2018). Therefore, the novelty of this empirical study consists of the inclusion of both controlled and uncontrolled determinants of hotel profitability.

According to Angeles Montoro-Sánchez, Mas-Verdu, and Ribeiro Soriano (2008), there is no proper unit of analysis for elucidating the profitability concept, as typically pointed out in the debate between economics and management disciplines in the literature. The quality and efficiency of hotel managers rely on their ability to identify those factors that can lead to profitability control. Generally, profitability could be defined as the earnings of the company that are generated from revenue after subtracting all related expenses incurred during a certain period. It is one of the most important distinguishing factors that refer to management success, customer satisfaction, the attraction of corporate investors and company sustainability. Undoubtedly, the ultimate goal of any organisation is to maximise the shareholder's portion by increasing profit from the used resources. Future extrapolations signpost that hotel profitability drivers will come to be even more of a challenge, with a subsequent effect on hotel management (Burgess, 2007).

One of the most important inquiries widely considered in literature is the reason behind the change in the pattern of profitability over time. Nanda and Panda (2018) observed the influence of the exogenous (macro-economic) and endogenous (firm-specific variables) determinants on profitability. They concluded in their Indian empirical research that the firm-specific factors and exchange rate channels are quite relevant in elucidating the profitability. Assaf, Josiassen, Knežević Cvelbar, and Woo (2015) reported that the financial measures of profitability are best measured using the technical efficiency gap

matrix which involves a small number of used inputs to generate many outputs.

Recently, Bodhanwala and Bodhanwala (2018) revealed a significant positive relationship between sustainable factors and some profitability measures (return on invested capital, return on equity, return on assets and earnings per share). They suggested that organisations which practise remarkable sustainable strategies ensure profitability and have substantially lower carbon footprints.

The main aim of this research is to re-test the relationship between hotel business model variables, sustainable orientation factors, and hotel profitability in Egypt. The research is conducted as follows. First, there is the literature review in which we discuss the profitability concept in the hotel industry. This is followed by the profitability measurement issues, both in general terms and specifically within the hotel context. The research methodology is then presented. Next, the results are discussed, and implications for further research are then reported.

Review of related literature

The literature shows two main related themes, to be discussed below as follows: profitability research in the hotel industry and the profitability determinants debate. Finally, the proposed framework is highlighted.

Profitability research in the hotel industry

The prime objective of a profit-seeking company is to maximise profitability. A business needs to make a profit to be able to offer a return for any investors and to be able to grow the business by re-investment (Parsons, 2002). The critical performance measure for any private business is profitability. Without ongoing profitability, a business is simply eroding its stock base. Because of its importance, profitability concepts are employed in many areas of business research. For instance, they are employed in many hospitality research studies (Sandvik, Duhan, & Sandvik, 2014; Bougatef, 2017; Menicucci, 2018). In addition, profitability definitions may be expressed in absolute terms (financial profits) or in comparisons and ratios. For example, profitability might be compared to active costs (gross operating profit, net margins) to specific activities within the hotel (return on sales [ROS], return on investments [ROI], return on assets [ROA], and return on other aspects of the business), to the capital provided to the organisation (return on equity, assets, debt, total investments), to stock prices across time, or to factors in the business environment such as profits before or after taxes, profits relative to competitors, or profits relative to industry averages. Sandvik et al. (2014) defined profitability as the ratio of returns to identifiable assets and sales.

Notably, financial ratios have always been a valuable tool for service industry managers. Ratios allow the user to summarise and analyse related data to provide meaningful information for making decisions (Singh & Schmidgall, 2002). Most of the financial ratios exist to help hotel executives to review and investigate the financial and operating data that appears in the corporate financial statements. The financial ratios are of five types (liquidity, operating, solvency, activity, and profitability). The liquidity ratios are used to show the ability of an organisation to meet short-term responsibilities. The operating ratios refer to management efficiency regarding its operations. The solvency ratios are used to show the ability of an organisation to pay long-term financial obligations. The activity ratios are to measure management efficiency regarding its assets. The profitability ratios highlight the management return on sales and investments. Most of the previous ratio studies have focused on the definition, adoption, interpretation, measurement, and benchmarks of performance and ratio usage between different groups (Xiao, O'Neill, & Mattila, 2012).

Profitability is considered a multidimensional concept in many financial measures such as return on equity, return on assets, occupancy rate, and gross operating profit per available room. The hotel industry calculates its achievement and excellence not only with bottom-line financial ratios like gross operating profit (GOP) or net operating income (NOI), but also with top-line financial indicators, such as the average daily rate (ADR) and revenue per available room (RevPar). ADR is measured by taking the total amount of revenue earned in one night and dividing it by the total number of sold rooms. RevPar is measured by taking overall revenue from accommodation and dividing it by the total number of vacant rooms in the hotel. These two ratios are considered by hotel managers to be the most crucial operating indicators when defining the profitability of a hotel. Furthermore, the industry uses occupancy as a financial indicator (O'Neill, Sohal & Teng, 2016). Occupancy is calculated by taking the total number of sold rooms and dividing it by the total number of available rooms in any hotel. In general terms, this percentage is discussed and used as a comparison tool against other hotels in the market, but it only identifies the actual demand. The goal of any hotel is to operate with full occupancy percentages to achieve better financial outcomes (Matovic, 2002). Wadongo, Odhuno, Kambona, and Othuon (2010) reported that hotel profit maximisation is one of the most important key performance indicators (KPIs) in the Kenyan hotel industry. They further confirmed hospitality managers in Kenya are still primarily focusing on financial measures of performance.

Hotel profitability determinants

Sainaghi, Baggio, Phillips and Mauri (2018) used network analysis in their research of the hotel financial performance indicators in the hospitality and tourism research domain to examine two research questions.

The first question relates to ascertaining general trends from the hotel performance literature, and the second focuses on identifying the salient streams and sub-topics. The analysis embraced 20 years (1996–2015). The sample included 1 155 papers. For the analysis, they created a network of papers designated as nodes and the citations among the papers as links. They found 761 papers that were "connected" studies within the network. By contrast, 34 per cent of the sample (394 papers) consists of "unconnected" studies. Excluding outliers, the net sample was 734 articles. They identified 14 clusters, which they broke down into several sub-topics. They provided some conclusions regarding trends and future research directions. With regard to salient topics, cross-citation and network analysis provide a detailed picture of where the literature comes from and where it currently stands.

O'Neill and Mattila (2006) in their research in US hotels found that hotel profit is highly correlated with size, market segment, and occupancy percentages. A follow-up study in Malaysia (Alarussi & Alhaderi, 2018) confirmed the correlation between organisation size and profitability. Nanda and Panda (2018) differentiated the profitability determinants into two

main factors, i.e. internal, and external factors. The internal factors include the business model variables, while the external profitability factors are the macro-economic determinants in Indian companies.

Menicucci (2018) examined profitability and its determinants using a sample of 2 366 Italian hotels from a panel data set from 2008 to 2016. He applied a composed measure of profitability comprising return on equity, return on assets, occupancy rate and gross operating profit per available room, and he investigated the variables affecting profitability and put them into five main groups: market variables, business model, ownership structure, management education, and control variables. Menicucci (2018) found that a financial crisis, business model factors, and ownership structure affect hotel profitability.

However, there is another stream of research which identified other factors affecting profitability such as the innovation and competitive market advantage in the Norwegian hotels (Sandvik et al., 2014). Bougatef (2017) has drawn researchers' attention to the effect of the corruption level on banks' profitability in Tunisia.

The ability to clearly formulate and execute a logical strategy is crucial to survive in the hotel industry. Previous literature focused on the relationship between hotels' strategy and profitability. The strategic decisions regarding hotel situation, size, chain affiliations, age, and brand are the main uncontrolled profitability determinants (O'Neill & Mattila, 2006; Xiao et al., 2012; Assaf & Tsionas, 2018). Most of them demonstrated a positive relationship between business model factors and hotel profitability.

The previous literature guided us to the first hypothesis, which is:

- Hypothesis 1: Hotel business model variables positively influence profitability.
  Hypothesis 1a: Hotel location positively influences profitability;
  Hypothesis 1b: Hotel size positively influences profitability;
  Hypothesis 1c: Hotel age positively influences profitability;
  Hypothesis 1d: Hotel brand positively influences profitability.

Recently, research on the effect of sustainable orientation on profitability is imperative, as recommended by Bodhanwala and Bodhanwala (2018). Sustainability incorporates many businesses, economic and social implications (Legrand, Sloan, & Chen, 2017). The most agreed upon sustainability practices introduced in this study can help hotel managers and their operations become more operationally sustainable. Bai and Sarkis (2014) introduced a methodology to identify sustainable KPIs that can then be used for sustainability performance evaluation. It was based on using the data envelopment analysis (DEA) to benchmark and evaluate relative performance.

Since the research conceptual framework (Figure 1) and hypotheses are based on the resources-based theory (Barney, 1991), it led us to the second hypothesis which is:

- Hypothesis 2: Hotel's sustainable orientation variables positively influence profitability.

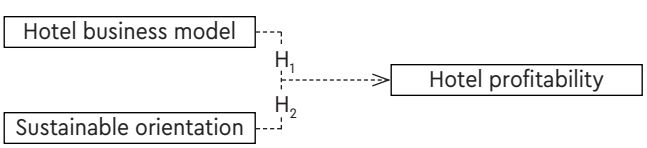

FIGURE 1: Hotel profitability framework

Hypothesis 2a: Energy management positively influences profitability;
Hypothesis 2b: Waste management positively influences profitability;
Hypothesis 2c: Water management positively influences profitability.

The aforementioned sustainability practices are modified from Azapagic and Perdan (2000) and Zaki (2017).

Research methodology

Evidence from various research suggested that hotels' profitability is to a great extent driven by many factors, either controlled or beyond the control of the management. This article questions this suspicion by testing the relationship between some hotel business model variables, sustainable orientation factors and hotel profitability using a cross-sectional data set of 31 hotels in Egypt. Furthermore, we extended the examination of profitability indicators using the importance/performance matrix ranking across different hotel companies. Hence, two main objectives for this research are subject to investigation: first, to analyse differences in importance/performance (usage) of the profitability ratios most commonly used by Egyptian hotel managers; second, to examine whether the hotel business model characteristics and sustainability practices affect hotel profitability.

The current study adopted a quantitative approach using the interviewer-completed questionnaire (ICQ) strategy as a method for data collection to answer the research question and to achieve the aim and objectives. The methodology designed for the current research was guided by the primary research question and the subsequent research objectives. Descriptive research describes and defines a phenomenon as it exists. It is used to identify and obtain information on the characteristics of a specific problem (Crotty, 2003).

Research data were collected through two methods of data collection: first, secondary methods through searching in several database sources were used to get the financial hotel data from hotel companies listed in the Egyptian Bursa database; second, using a questionnaire that was developed on the basis of the reviewed literature and the pilot study to quantify, supplement and complement the research's main concern.

The final questionnaire draft involved five sections of 46 survey-coded variables. The first part contains a cover letter to explain the purpose of the study, contact information, and general directions. The second part aimed to collect data about the hotel, asking them to record the business model variables (hotel name, location, size, total staff capacity, and brand). The demographic profile of respondents then followed using four closed questions. The third part aimed to measure the perception of hotel managers to the profitability indicators according to the importance/performance analysis (IPA) matrix evaluations.

It was also noted that the majority of hotel managers were unwilling to share and disclose their financial data. However, we included the financial data from other sources such as the financial statements, income statements, and balance sheets obtained from each company website and from the Egyptian Bursa database.

The final part aimed to ask hotel managers to what extent they use some sustainable indicators of energy, water, and waste practices in the hotel operations. The final part listed

five indicators related to the use of energy management practices, six indicators related to the use of water consumption management practices, and eight items related to the use of waste handling management practices, to be assessed based on their actual usage levels. A five-point Likert scale type was used: "5 = strongly used" and "1 = strongly not used".

The target population of the current study was the hotel managers working in Egyptian hotels in four cities in Egypt, e Cairo, Giza, Fayoum, and Hurghada. The main reason for selecting these four cities is related to accessibility and the time limitation using convenience sampling to achieve the predetermined objectives. The sample frame size selected was 31 hotels, as seen in Table 1.

A total of 31 questionnaires were distributed to the managers of the sampled hotels. From the sample, 31 questionnaires were fully returned, a response rate of 100% (Table 2).

Mixed methods of data analysis were performed. The collected data were processed and analysed through some statistical tests using two statistical programs. The descriptive analysis was performed using SPSS Vers. 24 (e.g. frequencies, percentage, independent and paired sample *t*-test, Cronbach's alpha, regression; Field, 2013).

The second program was LIMDEP Ver. 11, recommended by Zaki (2014) to calculate hotel profitability using a mix of financial input/output measures. LIMDEP is one of the econometric and statistical software packages with a diversity of estimation tools. In addition to the core econometric tools for analysis of cross sections and time series, LIMDEP supports methods for frontier and efficiency calculations.

Results and discussion

Profitability calculations

Once the main hotel data was obtained, it was entered into the LIMDEP software to calculate the technical efficiency gap (Mhlanga, 2018) to reveal the best performing hotel in the sample. Therefore, hotels which get the frontier (1.0) are considered the more profitable hotels compared to others.

As shown in Table 3, four hotels (namely 14, 21, 24, and 27) emerged as on the technical and cost efficiency frontier, with hotel 23 having the second highest efficiency (0.98) scores. Hotel 12 and hotel 25 emerged in third place with (0.97) scores. To understand the dynamics underlying these scores and the profitability determining factors, the results from the second-stage analysis are discussed in the regression results section. Table 3 lists the descriptive statistics for the hotel sample.

In relation to categorising the similarities and differences between the importance and actual usage level of each profitability measure, the normality test showed that data has the parametric test requirements. Thus, the paired sample *t*-test was employed to determine such similarities and differences. The results are shown in Table 4.

The possible range of importance/actual usage levels started from 1.0 and went up to 5.0, with 1.0 being the least important, and 5.0 the most important on the scale, and 1 indicated that it rarely used, and 5 highly used on the performance scale. Thus, the scale length is 5.0, and the central point on this scale is 2.5. Thus, the measure was considered "highly important" or had "high performance" if it was given importance or performance score means that exceed 2.5. Otherwise, it was considered "low important" or "low performance". Importance and performance data of profitability measures were plotted on two axes, with importance on the Y-axis and performance on the X-axis. The Y-axis reports the assessed profitability measures, and the X-axis shows the performance in relation to these measures.

The IPA matrix (Figure 2) includes four quadrants. Each quadrant involves a different management approach. Based on IPA positioning, hotel managers can determine which

TABLE 1: Hotels sampled and their classifications

Hotel sample	Hotel classifications			Total
	5 star	4 star	3 star	
Cairo	7	8	1	16
Giza	5	5	0	10
Hurghada	3	0	0	3
Fayoum	1	1	0	2
Total	16	14	1	31

TABLE 2: Descriptive statistics

Variable	Frequency	%
Sex		
Male	26	83.9
Female	5	16.1
Age		
21–30	4	12.9
31–40	16	51.6
41–50	8	25.8
Above 51	3	9.7
Hotel manager	8	25.8
Executives	23	74.2
Experience		
Less than 1 year	1	3.2
1–5 years	2	6.5
6–10 years	2	6.5
11 years and more	26	83.9
Hotels characteristics		
Location		
Cairo/Alex road	8	25.8
Cairo	8	25.8
Fayoum	2	6.5
Giza	10	32.3
Hurghada	3	9.7
Size		
1–50 room	1	3.2
51–200	9	29.0
201–400	14	45.2
401–600	2	6.5
>600	5	16.1
Age		
1900–2000	21	67.7
2001–2018	10	32.3
Number of employees		
<100	5	16.1
101–300	21	67.7
301–500	5	16.1
Star		
3 star	1	3.2
4 star	14	45.2
5 star	16	51.6
Type		
Independent	10	32.3
Chain	21	67.7
Total	31	100.0

profitability indicator should command more attention. The four identifiable quadrants are: concentrate here, keep up the good work, low priority, and possible overkill.

According to the occupancy rate, this measure was assessed by managers to be of high importance, and at the same time, to have high levels of performance. The message here is to keep up the good work. However, three profitability indicators (cost targeting, ROE, ROA) have been seen to be of low performance. Accordingly, hotel managers should consider them.

Table 5 shows differences in profitability between the hotel clusters classified by the independent variables. The independent samples *t*-test is mostly valuable in measuring differences between two independent groups. It detects statistically significant differences in the mean of profitability

TABLE 3: Profitability calculations using LIMDEP

Stoc. Frontier normal/truncated-normal model Log likelihood = -84.085517					**Number of obs: 31** **Wald χ^2 (3): 3.57e+07** **Prob > χ^2 = 0.000**	
Output	**Coefficient**	**Standard error**	***z***	***p* > *z***	**95% CI**	
Occupancy	0.0070497	0.0027	3.56	0.010	0.0016523	0.01244
REVPAR	0.0006209	0.00020	3.06	0.002	−0.0010189	−0.0022
ROE	0.0000146	0.00002	0.52	0.600	−0.000399	0.00006
-cons	91.44586					
Code	**Output**	**No. of rooms**	**REVPAR**	**ROE**	**Max_output**	**Efficiency**
1	75	280	26 224	201 062	80.68	0.93
2	77	320	21 456	113 389	84.13	0.92
3	80	286	26 224	190 080	86.75	0.92
4	70	400	26 224	177 408	83.32	0.84
5	71	560	21 456	144 288	84.37	0.84
6	72	283	21 456	135 993	83.15	0.87
7	75	279	23 840	172 800	84.2	0.89
8	74	298	21 456	155 520	82.8	0.89
9	80	290	26 542	200 000	84.93	0.94
10	69	293	25 654	201 111	84.74	0.81
11	80	297	24 857	180 000	84.43	0.95
12	81	310	22 555	170 000	83.44	0.97
13	83	301	21 000	199 999	86.89	0.96
14	85	300	22 100	165 849	85	1.00
15	79	298	22 456	125 478	85.37	0.93
16	79	68	22 478	132 654	85.76	0.92
17	78	680	22 450	210 101	87.54	0.89
18	80	670	21 589	201 000	89.43	0.89
19	78	675	26 224	184 564	82.01	0.95
20	80	700	21 456	154 658	86.72	0.92
21	88	780	21 456	200 100	88	1.00
22	83	140	23 840	168 999	86.05	0.96
23	84	145	21 456	186 974	85.5	0.98
24	82	142	26 224	135 698	82	1.00
25	81	146	22 555	170 000	83.44	0.97
26	83	150	21 000	199 999	86.89	0.96
27	85	442	22 100	165 849	85	1.00
28	79	86	22 456	125 478	85.37	0.93
29	79	65	22 478	132 654	85.76	0.92
30	78	15	22 450	210 101	87.54	0.89
31	80	52	21 589	201 000	89.43	0.89

TABLE 4: Paired sample *t*-test

Profitability measures	**Importance mean**	**Actual usage mean**	***t*-test result (sig. *p*-value)**	**Decision (similar/gap)**
P1 Total sales	4.90	4.10	<0.001	Gap
P2 Revenue per available room	4.94	4.03	<0.001	Gap
P3 Total revenue	4.87	4.03	<0.001	Gap
P4 Cost targeting	4.74	2.29	<0.001	Gap
P5 Return on equity	4.90	2.35	<0.001	Gap
P6 Return on assets	4.97	2.42	<0.001	Gap
P7 Occupancy rate	4.84	4.87	0.325	Similar

$p < 0.05$: shows similarity between the importance and actual usage level of the profitability measures

$p \leq 0.05$: shows the significant difference between the importance and actual usage level of the profitability measures

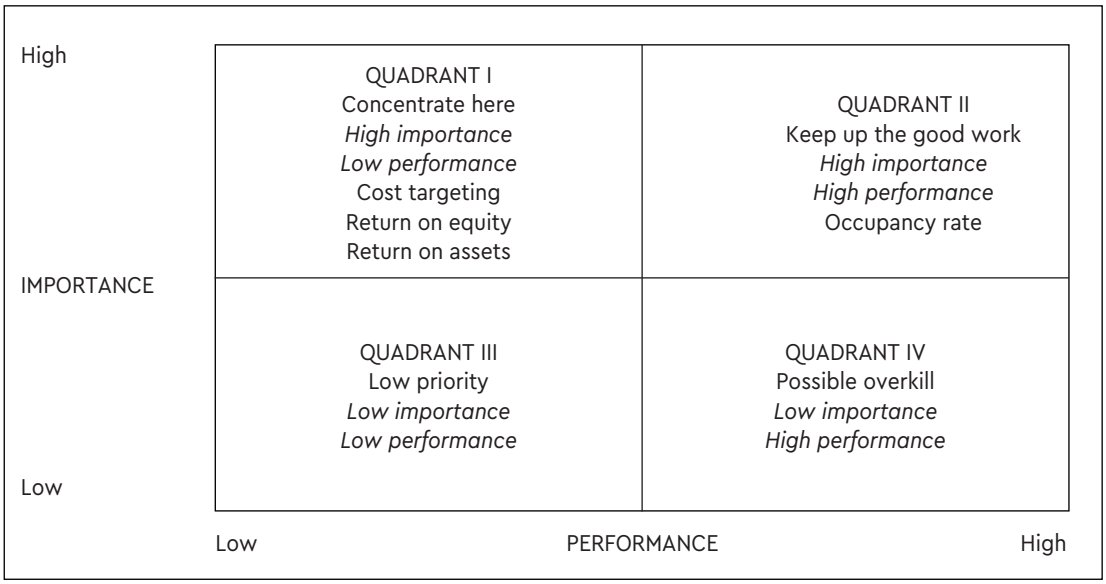

FIGURE 2: IPA matrix of profitability measures

TABLE 5: Independent samples *t*-test for profitability differences

	Levene's test for equality of variances		*t*-test for equality of means				
	F	Sig.	*t*	df	Sig. (2-tailed)	Mean difference	Standard error difference
Hlocation	1.503	0.230	−0.303	29	0.764	−0.177	0.584
Hsize	0.000	0.997	−4.573	29	0.000	−1.869	0.409
Hage	83.154	0.000	1.710	29	0.098	0.385	0.225
Noemployees	0.001	0.972	−4.230	29	0.000	−0.954	0.226
Star	29.861	0.000	−2.377	29	0.024	−0.615	0.259
Htype	83.154	0.000	−1.710	29	0.001	−0.385	0.225
Age	0.035	0.852	0.354	29	0.726	0.146	0.412
level	0.477	0.495	−0.314	29	0.756	−0.069	0.221
Experience	4.903	0.035	−0.958	29	0.006	−0.346	0.361
Energy	0.640	0.430	−0.593	29	0.558	−0.18308	0.30855
Water	4.400	0.045	−1.496	29	0.014	−0.57821	0.38647
Waste	0.626	0.435	−4.284	29	0.000	−1.42500	0.33264
Profitability	2.267	0.143	0.527	29	0.602	0.01285	0.02436

measures, confirming the null hypothesis as two populations share the same distribution in the dependent variable.

