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Sustainable Hotels: Management and Consumer Pro-environmental Behaviours

Thesis

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Abstract

This research project focused on developing a better understanding of the role of consumer and management in mainstream hotels in achieving sustainability. The structure of this research is initiated by providing more information about the main research background, followed by a literature review and development of the models used. The research design is presented with the models. Results of three studies are explained and discussed.

The main research question to be answered is ‘What is the role of consumer and management in creating sustainability in a hotel context?’ The literature review on stakeholder theory in strategic green management suggested a multi-perspective involvement (company and customers) in establishing green management in hotels. The hotel consumer literature review found a high extent of Theory of Planned Behaviour (TPB) approaches used to conceptualise individual Pro-Environmental Behaviour (PEB) in existing models. However, fewer studies clearly pointed out that the inclusion of hotel green attributes contributes to a better explanation of customer loyalty in hotels. There is also scarcity in the inclusion of behavioural elements and mindfulness in existing PEB models. This research includes a novel feature of mindfulness, domestic green habits (behaviour), and hotel green attributes (context) as an alternative approach to explain individual PEB in hotels. In accordance with stakeholder theory, this research examines co-operations between hotel management and customers to establish business sustainability and provide win-win-win solutions for customers, company, and the natural environment.

This research is designed on the pragmatist paradigm. A sequence of mixed-methods design (qualitative – quantitative – qualitative) was selected as the strategy of inquiry. In the first qualitative phase, two customer focus group discussions were conducted to develop some questionnaire items. After the pilot study, a survey targeting 3-star to 5-star hotel users was conducted in Indonesia (n=324). A similar survey was also carried out in Australia (n=339). Hotel management interviews (n=26) were also conducted to develop better understandings on hotel pro-environmental management from managers’ perspectives.

The empirical studies presented in this research suggest that the pro-environmental collaboration between consumer and hotel management maintains a significant role in achieving sustainable hotel business. The study of individual PEB in hotels suggests that mindfulness significantly impacts consumer PEB in hotels. Hotel green attributes are found to be prominent in facilitating green behaviours in hotels. The study of the influence of hotel green attributes on customer loyalty suggests that the establishment of hotel green attributes supports customer's positive attitudes towards the hotel's brand and exerts customer loyalty. The significance of green attributes in hotels conforms to the results of manager interviews. The green typology developed from the management interviews suggests high-level motivation, wide scope, very good processes and monitoring, and enhanced levels of customer communication enables best practice pro-environmental management.

Exploring PEB in hotels from different perspectives contributes a green collaboration concept between consumer and hotel management to the hotel sustainability literature. A typology of hotel green management is presented to predict the extent of green practices in mainstream hotels. The green management criteria of the typology contribute insights to the actualisation of green management in mainstream hotels, and detailed standards to achieve best green practices in hotels. Supporting the stakeholder theory, staff participation and customer communications are necessary to achieve best green management practices. The novel concept of mindfulness and the behavioural approach to determining consumer PEB in hotels contribute a new perspective to the consumer behaviour literature. This research contributes to hotel management literature by providing insights on the prominent role of hotel green attributes in the actualisation of customer PEB in hotels. Findings of this research add deeper understandings of the role of hotel green attributes and customer experience in generating customer loyalty in hotels.

Practically, this research mainly points to green collaboration between stakeholders (managers, staff, and consumer) that can be applied in hotel management. The green management typology criteria developed from this research can be applied to measure the extent of a hotel's green practices. It can also assist hotel managements by providing a valid reference to enable best green practices in their hotels. Results of this research encourage hotel managers to involve the staff in formulating a green strategy and communicate the green strategy to their customers. Noting the positive impact of hotel green attributes and good hotel customer experience on loyalty, findings of this

research deliver a novel approach for hotel management to gain a better understanding of their customers and to improve customer loyalty in their hotel. The inclusion of behavioural aspects and mindfulness in determining hotel PEB challenges and encourages the enactment of PEB among hotel customers.