Table 5 reveals statistically significant ($p < 0.05$) differences in the profitability variable according to the hotel's size, capacity, star rating, type, managers' experience, water, and waste factors. Specifically, we observed variations between large and small hotels, hotels with a lot of staff and those who have fewer numbers of employees, hotels with 5, 4 and 3-stars, and chain-affiliated and individual hotels. However, hotels located in the capital city do not show higher profitability values than hotels located in remote areas. These findings deviate from the findings by Menicucci (2018), who found that hotels situated in urban locations in Italy are more profitable than hotels situated in coastal locations. Consequently, the hotel location does not appear to ensure high profits. Interestingly, hotels operating under general managers with a high level of experience show higher profitability values than hotels operating under less-experienced managers. The coefficients are statistically significant (0.006). This result supports Menicucci (2018), who found that well-educated hotel managers contribute to higher levels of profitability.

It is also noted that hotels approaching the sustainable practices of water conservation and waste management show higher profitability values than hotels that do not consider these approaches. The coefficients are statistically significant ($p < 0.05$). These findings support prior studies verifying that high performance in hotels or hospitality organisations is directly related to sustainability-based practices (Peng Xu, Chan, & Qian, 2012; Rowe, 2018). The same can be said for manufacturing companies (Bodhanwala & Bodhanwala, 2018).

Correlation test

To understand the nature of the relationships between the variables considered to influence profitability, the correlation test was applied to the data to determine the strengths of the relationships. Table 6 shows how hotel location, hotel age, capacity (number of employees), type, and water variables positively affect profitability. While hotel size, star rating, energy, and waste factors negatively affect profitability. As with the case of multicollinearity, Myers and Myers (1990) indicated that the variance inflation factor (VIF) value of more than 10 is

problematic. Consequently, the VIF values reported for this study are acceptable and are lower than 3. Moreover, the tolerance values were greater than 0.1. Therefore, multicollinearity is not a concern for this further analysis.

Regression results

To test the theoretical framework and the corresponding hypotheses, a regression analysis was performed, and the results are presented in Table 6 and Figure 3.

Table 7 and Figure 3 show that only two business model factors (namely star rating and type) significantly impact ($p < 0.05$) (at 5% level) hotel profitability. The coefficients for star-rating categorisation and hotel type are statistically significant and positive ($p < 0.05$). The results deviate from the findings by Menicucci (2018), who confirmed the significant positive effect of hotel size, age, and location on profitability. Consequently, this study partially answers the first proposition, as hotel business model variables positively influence profitability. Findings show that sustainable orientations have a significant positive effect on hotel profitability. Hence the second proposition was fully accepted as the coefficients for energy saving, water consumption, and waste management practices are statistically significant and positive ($p < 0.05$). The results support previous studies (Peng Xu et al., 2012; Rowe, 2018).

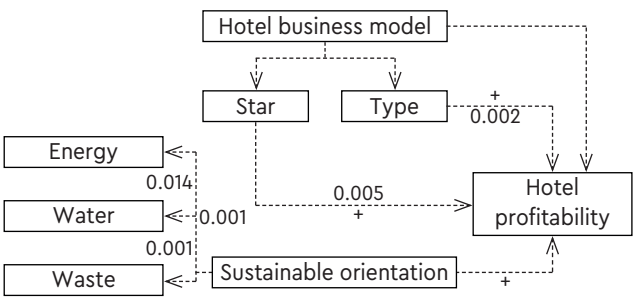

FIGURE 3: Hotel profitability tested model

Conclusions and practical implications

Evidence from previous research suggest that hotel profitability is, to a great extent, affected by many factors either controlled or beyond the control of the management. Therefore, this article questions this suspicion by testing the relationship between hotel business model variables (size, location, type, and brand), sustainability factors and hotel profitability at 31 Egyptian hotels. The research aimed to analyse differences in importance/performance of the profitability ratios most commonly used by Egyptian hotel managers. Furthermore, it proposes to examine whether hotel profitability is driven by management-controlled factors or not.

Primary and secondary data were collected using the financial hotel data and the questionnaire strategy. The financial hotel data have helped the calculation of hotel profitability. A profitability measure was obtained using the frontier analysis of LIMDEP software. Then, the relationship between hotel profitability (a dependent variable) and the profitability determinates (independent variables) was subject to testing through regression analysis.

The IPA results show that occupancy rate as a critical profitability measure is situated in the second IPA quadrant, which means there is a similarity between importance and performance perceptions. However, gaps were highlighted in relation to other profitability measures.

Moreover, the results revealed that hotel brand and star rating categories influence hotel profitability positively. Interestingly,

TABLE 6: Correlation matrix

	Hlocation	Hsize	Hage	No employees	Star	Htype	Energy	Water	Waste	Profitability
Hlocation	1	−0.169	0.524**	−0.196	0.061	0.150	0.059	0.280	−0.032	0.261
Hsize	−0.169	1	−0.506**	0.556**	0.461**	0.216	0.276	0.151	0.488**	−0.061
Hage	0.624**	−0.606**	1	−0.607**	−0.226	0.181	−0.030	0.175	−0.117	0.245
No employees	−0.196	0.556**	−0.507**	1	0.304	0.243	0.166	0.012	0.396*	0.117
Star	0.061	0.461**	−0.226	0.304	1	0.506**	0.290	0.507**	0.505**	−0.263
Htype	0.150	0.216	0.181	0.243	0.596**	1	0.344	0.433*	0.557**	0.011
Energy	0.059	0.276	−0.030	0.166	0.290	0.344	1	0.246	0.284	−0.036
Water	0.280	0.151	0.175	0.012	0.587**	0.433*	0.246	1	0.413**	0.113
Waste	−0.032	0.488**	−0.117	0.396*	0.525**	0.557**	0.284	0.613**	1	−0.212
Profitability	0.261	−0.061	0.245	0.117	−0.263	0.011	−0.036	0.113	−0.212	1

**Correlation is significant at the 0.01 level (2-tailed); *Correlation is significant at the 0.05 level (2-tailed)

TABLE 7: Regression analysis

Model		Unstandardised coefficients		Standardised coefficients	*t*	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.967	0.112		8.641	0.000
	Hlocation	0.000	0.009	0.004	0.020	0.984
	Hsize	0.000	0.000	−0.565	−1.038	0.310
	Hage	0.000	0.001	−0.066	−0.305	0.763
	No employees	0.000	0.000	1.073	2.032	0.044
	Star	−0.072	0.020	−0.835	−3.539	0.002
	Htype	0.076	0.024	0.734	3.112	0.005
	Energy	−0.006	0.013	−0.081	−0.512	0.014
	Water	0.053	0.014	0.866	3.871	0.001
	Waste	−0.052	0.014	−0.909	−3.695	0.001

the hotel which practises sustainability efforts reported higher profitability scores than others.

The theoretical contributions of this study reveal that hotel profitability, according to this empirical data and regression outcome, is a matter of control. The study found some variations between large and small hotels, hotels of many staff and those who have smaller numbers of employees, hotels ranked 5, 4 and 3-star, chain-affiliated and individual hotels. However, hotels located in the capital do not show higher profitability values than hotels located in remote areas. Generally, a hotel's size, capacity, star rating, type, managers' experience, energy, water, and waste factors were found to be the main profitability determinants.

We could conclude that this article differs from previous studies in many ways: first, it focuses on financial data in Egypt to calculate the actual efficiency score using a unique frontier technique. Previous studies have concentrated on other proxies for efficiency. Second, this study analyses the relationship between the most well-known firm-related factors (hotel business model) and three other independent factors of sustainability and profitability as a dependent variable.

The results further offer some new evidence to a sample from the Egyptian hotel sector and note the importance of examining several firm-specific factors to measure hotel profitability. Few empirical studies have inspected the performance in developing countries, or Egyptian hotels industry so far, and no study in such a context has investigated the influence of the sustainability orientation and business model impact on hotel profitability. Therefore, our research attempts to fill a gap that remains an open question in the existing literature as prior studies used a limited number of controlled variables to search for a relationship with efficiency and profitability.

The major limitation of this research is the availability of profitability data from hoteliers. Most hotel managers do not like to share their financial outcomes. That was why only 31 hotels agreed to participate in this study. Future research may consider this issue to find out alternatives to the financial data. The small sample here is considered a constraint to generalisability considerations. Therefore, future research should consider a large sample with longitudinal data. Finally, this article recommends the use of a variety of profitability measures for the hotel owners, and sends a message to hotel managers to practise sustainability such as energy-saving, water conservation, and waste handling.

ORCID

Karam Zaki https://orcid.org/0000-0001-6070-5449

References

Alarussi, A. S., & Alhaderi, S. M. (2018). Factors affecting profitability in Malaysia. *Journal of Economic Studies*, 45(3), 442–458. https://doi.org/10.1108/JES-05-2017-0124

Angeles Montoro-Sánchez, M., Mas-Verdu, F., & Ribeiro Soriano, D. (2008). Different ways of measuring performance in the service industries: application in Spanish small and medium-sized hotels. *The Service Industries Journal*, 28(1), 27–36. https://doi.org/10.1080/02642060701725396

Assaf, A. G., Josiassen, A., Knežević Cvelbar, L., & Woo, L. (2015). The effects of customer voice on hotel performance. *International Journal of Hospitality Management*, 44, 77–83. https://doi.org/10.1016/j.ijhm.2014.09.009

Assaf, A. G., & Tsionas, M. (2018). Measuring hotel performance: Toward more rigorous evidence in both scope and methods. *Tourism Management*, 69, 69–87. https://doi.org/10.1016/j.tourman.2018.05.008

Azapagic, A., & Perdan, S. (2000). Indicators of sustainable development for industry: a general framework. *Process Safety and Environmental Protection*, 78(4), 243–261. https://doi.org/10.1205/095758200530763

Bai, C., & Sarkis, J. (2014). Determining and applying sustainable supplier key performance indicators. *Supply Chain Management: An International Journal*, 19(3), 275–291. https://doi.org/10.1108/SCM-12-2013-0441

Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120. https://doi.org/10.1177/014920639101700108

Bodhanwala, S., & Bodhanwala, R. (2018). Does corporate sustainability impact firm profitability? Evidence from India. *Management Decision*, 56(8), 1734–1747. https://doi.org/10.1108/MD-04-2017-0381

Bougatef, K. (2017). Determinants of bank profitability in Tunisia: does corruption matter? *Journal of Money Laundering Control*, 20(1), 70–78. https://doi.org/10.1108/JMLC-10-2015-0044

Burgess, C. (2007). Do hotel managers have sufficient financial skills to help them manage their areas? *International Journal of Contemporary Hospitality Management*, 19(3), 188–200. https://doi.org/10.1108/09596110710739895

Crespi, G., Criscuolo, C., Haskel, J., & Hawkes, D. (2006). Measuring and understanding productivity in UK market services. *Oxford Review of Economic Policy*, 22, 560–572. https://doi.org/10.1093/oxrep/grj033

Crotty, M. (2003). *The foundations of social research: Meaning and perspective in the research process* (2nd edn). London: Sage Publications.

Field, A. (2013). *Discovering Statistics using IBM SPSS Statistics* (4th Ed.), London, UK: SAGE.

Legrand, W., Sloan, P., & Chen, J. S. (2017). *Sustainability in the Hospitality Industry: Principles of sustainable operations* (3rd Ed.), London, UK: Taylor & Francis.

Matovic, D. (2002). *The competitive market structure of the US lodging industry and its impact on the financial performance of hotel brands* (PhD Thesis). Virginia Tech University, Blacksburg.

Menicucci, E. (2018). The influence of firm characteristics on profitability: Evidence from Italian hospitality industry. *International Journal of Contemporary Hospitality Management*, 30(8), 2845–2868. https://doi.org/10.1108/IJCHM-04-2017-0219

Mhlanga, O. (2018). Factors impacting restaurant efficiency: a data envelopment analysis. *Tourism Review*, 73(1), 82–93. https://doi.org/10.1108/TR-07-2017-0109

Myers, R. H., & Myers, R. H. (1990). *Classical and modern regression with applications* (2nd edn). Belmont: Duxbury Press.

Nanda, S., & Panda, A. K. (2018). The determinants of corporate profitability: an investigation of Indian manufacturing firms. *International Journal of Emerging Markets*, 13(1), 66–86. https://doi.org/10.1108/IJoEM-01-2017-0013

O'Neill, P., Sohal, A., & Teng, C. W. (2016). Quality management approaches and their impact on firms' financial performance – an Australian study. *International Journal of Production Economics, 171*, 381–393. https://doi.org/10.1016/j.ijpe.2015.07.015

O'Neill, J. W., & Mattila, A. S. (2006). Strategic hotel development and positioning: The effects of revenue drivers on profitability. *Cornell Hotel and Restaurant Administration Quarterly*, 47(2), 146–154. https://doi.org/10.1177/0010880405281519

Parsons, L. J. (2002). Using stochastic frontier analysis for performance measurement and benchmarking. *Advances in Econometrics 16*, 317–350. https://doi.org/10.1016/S0731-9053(02)16013-0

Peng Xu, P., Chan, E. H. W., & Qian, Q. K. (2012). Key performance indicators (KPI) for the sustainability of building energy efficiency retrofit (BEER) in hotel buildings in China. *Facilities*, 30(9/10), 432–448. https://doi.org/10.1108/02632771211235242

Rowe, K. (2018). Hoteliers' perceptions of sustainable practices on small hotel optimization. Walden University. https://scholarworks.waldenu.edu/symposium2018/8

Sainaghi, R., Baggio, R., Phillips, P., & Mauri, A. G. (2018). Hotel performance and research streams: a network cluster analysis. *International Journal of Contemporary Hospitality Management*. [online] https://doi.org/10.1108/IJCHM-05-2017-0260

Sandvik, I. L., Duhan, D. F., & Sandvik, K. (2014). Innovativeness and profitability: An empirical investigation in the Norwegian hotel industry. *Cornell Hospitality Quarterly*, 55(2), 165–185. https://doi.org/10.1177/1938965514520963

Singh, A. J., & Schmidgall, R. S. (2002). Analysis of financial ratios commonly used by US lodging financial executives. *Journal of Retail & Leisure Property*, 2(3), 201–213. https://doi.org/10.1057/palgrave.rlp.5090210

Statista. (2018a). Egypt – GDP distribution across economic sectors. https://www.statista.com/statistics/377309/egypt-gdp-distribution-across-economic-sectors/

Statista. (2018b). United Kingdom – Distribution of GDP across economic sectors. https://www.statista.com/statistics/270372/distribution-of-gdp-across-economic-sectors-in-the-united-kingdom/

Wadongo, B., Odhuno, E., Kambona, O., & Othuon, L. (2010). Key performance indicators in the Kenyan hospitality industry: a managerial perspective. *Benchmarking: An International Journal*, 17(6), 858–875. https://doi.org/10.1108/14635771011089764

Xiao, Q., O'Neill, J. W., & Mattila, A. S. (2012). The role of hotel owners: the influence of corporate strategies on hotel performance. *International Journal of Contemporary Hospitality Management*, 24(1), 122–139. https://doi.org/10.1108/09596111211197836

Zaki, K. (2014). The impact of human resources management practices on employees' productivity in the hotel industry. PhD thesis, Fayoum University, Egypt. http://www.eulc.edu.eg/eulc_v5/Libraries/Thesis/BrowseThesisPages.aspx?fn=PublicDrawThesis&BibID=12047289

Zaki, K. (2017). Hotel managers' perception of the internal environment for innovation: The case of Egyptian hotels. *International Journal of Heritage, Tourism, and Hospitality*, 11(3/2).

Zaki, K. G. M., Jones, E., Morsy, M. A., & Abdelmabood, A. E. (2013). Using the Delphi Technique to develop a conceptual model for employee productivity in the Egyptian hotel industry. *Journal of Tourism Research & Hospitality, 2*(4), 1–13. https:// doi.org/10.4172/2324-8807.1000130

Research in Hospitality Management 2019, 9(2): 99–108
https://doi.org/10.1080/22243534.2019.1689699

RHM
2019
Research in
Hospitality
Management

Are we poles apart? Stakeholders' cooperation and decision-making in on-land cruise tourism in Iceland and New Zealand

Tracy Harkison[1]* & Þórný Barðadóttir[2]

[1]*Auckland University of Technology, Auckland, New Zealand*
[2]*Icelandic Tourism Research Centre, Akureyri, Iceland*
**Corresponding author, email: tracy.harkison@aut.ac.nz*

ABSTRACT: The rapid growth of the global cruise ship industry in tourism has been evident in New Zealand in the southern hemisphere and Iceland in the northern hemisphere, where both countries have experienced a substantial increase in cruise ship arrivals at a growing number of ports. Although the two countries are geographically very far apart, they do share various similarities in their tourism. Within the framework of stakeholder theory and using an interpretivist, case-study methodology, the aim of this research is to explore similarities and differences in the issues facing stakeholders in on-land cruise services in New Zealand and Iceland, and to evaluate stakeholders' levels of participation in decision-making in their respective cruise sectors. The population of Napier is 61 100, whereas Akureyri's population is merely 18 500. However, both destinations receive similar numbers of cruise passengers, or around 100 000 in the 2016/2017 New Zealand season, 2017 Icelandic season. Findings provide general insights into on-land cruise services, and the co-existence of land-based tourism and cruise tourism in rural and urban areas. Furthermore, the overall research findings indicate that although the two destinations differ in their population, main attractions and geographical location, they seem not that far apart in the opportunities and challenges facing the local stakeholders and the decision-making processes of their cruise sectors.

KEYWORDS: cruise tourism, Iceland, New Zealand, stakeholders

Introduction

One of the world's fastest growing tourism sectors is the cruise industry (United Nations World Tourism Organisation [UNWTO] & Asia-Pacific Tourism Exchange Centre [APTEC], 2016; MacNeill & Wozniak, 2018). Iceland and New Zealand have experienced a growth in the number of cruise calls and passengers, as well as a rise in the number of ports being visited in both countries. Administration of data and access to information on this sector varies greatly between the two countries. While Cruise New Zealand annually publishes an extensive "Summary Report" (Cruise New Zealand, n.d.) on the economic importance of the country's cruise industry, the comparable Icelandic organisation, Cruise Iceland, provides merely the numbers of passengers embarking at Icelandic harbours in the last couple of years (Cruise Iceland, n.d.). However, what is evident is that in both countries the arrival and service of these cruise ships requires the involvement of numerous stakeholders.

This research set out to explore the following question:

> In the context of stakeholder theory, how effectively do stakeholders in on-land cruise services cooperate and what is their role in decision-making processes in the sector?

While stakeholders in on-land cruise services are the subject of this research, they are of course not the only stakeholders in the cruise sector in the two towns being studied. The experiences, views and values of other important stakeholders, such as residents and the visiting passengers, also deserve attention and would be a worthy topic for follow-up research at the two sites.

Cooperation and cohesion between stakeholders is both vital to the sustainable development of the cruise sector and an important tool in deterring fragmentation between the cruise sector and other forms of tourism (Lester & Weeden, 2004). Recent studies still indicate a lack of such cooperation and management (Pashkevich, Dawson, & Stewart, 2015; Alonso & Alexander, 2017). This article investigates the main opportunities and challenges facing stakeholders in on-land cruise services in Iceland and New Zealand.

Despite the geographical distance between New Zealand in the southern hemisphere and Iceland in the northern, the two countries share many similarities in regard to tourism. The similarities are evident in travellers' comments in online travel guides and blogsites (Young Adventuress, 2014; Jackson, 2016; Jontycrane, 2017) and are also reflected in Icelandic tourism strategies. An example of the latter is the Icelandic Tourist Board's implementation of a quality assurance and environmental system for Icelandic tourism, where it chose to emulate New Zealand's Qualmark organisation (Icelandic Tourist Board, n.d.). Another example is in Promote Iceland's (2013) *Long-Term Strategy for the Icelandic Tourism Industry*, where it says that "although New Zealand is located on the other side of the world, comparisons are often made with Iceland in terms of destination

similarities with regard to the landscape and Adventure Tourism potential" (p. 26).

New Zealand with its 4.8 million population far exceeds the Icelandic nation of 350 000 souls, as does Napier with its 61 100 residents, while Akureyri has only 18 500. Napier is situated in Hawkes Bay, a region in the east of the North Island of New Zealand. Akureyri is located in Eyjafjörður, mid-north Iceland. Napier's main tourist attractions are its constructed and manufactured art deco architecture, and wine. Akureyri is one of Iceland's most visited destinations and is situated close to some of the country's most popular nature resorts (Huijbens, 2015). The town is the largest by population outside of the Icelandic capital area and is often referred to as the "Capital of the North" (Visit North Iceland, 2015).

Although these two towns differ in both geographical location and number of residents, they are visited by quite comparable numbers of cruise passengers: around 100 000. However, while Napier port received 55 cruise ships in the 2016/2017 season, Akureyri port serviced 107 cruise ships in the 2017 season (Table 1).

Akureyri port has long been one of three most-visited cruise ports in Iceland (the other two being Reykjavík and Ísafjörður). The number of cruise calls and passengers in Akureyri has risen markedly in recent years (Figure 1).

Napier port has become a popular cruise destination in New Zealand, although Figure 2 shows that the town has seen both rises and falls in the number of visiting cruise ships and passengers since 2011.

Figures 1 and 2 highlight the different cruise traffic in the two destinations under investigation. In Akureyri, the recent increase in cruise traffic has mostly been caused by repeat visits of the same cruises, meaning that in 2017 the number of cruise calls (107) far exceeded the number of cruise ships visiting the port (52). In Napier, few cruises make more than one docking each season, resulting in the number of cruise dockings (58 in 2016/2017) being almost the same as the number of arriving cruise ships (55). However, both received and serviced around 100 000 passengers in their respective seasons of 2017 and 2016/2017.

Numbers are not the only factor of importance when collecting information on the cruise industry. This was stated in a recent report on the Southeast Asian cruise industry: "The most important component of sustainable cruise tourism development is for destination policymakers and managers to conduct assessments to understand cruise tourism's potential benefits, risks and impacts" (UNWTO & APTEC, 2016, p. 11).

TABLE 1: Comparison of key cruise tourism statistics from Napier, New Zealand, and Akureyri, Iceland (Cruise New Zealand, n.d.; Statistics Iceland, n.d.; Tourism Dashboard, n.d.; Stats NZ, 2018)

Aspect	New Zealand	Iceland
Country: total population (2017)	4 764 951	343 960
Cruising season	October to April	April to October
Port city studied	Napier	Akureyri
City resident population (2017)	61 100	18 500
Cruise season studied	2017/2018	2017
Total season cruise calls	58	107
Total season passengers	98 100	103 000
Ratio of city residents to cruise passengers	1:1.6	1:6.2

The focus of this article is on the experiences and viewpoints of stakeholders in the on-land service of cruise ships in Iceland and New Zealand. The aim is to explore similarities and differences in the issues facing their on-land cruise services and to use the findings to evaluate the level of stakeholder cooperation, cohesion and participation in decision-making procedures in the cruise sectors in the two countries.

One issue that could be perceived as a limitation of this study is that it includes only one port in Iceland and one port in New Zealand. Another limitation is that the data were collected in a narrow time period in one year. Since the cruise industry is a highly seasonal sector, interviews conducted at other times of the year might result in different data. In spite of these potential shortcomings, the empirical data gathered reveal valuable insights into the concerns and challenges facing stakeholders in on-land cruise services that are highly relevant for policy in the cruise sector, regardless of its location.

Literature review

Globally, cruise tourism experienced growth in passenger numbers of over 30% between 2009 and 2016 (Dowling & Weeden, 2017). The Cruise Lines International Association (CLIA; 2017) has indicated that some of the worldwide reasons for the increase are a rise in the Chinese market, Generation X and millennials gaining an interest in cruising, new on-board and onshore activities being available, the introduction of larger ships, and the opening of new destinations. The worldwide effects of melting sea ice due to rising temperatures has lengthened cruising seasons, expanded the number of destinations that are now accessible, and opened what were previously austere and remote environments to the global cruise ship industry (Hull & Milne, 2010).

Despite the growth of the cruise sector, researchers seem to have long overlooked this sector of world tourism. A review of tourism research published from 1983 to 2009 (Papathanassis & Beckmann, 2011) concluded that relatively few papers dealt with the cruise sector, and that those published had a narrow focus, as most dealt with the business and economic aspects of the industry. Recent research has emphasised negative environmental effects of cruise tourism (Maragkogianni & Papaefthimiou, 2015; Carić, 2016) and raised questions about the real economic benefits of cruise visits to ports (Larsen & Wolff, 2016). Academics have also highlighted some positives of cruise visits (Shone, Wilson, Simmons, & Stewart, 2017) within the context of areas off the general land-based tourist track, where cruise visits are seen as possible catalysts for local, land-based tourism development (Olsen & Heleniak, 2016).

International organisations are increasingly paying attention to the importance of sustainability in tourism. The United Nations General Assembly (UN) proclaimed 2017 the International Year of Sustainable Tourism for Development (UN, 2016). This announcement emphasised the three dimensions of sustainable development: economic, social and environmental. The UN definition of sustainable tourism development states that it "requires the informed participation of all relevant stakeholders, as well as strong political leadership to ensure wide participation and consensus building" (United Nations Environment Programme & UNWTO, 2005, p. 11). Sustainable tourism has been linked to stakeholder theory (Getz & Timur, 2005). This theory is based on Freeman's (1984) book, where he defined

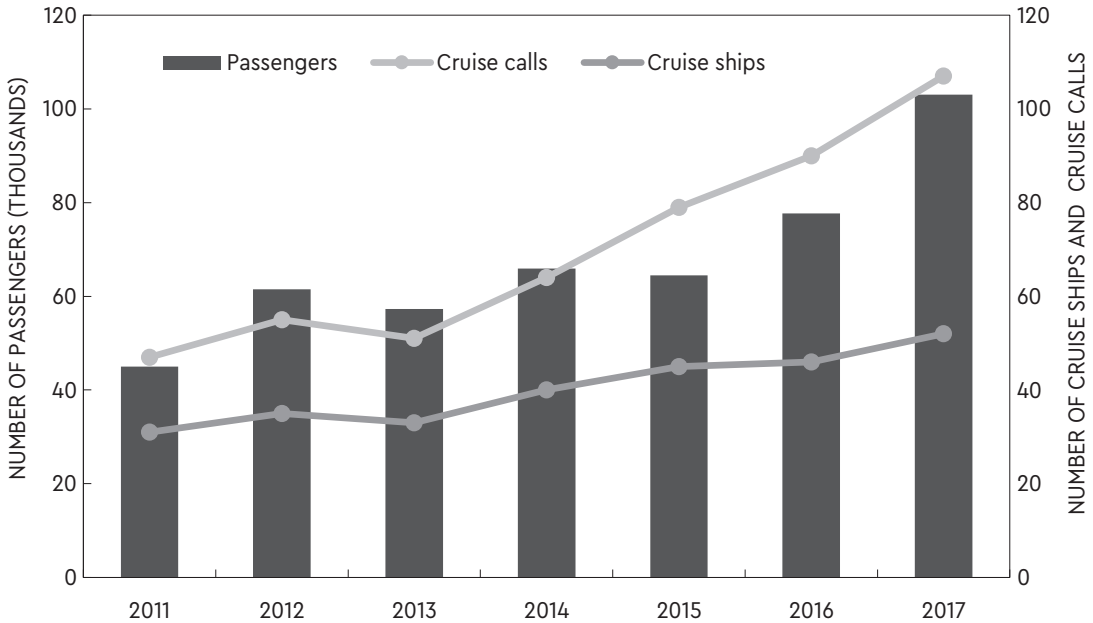

FIGURE 1: The number of cruise ships, cruise calls and cruise passengers visiting Akureyri, Iceland, in 2011–2017 (Tourism Dashboard, n.d.)

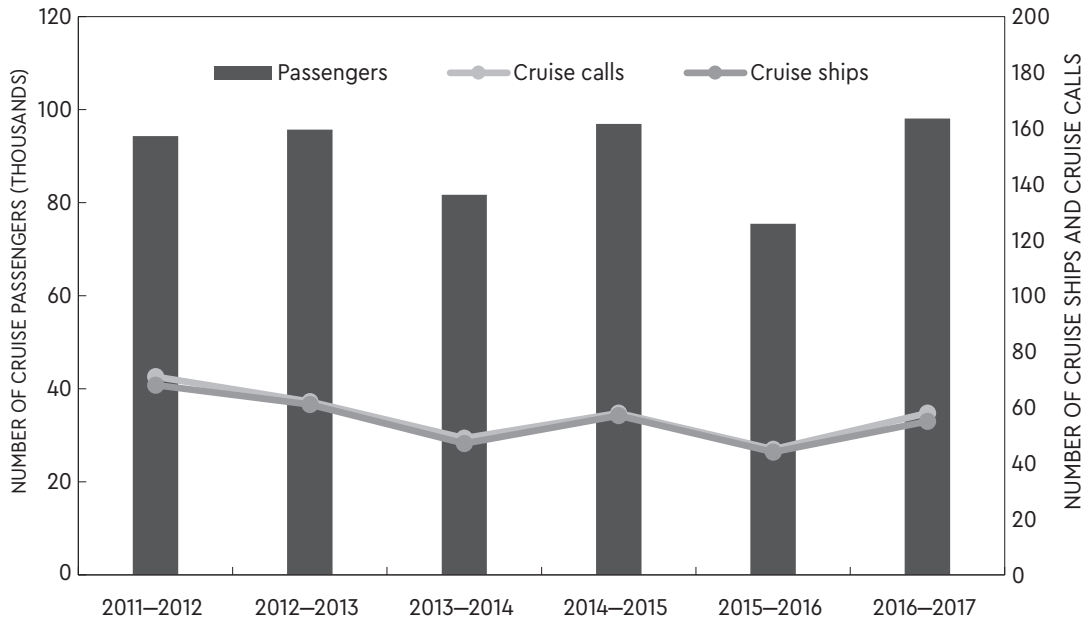

FIGURE 2: Number of cruise ships, cruise calls and passengers visiting Napier, New Zealand, in 2011–2017 (Cruise New Zealand, n.d.)

stakeholders as "any group or individual who can affect or is affected by the achievement of the organization's objectives" (p. 46). The core of stakeholder theory is that the best practice and success of any business is achieved through the inclusion of representatives of all relevant stakeholders in decision-making and strategic planning. The argument is that such participation by all stakeholders, as well as collaboration between them, would result in the best decisions and thereby maximise the overall economic benefits. Stakeholder theory originated in business studies but was later adapted to other sociological phenomena. Sautter and Leisen (1999) applied the theory to tourism. Their main focus was on stakeholders' compatibility and congruence, suggesting that "if players proactively consider the interests of all other stakeholders, the industry as a whole stands to gain significant returns in the long term" (p. 326).

In this research, the main focus is on the stakeholders in the receiving and on-land service of cruise ships. That emphasis is supported by the fact that

> while the existing cruise travel literature implicitly or explicitly highlights the impacts or implications of cruise travel for stakeholders, there has been a tendency to focus primarily on guests' experiences. Consequently,

> attention paid to other stakeholder groups directly or indirectly involved in this industry has been very limited. (Alonso & Alexander, 2017, p. 365)

Iceland and New Zealand have both experienced rapid growth in cruise tourism. For New Zealand, there has been a huge increase in the number of Australians who are now cruising its coast, along with a sharp rise in the Chinese market. New Zealanders themselves are also cruising: 2017 saw 2 per cent of the New Zealand population take a cruise – 90 184 New Zealanders sailed the world's oceans (Stats NZ, 2017). Iceland has long been visited by overseas cruises; in recent years there has been a rapid increase in the arrival of expedition cruises where Iceland is one of the North Atlantic cruises' Arctic destinations (Huijbens, 2015).

In a recent study in Akaroa, New Zealand, concerns about the increase in cruise traffic and its impacts on the town were voiced by the community. These impacts were seen as a strain on the infrastructure and facilities, and crowding in public buildings, footpaths, retail stores, cafés and restaurants. Other concerns were that the current number of cruise ship visitors overwhelmed the town, and there was a perception that there was a lack of control on this number and that there was a need to protect what the community felt made Akaroa "special" (Shone et al., 2017). There are many other sites around the globe that have experienced crowding issues when scores of cruise ship passengers disembark at the same time (Marušić, Horak, & Tomljenović, 2008; Papathanassis & Beckmann, 2011; Weeden, Lester, & Thyne, 2011; Jacobsen, Iversen, & Hem, 2019).

Few studies have focused on Icelandic cruise tourism in recent years. Those have mostly focused on Iceland as one of the world's Arctic destinations (Karlsdóttir & Hendriksen, 2005; Fay & Karlsdóttir, 2011; Huijbens, 2015). Although efforts have been made to evaluate the socio-economic effects of cruise visits in northern Iceland (Huijbens, 2015), no research has emphasised the on-land service of the Icelandic cruise sector. This research attempts to address this gap.

Methodology

The research was conducted through the application of an interpretive, qualitative case-study approach. The data collected were analysed by developing conceptual categories (Chetty, 2013). Qualitative interviews were the key source of data. Semi-structured interviews were used as they strike a balance between very structured interviews, which have an explanatory/descriptive approach, and the use of unstructured interviews, which enable a broad investigative approach (Altinay & Paraskevas, 2008). The guiding questions applied can be found in the Appendix.

For the purpose of this research, the relevant stakeholders were identified according to Hull and Milne (2010), who state that the successful receiving and servicing of cruise ships requires the participation of port authorities, municipal governments, shipping agencies, tour operators and local retail operators. Eight representatives were interviewed at each site of investigation, yielding a total of 16 interviewees for the study. Participants included shipping agents, tour operators, local business operators, visitor centre employees, city employees and councillors, as well as members of the cruise industry association.

The main data collection phase took place in Napier between 10 and 21 April 2017, and in Iceland between 13 March and 28 April 2017. The Icelandic interviews were conducted in Icelandic and later translated into English. All interviews were audio-recorded and took between 29 and 68 minutes to conduct. After being fully transcribed, the interviews were coded. Although the interview transcripts were coded in the context of the overall research question, coding was still performed with an open mind, with no codes predetermined – a method called "open coding" (Gibbs, 2007). Thematic analysis was applied, where patterns (themes) in the data are identified (Braun & Clarke, 2006). This enabled us to determine the emergent themes, challenges and opportunities faced by the stakeholders in cruise services at each destination. These findings are reported next, grouped in a section for each town (Napier and Akureyri), and will be further explored in the discussion section.

Findings: Napier

In Napier, strong themes came through the data from the stakeholders regarding the experiences of the on-land service for cruise ships. The themes and sub-themes are listed in Table 2 and elaborated on in the sections that follow.

Benefits

Monetary gain and atmosphere

The port authority manager stated that although cruise ships were not their main revenue stream, the benefits were great, as the visits and resulting tours brought revenue to the whole region. As stated by a tour operator: "*It's a big part of our summer income*". Cruise ship passengers were great for the marketing of Napier as a destination: "*I think what we've always said is that a cruise stopover is like a taster to the region, so it's a very good opportunity to showcase what we have*" (Tourism Hawkes Bay employee). Research conducted previously via Tourism Hawkes Bay has shown that 25% of passengers revisited Napier and the surrounding region after their cruise was over; most of those passengers were Australian. Adding to the life of the city was seen as another benefit: "*Cruise passengers add atmosphere to the city when they are here*" (Napier's Deputy Mayor).

Attraction

The art deco architecture in Napier is a point of difference and definitely a selling point for cruise passengers. The stakeholders noted that art deco-themed entertainment is always provided at the start and finish of each cruise ship visit. Napier is a compact city – a tourist city that it is novel and unique. Passengers are also drawn to the wider region because of activities associated with its vineyards. However, the interviewees did feel that the surrounding region's natural resources were underutilised, so there was a need to "*help industry to develop more products to offer the passengers*" (Tourism Hawkes Bay employee) including

TABLE 2: Themes sub-themes from stakeholder interviews in Napier, New Zealand

Theme	Sub-themes
Benefits	Monetary gain and atmosphere
	Attraction
Challenges	Pressure on infrastructure
	Pressure on the ports
Emergent themes	Increasing passenger numbers
	Improvements needed
	Decision-making

"*enough tourism product that isn't wine or art deco related*" (Napier City Business Inc. [NCBI] employee).

Challenges

Pressure on infrastructure

There were negatives to having cruise ships visit Napier. The shuttle buses ferrying cruise passengers in and out of the town could cause bottle necks in the town and there was a fair amount of congestion due to increased vehicle traffic. When Napier has two "big" cruise ships in the port at the same time, bus operators must enlist help from outside the region in order to have enough shuttle buses to deal with the number of passengers. An increase in the number of cruise ships has increased the numbers of homeless people coming into the centre of the city and begging for money, which is creating a negative image for the city. There were no comments about damaging the environment in Napier, although promoting sustainable tourism in the form of being environmentally friendly was an issue for stakeholders: "*No recycling bins in the town* – [cruise ship passengers] *can cause an increase in the rubbish that is generated*" (Tourist operator) was one concern.

Pressure on the ports

The port is in huge demand for the export of apples, bottled water and timber from the region; it is a working port that deals with large amounts of cargo. The port also felt pressure in its dependence on other ports to "bring" the ships to Napier: "*The ports have already widened their berths and increased* [the number of] *berths due to more ships visiting and* [the new ships] *being built are getting bigger and bigger*" (Port authority manager). The cruise ships need a particular tide in order for them to berth in the Napier port. This adds more pressure on the port to receive and process the cruise ships as quickly as possible. There is also competition from other ports to receive ships.

> *The port put up the landing fees because of the increase in ships, so they just went to another port. The port had to remove the increase due to pressure from the council so that the ships would come back* (Port authority employee).

Emergent themes

Increasing passenger numbers

Hosting repeat cruisers and capturing all the passengers when they are in port were important goals. "*To actually get all the passengers off the ships all the time; we see them staying on the ships and wonder why*" (Napier's Deputy Mayor). Stakeholders would like to increase the number of passengers coming to Napier by building on the shoulder months so that cruises arrive outside of the high season and provide repeat business to Napier and the region. Stakeholders felt that there was a need for more collaboration between council and ports and that this should come in the form of better dialogue/communication. It was felt that they could not become complacent, because the cruise ships would simply move to another port.

Improvements needed

Information for visitors via signage was felt to be inadequate and the only available seating was provided by cafés; not everyone wants to patronise a café in order to sit down. The first impressions of the port (it is a working port) could be addressed, and perhaps a better walkway into the city could be introduced. The i-site (information centre) was not well positioned, so a redesign or moving it would be an improvement. The mental requirements are for local attitudes towards cruise ship passengers to improve: "*Attitudes are changing, but you will always have grumpy people and that is hard to work with*" (NCBI employee). A more positive attitude in the city towards cruise passengers would help efforts to get businesses to open early for the early ships coming in and to stay open later for the ships that go out in the evening. Attitudinal change could also lead to businesses developing more tourism products. "*We tend to hang our hat on art deco and wine. There is a huge piece of fun missing and we need to find it*" (Tour operator).

Decision-making

The cruise ship companies deal directly with the Napier Port authority, providing a five-year schedule of when cruise ships will be arriving without any opportunity for local stakeholders to negotiate the schedule. The ports only provide the cruises with water and do not take any of their refuse. Tour operators work very closely with the ground handler (the inbound agent) who shows the tour operators the programme that they have planned for the cruise ship passengers. What was highlighted by the tour operators was that they are told by the ground handlers not to take passengers to the i-site; this means that passengers must buy their ground tours while still on board the cruise ships. Tour operators thought that this disadvantaged the region; it was preferable that the i-site could provide cost-effective tours through passengers not having to pay the premium price demanded on the ship. However, the i-site team reported that they had seen an increase in the number of passengers who come ashore to book tours or who had pre-booked via the internet.

The overall findings from Napier show that although stakeholders felt that there were many benefits, there were many challenges for cruise ship tourism, and emergent themes needed to be addressed. Stakeholders felt that in general they worked well together and that there was a great deal of cooperation; however, there was still a lack of communication between them due to the separate and demarcated roles they perform when cruise ships arrive.

Findings: Akureyri

Themes that emerged from the Akureyri interviews are listed in Table 3 and presented in detail below.

Benefits

Monetary gain and atmosphere

The Akureyri findings show a strong focus on the economic gain from cruise visits. Stakeholders were concerned about a general

TABLE 3: Themes and sub themes from stakeholders in Akureyri, Iceland

Theme	Sub-themes
Benefits	Monetary gain and atmosphere
Challenges	Lack of management
	Strain on infrastructure
Emergent themes	Changes in traffic and passengers' travel patterns
	Different stakes
	Decision-making

presumption in Iceland that the cruise traffic contributes little to the local economy. They strongly opposed those notions, reporting that "*huge revenues*" (Tour operator) were the main benefit, or more precisely, "*just the income and better utilisation of the port's infrastructure and the revenue it brings*" (Municipal employee). The participants also emphasised the sense of life and a kind of positive pulse brought in by cruise passengers. There were even comments like, "*there's a kind of romantic flair linked to these arrivals here...the locals like to see the cruises at the pier*" (Port employee).

One factor in the rapid growth of cruise visits to Icelandic waters is high participation in the onshore tours, which are organised by contractual tour operators and sold by the cruises. Tour sales are important in the cruise lines' business model, as "*they* [cruise lines] *don't necessarily make their money from the sailing...tours really do sell well up here...this is their main source of income, what they sell on board the cruises*" (Tour operator). That fact, however, is directly linked to both challenges for the industry and possible changes to passengers' travel patterns.

Challenges

Evident challenges for the cruise industry in Iceland were poor management, lack of infrastructure and a discourse that linked cruise travel to mass tourism and low-spending tourists.

Lack of management

Findings show a general emphasis on the need for a regulatory framework: "*we are in such a grey area,* [and we] *need to just get clear rules, this is what I feel is causing most turmoil*" (Shipping agent). Comments on the lack of management also applied to cruise traffic. While the port showed the least interest in any centralised management, other stakeholders in service thought that ports should participate in such oversight:

> *We might want to see more management of arrivals... the ports have not been willing to do it because they don't think it's their role really and if they see they have the docking spot, they then think it is someone else's matter to handle* (Tour operator).

Strain on infrastructure

The challenges regarding the strain on infrastructure included that "*these larger cruises just pollute like a small village*" (Tour operator) and "*in the ER* [hospital] *it just means increased strain...during the summer vacation*" (Municipal employee). In Akureyri, most passengers take bus tours to a nature resort out of town. Participants commented that "*this is mass-tourism in its purest form. People stay for a very short time...they're very much consuming just within the unit of the cruise*" (Municipal employee). What the passengers do on land is undertaken in highly noticeable groups, raising concerns about their negative influence on the experiences of other visitors.

> *Having the image and perception of a quiet area, they may arrive...and there are lines of buses for like 500 metres and the area is just totally crowded* (Local tourism operator).