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Statement of Originality

This work has not previously been submitted for any degree or diploma in any university. To the best of my knowledge and belief, this thesis contains no material previously published or written by another person, except where due reference is made in the thesis itself.

Maria Delarosa Dipta Dharmesti

Table of Contents

Abstract.....	ii
Acknowledgement.....	v
Statement of Originality	vii
Table of Contents	viii
List of Tables	xiv
Table of Figures.....	xvi
CHAPTER ONE: BACKGROUND AND INTRODUCTION TO THE RESEARCH	2
1.1 Introduction.....	2
1.2 Setting the Background of the Research.....	2
1.3 The Aim of this Research.....	4
1.4 Research Question	5
1.5 Key Hypotheses	5
1.6 Justification of research topic	7
1.7 Methodology	8
1.8 Structure of the Thesis	8
1.9 Glossary of Key Concepts	11
1.10 Chapter Summary	13
CHAPTER TWO: INDONESIA AT A GLANCE	15
2.1 Introduction.....	15
2.2 Indonesian Tourism and Environment.....	15
2.3 Cultural comparison: Indonesia and Australia.....	16
2.4 Indonesian environmental lifestyle	18
2.5 Hotel industry in Indonesia	20
2.6 Pro-environmental management in Indonesian hotels: Standards and application ...	21
2.7 Chapter Summary	23

CHAPTER THREE: PRO-ENVIRONMENTAL BEHAVIOURS OF CONSUMERS AND HOTEL MANAGEMENT	25
3.1 Introduction.....	25
3.2 Company and consumers as stakeholders in sustainable business	25
3.3 Consumer pro-environmental behaviours (PEB).....	26
3.3.1 PEB and consumers as stakeholders	26
3.3.2 Reviewing the TPB approach of pro-environmental consumer behaviour in hotels	29
3.3.3 Tourists pro-environmental behaviours (PEB) in hotel	34
3.3.4 The new perspective of pro-environmental behaviour: Mindfulness.....	37
3.4 Consumer loyalty in hotels	39
3.4.1 Hospitality services	39
3.4.2 Experience	41
3.4.3 Determinants of behavioural intentions	43
3.5 Hotel green responsibility, branding, and green co-responsibility	45
3.6 Hotel Green Management.....	47
3.6.1 Current ‘Green’ hotels.....	47
3.6.2 Why go green?	48
3.6.3 Pro-environmental scope and existing standard in hotels	49
3.6.4 Literature on pro-environmental practices in hotels	53
3.6.5 Pro-environmental behaviour: hotel management perspective	54
3.7 Gap in the literature	56
3.8 Chapter summary	61
CHAPTER FOUR: MAIN HYPOTHESES AND MODEL DEVELOPMENT ..	63
4.1 Introduction.....	63
4.2 Consumer PEB in hotel.....	63
4.2.1 Home vs. Hotel behaviours	65
4.2.2 Normative.....	66

4.2.3 Contextual	67
4.2.4 Green mindfulness	68
4.2.5 Daily routines that influence green mindfulness.....	69
4.2.6 Mindfulness in general that influences green mindfulness	70
4.2.7 Hotel PEB model development	71
4.3 The influence of hotel green attributes on customer loyalty.....	73
4.3.1 Hotel green attributes, brand, and loyalty	74
4.3.2 Service quality, satisfaction, brand, and loyalty.....	75
4.3.3 Hotel customer experience levels.....	76
4.3.4 The development of hotel customer loyalty model.....	78
4.4 Strategic hotel pro-environmental management	80
4.4.1 Motivation	81
4.4.2 Scope	82
4.4.3 Process.....	83
4.4.4 Monitoring.....	83
4.4.5 Customer communications.....	84
4.5 Summary of the chapter	85
CHAPTER FIVE: RESEARCH DESIGN	87
5.1 Introduction.....	87
5.2 Research Paradigm.....	87
5.3 Research Design.....	88
5.4 Focus group discussion (Qualitative – Phase One).....	89
5.5 Surveys (Quantitative – Phase Two).....	91
5.5.1 Survey instrument development.....	92
5.5.2 Instrument translation.....	94
5.5.3 Survey population and unit of analysis	94
5.5.4 Survey sampling and data collection.....	94
5.5.5 Quantitative phase validity and reliability tests	95