Other emergent themes

Changes in the passengers' travel patterns

The pattern of large groups of passengers travelling on buses might alter in the near future as findings show an emphasis on changes in the passengers' travel patterns, where an increasing number of passengers arrange their own tours. This can result in a wider distribution of income and even higher revenue for local tourism businesses, as "*the cruise ships add significantly to the prices for these tours...they add up to 100% to the retail price*" (Tour operator). Individuals travelling on their own can, however, create different kinds of management challenges. When there are "*over a thousand people arriving here in a matter of hours... this might become a problem later on with new generations accustomed to booking everything – wanting to do everything by themselves and able to do so*" (Municipal employee).

Different stakes

Large groups of visitors arriving in a sparsely populated country causes both strain on infrastructure and problems in providing an adequate service: "W*hen there are two, three, four ships the same day, it's difficult for us to handle because we just don't have enough buses, we don't have enough guides*" (Tour operator). Here the different stakes of the stakeholders become evident, as the "*ports gain most from the big cruises... they charge by tonnage and per passenger*" (Shipping agency employee). For other stakeholders, the case can be quite the opposite: "*the big cruises are those earning us the least...guides must be flown in, costing us before they even start talking... the last bus is for us the most expensive one*" (Tour operator). The cruise lines still actively market the tours and "*some sell enormously*" (Local tourism operator).

Decision-making

The findings reveal that the real decisions on the cruises' routes and stopover schedules in Icelandic ports are made solely by the cruise lines. This is linked to the different roles of the stakeholders in the service procedure and who their real customers are. Shipping agents and tour operators make contracts with the cruise lines on the servicing of their entire fleet's dockings in Iceland, while the ports and other service providers service each ship as an individual unit. The nationwide tour operators handle onshore activities through contracts with the cruise lines, although in some cases they outsource management of a ship to local tourism operators, who otherwise offer their services to cruise passengers in the same way as to other visitors. The municipality provides tourist information to the passengers as for other visitors, while the cruise association markets its associated ports and service units at trade fairs. Lines of communication show that shipping agents and tour operators are the only domestic stakeholders in direct contact with the cruise lines: shipping agents when receiving bookings from cruise line itinerary planners; and tour operators later on when receiving bookings from the cruise lines' departments of recreation and activity.

The overall findings from Akureyri show that although the stakeholders in on-land cruise services feel their cooperation to be strong, some of their comments suggest a slight lack of respect for each other's role in the process of service. Findings also reveal that the real decisions on the cruising routes, and even on the on-land cruise tourism, are taken by the international cruise lines without much say from the domestic and local stakeholders.

Discussion

The premise of this research was to collect knowledge from stakeholders in on-land cruise services and to assess the level of

their cooperation, cohesion and participation in decision-making procedures. The findings show some contrasting remarks on the concerns and challenges facing stakeholders at the two sites of investigation. Some of those disparities have to do with differences between the two cruise destinations. While the main attractions in Napier are within the city and either built or manufactured – art deco architecture and wine, in Akureyri they are out of town and nature-based. Interestingly, the findings show a desire in common to change this: Napier stakeholders were looking towards the possibility of developing underutilised natural resources, while the stakeholders in Akureyri emphasised the need for attractions that would keep passengers in town. The in-town versus out-of-town difference between the two destinations was further evident in the stakeholders' concerns. In Napier, there was a strong focus on the strain on the city by the large groups of passengers; examples being comments on the lack of rubbish bins and an increase in beggars on the streets. In Akureyri, the concerns were more on the possible crowding-out effect of large groups of passengers at nearby nature-based tourist destinations. Worldwide attention has been brought to the large numbers of cruise ship passengers who are disembarking at various sites and causing "over-tourism" (Jacobsen et al., 2019).

Another difference is that while in Napier the interviews highlighted possible competition from other cruise ports, Akureyri port seemed to be considered as a solid cruise destination. This was due the port's location in central north Iceland, where it compares favourably with not only nearby Icelandic ports, all with smaller service ability, but also with the much smaller ports in Greenland and on the Arctic sailing routes in the North Atlantic. Yet another factor of difference is that while the Napier data show an emphasis on cruise passengers as possible return visitors, no such comments were made in the Akureyri interviews.

However, there are some strong similarities in the research findings. In both locations, the stakeholders' perceived benefits were of the cruise visits bringing positive feelings and a sense of liveliness to the destinations, benefits echoed in recent research conducted on tourism in rural Iceland (Bjarnadóttir, Jóhannesson, & Gunnarsdóttir, 2016). Still, the benefit most emphasised in both towns was economic gain. In macro-economics, cruise ship passengers are not defined as "tourists". They are "same-day visitors", as their visits do not include an overnight stay (Eurostat, 2014) and therefore they do not buy accommodation at their destinations. Previous research has shown some contradictions in cruise passengers' spending. Research conducted in the La Palma Islands indicates the spending power of cruise tourists is "among the strongest of all tourists visiting the islands" (Alonso & Alexander, 2017, p. 368). There seems, however, to be a common notion that the average spending of cruise passengers is much lower than that of overnight tourists (Larsen & Wolff, 2016), resulting in Lester and Weeden (2004) concluding that "being able to attract high numbers of low yield tourists is not a solid foundation for sustainable growth" (p. 43).

In this research, the Akureyri stakeholders showed concerns about the general presumption that cruise passengers contribute little to the local economy, strongly opposing such notions, and providing various examples of real economic benefit from the visits, examples that can be summed up as: *they don't add to the local economy unless you try to sell them something* (Cruise association representative). There is, however, a wide lack of official data on the real economic value of Icelandic cruise tourism (Frent, 2015), both at the sub-national level as well as for Icelandic cruise tourism in general. Napier, on the other hand, was able to show the real value of the cruise ships: they boosted the local economy by $22 million dollars in the 2016/2017 season (Cruise New Zealand, n.d.).

The theoretical frame for the research was stakeholder theory, at the core of which is the importance of all stakeholders' cohesion and input into decisions, planning and procedures (Freeman, 1984; Freeman, Harrison, Wicks, Parmar, & de Colle, 2010). Studies have further emphasised stakeholders' cooperation and cohesion as vital for both sustainable development of the cruise sector and an important tool in deterring fragmentation between different sectors of the tourism industry (Lester & Weeden, 2004). The findings of this research revealed indications that the stakeholders in both towns lack a real understanding of (and perhaps respect for) each other's roles and their importance in the service chain. Even though the findings show that stakeholders in both countries sense their cooperation to be close, some of their comments indicate that in reality there is an underlying attitude being "*this* is our job; *that* is their job" and "I do only *this*; others must manage *that*".

The findings do show the overwhelming and alarming power of the international cruise lines in all decision-making. The only domestic stakeholders in direct contact with the cruise lines are the nationwide shipping agents (who receive bookings in the initial planning period of a cruise's sailing route), and the nationwide tour operators (who receive bookings from other cruise line departments, far closer to the cruises' arrivals). No local stakeholders were found to be in contact with the cruise lines or to play a meaningful part in the planning of the ships' routes. The real decision of when cruise ships will arrive in the port lies therefore with the cruise lines. In both locations, there was an underlying sense that stakeholders felt they were simply receiving schedules from the cruise lines, without any opportunity for negotiation. This indicates the stakeholders' sense of a lack of ability to manage and control the cruise traffic in their areas. The findings also reveal that much of the on-land cruise tourism is furthermore planned, managed and sold by the international cruise lines, with little power of negotiation for local service providers.

Previous research has raised questions about local authorities' ability to take part in the power play between international corporate cruise lines and other non-local developers (London & Lohmann, 2014). There are, however, indications that destinations are gaining an increase in negotiation power when the initiative for visits comes from the cruise lines, rather than from ports marketing themselves as potential cruise destinations (London & Lohmann, 2014).

Research has showcased the complexity of branding and definitions of cruise tourism magnets. Questions have been raised about the role of attractions in the development of a cruise destination, as each port can be viewed merely as a venue on the cruise's route, rather than as a destination in its own right (Lemmetyinen, Dimitrovski, Nieminen, & Pohjola, 2016). In that context, the cruise lines are the suppliers of products (visiting cruises and passengers) to meet the demand of ports' berths (sales of service). Esteve-Perez and Garcia-Sanchez (2018) state that the rapid growth of global cruise traffic is bound to result in cruise lines searching for new destinations and attractions. Therefore, a scenario could develop where there will be a lack

of ports able to serve cruise ships, with those who end up as the real suppliers to the demanding cruise lines having strengthened powers of negotiation.

The core of stakeholder theory is that the success of any business is achieved through the inclusion of all relevant stakeholders in strategic planning and decision-making. Here, the stakeholders in focus have been the providers of on-land services. As discussed in the introduction, Icelandic tourism has at times looked towards New Zealand as a model for the quality control and management of tourism. In 2018, the Icelandic minister of tourism, Þórdís Gylfadóttir, said "we should to a greater extent look to countries that often are more advanced than us...there New Zealand is an example" (Brunton, 2018, para. 1).[1] Soon after a visit to New Zealand for the purpose of learning about quality tourism, Gylfadóttir told the Icelandic parliament (Alþingi) that "[w]e're facing a lot of the same challenges, and in some matters [New Zealand] is ahead of us" (para. 1). The findings of this research indicate that Iceland and New Zealand are indeed facing much the same challenges in the management of negotiations and real power in domestic and local decision-making in their dealings with international cruise lines.

There are many opportunities for further research to be conducted to look at the similarities and differences in other ports of each country.

Conclusion

The aim of this research was to seek experiences from stakeholders in on-land cruise services in two locations and, in the context of stakeholder theory, to evaluate the level of their cooperation and participation in decision-making procedures. The findings show that in both locations the stakeholders' concerns are linked to their role in the service chain. Disparities between the two sites of research can be understood in the light of the differences between the two destinations in their attractions and the scope of visiting cruises. The similarities, however, seem to have much to do with the general lack of ability of domestic and local stakeholders to negotiate with the international cruise lines and to have a voice in the planning of navigation routes and on-land activities. The overall conclusion, therefore, is a stark reminder of the need for local governance and for closer cooperation between stakeholders on management and strategic planning in order to gain a strong and unified voice in all dealings with international cruise companies.

Notes

1 English translation by ÞB. Original Icelandic: "...við eigum að vera dugleg við það og í meira mæli að líta til landa sem oft eru komin lengra en við í ýmsum málum og þar er Nýja-Sjáland dæmi".

ORCID

Tracy Harkison https://orcid.org/0000-0003-2409-231X
Þórný Barðadóttir https://orcid.org/0000-0001-8415-7846

References

Alonso, A. D., & Alexander, N. (2017). Stakeholders' perceived gains and obstacles of cruise ship tourism development: The case of La Palma Island. In R. Dowling & C. Weeden (eds), *Cruise ship tourism*, (2nd edn, pp. 363–377). Brighton: CABI. https://doi.org/10.1079/9781780646084.0363

Altinay, L., & Paraskevas, P. (2008). *Planning research in hospitality and tourism*. Oxford, England: Elsevier. https://doi.org/10.1016/B978-0-7506-8110-0.50009-0

Bjarnadóttir, E. J., Jóhannesson, A. Þ., & Gunnarsdóttir, G. Þ. (2016). *Analysis of tourism impact in Icelandic communities* [Greining á áhrifum ferðaþjónustu og ferðamennsku í einstökum samfélögum]. http://www.rmf.is/static/research/files/04-2016-samfelagsahrif_lokpdf

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Brunton, T. (2018). Iceland visits to learn tourism lessons from New Zealand. *Radio New Zealand*, 7 October. https://www.radionz.co.nz/news/national/368098/iceland-visits-to-learn-tourism-lessons-from-new-zealand

Carić, H. (2016). Challenges and prospects of valuation – cruise ship pollution case. *Journal of Cleaner Production, 111*(B), 487–498.

Chetty, L. (2013). Innovative interpretive qualitative case study research method aligned with systems theory for physiotherapy and rehabilitation research: A review of the methodology. *African Journal of Physiotherapy and Rehabilitation Sciences, 5*(1–2), 40–44.

Cruise Iceland. (n.d.). *Statistics*. http://www.cruiseiceland.com/about-us/statistics/

Cruise Lines International Association (CLIA). (2017). *Annual report 2017*. https://www.cruising.org/about-the-industry/research/2017-annual-report

Cruise New Zealand. (n.d.) *Data*. http://cruisenewzealand.org.nz

Dowling, R., & Weeden, C. (2017). The world of cruising. In R. Dowling & C. Weeden (eds), *Cruise ship tourism*, (2nd edn, pp. 1–39). Brighton, England: CABI. https://doi.org/10.1079/9781780646084.0001

Esteve-Perez, J., & Garcia-Sanchez, A. (2018). Dynamism patterns of Western Mediterranean cruise ports and the competition relationships between major cruise ports. *Polish Maritime Research, 25*(1), 51–60. https://doi.org/10.2478/pomr-2018-0006

Eurostat. (2014). *Manuals and guidelines: Methodological manual for tourism statistics, version 3.1*. http://ec.europa.eu/eurostat/documents/3859598/6454997/KS-GQ-14-013-EN-N.pdf

Fay, G., & Karlsdóttir, A. (2011). Social indicators for arctic tourism: Observing trends and assessing data. *Polar Geography, 34*(1–2), 63–86. https://doi.org/10.1080/1088937X.2011.585779

Freeman, R. E. (1984). *Strategic management: A stakeholder approach*. Boston: Pitman.

Freeman, R. E., Harrison, J. S., Wicks, A. C., Parmar, B. L., & de Colle, S. (2010). *Stakeholder theory: The state of the art*. New York: Cambridge University Press. https://doi.org/10.1017/CBO9780511815768

Frenţ, C. (2015). Measuring tourism at the border: A critical analysis of the Icelandic context. *Scandinavian Journal of Hospitality and Tourism, 16*(1), 87–97. https://doi.org/10.1080/15022250.2016.1244597

Getz, D., & Timur, S. (2005). Stakeholder involvement in sustainable tourism: Balancing the voices. In W. F. Theobald (ed.), *Global tourism*, (3rd edn, pp. 230–247). Amsterdam: Elsevier. https://doi.org/10.1016/B978-0-7506-7789-9.50019-4

Gibbs, G. R. (2007). *Analysing qualitative data*. Thousand Oaks: Sage. https://doi.org/10.4135/9781849208574

Huijbens, E. H. (2015). Cruise tourism in Iceland and the North Atlantic: Gateways to the Arctic and the challenges to port readiness programs. *Tourism in Marine Environments, 10*(3), 241–254. https://doi.org/10.3727/154427315X14181438892928

Hull, J. S., & Milne, S. (2010). Port readiness planning in the Arctic: Building community support. In M. Lück, P. Maher & E. J. Stewart (eds), *Cruise tourism in Polar Regions: Promoting environmental and social sustainability* (pp. 181–203). London: Earthscan.

Icelandic Tourist Board. (n.d.). *Icelandic Tourist Board: Quality issues – Vakinn*. https://www.ferdamalastofa.is/en/about-us/icelandic-tourist-board

Jackson, K. (2016). Is Iceland the new New Zealand? *The Active Times*, 16 February. https://www.theactivetimes.com/travel/world/iceland-new-new-zealand

Jacobsen, J. K. S., Iversen, N. M., & Hem, L. E. (2019). Hotspot crowding and over-tourism: Antecedents of destination attractiveness. *Annals of Tourism Research*, *76*, 53–66. https://doi.org/10.1016/j.annals.2019.02.011

Jontycrane. (2017). Iceland v New Zealand. *Jontynz*, 18 September. https://jontynz.com/2017/09/18/iceland-v-new-zealand/

Karlsdóttir, A., & Hendriksen, K. (2005). *Et komparativt studie af Islands og Grønlands position i forhold til udviklingen af krydstogtsturisme i Arktis*. Copenhagen: Denmark Institut for Produktion og Ledelse, Danmarks Tekniske Universitet.

Larsen, S., & Wolff, K. (2016). Exploring assumptions about cruise tourists' visits to ports. *Tourism Management Perspectives, 17*, 44–49. https://doi.org/10.1016/j.tmp.2015.12.001

Lemmetyinen, A., Dimitrovski, D., Nieminen, L., & Pohjola, T. (2016). Cruise destination brand awareness as a moderator in motivation-satisfaction relation. *Tourism Review*, *71*(4), 245–258. https://doi.org/10.1108/TR-07-2016-0027

Lester, J.-A., & Weeden, C. (2004). Stakeholders, the natural environment and the future of Caribbean cruise tourism. *International Journal of Tourism Research*, *6*(1), 39–50. https://doi.org/10.1002/jtr.471

London, W. R., & Lohmann, G. (2014). Power in the context of cruise destination stakeholders' interrelationships. *Research in Transportation Business & Management*, *13*, 24–35. https://doi.org/10.1016/j.rtbm.2014.11.004

MacNeill, T., & Wozniak, D. (2018). The economic, social, and environmental impacts of cruise tourism. *Tourism Management*, *66*, 387–404. https://doi.org/10.1016/j.tourman.2017.11.002

Maragkogianni, A., & Papaefthimiou, S. (2015). Evaluating the social cost of cruise ships air emissions in major ports of Greece. *Transportation Research Part D: Transport and Environment*, *36*, 10–17. https://doi.org/10.1016/j.trd.2015.02.014

Marušić, Z., Horak, S., & Tomljenović, R. (2008). The socio-economic impacts of cruise tourism. *Tourism in Marine Environments*, *5*(2/3), 131–144. https://doi.org/10.3727/154427308787716767

Olsen, L. S., & Heleniak, T. (2016). Tourism: A new economic driver? In J. Grunfelder, L. Rispling & G. Norlén (eds), *State of the Nordic region 2016* (pp. 94–104). Copenhagen: Nordic Council of Ministers.

Papathanassis, A., & Beckmann, I. (2011). Assessing the 'poverty of cruise theory' hypothesis. *Annals of Tourism Research*, *38*(1), 153–174. https://doi.org/10.1016/j.annals.2010.07.015

Pashkevich, A., Dawson, J., & Stewart, E. (2015). Governance of expedition cruise ship tourism in the Arctic: A comparison of the Canadian and Russian Arctic. *Tourism in Marine Environments, 10*(3), 225–240. https://doi.org/10.3727/154427315X14181438892883

Promote Iceland. (2013). *Long-term strategy for the Icelandic tourism industry*. https://www.islandsstofa.is/media/1/final-long-term-strategy-for-icelandic-tourism-industry-270213kh.pdf

Sautter, E. T., & Leisen, B. (1999). Managing stakeholders: A tourism planning model. *Annals of Tourism Research*, *26*(2), 312–328. https://doi.org/10.1016/S0160-7383(98)00097-8

Shone, M .C., Wilson, J., Simmons, D. G., & Stewart, E. J. (2017). Sailing into stormy waters? Understanding the community impacts of cruise tourism growth in Akaroa, New Zealand. In R. Dowling & C. Weeden (eds), *Cruise ship tourism*, (pp. 393–407). Wallingford, England: CABI. https://doi.org/10.1079/9781780646084.0393

Statistics Iceland. (n.d.). *Population by municipalities, sex and age, 1 January 1998–2017 – Current municipalities*. http://px.hagstofa.is/pxen/pxweb/en/Ibuar/Ibuar__mannfjoldi__2_byggdir__sveitarfelog/MAN02001.px

Stats NZ. (2017). *Cruise ship traveller statistics: June 2017*. http://archive.stats.govt.nz/browse_for_stats/industry_sectors/Tourism/cruise-ship-stats.aspx

Stats NZ. (2018). *Cruise ship traveller and expenditure statistics: Year ended June 2018*. https://www.stats.govt.nz/information-releases/cruise-ship-traveller-and-expenditure-statistics-year-ended-june-2018

Tourism Dashboard. (n.d.). *Icelandic tourism task force* [Mælaborð ferðaþjónustunnar – Skemmtiferðaskip]. http://stjornstodin.is/maelabord-ferdathjonustunnar

United Nations Environment Programme & United Nations World Tourism Organisation. (2005). *Making tourism more sustainable: A guide for policy makers*. http://www.unep.fr/shared/publications/pdf/DTIx0592xPA-TourismPolicyEN.pdf

United Nations General Assembly. (2016). *Resolution adopted by the General Assembly on 22 December 2015*. http://www.un.org/en/ga/search/view_doc.asp?symbol=A/RES/70/193&referer=/english/&Lang=E

United Nations World Tourism Organisation & Asia-Pacific Tourism Exchange Centre. (2016). *Sustainable cruise tourism development strategies – tackling the challenges in itinerary design in South-East Asia*. Madrid: UNWTO.

Visit North Iceland. (2015). *Akureyri the capital of north Iceland number 1 in Lonely Planet's best destinations 2015*. https://www.northiceland.is/en/blog/lonelyplanet

Weeden, C., Lester, J. A., & Thyne, M. (2011). Cruise tourism: Emerging issues and implications for a maturing industry. *Journal of Hospitality and Tourism Management*, *18*(1), 26–29. https://doi.org/10.1375/jhtm.18.1.26

Young Adventuress. (2014). *Hold up, are New Zealand and Iceland actually the same place?* https://youngadventuress.com/2014/11/new-zealand-iceland.html

Þórdís Gylfadóttir. (2018). *Erlendar fjárfestingar í ferðaþjónustu. Ferðamála-, iðnaðar- og nýsköpunarráðherra (Þórdís Kolbrún R. Gylfadóttir)* [Foreign investment in tourism. Minister of tourism, industry and innovation (Þórdís Kolbrún R. Gylfadóttir)]. https://www.althingi.is/altext/raeda/149/rad20181017T161606.html

Appendix 1: Guiding interview questions

In Akureyri, Iceland, the guiding open-ended interview questions were asked in Icelandic, but in Napier, New Zealand, the questions were in English. The English version is provided below.

Guiding questions:

- What do you see as the overall impact of cruise visits to Napier/Akureyri?
- How is the interplay between cruise tourism and on-land tourism in Napier/Akureyri?
- What are the main benefits from cruise ship arrivals in Napier/Akureyri?
- What are the key opportunities and challenges related to cruise ship services in Napier/Akureyri?
- How can Napier/Akureyri create and increase sustainable value from cruise arrivals?
- Who do you see as relevant stakeholders in cruise tourism in Napier/Akureyri?
- What is your vision for the future development of cruise tourism in Napier/Akureyri?

Research in Hospitality Management 2019, 9(2): 109–112
https://doi.org/10.1080/22243534.2019.1697092

RHM
2019
Research in
Hospitality
Management

Animal rights/Plant rights

Jan A. Schulp

Masters & Research Unit at NHL Stenden University of Applied Sciences, Leeuwarden, The Netherlands
Email: janschulp@icloud.com

ABSTRACT: This article sketches the rise of the concept of animal rights, especially in the late 20th century, mainly due to the work of Peter Singer. Considering the increase in evidence of plant intelligence, the question is discussed of whether plants might also be entitled to the same rights as animals. This question is answered in the affirmative. This would mean that humans would no longer be allowed to eat their fellow creatures. It is demonstrated that the concept of rights for non-human entities is a fundamental negation of rights as something exclusively human. Humans, like all other organisms cannot do anything else than obey the natural law of eating and being eaten. The position of plants and animals in farming is discussed from the perspective of domestication of plants and animals, and the responsibilities that this situation imposes on humans. Although a certain reduction of consumption of animal products is desirable, this has nothing to do with animal rights, but with ecological necessities only. Some recommendation for food service practice are given.

KEYWORDS: animal rights, food service, plant rights, speciesism, vegan, vegetarian

Increasingly, attention is being paid, including in the hospitality industry, to corporate responsibility. This includes ethical considerations concerning labour conditions, the environment, animal well-being and many other aspects.

For the hospitality industry, the methods of food production are particularly significant. Not only the environmental impact of agriculture, husbandry, fisheries and hunting/collecting is considered, but also animal well-being. In this context, the concept of animal rights plays an important role. Many reasons are advanced in favour of vegetarianism and even for veganism. Should these modes of nutrition become dominant, the consequences for the food service industry would be considerable in terms of purchasing, storing and preparation. This article discusses those consequences.

Until fairly recently, the idea that animals had been created for the sole use and profit of man was dominant. "The only purpose of animals was to minister to man, for whose sake all the creatures were made that are made" (Thomas Wilcox, ca 1600, cited by Thomas, 1983, p. 19). However, since antiquity, philosophers and theologians have presented opposite views: that animals have a purpose of their own, or, from a Christian perspective, the purpose to demonstrate to humanity the greatness of the creator. During the 17th and 18th centuries, the idea increasingly gained acceptance that animals and plants could suffer, and that it was morally wrong to inflict unnecessary pain upon animals. This thinking goes so far as to propose the possibility of animal rights acknowledged by the state. Thomas (1983) gives an extensive treatment of the development of these lines of thought.

During the same period, ideas arose that plants might have comparable powers of perception, a form of intelligence and powers to avoid suffering. One characteristic quotation is: "a kind of perception in [plants] tending themselves to that which nourishes and preserves them, and eschewing and voiding that which injures them" (Worlidge, *Systema Horticulturae*, 1677, p. 283, quoted by Thomas, 1983, p. 179). However, this line of thinking could not stand against the mechanistic view of plants that became dominant during much of the 18th and 19th centuries. The idea of plant rights never gained acceptance during this period.

Since the 1970s, the line of thinking about animal rights, not about plant rights, has been invigorated by the work of Peter Singer (1975; 2000). Briefly, he states that any form of exploitation of non-human animals is unacceptable because animals are able to suffer. No being that can feel and suffer should be subjected to cruel treatment, including being slaughtered and eaten. Singer derives this idea from many philosophers of the 17th to 19th centuries, who were concerned about animal well-being, particularly from utilitarians like Jeremy Bentham. But he adds a new idea: domination and exploitation of animals is to be compared with suppression within the human species by the dominant classes: women suppressed by men (sexism) or black by white people (racism). In the same vein, he characterises the exploitation of non-human animals as *speciesism* and he expects that it will be rejected in future along the same lines as sexism and racism are now. His thinking has stimulated the rise of animal rights, even as an academic discipline in faculties of law.

The idea that animals can suffer is fairly obvious in animals that resemble us more or less (mammals, birds): when you inflict pain or stress upon these animals they react in ways that can seemingly be understood by humans. From an anatomical perspective, this can be understood from the great similarity in brain structure between humans and the higher mammals. But the question is: how far down does the power of suffering

go? Does it stop on the level of fish? Of snails and mussels? The idea is advanced that a certain level of complexity in the central nervous system determines the power of suffering. But where should the line be drawn? At the cuttlefish with its complex brain? The snail, that has at least a ring of nervous tissue around the oesophagus, sending axons all through the body? The sea anemone with a diffuse network of neurons all over the body, with a slightly higher concentration around the mouth? Or should we follow the vegan that I once heard: "I do not eat an animal, even when it has just one neuron"? In other words, the right not to be eaten depends on possessing at least one neuron.

During the 19th and 20th centuries, the research on perception by plants and on plant intelligence was certainly not a mainstream branch of botanical science. Research was dominated by a mechanistic view of growth and movement of plants. Notable exceptions were Charles Darwin and his son Francis (1880; 1888), who performed a wide range of experiments on movement in plants. Invariably, these movements have a clear aim in the survival of the plant and can be interpreted as intelligent actions, not less than the chewing of grass by a cow or the running away from a lion by an antelope. In the early 21st century, we see an upsurge in the interest in plant intelligence (Mancuso & Viola, 2013; Peeters, 2016; Wohlleben, 2016). They all go back to the work of the Darwins. Especially Mancuso and Viola (2013) use new concepts that are partly derived from the intelligent behaviour of swarms of animals – intelligence that transcends the intelligence of each separate individual. Another valuable comparison is the working of self-learning computer systems. They treat the intelligent behaviour of the root system as such a form of intelligence. Yet humans are not easily inclined to recognise plant intelligence. One cause is the "slowness" of plants. People who are not in daily close contact with plants do not perceive their movements although they may be able to see the effects after days or weeks. When the movements of plants are accelerated by photographic techniques, humans can see how flowers open, the stalks of beans wrap themselves around their poles, et cetera. They can see it, and yet they do not believe it. Every biology educator most likely shares my experience that it is extremely hard to arouse children's interest in plants, simply because of their slowness. The most effective way to create at least some interest is growing garden cress that will germinate within 24 hours and be ready to eat after a week. Only when children grow up with adults that live with plants themselves and stimulate the children's interest in them will they to a certain extent also develop an understanding for plants.

Mancuso and Viola (2013; 2017; 2018) conclude that plants breathe without lungs or gills, feed themselves without digestive organs, perceive stimuli and react accordingly using the water transport system, instead of possessing a specialised nervous system. Plants possess intelligence not less than animals. They pose the question of whether a brain in itself, a brain without a body, is still intelligent. Their answer is that a brain in itself is not more intelligent than an isolated stomach. In animals, a certain coherent complex of neurons branching throughout the body is necessary to coordinate all the bodily functions. In plants it is different:

> ...the brain functions are not separated from the body functions, but together and simultaneously present in each individual cell. This is a beautiful live example of what Artificial Intelligence researchers call embodied agent: an intelligent virtual figure that by an autonomous physical body interacts with the world (Mancuso & Viola, 2017, p. 138)

All organisms strive for maximum reproductive success, plants no less than animals. For this goal, they must eat and avoid being eaten. They prey in different ways and they defend themselves in different ways, but these are all directed to maximal reproductive success. For "preying", only a limited number of plant species actively catch animals to digest them (Darwin & Darwin, 1888). Most plants leave the digestion to moulds and other organisms that break down dead organic matter. Most animals actively go after the prey they want to eat; a considerable minority live as filter feeders; and a wide variety of animals use poisons to paralyse their prey. Animals defend themselves actively with weapons (teeth, claws, horns, stings), eventually complemented by aggressive behaviour. Or they use passive forms of protection, notably camouflage. Plants defend themselves from being eaten by being tough, with thorns and stings, by a horrible taste or by poisons. Additionally, many plants can suffer big losses of their bodies without dying. Grasses and trees are notable examples of this capacity. Summarising this: eating and being eaten is the basic law of living nature.

Briefly, both plants and animals are organisms that strive for maximal reproductive success in an intelligent way. Both plants and animals can suffer. Any gardener or horticulturist can recognise suffering in plants when circumstances are adverse: a shortage of water or essential minerals, lack of or excess sunlight or temperature and attacks by predators (overgrazing, being completely stripped of leaves by insects, being attacked by fungi, et cetera). Using Singer's criteria, they qualify for protection by humans, they deserve not to be eaten and not to be exploited. Still, the staunchest defender of animal right will eat plants without flinching. Why? Hopefully, the previous part of this article has given sufficient argument that plants are entitled to the same rights as animals. In other words, humankind should stop eating fellow creatures altogether, be they animal, plant or fungus. In other words, applying the principles of Singer would mean the abolition of humans. That is not reasonable. After all, humans are organisms, not pure spirit. Humans have rights that are at least equal to other organisms. If hawks are entitled to eat pigeons, why aren't we? Why should all the nuts be for the squirrels and the wild boars and not for us? The ideas of Singer will lead us to a dead end, literally. Sparing the animals and just eating the plants is just as wrong as the reverse. Plant eaters may be free from "speciesism", but they commit the sin of "cerebrocentrism" or "neuronism": just because plants do not have brains or even interconnected single neurons like ours, their lives, in contrast with the lives of animals, can freely be taken for our sustenance. A better way is perhaps to obey the law of eating and being eaten, accepting that we can be eaten by other animals (for an extensive review, see Quammen, 2004). That is not something of the past: the number of victims of crocodiles alone worldwide is around 1 000 persons per year. And the number of victims of hippopotamuses, lions, leopards and tigers is not inconsiderable. Why, then, not eat animals?

However, many affluent, educated, urban Western people are toiling with feelings of guilt toward animals. They see the exploitation and consumption of animals almost as a sin. Where does this attitude come from?

In the first place, urban people keep pets. These animals purely serve the emotional needs of their owners. They are treated as members of the family; they belong indoors, not in

a kennel and they are never eaten. Thomas (1983) mentions several examples as early as the late Middle Ages. In 1634, the Dutch poet Joost van den Vondel composed a poem, mocking the Leiden head sheriff Willem de Bont, for the burial of his dog Tyter with extreme pomp and circumstance (Sterck et al., 1929, p. 408). This demonstrates that the treatment of pets as humans existed at that time in Holland, but that it was not yet generally accepted. These pet lovers require that farm animals are kept and taken care of in the same way as they do their pets. In this way, they ignore the different natures of the farm animals and the purposes for which they are kept. This, in turn goes back to a lack of familiarity with agriculture and husbandry (Korthals, 2002). The town dwellers have no idea about the needs of the farm animals as such and the need of the farmers to make a living from these animals.

Agriculture essentially is a refined preying technique: animals and plants are not only at human's disposition for being eaten, but also for being kept for services and products for which they need not be killed: eggs, wool, down, or drawing carts and ploughs; trees are kept alive for fruits, sometimes for thousands of years. All of this is an effect of the domestication of animals and the cultivation of plants.

Domestication of animals has been successful for only a limited number of species. Diamond (1997; 2000) states that out of 148 big wild herbivorous land animals – the potential candidates for domestication – only 14 species have more or less successfully been domesticated. Diamond specifies the requirements for successful domestication (herbivorous diet, growth rate, no problems with reproduction in captivity, not an aggressive character, not being prone to panicking, socially organised) (Diamond, 1997; 2000). Not only have these animals changed considerably under human domestication, humankind itself has changed as well: co-evolution of humans and domesticated animals. This situation has characteristics of a covenant between humans and domesticated animals, in spite of Hobbes' statement that there could be no obligations to animals because "to make covenants with brute beasts is impossible" (Hobbes, quoted by Thomas, 1983, p. 21). It is with this covenant-like connection that Korthals (2002; 2004) argues in favour of an ethical husbandry. The animals under domestication are better off than their wild kin. They are protected against predators and inclement weather; they are led to better grazing grounds; their owners will produce reserve feed in harsh times; and for their offspring the best care is taken. In this way, they have, numerically, become the dominant species among the larger mammals. Of course, they end up in the pot or on the spit, but most likely this is preferable to an end in the stomachs of a pack of wolves.

The number of plant species that have been domesticated is also rather modest, certainly the number of species (wheat, soy, corn, rice, potato) that provide most of the calories for humans. Due to conscious or semi-conscious selection by humans, these species have lost characteristics that in their natural state would have been indispensable. Two examples of this can be shown from the field of seed dispersal: legumes like peas, beans and lentils have lost the power to shoot their seeds away when the dry pods open. Cereals have lost the characteristic that the ripe fruits will fall from the ear. These losses are harmful for the natural dispersion of the species, but extremely convenient for humans harvesting the peas or the corn. In spite of this loss, it could be argued that the plants are better off because humans take care that every year big fields are sown with the seeds, thus making cereals and legumes the dominant species on earth.

For a justification of the eating of farm animals, I do not know a better plea than that of Korthals (2002, p. 137). I give it in my own translation from the original Dutch edition:

> I, being a moderate but still convinced meat eater, see a different justification. We might consider the keeping of cattle, pigs and sheep for slaughter as a kind of contract between humans and farm animals: humans take care of the animals, and the animals give us their products like milk and wool and ultimately their lives. In exchange for good care, their feed and drink, the cows, pigs and sheep ultimately give us their lives and we slaughter them for their meat. The contract between humans and farm animals creates obligations. Humans must play their part: taking good care of the animals, not reducing them to biomachines, to milk and meat machines; then, the animals give their lives for our meat. Intensive husbandry is at variance with the contract, for we did not agree with the cows, sheep and pigs to give them a rotten life; they would get what they need. Catching and keeping animals does not mean keeping them in prison. In this, consumers have their own responsibility: they must be willing to pay a good price and to pay attention to quality.

Indeed, in the most brutal forms of intensive husbandry one sees the animals suffering: pigs on slippery grid floors without straw, without the possibility to lie down, or chickens in small cages. Meanwhile, better methods have been developed for keeping animals, even in a high-density environment. With plants, it is a different matter: you never see more satisfied tomato plants than in professional greenhouses; in comparison, growing tomatoes in the Dutch climate out of doors or with minimal shelter seems like suffering, both for the plants and the gardener.

Would animals indeed be better off if mankind stopped eating them? Many of the domesticated animals would die straight away, while a number would successfully go feral. But they would continue to be eaten. From a utilitarian perspective, the total suffering of animals would not decrease – or would most likely even increase. Compare the suffering of a pigeon falling dead from the air after a good shot by a hunter with that of the bird taken in flight by a hawk. It will be pierced by eight long and sharp nails, probably not dead but suffering and brought over a certain distance to the hawk's nest and then hacked and clawed apart by young hawks until it dies after a cruel hour or so.

A correct way of eating and exploiting animals, therefore, is not a problem from the perspective of animal well-being. Animals are no more entitled to "rights" than plants are. "Rights" can only function within the human species. Speciesism is not a sin but a fact, and even a necessity for the survival of mankind. When "rights" are awarded to non-human entities, the following happens: certain humans claim these rights and pretend to exercise them on behalf of the animals, plants, rivers or whatever they might invent. In this way, they grasp more power than they are entitled to and they curtail the rights of their fellow humans, ultimately denying them the right to live, i.e. when rights of animals and plants alike are vindicated.

Although the rights of animals are null and void, a certain limitation to the consumption of animals and animal products may be necessary from an ecological perspective, but that is not the challenge this article deals with.

Supposing that animal and plant rights alike were promoted, the food service industry would quickly disappear, together with the entire human species. Meanwhile, a not inconsiderable number of consumers ("vegans") refuse to eat any animal products. The only way for the food service industry to survive is to follow the demand. When a group of six persons enters your restaurant and one of them requires vegan food, it might be wise to have something attractive for them, otherwise you might lose the whole group. On the other hand, for most restaurants, going fully vegan would mean a form of business suicide. Mainly catering for omnivores and meeting on a certain level the needs of vegetarians and vegans, on a level as required, is probably the best strategy. From an ecological and health perspective, a stronger focus on vegetables and smaller portions of animal products might have positive effects, both ecologically and from a health perspective (Kooy, 2006; Schulp, Kooy & Cavagnaro, 2010). Here, the philosophy of eating the whole animal, not only the prime cuts, contributes to respect for the animal and the farmer. That is what an animal is entitled to: respect, not rights.

References

Darwin, C. R. & Darwin, F. R. (1880). *The Power of Movement in Plants*. London: John Murray.

Darwin, C. R. & Darwin, F. R. (1888). *Insectivorous Plants*. London: John Murray.

Diamond, J. (1997). *Guns, Germs and Steel. The Fates of Human Societies*. New York: Norton.

Diamond, J. (2000). *Zwaarden, Paarden Ziektekiemen – waarom Europeanen en Aziaten de wereld domineren*. Utrecht: Het Spectrum.

Kooy, A. (2006). *De Nieuwe Nederlandse Keuken*. Zutphen: KunstMag.

Korthals, M. (2002). *Voor het eten – filosofie en ethiek van de voeding*. Amsterdam: Boom.

Korthals, M. (2004). *Before dinner: philosophy and ethics of food*. Dordrecht: Springer. https://doi.org/10.1007/978-1-4020-2993-6

Mancuso, S. & Viola, A. (2013). *Verde brillante, Sensibilità e intelligenza del mondo vegetale*. Firenze: Giunti editore.

Mancuso, S. & Viola, A. (2017). *Briljant groen. De intelligentie van planten*. Amsterdam: Cossee.

Mancuso, S. & Viola, A. (2018). *Brilliant Green: The Surprising History and Science of Plant Intelligence*. Washington, DC: Island Press.

Peeters, N. (2016). *Botanische revolutie – De plantenleer van Charles Darwin*. Zeist: KNNV uitgeverij.

Quammen, D. (2004). *Monster of God: The Man-Eating Predator in the Jungles of History and the Mind*. New York: Hutchinson.

Schulp, J. A., Kooy, A., & Cavagnaro, E. (2010). Toward a sustainable F & B management – Work in progress. Paper presented at *Euro CHRIE 2010 Passion for Hospitality Excellence*, 25–28 October, Amsterdam.

Singer, P. (1975). *Animal Rights A New Ethics for our Treatment of Animals*. New York: Vintage Publishing.

Singer, P. (2000). *Writings on an Ethical Life*. New York: Ecco Press.

Sterck, J. F. M., Moller, H. W. E., de Vooys,C. G. N., de Klerk, C. R., Molkenboer, B. H., Prinsen, J., Lzn J. & Simons, L (eds). (1929). *De Werken van Vondel*. Amsterdam: De Maatshappij voor Goede en Goedkope Lectuur.

Thomas, K. (1983). *Man and the Natural World – changing attitudes in England 1500–1800*. London: Penguin.

Wohlleben, P. (2016). *Das Geheime Leben der Bäume – was sie fühlen, wie sie kommunizieren. Der Bildband*. Munich: Ludwig Verlag.

Research in Hospitality Management 2019, 9(2): 113–115
https://doi.org/10.1080/22243534.2019.1689700

RHM
2019
Research in
Hospitality
Management

Chatbots — an organisation's friend or foe?

Emma Carter* & Charlotte Knol

Stenden Hotel Management School, NHL Stenden University of Applied Sciences
**Corresponding author, email: emmamlcarter@gmail.com*

ABSTRACT: In recent years, the use of artificial intelligence has increased tremendously and the hospitality industry has not gone unaffected. Nowadays, chatbots, which simulate human conversations, are almost indispensable in the customer service branch of hospitality. Where organisations started rapidly with the introduction of this new technology, they are now raising the question of whether or not this technological evolution is a good development for this industry. On the one hand, chatbots improve and accelerate customer service, saving time and labour costs. On the other hand, there are privacy and security concerns, lack of personality and lack of research resulting in errors and financial expenses. Presently, chatbots are seen as a technology to support human service, but due to rapid development this situation is open to change.

KEYWORDS: artificial intelligence (AI), chatbots, hospitality industry, human resource management (HRM)

Introduction

Over recent years the use of technology has been increasing, affecting different areas in numerous industries all over the world. Although the hospitality industry was slow at integrating technology, it is rapidly developing. One way in which technology is augmenting its presence in the modern world is with the use of artificial intelligence (AI). AI is defined as "a subpart of computer science, concerned with how to give computers the sophistication to act intelligently, and to do so in increasingly wider realms" (Nilsson, 1981, p. 1). With AI, computers are able to solve complex problems that in the past would not have been possible (Michiels, 2017). While some may believe that artificial intelligence is a new concept, the broad sense of artificial intelligence actually dates back to the 1950s (Newell, 1983). One of the first events regarding artificial intelligence was the "Turing Test", invented by Alan Turing (Berkeley, 1997). This test takes place between a human being, called a "judge", and two others – a computer and another human being. During the test, the "judge" must ask questions of both parties and if s/he can not distinguish which answers belonged to whom, the test is deemed successful – the computer has matched human levels (Berkeley, 1997).

Ivanov and Webster (2017) and Talwar (2015) state that companies are keen to work with new technological solutions due to a large amount of attention on social media and in the press, most of the times without considering whether or not it is worth the investment in time and other resources. Their intentions for using artificial intelligence are to improve their operational processes, to optimise their costs, to expand their service capacity and, of course, to create an improved customer experience. The concept of AI provokes different attitudes towards this concept by media, academia and politics. On the one side, there is the positive benefit of liberating human beings from manual work (Talwar, 2015; Ivanov & Webster, 2017), and on the other there is a fear of making people outdated in a robotised community (Crews, 2016; Ivanov & Webster, 2017). Investigating artificial intelligence in companies, we find that chatbots are used more and more for online communication, with companies and organisations rather using thses new processes than human beings (Hill, Ford & Farreras, 2015). On almost every website you visit, a chatbot pops up to assist you, whatever the time of day or night. This report will reflect on the use of chatbots and give an insight into their impact on the hospitality industry and especially on human resource management.

What are chatbots and how do they work?