5.5.6 Multicollinearity in regression	96
5.5.7 Quantitative data analysis and hypotheses testing	96
5.6 Manager interviews (Qualitative – Phase Three).....	98
5.6.1 Interview instrument development.....	99
5.6.2 Qualitative – manager interview sampling	99
5.6.3 Manager interview validity test.....	100
5.6.4 Interview data analysis	100
5.7 Chapter Summary	102
CHAPTER SIX: STUDY OF CONSUMER PRO-ENVIRONMENTAL	
BEHAVIOURS IN HOTELS	104
6.1 Introduction.....	104
6.2 Demographics	104
6.2.1 Indonesian sample demographics	104
6.2.2 Australian sample demographics	107
6.3 Scale items and reliability	109
6.4 Validity tests	114
6.4.1 Construct validity	114
6.4.2 Content validity (Face validity)	114
6.4.3 Convergent validity	114
6.4.4 Criterion (predictive) validity.....	115
6.4.5 Discriminant validity.....	115
6.5 Hotel consumer pro-environmental behaviour (PEB) model	119
6.6 Conclusions.....	124
CHAPTER SEVEN: STUDY OF THE INFLUENCE OF HOTEL GREEN	
ATTRIBUTES TO CUSTOMER LOYALTY.....	126
7.1 Introduction.....	126
7.2 Sample profiles	126
7.3 Scale items and reliability	126

7.4 Validity tests	128
7.5 Hotel customer loyalty model analysis	132
7.6 Chapter summary	137
CHAPTER EIGHT: STUDY OF HOTEL MANAGEMENT GREEN	
ATTITUDES AND PROCESSES	139
8.1 Introduction	139
8.2 Management interview process	139
8.2.1 Interview protocol	139
8.2.2 Conducting the interview	140
8.2.3 Data analysis	140
8.3 Interviewee profiles	141
8.4 Analysing and generating classifications	143
8.5 Weak Green Practices	147
8.6 Average Green Practices	151
8.7 Green Best Practices	155
8.8 Chapter summary	160
CHAPTER NINE: DISCUSSION OF HOTEL PRO-ENVIRONMENTAL	
BEHAVIOURS BY CONSUMERS AND MANAGERS	162
9.1 Introduction	162
9.2 Domestic habits, influence, and hotel consumer PEB	162
9.3 The power of mindfulness	164
9.4 The prominent role of hotel green attributes	165
9.5 Learning from experience	167
9.6 Hotel green attributes on management perspective	169
9.7 The synergy of hotel management – customers green collaboration	172
9.8 Summary of the discussions	175
CHAPTER TEN: CONTRIBUTIONS, FUTURE RESEARCH SUGGESTIONS,	
AND CONCLUSIONS	177
10.1 Introduction	177

10.2 Contributions.....	177
10.2.1 Economic significance and contributions	177
10.2.2 Theoretical significance and contributions	178
10.2.3 Practical significance and contributions.....	180
10.3 Overview of methodology	181
10.4 Overview of key results	182
10.5 Limitations and suggestions for future research	184
10.6 Final conclusions	185
REFERENCES	187
APPENDICES.....	205
Appendix A: Ethical Clearance Approval (Qualitative study)	205
Appendix B: Ethical Clearance Approval (Quantitative study).....	206
Appendix C: Focus Group Discussion Protocol	207
Appendix D: Interview Protocol	210
Appendix E: List of items in pilot questionnaire	213
Appendix F: Final Questionnaire	218
Appendix G: Interview Results.....	232

List of Tables

Table 1.1 Glossary of key concepts in this research.....	12
Table 3.1 Literature on consumer pro-environmental behaviours in hotel	33
Table 3.2. Comparison of Existing Pro-environmental Criteria.....	52
Table 3.3. Literature gap and contributions to address research sub-question 1	58
Table 3.4. Literature gap and contributions to address research sub-question 2	59
Table 3.5. Literature gap and contributions to address research sub-question 3	60
Table 4.1. Hotel consumer PEB model hypotheses	72
Table 4.2. Hotel customer loyalty model hypotheses.....	80
Table 6.1. Indonesian hotel and sample characteristics.....	106
Table 6.2. Australian hotel and sample characteristics	108
Table 6.3. Focus Group Discussion Results – Australia	109
Table 6.4. Focus Group Discussion Results – Indonesia	110
Table 6.4 (Continued). Focus Group Discussion Results – Indonesia	111
Table 6.5. Initial Reliability Test Results – Indonesia	113
Table 6.6. Initial Reliability Test Results - Australia.....	113
Table 6.7. Discriminant validity between constructs - Indonesia: Inter-factor correlation (diagonal indicates $\sqrt{\text{AVE}}$).	116
Table 6.8. Discriminant validity between constructs - Australia: Inter-factor correlation (diagonal indicates $\sqrt{\text{AVE}}$).	116
Table 6.9. PEB in hotels model variables scales validity and reliability - Indonesia...	117
Table 6.10. PEB in hotels model variables scales validity and reliability - Australia..	118
Table 6.11. Hotel PEB model variables normality test (n=663)	119
Table 6.12. PEB in hotels model explanatory power and fit indices.....	120
Table 6.13. PEB in hotels model hypotheses testing results.	123
Table 7.1. Reliability Test Results – Indonesia	127
Table 7.2. Reliability Test Results - Australia	128

Table 7.3. Discriminant validity between constructs - Indonesia: Inter-factor correlation (diagonal indicates $\sqrt{\text{AVE}}$).	129
Table 7.4. Discriminant validity between constructs - Australia: Inter-factor correlation (diagonal indicates $\sqrt{\text{AVE}}$).	129
Table 7.5. Loyalty model variables scales validity and reliability - Indonesia	130
Table 7.6. Loyalty model variables scales validity and reliability - Australia	131
Table 7.7. Data grouping for loyalty model	132
Table 7.8. Loyalty model variables normality test (n=663)	133
Table 7.9. Model explanatory power and fit indices.	133
Table 7.10. Loyalty model hypotheses testing results.	137
Table 8.1. Hotel characteristics	142
Table 8.2. Hotel criteria	145
Table 8.3. Pro-environmental rating	146

Table of Figures

Figure 1.1. Thesis map	10
Figure 2.1. Indonesian bathroom.....	19
Figure 2.2. Various devices for waste storage (plastic waste bin, brick waste bin, and plastic bag) in front of houses in Jakarta	19
Figure 2.3. Number of hotel guests in Indonesia (2003-2013).....	21
Figure 3.1. The development of pro-environmental behaviour theory in consumer purchase decisions	29
Figure 3.2. Hotel's customer service scheme.....	41
Figure 3.3. Relationships between beliefs and intention to stay at a hotel	43
Figure 4.1. Hypotheses in PEB in hotel model	73
Figure 4.2. Hypotheses in hotel customer loyalty model	79
Figure 5.1. Item development from hotel customer focus group discussions	90
Figure 5.2. Quantitative research scheme.....	92
Figure 5.3. Developing typology from manager interviews.....	98
Figure 6.1. Consumer PEB in hotels model – Indonesia.....	121
Figure 6.2. Consumer PEB in hotels model – Australia.....	122
Figure 7.1. Indonesian sample – high experience level (Group 1) results	135
Figure 7.2. Indonesian sample – low experience level (Group 2) results	135
Figure 7.3. Australian sample – high experience level (Group 3) results	136
Figure 7.4. Australian sample – low experience level (Group 4) results	136
Figure 8.1 Mainstream hotel pro-environmental levelling	143
Figure 10.1. Conclusion map.....	186