According to Shawar and Atwell (2007), chatbots are computer programs interacting with human beings by means of natural languages. There are different terms that have been used for the chatbot, such as machine conversation system, dialogue system, virtual agent, and chatterbot. According to Dale (2016), chatbots are referred to as applications that use written language to communicate. This technology was invented in the 1960s with the aim of trying to fool people by letting them believe that the chatbot systems were real humans. Nowadays, the purpose of chatbot systems is to simulate human conversations. It integrates language models and computational algorithms in order for human beings to be able to have informal communication with a computer using natural language (Shawar & Atwell, 2007). Schumaker, Ginsburg, Chen, and Liu (2007, p. x) defined a chatbot as a system that "seeks to mimic conversation rather than understand it". Where Schumaker et al. emphasise the mimicry and simulation rather than the understanding, Mauldin (1994, as cited in Pereira, Coheur, Fialho & Ribeiro, 2016) talks about chatbots being systems that have

the goal "to think". Michiels (2017) has stated that chatbots are there to provide service any time and any where.

The first chatbot invented in 1966 was called ELIZA (Pereira, Coheur, Fialho & Ribeiro, 2016). This program was created by Joseph Weizenbaum and the ELIZA program was able to hold a conversation with humans, and responded as one as well. What made ELIZA so special was that not only was she the first of her kind, she was also a huge success. Humans were not able to tell if they were speaking with a robot or another human (Pereira et al., 2016). Following the success of ELIZA, many different chatbot models were invented to further tap into this new technology and the world of artificial intelligence. Since its success and increasing popularity, chatbots have contributed to almost half of all conversations that have taken place online from 2015 to 2017 (Tsvetkova, Garcia-Gavilanes, Floridi & Yasseri, 2016 as cited in Weißensteiner, 2018, p. 6).

Impact on hospitality

Benefits of chatbots

While the presence of chatbots is increasing, one industry that is benefiting from this form of artificial intelligence is the hospitality industry. According to Michiels (2017), there are five ways in which chatbots are improving this industry, with the first being customer service. Michiels (2017) explains that chatbots can be added to a website with the purpose of automatically answering questions. This is backed up by Ivanov and Webster (2017), who point out that by adding chatbots to a company's website, not only are they relieving staff of certain "simple" duties, but also saving on labour costs. Furthermore, chatbots can operate 24 hours a day and 7 days a week, giving companies the chance to serve customers whenever needed (Ivanov & Webster, 2017).

The second and third advantages explained by Michiels (2017) can be analysed together. These involve chatbots and mobile apps as well as social media channels. With the use of mobile apps increasing exponentially (Rakestraw, Eunni & Kasuganti, 2013), more and more hospitality companies are choosing to develop their own apps, as well as increasing their online presence using social media. Chatbots can manage these various channels and connect with users. Ivanov and Webster (2017) state that by using chatbots, companies have the opportunity to interact and serve many customers simultaneously. Weißensteiner (2018) explains that this is much easier for the consumer as they are typically already using these applications for different reasons on a daily basis.

Michiels (2017) explains that the fourth area in which chatbots are an advantage to the industry is that of the "internet-of-things". In this situation, chatbots can understand and respond to users' commands, as well as reach out to more people using all languages (Ivanov & Webster, 2017), which is an advantage in the hospitality industry that operates and caters to guests all over the world. Michiels' (2017) fifth statement goes deeper by explaining that chatbots have the ability to hold conversations and communicate with natural language, thus improving interactions with customers.

Although Michiels (2017) has focused on five areas in which chatbots are advantageous to the hospitality industry, there are numerous other ways in which this technology is aiding companies. For example, Weißensteiner (2018) states that while chatbots do improve customer service channels, they can also identify customers' opinions and their expectations of the service. Furthermore, Ivanov and Webster (2017) suggest that chatbots add value to a company's brand, giving it the image of being a "high tech" company, and improving its reputation.

Pitfalls of chatbots

Although there are a lot of benefits regarding chatbots in the hospitality industry, we can also think of several disadvantages and barriers in the use of chatbots. First of all, consumers are concerned about their privacy and security (Michiels, 2017). Chatbots are becoming better skilled in the imitation of human conversations which can be seen as an advantage but also as a disadvantage since information can be captured by the wrong people. Hackers will be able to create their own bots to convince consumers to share personal information, for instance their bank details, which could cause trouble for consumers (Wasserman, 2018). Next to this, chatbots have access to a global network of information by using open internet protocols through which the chance of hacking and phishing of their private information increases (Kar & Haldar, 2016).

A second downside of using chatbots in the hospitality industry is that they sometimes turn out to not be intuitive enough (Michiels, 2017). Chatbots can be properly used in communication with end users when the conversation flows in the right direction as the chatbot is programmed with the help of natural language processing. However, chatbots do not have their own identity or personality with feelings and emotions like real human beings. People often look for a connection and engagement during a conversation, making the lack of personality a concern.

As a result, consumers might feel uncomfortable and unsure about how to use the chatbot (Ivanov & Webster, 2017). Consumers might not have enough knowledge about this technology and this could lead to a refusal to use it. They might consider chatbots as inferior to work done by real human beings and are therefore not willing to pay the same amount of money for both types of service (Ivanov & Webster, 2017).

Although more and more research is being done on the use of chatbots (Pereira et al., 2016), natural language processing is not the core competency in information technology (IT) as it is still in development (Michiels, 2017). The programs are not yet able to capture variations in human conversations through which errors occur. These errors can influence the customer experience and satisfaction, thus affecting customers' buying behaviour. This is why companies and organisations are very careful in using chatbots since they are afraid it will cause damage to their brand's image (Michiels, 2017).

Apart from the risk of implementing chatbots, there are high financial costs associated with acquiring, updating and hiring specialists (Ivanov & Webster, 2017). Chatbots need to be integrated into already existing infrastructure, which is costly and time consuming. They also need to be developed into multiple languages which is for international companies a large effort to make (Michiels, 2017). It can be said that renting or leasing the chatbot would mitigate these costs. In that case, the use of a chatbot with a monthly fee to pay is financially comparable to human beings doing the work for their monthly salary (Ivanov & Webster, 2017).

Impact in HR

After having discussed AI and chatbots' influence on the hospitality industry, we now focuses more specifically on human resources management within the industry. When analysing this department, we find that there is much debate about whether AI and technological advances are a negative or a positive for an organisation. On the one hand, Ivanov and Webster (2017) state that chatbots carry out jobs much faster than human beings, which therefore increases the productivity and is a cost-saving solution. As a result, human positions could be replaced by chatbots, which from the companies' perspective, could be seen as an advantage. In addition, Ivanov and Webster (2017) mention that chatbots are also more efficient when it comes to seasonal positions, where companies are able to rent the robots for a short period of time rather than having to go through the entire hiring and firing process, and the challenges of non-permanent employees. However, Ivanov and Webster (2017) also state that chatbots and other forms of AI are not substituting human beings, but rather enhancing them and their ability to perform efficiently. While technology has evolved tremendously, it has not yet reached the point where chatbots can perform all tasks independently.

What will the future look like?

AI in hospitality

After considering the past and how AI and chatbots have developed over the years, it is important to think about the future. In the long term, as the technology continues to evolve, certain customers may feel intimidated by it and with their lack of knowledge, prefer the human interaction over that of a machine. People like what is familiar, and anything new will be seen as a threat to what they know as their "normal". Based on current growth rates (Pereira et al., 2016), it is likely that the presence of AI and chatbots will continue to grow in the hospitality industry. Businesses may wish to consider tutorials for the customers, explaining how to use the technology. They will then feel supported and more comfortable using these services.

AI in human resources

Regarding the HR aspect of the hospitality industry, there are two main sides that could be seen for the future based on what was mentioned earlier. Firstly, the term "human resource management" says just that – managing humans. With the implementation of chatbots, companies are removing the very thing that makes HR what it is. Therefore, the future of HR in the hospitality industry may be quite different as there will be much less to manage.

On the other hand, chatbots are not able to do everything on their own which means that people will still be needed to assist in this process. As a result, human resource management will still be important and there will be even more aspects to take into consideration when implementing more technology. Therefore, it could be more a matter of change in this department rather than disappearance.

To conclude, future predictions are that humans will always be necessary in the hospitality industry as it is a people business. To remain hospitable, the hotels will require human contact with guests. Thus, for the immediate future only the most basic processes will be automated. However, on reflection, the speed of development with AI and chatbots could see many things change. A few years into the future, chatbots may have "emotion" and the ability to make decisions, but they are currently limited to being a useful support technology for human service.

References

Berkeley, I. (1997). *What is Artificial Intelligence?* http://www.ucs.louisiana.edu/~isb9112/dept/phil341/wisai/WhatisAI.html

Crews, J. (2016). *Robonomics: Prepare today for the jobless economy of tomorrow*. CreateSpace Independent Publishing Platform. https://www.i-programmer.info/bookreviews/28-general-interest/10351-robonomics-prepare-today-for-the-jobless-economy-of-tomorrow.html

Dale, R. (2016). The return of the chatbots. *Natural Language Engineering, 22*(5), 811–817. https://doi.org/10.1017/s1351324916000243

Hill, J., Ford, W. R., & Farreras, I. G. (2015). Real conversations with artificial intelligence: A comparison between human-human online conversations and human–chatbot conversations. *Computers in Human Behavior*, *49*, 245–250.

Ivanov, S., & Webster, C. (2017). Adoption of robots, artificial intelligence and service automation by travel, tourism and hospitality companies – a cost-benefit analysis. *International Scientific Conference "Contemporary tourism – traditions and innovations"*. Sofia University, 19–21 October 2017.

Kar, R. & Haldar, R. (2016). Applying chatbots to the internet of things: Opportunities and architectural elements. *International Journal of Advanced Computer Science and Applications*, *7*(11), 147–154.

Michiels, E. (2017). Modelling chatbots with a cognitive system allows for a differentiating user experience. *Doctoral Consortium and Industry Track Papers*, 2027, 70–78.

Newell, A. (1983). Intellectual issues in the history of artificial intelligence. In F. Machlup & U. Mansfield (eds), *The Study of Information: Interdisciplinary Messages* (pp. 187–227). New York: John Wiley & Sons.

Nilsson, N. J. (1981). Principles of artificial intelligence. *IEEE Transactions on Pattern Analysis and Machine Intelligence, 3*(1), 112. https://doi.org/10.1109/TPAMI.1981.4767059

Pereira, M. J., Coheur, L., Fialho, P., & Ribeiro, R. (2016). *Chatbots' greetings to human-computer communication*. https://arxiv.org/abs/1609.06479

Rakestraw, T., Eunni, R., & Kasuganti, R. (2013). The mobile apps industry: A case study. *Journal of Business Cases and Applications, 9*(1), 1–26.

Schumaker, R. P., Ginsburg, M., Chen, H., & Liu, Y. (2007). An evaluation of the chat and knowledge delivery components of a low-level dialog system: The AZ-ALICE experiment. *Decision Support Systems, 42(4)*, 2236–2246.

Shawar, B. A., & Atwell, E. (2007). Chatbots: are they really useful? *LDV Forum*, *22(1)*: 29–49.

Talwar, R. (Ed.) (2015). *The future of business*. London: Fast Future Publishing.

Wasserman, T. (2018). *Chatbots are all the rage – and something of a risk.* https://www.securityroundtable.org/chatbots-rage-something-risk/

Weißensteiner, A. A. A. (2018). *Chatbots as an approach for a faster enquiry handling process in the service industry.* Master's dissertation, Modul University, Vienna, Austria. https://www.modul.ac.at/uploads/files/Theses/Bachelor/Undergrad_2018/Thesis_1511041_Alina_Weissensteiner.pdf

Research in Hospitality Management 2019, 9(2): 117–120
https://doi.org/10.1080/22243534.2019.1689701

RHM
2019
Research in
Hospitality
Management

For better or for worse: Shaping the hospitality industry through robotics and artificial intelligence

Nadine Drexler* & Viyella Beckman Lapré

Stenden Hotel Management School, NHL Stenden University of Applied Sciences, Leeuwarden, The Netherlands
**Corresponding author, email: nadinedrexler@yahoo.com*

ABSTRACT: Contemporary technological applications are widely in use in the public sector; transportation, law enforcement, armed forces, and health care industries have long adopted robotics and artificial intelligence (AI). Our daily lives have been shaped through the digital transformation and, as such, this development has also impacted the hospitality industry. By exploring the practical implications, the authors outline motivations of organisations, and highlight shortcomings due to the current level of technology adoption. In line with this, a trade-off between convenience and limiting freedom of choice is contrasted with varying regional acceptance levels by users. Further, the adoption of advanced technology as far-reaching as social robots has implications on a strategic and human resources level; human-robot interaction (HRI) in a professional setting comes with changing job tasks, and a general-skill-focused human workforce and therefore requires adapted policies and strategies. Undoubtedly, the future is here, and rather than fearing the change the authors recommend using technological advancements and its possibilities through an informed choice.

KEYWORDS: acceptance, artificial intelligence (AI), hospitality industry, human–robot interaction (HRI), robotics, technological development, strategic human resource management (HRM)

The digital transformation

Automated processes and robotics are deeply integrated in today's society, and Collier (as cited in Murphy, Hofacker & Gretzel, 2017) declared, in 1983, the end of the Industrial Revolution through technological advancements. The Industrial Revolution, being widely associated with the economic prosperity of the Global North, was also the driver of societal changes based on changed living arrangements that were followed by new saving and spending patterns. Daily life was newly defined through scheduled working hours and emerging labour laws; commercial asset investments contributed to the development of accounting and finance practices. According to Wisskirchen, Biacabe, Bormann, Muntz, Niehaus, Soler, and von Brauchitsch (2017), digitalisation with the emergence of the internet and a new era of access to information beginning in the 1970s contributed to extended use of industrial machines. Industry 4.0, or the fourth Industrial Revolution, is defined through *cyber-physical systems* (CPS) – the extended integration of technology and the communication between everyday objects (the *internet of things*) – and shapes a new world order of permanently (inter)connected humans and machines. Hence, Dirican (2015) raised the question of how the emergence of robotics and artificial intelligence (AI) aggravated economic and labour market development not only on a societal and organisational level, but also on an individual basis.

Discussing the history of "robotics", Murphy et al. (2017) state that science fiction authors and later movie producers have had an interest in non-human beings since the early 1900s. Despite the commonly grim outlook of humanoids replacing life on Earth in most stories, *robotic applications* are an integral part of our daily lives, not only in our homes, but also in transportation, entertainment, law enforcement, armed forces, and health care.

Technological advancements in the hospitality industry

Even though for some the hospitality industry is still associated with long working hours, low salary levels and exploitation of minorities, the industry has come a long way since Orwell famously criticised and labelled hospitality-related workers as having *no social significance* in the 1930s (Baum, 2019). In the age of big data, the hospitality industry, a sector within the broader services industry, has adopted computerised processes and artificial intelligence in, for example, property management systems (PMS), revenue management systems (RMS), or customer relationship management (CRM), to synthesise key performance indicators (Mariani, Baggio, Fuchs, & Höepken, 2018). Smart home appliances and applications such as Alexa by Amazon, Siri by Apple, and the Google Assistant have found their way into hotel rooms to control the ambiance, provide information, order services or communicate complaints. Robotic appliances are not only utilised for programmable housekeeping purposes and assisting lobby attendants, concierges and bellboys, but have also been introduced as waiters in restaurants. The owner of a restaurant in China sees robots as not only an opportunity to save costs in the long run by easing the demanding workload of

his staff, but also as a form of high-tech entertainment (Allman, 2014). The Henn na Hotel in Tokyo, Japan, an experimental hotel project, utilises robotics and state-of-the-art technology to run what they called a low-cost hotel (LCH) with minimal human labour (Masuda & Nakamura, 2018).

Robotic butlers (e.g. Boltr in Aloft Hotels), robotic arms as bartenders (Bionic Bar on Royal Caribbean's *Quantum of the Seas*), or even virtual robotic agents in Singapore`s tourist information centre are further examples of how technological advancements have found their way into the day-to-day operations of hospitality businesses (Tung & Law, 2017).

In line with this, and probably an example of the most advanced application of AI, Singapore's Nanyang Technological University (NTU) introduced the human-like *social robot* "Nadine" as a receptionist in the Institute of Media Innovation faculty in 2018, and according to the scientists who created her, staffing needs were the main driver in her development. With the goal to fulfil administrative tasks in the care of the elderly, "Nadine" might even become a companion. She can interact with her environment, express emotions and, with the efficiency of a machine, work for extended periods of time (Nanyang Technological University Singapore, 2019). With the ambitious vision of social robots working alongside lawyers and journalists, "Nadine" could be the beginning of a line of front-line staff in the hospitality industry far beyond the capabilities of the robots used in the Henn Na Hotel in Japan.

As the above examples show, efforts to include machines, robotic applications or sophisticated social robots are plentiful. With manpower issues or economising efforts in mind, academic literature supports the notion that the technological development in service automation, artificial intelligence, and robotics create possibilities to enhance organisational performance, productivity, and quality consistency (Ivanov, Webster & Berezina, 2017). Ivanov (2019) further highlights the potential of waste and cost reduction to boost the financial bottom line.

How does it work in practice?

The question is: to what extent do these applications fulfil these ambitions from an organizational point of view? Especially, as the following examples outline, that in practice, the current state of robotic technology available to the hospitality industry has proven to be unsatisfying.

After only one year in operation, robotic waiters in three different restaurants in Guangzhou, China were, in spite of large-scale initial investment, "fired" because of incompetent service delivery and frequent technical difficulties (Price, 2016). In 2018, the CEO of travel company H.I.S., Hideo Sawada, the company behind the Henn na Hotel, announced plans to reduce the workforce of an amusement park by a third. Even though they will be re-assigned within the company, their old duties were to be taken over by machines (*Nikkei Asian Review*, 2018). However, in 2019, news emerged that management had to change their personnel strategy, as robots created more problems than achieving the goal of streamlined productivity and addressing labour market shortages (Hertzfeld, 2019).

Nevertheless, within academic circles, a consensus of more robotic appliances finding their way into the workplace can be seen. The extent of the predicted impact varies, however, as does the timeline. In addition, the notion of robots replacing or even eradicating human life on earth is as old as the emergence of the term itself. Is this fear, undeniably painted by "Hollywood", justifiable or do the advantages outweigh the negatives?

Osawa, Ema, Hattori, Akiya, Kanzaki, Kubo, Koyama, and Ichise (2017) for example, argue for technology substituting job tasks, supplementing humans, but not replacing them. A study by the Future of Humanity Institute at Oxford University by Grace, Salvatier, Dafoe, Zhang, and Evans (2018, p. 729) reported on a panel of AI experts' significant variations in their prediction of "when will AI exceed human performance". The timeline stretches between a 50% chance within 45 years and a 9% chance for it to happen within the next nine years.

Interestingly, experts from Asia indicated a 30-year totalled estimate versus 74 years by North American respondents. Without details on the cause of the discrepancy, a report in *MIT Technology Review* picks up on this difference. In that report, Winick (2018) details that if statistics are adjusted for wage differences, Southeast Asian countries have up to a 200% higher adoption rate of robots than Europe or North America. Meinhardt, Laha, Arcesati, and Kopecky (2018) state that China's ambition for AI strategies is gaining momentum and overtaking North America's research investments, and leaving Europe behind. Supported by government policies and a strong incentive plan, China is planning to become the leader in AI innovations by 2030. With strong privacy concerns, enforced by the GDPR (General Data Protection Regulations 2016/679), Europeans tend to be more sceptical in accepting everyday technological advancements than their Chinese counterparts (European Political Strategy Centre, 2018).

Convenience over freedom of choice?

Fully adopting and incorporating AI and deep-learning applications is a choice, characterised by the convenience for the individual, the efficiency of the organisation and the economic prosperity of society.

Developments in artificial intelligence have been shown to go far beyond the comprehension of the human brain. In 1996, the world chess champion was beaten by Deep Blue (IBM), and in 2016 AlphaGo (Google) defeated a Go grandmaster, "a game long considered to be a challenge too complex and difficult for AI" (Villaronga, Kieseberg, & Li, 2018, p. 304). In line with this, Villaronga et al. (2018) pointed out the "right to be forgotten", a concept that emerged alongside the right for erasure, rooted in privacy laws and regulations, especially in the European Union. Even though AI may have been designed by humans, the self-learning and development capabilities may lay outside controllable parameters. Carrasco, Mills, Whybrew, and Jura (2019) further raised concerns of conscious and unconscious bias being carried forward in algorithms coded by their human developers.

Hence, in an ideal solution, governments, policymakers, and organisations would be either required to pursue collecting only non-sensitive data, or for data storage to be assessed differently for human brains and in artificial intelligence environments. This, however, contradicts the convenience that comes along with data collection and the ability of machines to "remember". Loyalty programmes are a large contributor to any hospitality company's ability to deliver personalised services based on collected data of spending or booking patterns. Personal guest profiles, as part of CRM systems, ensure that preferences are

remembered and support efforts to deliver hospitable service. Opposing this, Nitzberg, Groth, and Esposito (2017) concluded on the limiting effects of AI by "[narrowing] our field of vision and [reducing] our social and economic choices". They urge policymakers not to focus on privacy concerns, but rather to ensure everyone's *freedom of choice*.

Management implications

In the hospitality industry, unlike other industries, the service process and delivery is defined through the guest's participation. Adding customer-facing technology to the equation will add a new level of interaction and henceforth will influence the service dynamics. The nature of intangible and personalised service delivery presents itself with the issue that guests might not accept robotic appliances and substantiates the need to understand the effect of human-robot interaction (HRI). Murphy et al. (2017) concluded that the perfect humanoid robot showcases the pace and accuracy of a machine while simultaneously adhering to social norms and displaying empathy without being biased. However, they further raised the issue of politeness being one-directional as humans may or may not extend this in their interactions with robots.

Therefore, traditional models in the service industry need to be reconsidered. Employees and management need to recognise the effects on the operational processes and ultimately the customer experience (Susskind & Curry, 2015). It is, therefore, a strategic choice to determine the role of technology and how it can best serve the company in accomplishing its strategic objectives (Marler & Parry, 2016).

Further, the hospitality industry is still characterised by its labour intensiveness, irregular working hours and restricted wages, all contributing to a shortage of employees and a high level of employee turnover (Kuo, Huang, Tseng, & Boger, 2016). In the Netherlands alone, research has indicated that the industry needs to recruit more than 90 000 people a year (Groenemeijer, de Kort, Marchal, Grotenhuis, & Zwaneveld, 2017).

Addressing these issues, a case study of the experimental Henn na Hotel details that the management placed efforts on balancing the human and robot functions and their performance. The more complex tasks, for example high-quality cleaning, were performed by human labour, while robots were assigned to generalised and supportive activities such as handling large and non-fragile pieces of luggage to enhance the efficiency of human performance (Osawa et al., 2017). Other reasons for robotic and self-service technology investments are in line with the aim of enhancing efficiency and lowering labour costs (*BBC News*, 2015), but also to decrease service error costs and ultimately improve the profitability of the company (Ivanov, 2019).

Again, based on the Henn Na Hotel, Osawa et al. (2017) described that by hiring a robotic workforce a wider range of general skills were required for the human personnel to anticipate non-routine activities, to support and educate guests in operating the robots, and to monitor the operations. To carry out these multidimensional tasks, employees were trained accordingly in the hope of enabling the company to operate with a minimal human workforce.

From a non-fiction perspective opposing the picture painted by Hollywood, the impact of technology is already evident in most departments with administrative tasks. With automated and standardised processes the focus lies on relevant and continuous improvement of information. Decision-making is decentralised, and Marler and Parry (2016) conclude that this offers employees the opportunity to pay more attention to more complex issues and responsibilities. Especially in human resources, AI and the use of data bots is an integral part of today's hiring process. However, bots are programmed to pick up on keywords and other predetermined data and will, therefore, exclude a potentially qualified candidate based on the algorithm it is designed to operate with.

In line with predicted developments similar to previous stages of the Industrial Revolution, Marler and Parry (2016) also determined the trend towards the creation of more up-skilled jobs, if technological applications take over job tasks on a more widespread level.

Hence, with an adapted strategic vision, HR strategies and policies need to be modified with an emphasis on empowerment activities, such as the advancement of existing employees, adjusting job responsibilities, the development of new jobs and career opportunities, and the degree of employee control (Siegel, Waldman, & Youngdahl, 1997). Human-robot interaction (HRI) should become an integral focus of human resource strategies going beyond personnel management. With non-human "employees", Murphy et al. (2017) state that HRI might lead to feelings of isolation among the staff, as machines are designed to take charge and work at a level of precision far higher than the human employee.

What does the future hold?

To conclude, technological advancements have come a long way since the first Industrial Revolution and have accelerated the development of our society. Undoubtedly, driven by fiction, a fascination for human-like robots comes along with the unknown. Nevertheless, technology is not only a vital, but also an integral part of our daily lives, and this does not exclude the hospitality industry.

Socially accepted levels of applications can be found in various settings, and experimental projects try to expand the usage in operational parts of the broader hotel and tourism industry.

Success, however, differs, partly due to the performance of available technology and partly due to the acceptance levels. Here, Europe especially – with a strong emphasis on privacy and data protection – seems to lag behind.

Addressing issues within the hospitality industry, the further integration of AI and robotics indicates that by supplementing human skill sets with technology, employees will have more time and opportunities to deliver genuine hospitable service. By decreasing the individual's work and emotional load, academics see a link to improved organisational performance, and ultimately guest satisfaction (Kuo et al., 2016; Osawa et al., 2017).

To successfully integrate non-human employees into a team, it is essential for companies to ensure that all parties involved in the new technologies understand the changes in the operation and the influences on guest experiences (Susskind & Curry, 2015). Developing guidelines, ethical principles, and a code of conduct will be critical to address adverse impacts on the social part of the HRI, for example, naming or addressing robots, social norms, and values towards the robots, but also the extent of encouraging the integration of the new team member.

However, even though there is no agreement upon how or when more sophisticated applications will find their way into our businesses and personal lives, our community may very well soon extend to social robots.

The future is here. Instead of fearing the change, fearing the unknown, technological advancements should be embraced. Not without caution though, but through an informed manner where one has a choice – the "rise of the machines" should be seen as an exciting opportunity not only for the hospitality industry, but for all businesses and humankind.

References

Allman, T. (2014). *China restaurant introduces robot waiters. BBC*, 13 December. https://www.bbc.com/news/av/world-asia-30460737/china-restaurant-introduces-robot-waiters

Baum, T. (2019). Hospitality employment 2033: A backcasting perspective. *International Journal of Hospitality Management*, *76*(B), 45–52.

BBC News. (2015). Five things about Japan's robot hotel. *BBC News*, 15 July. https://www.bbc.com/news/world-asia-33562368

Carrasco, M., Mills, S., Whybrew, A., & Jura, A. (2019). The citizen's perspective on the use of AI in government: BCG Digital Government Benchmarking. Boston: BCG (Boston Consulting Group). https://www.bcg.com/publications/2019/citizen-perspective-use-artificial-intelligence-government-digital-benchmarking.aspx?linkId=65048574&redir=true

Dirican, C. (2015). The impacts of robotics, artificial intelligence on business and economics. *Procedia-Social and Behavioral Sciences*, *195*, 564–573. https://doi.org/10.1016/j.sbspro.2015.06.134

European Political Strategy Centre. (2018). The age of artificial intelligence: Towards a European strategy for human-centric machines. https://doi.org/10.2872/143581

Grace, K., Salvatier, J., Dafoe, A., Zhang, B., & Evans, O. (2018). When will AI exceed human performance? Evidence from AI experts. *Journal of Artificial Intelligence Research*, *62*, 729–754. https://doi.org/10.1613/jair.1.11222

Groenemeijer, L., de Kort, J., Marchal, B., Grotenhuis, M., & Zwaneveld, J. (2017). *Arbeidsmarkt en opleidingsbehoeften Horeca*. Koninklijke Horeca Nederland & Stichting Vakbekwaamheid Horeca. https://www.khn.nl/nieuwsberichten/2017/10/groot-personeelstekort-in-de-horeca-behoud-medewerkers-belangrijkste-succesfactor

Hertzfeld, E. (2019). Japan's Henn na Hotel fires half its robot workforce. *Hotel Management*, 31 January. https://www.hotelmanagement.net/tech/japan-s-henn-na-hotel-fires-half-its-robot-workforce

Ivanov, S. H., Webster, C., & Berezina, K. (2017). Adoption of robots and service automation by tourism and hospitality companies. *Revista Turismo & Desenvolvimento*, (27/28), 1501–1517. https://www.researchgate.net/profile/Stanislav_Ivanov/publication/322635104_Adoption_of_robots_and_service_automation_by_tourism_and_hospitality_companies/links/5a65938e0f7e9b6b8fdbe57d/Adoption-of-robots-and-service-automation-by-tourism-and-hospitality-companies.pdf

Ivanov, S. H. (2019). Ultimate transformation: How will automation technologies disrupt the travel, tourism and hospitality industries? *Zeitschrift für Tourismuswissenschaft*, *11*(1), 25–43. https://www.researchgate.net/profile/Stanislav_Ivanov/publication/331152771_Ultimate_transformation_How_will_automation_technologies_disrupt_the_travel_tourism_and_hospitality_industries/links/5c6822d1299bf1e3a5ad2d99/Ultimate-transformation-How-will-automation-technologies-disrupt-the-travel-tourism-and-hospitality-industries.pdf

Kuo, C. M., Huang, G. S., Tseng, C. Y., & Boger, E. P. (2016). SMART SWOT strategic planning analysis: For service robot utilization in the hospitality industry. *Consortium Journal of Hospitality & Tourism*, *20*(2), 60–72.

Mariani, M., Baggio, R., Fuchs, M., Höepken, W. (2018). Business intelligence and big data in hospitality and tourism: a systematic literature review. *International Journal of Contemporary Hospitality Management*, *30*(12), 3514–3554.

Marler, J. H., & Parry, E. (2016). Human resource management, strategic involvement and e-HRM technology. *The International Journal of Human Resource Management*, *27*(19), 2233–2253. https://doi.org/10.1080/09585192.2015.1091980

Masuda, H., & Nakamura, K. (2008). Henn na Hotel Huis Ten Bosch: The road to low-cost hotels (LCHs). *AIRTH – Alliance for Innovators and Research in Tourism and Hospitality*, *AIRTH Encyclopedia*. http://www.airth.global/depositview.aspx?dpid=8667&lng=en

Meinhardt, C., Laha, M., Arcesati, R., & Kopecky, V. (2018). Europe's AI strategy is no match for China's drive for global dominance. *MERICS (Mercator Institute for China Studies)*. https://www.merics.org/en/blog/europes-ai-strategy-no-match-chinas-drive-global-dominance

Murphy, J., Hofacker, C., & Gretzel, U. (2017). Dawning of the age of robots in hospitality and tourism: Challenges for teaching and research. *European Journal of Tourism Research*, *15*, 104–111.

Nanyang Technological University Singapore. (2019). Nadine Social Robot. https://imi.ntu.edu.sg/IMIResearch/ResearchAreas/Pages/NadineSocialRobot.aspx

Nikkei Asian Review. (2018). Japan theme park to replace a third of staff with robots. *Nikkei Asian Review*, 17 March. https://asia.nikkei.com/Editor-s-Picks/Japan-Update/Japan-theme-park-to-replace-a-third-of-staff-with-robots

Nitzberg, M., Groth, O., & Esposito, M. (2017). AI isn't just compromising our privacy – it can limit our choices too. *Quartz*. https://qz.com/1153647/ai-isnt-just-taking-away-our-privacy-its-destroying-our-free-will-too/

Osawa, H., Ema, A., Hattori, H., Akiya, N., Kanzaki, N., Kubo, A., Koyama, T., & Ichise, R. (2017). What is real risk and benefit on work with robots?: From the analysis of a robot hotel. *Proceedings of the Companion of the 2017 ACM/IEEE International Conference on Human-Robot Interaction*, 241–242. 6–9 March, Vienna, Austria. http://dx.doi.org/10.1145/3029798.3038312

Price, M. (2016). A line of robot waiters did such a terrible job that they forced two restaurants to close down. *Business Insider*, 11 April. https://www.businessinsider.com/two-restaurants-close-down-due-to-terrible-robot-waiters-china-2016-4

Siegel, D. S., Waldman, D. A., & Youngdahl, W. E. (1997). The adoption of advanced manufacturing technologies: Human resource management implications. *IEEE Transactions on Engineering Management*, *44*(3), 288–298. https://doi.org/10.1109/17.618170

Susskind, A. M., & Curry, B. (2015). An examination of customers' attitudes about tabletop technology in full-service restaurants. *Service Science*, *8*(2), 203–217. https://doi.org/10.1287/serv.2016.0132

Tung, V. W. S., & Law, R. (2017). The potential for tourism and hospitality experience research in human-robot interactions. *International Journal of Contemporary Hospitality Management*, *29*(10), 2498–2513. https://doi.org/10.1108/IJCHM-09-2016-0520

Villaronga, E. F., Kieseberg, P., & Li, T. (2018). Humans forget, machines remember: Artificial intelligence and the right to be forgotten. *Computer Law & Security Review*, *34*(2), 304–313. https://doi.org/10.1016/j.clsr.2017.08.007

Winick, E. (2018). These charts show how Asia is dominating industrial-robot adoption: Europe and America have far fewer robot workers than we might expect them to have. *MIT Technology Review*, 27 November. https://www.technologyreview.com/s/612475/these-charts-show-how-asia-is-dominating-industrial-robot-adoption/

Wisskirchen, G., Biacabe, B. T., Bormann, U., Muntz, A., Niehaus, G., Soler, G. J., & von Brauchitsch, B. (2017). Artificial intelligence and robotics and their impact on the workplace. London: IBA Global Employment Institute. https://www.ibanet.org/Document/Default.aspx?DocumentUid=c06aa1a3-d355-4866-beda-9a3a8779ba6e

Research in Hospitality Management 2019, 9(2): 121–124
https://doi.org/10.1080/22243534.2019.1689702

RHM
2019
Research in
Hospitality
Management

Artificial intelligence in today's hotel revenue management: opportunities and risks

Thomas Millauer* & Matthijs Vellekoop

Stenden Hotel Management School, NHL Stenden University of Applied Sciences, Leeuwaarden, The Netherlands
**Corresponding author, email: thomas-millauer@web.de*

ABSTRACT: The implementation of revenue management in the hospitality industry has significantly increased in the past years. It started in the rooms departments and is slowly evolving to be further used for conference and event spaces, as well as food and beverage outlets. At the same time, advancements in technology allow new products such as automated revenue management systems to develop. On one hand, the opportunities are to make use of big data and shift to a science-based revenue management. On the other hand, risks include the increased vulnerability such as through hacking or data leaks. The current debate is often dominated by the fear of possible job loss and a lack of trust in the new technology. Nonetheless, the industry is slowly shifting towards automation and will have to adapt over time.

KEYWORDS: artificial intelligence (AI), hotels, literature review, revenue management, risk and opportunities

Introduction on revenue management

Revenue management was initially invented by the airline industry about 60 years ago and has been adapted by the hospitality industry over the past several decades (Anderson & Xie, 2010). Traditionally, it was defined as selling the right product, to the right customer, at the right time, for the right price (Yeoman & McMahon-Beattie, 2017). So far, it has mainly been implemented in the rooms departments. Ten years ago, scholars predicted a renaissance of revenue management that would evolve through technology in other hotel operations as well (Cross, Higbie, & Cross, 2009). With the rapid development of new revenue management software, it is questionable to what extent the revenue department as we know it today is future proof. As technology is developing at an increasingly faster pace, it is getting easier to run complex algorithms that allow revenue management to optimise and improve. The revenue department as it is known today is undergoing major changes. Current developments in the hotel industry include the automation and centralisation of revenue management that replaces the role of on-property revenue managers (Kimes, 2011). Artificial intelligence and automation are praised as game changers in the industry. This, in turn, leaves the question: will it be possible to fully automatise and replace humans or is the future a close collaboration between both?

Opportunities of automation

Revenue management is a rather new discipline in the hospitality industry. It has already seen major changes such as the shift from an occupancy-driven to price-optimisation revenue management. So far, existing revenue management software still relies heavily on being fed with information and being maintained by humans. With the rise of artificial intelligence, and a fast development in computer software and hardware, revenue management software is becoming more accurate, reliable, and heuristic in its decision-making. Using advanced technology, super computers, and cloud services, a shift from a rule-based revenue management to science-based revenue management is made possible. Automatic and centralised revenue management systems effectively analyse all possibilities and execute the option that is most in line with the holistic strategy of the hotel (Wang, 2012; Wang, Yoonjoung Heo, Schwartz, Legohérel, & Specklin, 2015). This can lead to an increase in efficiency levels, resulting in lower costs and a higher level of profit for the hotel.

Big data

All revenue management systems rely heavily on data and processing power. Recently, the mass media started using the term "big data", which lacks a general and uniform definition. A popular approach is the "3Vs" that describe big data as volume, variety and velocity, or the "4Vs" that further include value, showing usefulness and importance (Li, Xu, Tang, Wang, & Li, 2018). With the implementation of an automatic revenue management software, it is possible to make use of big data for forecasting and pricing. Especially both short- and long-term forecasting is of great importance for a successful business operation and a competitive advantage (Pan & Yang, 2017). Scholars argue though that internal data might not be enough anymore to have a competitive advantage, and in order to build a "data warehouse" external data needs to be acquired (Buhalis & Leung, 2018). Due to the immense volume of big data it can only be processed by non-traditional computing methods (Pan & Yang, 2017). With the modern traveller leaving digital traces before, during, and after their stay, technology allows us to create profiles that include the guest's satisfaction, preferences, geographical location, and spending habits (Pan & Yang,

2017). While most revenue management models rely mainly on historical data, big data can also take a company's external data into consideration (Buhalis & Leung, 2018). This data can, for instance, include the political environment and security of a destination (Buhalis & Leung, 2018). Social media can be a good source for hotels to get this data and be more customer-centric, and can even be seen as a new distribution channel (Noone, McGuire, & Rohlfs, 2011). Through the effective use of all this data in real time, room rates or packages can be customised for each guest, individually offering the best options for both revenue maximisation and guest satisfaction (Wang et al., 2015).

Before the hospitality industry can transform and integrate fully automated revenue management systems, the general structure of the department must be changed. An ongoing trend here is centralisation (Kimes, 2011). So far, most hotels have their own revenue management department. Some hotels outsource their revenue department to cut costs. Additionally, the trend is to have a central office that is responsible for multiple properties on a corporate level. This implies that current revenue management departments are operating on the business unit level and will be relocated to the corporate level (Wit & Meyer, 2014). With smart revenue management software, it will be possible to cover more properties with one manager, which reduces costs.

Risks of automation

Critics argue that even though automatic revenue management systems are effective techniques to increase revenue streams and thus profits, they lack the ability to maintain and create human relationships (Wang, 2012). Pricing is an essential criterion for strategic customers of a hotel. Key partners therefore have contracts with hotels to guarantee them a certain corporate rate. This rate typically remains the same during the contract period regardless of the best available rates. One result from the automatisation of revenue management is that the system is not able to favour loyal key account partners with fixed lower rates above higher paying one-time customers. This may lead to dissatisfaction among business partners and clients, who might then take their business elsewhere. Meanwhile, corporate rates that were only available to be booked directly through the hotel's reservations or sales department are now available online via reservation interfaces and mobile applications that are linked to revenue management systems. Key accounts are essential for a hotel during low-demand periods but are easily neglected by the automatic revenue management systems in high-demand seasons. A loss of key accounts can have significant impact on the hotel's long-term performance (Wang, 2012).

Although the automation of revenue management has the clear benefit of an increase of accuracy and speed, it is questionable whether hotels should rely solely on automation rather than employing humans (Frey & Osborne, 2017). It increases the vulnerability in cases of outages, hacking attacks, or systems failures. Hotel operation systems have been exposed to those threats, as shown in recent examples. In 2018, there was a hacking attack on Marriott International, where the data of 500 million guests was stolen (O'Flaherty, 2019), or where a former employee hacked the revenue management system to manipulate room rates and discounted them to as little as US$12 (Mest, 2017). The more dependent hotels become on automation, the higher the risk of financial consequences when systems fail or face problems. Research tried to define the costs from information technology (IT) incidents, starting with $140 000 per incident for the average company, or up to a total of $700 billion per year for North American companies alone (Oats, 2017). Furthermore, it increases the dependency on suppliers and third parties such as consultants and service providers, especially for smaller operations that do not have the expertise or capital to run complicated software and programs.

In order to make use of automated revenue systems, as much data as possible is needed. To prevent unauthorised individuals from corporate data mining, data protection policies need to be in place. It is argued that a model should be developed where the benefits for organisations and individuals are balanced (Li et al., 2018). Utilising such a model can assist organisations to determine whether it is justified to process the data or that the individual should give consent. Besides that, it clarifies the need for providing data for the individual.

The current debate

There is a big debate on automation and the fear of a potential job loss, labelled as "technological unemployment" by the economist John Maynard Keynes (McClure, 2018). This distrust significantly increased during the Great Depression, but economists became more optimistic in the following years (McClure, 2018). Recently, mistrust has grown especially since research was published that predicted 47% of jobs in the US to be affected by automation or even no longer be needed (Frey & Osborne, 2017). Other research such as a study by Gartner Research states that more than 1.8 million jobs will be lost due to technological advancement in the US, but 2.3 million new ones will be created (Arnold, 2018). According to a report by McKinsey & Company (2017) up to one fifth of the world's workforce will be replaced by robotics by 2030, especially in developed nations such as Germany or the US. This leads to fear among many and is therefore a widely discussed topic in society. Nonetheless, it can be said that automation is already well underway in most sectors, especially in highly developed industrial countries, and will continue to grow in the next few years.

The question is whether software developers, hotel managers, and employees can overcome their prejudices and together redefine what the job of a revenue manger will be in the future.

Future development

The position of the revenue manager is currently seen and executed by a human with the utilisation of hardware and software. With the current developments in this field, it is questionable how realistic this function design will be in the near future. Is the revenue manager position becoming replaced by a completely independent operating system or does human approval remain essential? (Schwartz & Cohen, 2004). So far, most revenue management systems are simple algorithms that fail to learn or show AI characteristics. Human revenue managers, in turn, can be defined as heuristic (Cetin, Demirciftci, & Bilgihan, 2016), which is the ability to learn independently from experiences through personal behaviour and the behaviour of others (Gilmore & Williams, 2013). This ability is essential to execute revenue management on a professional level and scale. Therefore, it is essential for

revenue managers to stay updated with developments in the market and invest in gaining new knowledge. In contrast to human revenue managers, moving to automated or centralised revenue management systems will increase the level of dependency on the system. Increasing the dependency level will automatically result in an increase of risk for a hotel (Wit & Meyer, 2014). This implies that hotels are then highly dependant on developers and thus suppliers of these systems. Besides that, software from third parties can be very costly. Can a hotel afford such a significant investment, and does it deliver value? Especially for hotel chains, a suggested option is to develop an artificial intelligent system in the organisation. This backward vertical integration results in a decreased level of dependency on suppliers (Wit & Meyer, 2014). However, developing software that is capable of using artificial intelligence involves a big investment. Therefore, the general feasibility is questionable. The big question is if this investment can be balanced against the expected increase in revenue.

Currently some hotels are executing revenue management at a basic level as a functional department through only looking to the rooms' revenue. It is a long way to develop the department and bring it to the business unit level (Wit & Meyer, 2014; Wang et al., 2015). Therefore, it is recommended to allow revenue managers to execute revenue management in all departments that generate revenue and grant them the required capabilities to do so (Kimes, 2011; Wang et al., 2015). Developments in revenue management technology might further stimulate a decrease in locally employed revenue managers, but increase the level of revenue management specialists on a corporate level who ensure human control in revenue management.