CHAPTER

1

BACKGROUND AND INTRODUCTION TO THE RESEARCH

CHAPTER ONE: BACKGROUND AND INTRODUCTION TO THE RESEARCH

1.1 Introduction

This chapter explicates the genesis of the research project. The research focuses on pro-environmental behaviours in hotels. Chapter one includes the introduction and overview of the research, aim of the research, research question, the outline of key hypotheses, justification of the topic, methodology, thesis structure, and glossary of key concepts. Chapter one guides the reader to understand the structure and content of this thesis. To assist, a chapter map and the outline of all chapters in the thesis are provided in this chapter.

Commencing this chapter, Section 1.2 discusses the general background underlying this research and the scope of the research, and is followed by Section 1.3 which discusses the research aim. The main research question and sub-questions are presented in Section 1.4. Following this section, key hypotheses that justify the research sub-questions are indicated in Section 1.5. The justification of the topic of this research is discussed in Section 1.6. Subsequently, Section 1.7 explains the methods utilised in this research. Each of ten chapters shaping the thesis is then outlined in Section 1.8. A map of each chapter is provided to guide the reader. The glossary of key concepts used in this research project is provided in Section 1.9. To conclude, a summary of the chapter is provided.

1.2 Setting the Background of the Research

Tourism and hotels, specifically, are considered as big industries in the world. According to IBISWorld (2014), the global hotel industry accounted for USD 717 billion revenue in 2013 and, as the global economy continues to improve, this is expected to continue to increase in 2014 to 2019, with an annual growth rate of 5.3%,.

Located between Asia and Pacific, Indonesia is a significant market for tourism and hospitality. Following the dynamic economy's progress, tourist arrivals (international and domestic) into Indonesia are expected to increase from 250 million in 2012 to approximately 400 million in 2023 (HVS Global Hospitality Services, 2013). The rise of tourism has a

positive influence on the hotel industry in Indonesia, especially in the world-renowned tourist destination, Bali, as well as the most populated island, Java. A survey by Horwath HTL (2014) indicated that the hotel industry in Indonesia contributes significant revenue to the country's economy. Hence, the hotel industry is considered to be an important industry in Indonesia.

The hotel industry is also regarded as a significant component of the Australian economy accounting for approximately AUD 8 billion revenue in 2016 (IBISWorld, 2016). The Australian hotel industry has recorded 2.3% annual growth in 2012-2017 (IBISWorld, 2016). According to Deloitte (2015) data, domestic tourism in Australia was mainly driven by corporate travel and visits to friends and relatives. International tourist arrival in Australia was dominated by visitors from China, Malaysia, Singapore, and Hong Kong in 2015 (Deloitte, 2015). The highest hotel occupancies in 2015 were recorded in Sydney (87%) and Melbourne (86%) (Deloitte, 2015).

Tourism and hotel industry sustainability has become a big challenge for the world. Hotels have some specific characteristics related to waste management, compared to the manufacturing industry. According to the United Nations Environment Programme and World Tourism Organization (2012), hotels are significant contributors of carbon emissions, resulting in the hotel industry as an energy-intensive sector being regarded as an energy-intensive sector. Unlike the manufacturing industry which has standard production processes and procedures for its waste, energy usage and waste management in the hotel industry are unpredictable and are highly dependent on hotels' operations and the customers' habits; for example, room heating/cooling, lighting, cooking (in restaurants), cleaning, washing, water for pools, and seawater desalination (for some areas). Based on hotels' contribution to carbon emissions as reported in the United Nations Environment Programme and World Tourism Organization (2012) report and the increase in the number of hotels in Indonesia and Australia, it is important for hotels to establish pro-environmental management, to support natural environment conservation, to attract more pro-environmental customers, as well as to reduce costs and energy usage.