Conclusion

The technological developments of the last decade have had a tremendous influence on the hospitality industry, the travel behaviour of guests, and how hotels operate. After revenue management was introduced to the industry, this new form of pricing has been adapted by most hotels. While having a revenue management strategy for hotel rooms is the standard, the industry is slowly transitioning to further implement it in conference and convention spaces, as well as food and beverage outlets (Kimes, 2011; Wang et al., 2015). Automation and artificial intelligence (AI) are developing at a fast pace, offering new opportunities such as the use of big data, but this also comes with challenges such as the fear that current employees can lose their jobs. Social media offers a great source for business to connect with the guests and collect their data. This could be used for short- and long-term pricing but also as a new channel to sell rooms. While complete automation is not yet feasible, intelligent revenue management software currently supports the revenue manager in analysing and forecasting, and in strategy-oriented rational decision-making. This allows companies to centralise their revenue departments, as one manager now can oversee more than one property. Nonetheless, the dependency on this software comes with risks for the hotels that must rely on the security of the systems used, often provided by external third-party suppliers, which can be expensive. One of the biggest challenges for these systems are human relationships that are often maintained between hotels and guests over years.

References

Anderson, C. K., & Xie, X. (2010). Improving hospitality industry sales: Twenty-five years of revenue management. *Cornell Hospitality Quarterly*, *51*(1), 53–67. https://doi.org/10.1177/1938965509354697

Arnold, A. (2018). Why robots will not take over human jobs. 27 March [Forbes newspage]. https://www.forbes.com/sites/andrewarnold/2018/03/27/why-robots-will-not-take-over-human-jobs/#3f4cc42592fd

Buhalis, D., & Leung, R. (2018). Smart hospitality—Interconnectivity and interoperability towards an ecosystem. *International Journal of Hospitality Management*, *71*, 41–50. https://doi.org/10.1016/j.ijhm.2017.11.011

Cetin, G., Demirciftci, T., & Bilgihan, A. (2016). Meeting revenue management challenges: Knowledge, skills and abilities. *International Journal of Hospitality Management*, *57*, 132–142. https://doi.org/10.1016/j.ijhm.2016.06.008

Cross, R. G., Higbie, J. A., & Cross, D. Q. (2009). Revenue management's renaissance: A rebirth of the art and science of profitable revenue generation. *Cornell Hospitality Quarterly*, *50*(1), 56–81. https://doi.org/10.1177/1938965508328716

Frey, C. B., & Osborne, M. A. (2017). The future of employment: How susceptible are jobs to computerisation? *Technological Forecasting and Social Change*, *114*, 254–280. https://doi.org/10.1016/j.techfore.2016.08.019

Gilmore, S., & Williams, S. (eds). (2013). *Human resource management* (Second edition). Oxford, United Kingdom: Oxford University Press.

Kimes, S. E. (2011). The future of hotel revenue management. *Journal of Revenue and Pricing Management*, *10*(1), 62–72. https://doi.org/10.1057/rpm.2010.47

Li, J., Xu, L., Tang, L., Wang, S., & Li, L. (2018). Big data in tourism research: A literature review. *Tourism Management*, *68*, 301–323. https://doi.org/10.1016/j.tourman.2018.03.009

McClure, P. K. (2018). "You're fired," Says the robot: The rise of automation in the workplace, technophobes, and fears of unemployment. *Social Science Computer Review*, *36*(2), 139–156. https://doi.org/10.1177/0894439317698637

McKinsey & Company. (2017). *Jobs lost, jobs gained: Workforce transitions in a time of automation*. www.mckinsey.com/mgi

Mest, E. (2017). Why strong cybersecurity means giving ex-employees the cold shoulder. *Hotel Management*, 14 April. https://www.hotelmanagement.net/operate/why-strong-cyber-security-means-giving-ex-employees-cold-shoulder

Noone, B. M., McGuire, K. A., & Rohlfs, K. V. (2011). Social media meets hotel revenue management: Opportunities, issues and unanswered questions. *Journal of Revenue and Pricing Management*, *10*(4), 293–305. https://doi.org/10.1057/rpm.2011.12

Oats, M. (2017). The high cost of "unpredictable" IT outages and disruptions. *Intellimagic*, 1 May. https://www.intellimagic.com/resources/blog/high-cost-unpredictable-outages-disruptions/

O'Flaherty, K. (2019). Marriott CEO reveals new details about mega breach. *Forbes*, 3 November. https://www.forbes.com/sites/kateoflahertyuk/2019/03/11/marriott-ceo-reveals-new-details-about-mega-breach/#d5a9853155c0

Pan, B., & Yang, Y. (2017). Forecasting destination weekly hotel occupancy with big data. *Journal of Travel Research*, *56*(7), 957–970. https://doi.org/10.1177/0047287516669050

Schwartz, Z., & Cohen, E. (2004). Hotel revenue-management forecasting: Evidence of expert-judgment bias. *Cornell Hotel and Restaurant Administration Quarterly*, *45*(1), 85–98. https://doi.org/10.1177/0010880403260110

Wang, X. L. (2012). The impact of revenue management on hotel key account relationship development. *International Journal of Contemporary Hospitality Management*, *24*(3), 358–380. https://doi.org/10.1108/09596111211217860

Wang, X. L., Yoonjoung Heo, C., Schwartz, Z., Legohérel, P., & Specklin, F. (2015). Revenue management: Progress, challenges, and research prospects. *Journal of Travel & Tourism Marketing*, *32*(7), 797–811. https://doi.org/10.1080/10548408.2015.1063798

Wit, B. de, & Meyer, R. (eds). (2014). *Strategy: An international perspective* (5th edn). Andover: Cengage Learning EMEA.

Yeoman, I. S., & McMahon-Beattie, U. (2017). The turning points of revenue management: A brief history of future evolution. *Journal of Tourism Futures*, *3*(1), 66–72. https://doi.org/10.1108/JTF-11-2016-0040

Research in Hospitality Management 2019, 9(2): 125–127
https://doi.org/10.1080/22243534.2019.1700624

RHM
2019
Research in
Hospitality
Management

Global Mind Monitor — determining intercultural competencies of Stenden Hotel Management School students: setting the research agenda

Anne Keizer-Remmers[1]* & Anja Brandsma-Dieters[2]

[1]*Stenden Hotel Management School, NHL Stenden University of Applied Sciences, Leeuwarden, The Netherlands*
[2]*Policy Advisor, NHL Stenden University of Applied Sciences*
**Corresponding author, email: anne.keizer@nhlstenden.com*

ABSTRACT: Ongoing Internationalization of Higher Hotel Management Education encourages professional universities to monitor and assess intercultural competence development of students. Moreover, strategic ambitions aimed at educating alumni capable of 'global thinking' and 'hostmanship' inevitably connect intercultural competence with hostmanship, a currently marginally explored academic concept. Hence, Stenden Hotel Management School needs to address both the measurement and assessment of intercultural competence development as well as the conceptualization of 'hostmanship'. This article discusses the need to set the research agenda for determining intercultural competence development within the context of educating globally oriented, hospitable hosts.

KEYWORDS: intercultural competence development, assessment of intercultural competence development, hostmanship

Introduction: strategic ambitions

In its first strategic institutional plan, NHL Stenden expressed its "focus…on internationalisation" (NHL Stenden, 2019, p. 17) for which this "young" university of applied sciences (UAS) "offer[s] an international and intercultural context" (NHL Stenden, 2019, p. 18) — even for students who choose not to study abroad. It is assumed that by virtue of this all-embracing environment, students will be enabled "to become world citizens that contribute to the development of the regions in which they are living" (NHL Stenden, 2019, p. 19).

Similarly, Stenden Hotel Management School (Stenden HMS), one of the most diverse schools of NHL Stenden, claims to develop alumni who are competent at "global thinking" and "hostmanship" (Stenden HMS, 2019). The bachelor's degree is offered at three of the four international campuses of NHL Stenden, and students can follow part of the major degree at one of these sites, or minors as part of a Grand Tour®.

Intentional intercultural learning

Assertions like these demonstrate the ambitions of a global- and future-oriented educational institution. Ambitions can be strong drivers of innovation and strategic direction and we should all welcome these ambitions, which all require intercultural competence (ICC), something Stenden HMS has been teaching for some two decades. However, the aspirations also partly seem to rely on the implicit assumption that the mere presence of culturally different "others" will somehow lead to the development of intercultural competence, a view that is refuted in recent research (Leask & Carroll, 2011; Vande Berg, Paige, & Lou, 2012; Leask, 2014; 2015; Gregersen-Hermans, 2015; Keizer-Remmers, 2017). Instead, these and other researchers (Deardorff, 2015; de Wit, Hunter, & Coelen, 2015; Rönnström, 2016) stress the importance of intentional learning and curriculum design, a focus on the process, and ongoing assessment of the impact *and* the outcomes of international education. Moreover, Deardorff and Arasaratnam-Smith (2017, p. 294) strongly emphasise the "intentionality" (of educators, learners and institutions), as "intercultural competence does not just happen".

Asssessing intercultural competence development

Hence, the question arises: how can we as educators (or policy makers) *know* when a student makes progress in the development of intercultural competence? How can students know? This question addresses the assessment of intercultural competence (ICC). Assessment of ICC is a challenging subject which is a hot topic in the field — unfortunately, the scope of this contribution does not allow a full discussion of recent developments in this field. Nonetheless, we agree with Deardorff and Arasaratnam-Smith (2017, p. 127; emphasis in original), who propose "a change of mindset in thinking about *assessment of learning* to *assessment for learning*". As educators and researchers, we need to focus on the process of assessment rather than the result of it and encourage students to express not only what they have learned, but also to articulate why this learning is important for their development (ibid.). This calls for "guided critical reflection" (ibid., p. 296). However, from our experience at Stenden HMS, students cannot always express their intercultural competence development eloquently — or sometimes clearly overestimate their intercultural abilities. Moreover, neither they nor Stenden HMS currently have clear evidence of ICC.

Evidencing intercultural competence development: Global Mind Monitor

Stenden HMS recognised the importance of evidencing intercultural competence development when it acquired CeQuInt certification as a distinctive feature of internationalisation for the bachelor's degree in 2015. Hence, it was only logical that Stenden HMS was one of the early adopters of the Global Mind Monitor (GMM), "a measuring instrument that gives students the opportunity to reflect on what they have learned and helps lecturers to carry out an evaluation interview with the student on the basis of concrete parameters" (Zuyd Research, 2017, p. 1). GMM was developed by Zuyd University of Applied Sciences in Maastricht. Stenden HMS and some other Dutch hotel schools (like Saxion and The Hague) have a good collegial and collaborative relationship with Zuyd UAS, centred around GMM. The GMM focuses on the qualities deemed crucial for the development of global and intercultural competence: "Openness (cultural empathy, open-mindedness), Adaptability (flexibility, emotional stability), Social initiative, Cultural knowledge/meta knowledge, Intercultural behaviour, and Cultural motivation" (Zuyd Research, 2017, p. 2). These qualities are also important for the development of "responsible global citizens", "global thinking", and "hostmanship" — the capacities aspired to of Stenden HMS students as mentioned earlier. What GMM measures overlaps considerably with a concept called "cultural intelligence" (Earley & Ang, 2003; Thomas, 2006; Van Dyne, Ang, & Livermore, 2010) which includes elements like knowledge, skills (behaviour), metacognition, motivation, and mindfulness — and these are also components (to some extent, and with different names sometimes) of "global thinking" and "hostmanship". However, better conceptualisation of the concepts being pursued is crucial — especially if one wants to make claims about the development of students in these areas as they become "game changers" (Stenden HMS, 2019). Evidencing this development is equally crucial.

Global Mind Monitor: research opportunities

Stenden HMS started to monitor all Leeuwarden-based students since 2017 via the GMM. This allows not only for the reflection and coaching options which have been mentioned earlier, but also provides an excellent opportunity for longitudinal research. It is now time to harvest the fruits of what we planted two years ago. We have access to all Stenden-related data collected via GMM. We will do so in collaboration with Hogeschool Zuyd and the other hotel schools, but also independently. Recently, during a GMM research day at Hogeschool Zuyd, some ideas were already framed by participants. Stenden HMS can and will embark on viable and innovative studies with research partners, but can also use its own data to investigate (for example) the relationship between cultural distance and the development of cultural competencies, the impact of a Grand Tour experience on the GMM scores, the effect of previous international experiences, or the number of languages a student speaks. We could relate DBE (design-based education, the newly developed didactical philosophy at NHL Stenden) to ICC development, or investigate the differences between gender and age groups, or incoming streams (like work and study, associate degree (Ad) or MHS[1] intake) — there is a plethora of research opportunities at Stenden HMS, but also with academic partners and the international campuses. Moreover, the focus of our future studies could be on staff as well as on students' ICC development — provided that educational staff (like career development coaches or placement coaches who monitor and discuss their students' development from several perspectives) also complete the GMM on a regular (annual) basis.

Not only could we do quantitative research and look at percentages and numbers yielded from GMM (the What) — we should also set up qualitative studies to look for the reasons behind the quantitative findings (the Why and the How). It will be interesting to engage in storytelling, critical incident techniques, appreciative enquiry, qualitative interviewing, participant observation or visual methods (e.g. photographs) to look beyond the numbers and facts. Moreover, a qualitative paradigm will allow researchers to critically approach the self-scored data and invite students to share examples, real-life experiences, stories and personal biographies.

Both quantitative and qualitative approaches offer good opportunities for students (bachelor's and master's) to participate in research and to co-create knowledge. It is time to take GMM at Stenden HMS to the next level and take full advantage of this practical tool to not only enhance the quality of intentional learning towards the articulated ambitions of global-thinking world citizens, but also to inspire new research in the field of Intercultural and global competence development which can contribute to true hospitality: "the art of making people feel welcome" (Gunnarsson, Blohm, & Wegweiser, 2008, p. 3).

Note

1. MHS – Middelbare Hotelschool, vocational hotel education (European Qualification Framework level 4)

References

de Wit, H., Hunter, F., & Coelen, R. (2015). *Internationalisation of higher education in Europe: Future directions. Internationalisation of Higher Education*. Brussels: Directorate General for Internal Policies. www.europarl.europa.eu/RegData/etudes/STUD/2015/540370/IPOL_STU(2015)540370_EN.pdf

Deardorff, D. K. (2015). Intercultural competence : Mapping the future research agenda. *International Journal of Intercultural Relations, 48*, 3–5. https://doi.org/10.1016/j.ijintrel.2015.03.002

Deardorff, D. K., & Arasaratnam-Smith, L. A. (2017). *Intercultural Competence in Higher Education: International Approaches, Assessment and Application*. New York: Routledge. http://search-1ebscohost-1com-1zu0iwq2800c8.access.nhlstenden.com/login.aspx?direct=true&db=nlebk&AN=1560736&site=ehost-live&scope=site

Earley, P. C., & Ang, S. (2003). *Cultural intelligence : individual interactions across cultures*. Stanford: Stanford University Press.

Gregersen-Hermans, J. (2015). The impact of exposure to diversity in the international university environment and the development of intercultural competence in students. In A. Curaj, L. Matei, R. Pricopie, J. Salmi & P. Scott (eds), *The European Higher Education Area* (pp. 73–92). Cham: Springer International Publishing. https://doi.org/10.1007/978-3-319-20877-0_6

Gunnarsson, J., Blohm, O., & Wegweiser, D. (2008). *Hostmanship: The art of making people feel welcome*. Stockholm: Dialogos.

Keizer-Remmers, J. L. C. (2017). *Underneath the Surface of Cosmopolitanism. In Search of Cosmopolitanism in Higher Education*. Delft: Eburon Academic Publishers.

Leask, B. (2014). Internationalizing the curriculum and all students' learning. *International Higher Education*, (78), 5–6. https://doi.org/10.6017/ihe.2014.78.5798

Leask, B. (2015). *Internationalizing the Curriculum*. New York: Routledge. https://doi.org/10.4324/9781315716954

Leask, B., & Carroll, J. (2011). Moving beyond 'wishing and hoping': internationalisation and student experiences of inclusion and engagement. *Higher Education Research & Development*, *30*(5), 647–659. https://doi.org/10.1080/07294360.2011.598454

NHL Stenden. (2019). *Working on world-wise innovation. Strategic institutional plan 2019–2024*. Leeuwarden: NHL Stenden.

Rönnström, N. (2016). Education and three imaginaries of global citizenship (pp. 123–138). Springer, Cham. https://doi.org/10.1007/978-3-319-30430-4_9

Stenden Hotel Management School (HMS). (2019). *Manifesto*. Leeuwarden: NHL Stenden.

Thomas, D. C. (2006). Domain and development of cultural intelligence: The importance of mindfulness. *Group & Organization Management*, *31*(1), 78–99. https://doi.org/10.1177/1059601105275266

Van Dyne, L., Ang, S., & Livermore, D. (2010). Cultural intelligence: A pathway for leading in a rapidly globalizing world. In K. M. Hannum, B. B. McFeeters & L. Booysen (eds), *Leading across Differences: Cases and Perspectives* (pp. 131–138). http://soonang.com/wp-content/uploads/2011/04/2010_VanDyne_CCL-CQ.pdf

Vande Berg, M., Paige, R. M., & Lou, K. H. (2012). *Student Learning Abroad : What Our Students Are Learning, What They're Not, and What We Can Do About It*. Sterling: Stylus Publishing. https://eric.ed.gov/?id=ED573617

Zuyd Research. (2017). The Global Mind Monitor. www.globalminds.international

Research in **Hospitality Management**

INSTRUCTIONS FOR AUTHORS

Original research articles, substantive topic reviews, viewpoints and short communications that make an original contribution to the understanding of hospitality and hospitality management in a global context will be considered for publication in the Journal. Email articles in MS Word format to the Editor-in-Chief at elena.cavagnaro@nhlstenden.com

Contributions are accepted on the understanding that the authors have the authority for publication. Submission of multi-authored manuscripts implies that all authors have approved submission of the article to this Journal, have read it and approve of its publication. Manuscripts should not have been published before and must not be under consideration by another journal. Contributions must conform to the principles outlined in Ethical Considerations in Research Publication available on the Journal's Instructions to Authors page*. The journal does not restrict manuscript length. Before submitting a manuscript, authors should peruse and consult a recent issue of the Journal for format and style.

Articles are published Open Access under a Creative Commons Attribution Licence (CC BY) and authors retain copyright of their work. There are no page charges levied for publication of contributions. Printing of colour is subject to negotiation with the Editor-in-Chief.

Manuscript format

Manuscripts must be in English with UK English spelling and hyphenation conventions (see Oxford English Dictionary). Non-English terms and phrases must include translations.

The following essential information is required:

Title: This should be brief and sufficiently informative for retrieval by automatic searching techniques.

Author/s and address/es of authors: List all authors' names in full. Provide an institutional address and email address for each author and indicate who is the corresponding author.

Abstract: Provide an abstract of no more than 250 words, accurately summarising the information presented in the article. Do not include references in the abstract.

Keywords: Provide 6 to 8 keywords not already in the title.

Main text: Articles should be well structured using standard or similarly appropriate headings (Introduction, Methods, Results, Discussion, Conclusion). Use no more than three heading levels (main heading and two subheading levels), in sentence case and not numbered. Endnotes (not footnotes) may be used. Use double quotation marks.

Tables: All tables must be provided in a suitable editable format. Tables must be numbered sequentially with Arabic numerals and with an explanatory title at the head. All tables must be referred to in the text.

Figures and illustrations: Authors must ensure that they have permission to reproduce any images protected by copyright. Figures should be numbered sequentially with Arabic numerals and with an explanatory caption below. All figures must be referred to in the text. Figures should be planned with a maximum final width of either 84 mm or 176 mm.

Authors must ensure that their figures conform to the technical requirements and style of the journal; fees may be charged for redrawing figures.

Images must be of suitable quality for reproduction, i.e., at least 300 dpi for photographs. These can be saved (in order of preference) in PSD, JPEG, PDF or EPS format. Line drawings like maps should be at least 600 dpi. Graphs, charts or maps can be saved in AI, PDF or EPS format. MS Office files (Word, Powerpoint, Excel) are also acceptable but DO NOT EMBED Excel graphs or Powerpoint slides in a MS Word document as an image, rather send the original Excel or Powerpoint files. More detailed technical information is given in Figure Guidelines for Authors.*

Acknowledgements: Check that funder requirements are met.

Reference list: A comprehensive list of all sources referred to in your article in APA 6 style (see below).

Referencing

All sources must be cited in the text using the AUTHOR–DATE method in the APA 6 style, with a corresponding list of references at the end also in the APA 6 style. All entries in the reference list must be cited in the text. Provide DOIs and URLs in your reference list where available and appropriate. Some examples follow:

Crotts, J. C. (2004). The effect of cultural distance on overseas travel behaviors. *Journal of Travel Research*, *43*(1), 83–88. https://doi.org/10.1177/0047287504265516

Arrindell, W. A., Eisemann, M., Richter, J., Oei, T. P. S., Caballo, V. E., van der Ende, J., ... Hudson, B. L. (2003, April). Phobic anxiety in 11 nations. *Behaviour Research and Therapy*, *41*(4), 461–479. https://doi.org/10.1016/S0005-7967(02)00047-5

De Mooij, M. (2004). *Consumer behaviour and culture: Consequences for global marketing and advertising*. Thousand Oaks, CA: Sage.

Ekman, P. (1992). *Telling lies* (3rd ed.). New York: W.W. Norton.

Molz, J. (2007). Cosmopolitans on the couch. In: J. Molz, & S. Gibson (Eds.), *Mobilizing hospitality: The ethics of social relations in a mobile world* (pp. 78–99). Farnham: Ashgate.

United Nations World Tourism Organization (UNWTO). (2003). Sustainable development of ecotourism: A compilation of good practices in SMEs. Madrid: UNWTO. Available at https://www.e-unwto.org/doi/pdf/10.18111/9789284406210

Schwartz, J. (1993, September 30). Obesity affects economic, social status. *The Washington Post*, p. 4.

Proofs and reprints

PDF proofs will be emailed to the corresponding author for checking and signoff. Prompt return of proofs will minimise the risk of the article being held over to a later issue.

***Instructions for authors and other information pertaining to the journal are available at http://www.nisc.co.za/products/19/journals/research-in-hospitality-management**

ISSN 2224-3534 (Print)
ISSN 2415-5152 (Online)

VOLUME 9(2) 2019

Cover image: iStock/andresr

Research in Hospitality Management