Environmental issues bring awareness to society to act pro-environmentally. Hotels have started to establish environmentally responsible programs and policies. However, to date, green management and policy tend to be centralised on the company side. Green management policy is mostly only one-sided and management-driven, without fully

considering or involving the consumer (Shaw, Newholm, & Dickinson, 2006). Stakeholder theory suggests to incorporate the stakes of both management and consumer (Polonsky, 1995a). Corresponding to the green policy adopted by the companies, consumers actually have an individual responsibility to evaluate the consequences of their consumption behaviour. Consumer green responsibility is related to the concern whether the product would negatively impact society and the environment (Shaw et al., 2006). The one-sided green management policy has raised the concern of limited choice for the consumer and their lack of consumer empowerment, while literature to date has recorded consumer's willingness to participate in pro-environmental behaviours (PEB) (Ajzen, 1991; Barber & Deale, 2014; Steg & Vlek, 2009). Accordingly, a multi-perspective approach is needed to address the one-sided policy and consumer empowerment issues. A number of extensive studies also suggest business sustainability practices that involve the consumer (e.g., Bansal (2005), Bansal and Kilbourne (2001)). In the hotel context, for instance, consumer may choose whether they follow the hotel's towel reuse option or request fresh towels; this would have an effect on the hotel's green management practices. Consumers with PEB may also appreciate green attributes in hotels more, because they may see that green attributes are in line with their views and support the sustainability in hotel (Bansal, 2005; Ortiz de Mandojana & Bansal, 2015). This research investigates pro-environmental practices from both hotel management and consumer perspectives, to co-create a win-win environmental responsibility (sustainability) in the hotel industry.

1.3 The Aim of this Research

Hotel managements and consumers have been reciprocally contending with environmental issues. With the rise of environmental consciousness in society, hotels have commenced to provide green attributes as part of their environmental responsibility behaviour and also to meet the stakeholders' demands. The stakeholders in the hotel business include managers, staff, and consumers. Interactions of hotel green attributes and consumers' PEB may contribute to good branding, customer satisfaction and loyalty behaviour. It is important for hotels to understand their customers better since loyalty behaviour is the principal aim of the customer-relationship management. This research aims to examine the role of hotel management and consumers in establishing sustainable hotel business practice.

Therefore, this research specifies hotel management and consumers as the stakeholders of sustainable hotel business.

1.4 Research Question

The increasing public attention and hospitality policies on environmental issues push hotels to seek better solutions to fulfil the stakes of their stakeholders, including hotel customers. From the customer's perspective, growing environmental issues may influence the choice of individual PEB in hotels. Given the phenomenon of eco-friendly practices among companies and consumers, it raises the main research question: *'What is the role of consumer and management in creating sustainability in a hotel context?'*

This research proposes the sub-questions below to support and clarify the main research question. The following sub-questions will be further addressed in the literature review, results, and the discussion chapters of the thesis.

Sub-question 1: *What factors contribute to consumer PEB in hotel?*

Sub-question 2: *What is the role of hotel management green practices in determining customer loyalty in hotel?*

Sub-question 3: *How are management pro-environmental practices in mainstream hotels organised?*

1.5 Key Hypotheses

To answer the research questions, two key hypotheses are developed in this research. The key hypotheses utilised the multi-perspective approach in assessing green aspects among consumers and hotel management. These key hypotheses are further discussed in Chapter four of the thesis.

Customer PEB Key Hypotheses (Hypotheses 1-6), addressing research sub-question 1: Pro-environmental habits at home, mindfulness, and hotel green attributes significantly influence individual customer's PEB in the hotel.

Hypothesis 1. At-home pro-environmental habits (recycling, energy saving, water saving) significantly influence similar behaviours in the hotel.

Hypothesis 2. Green influence from family and friends significantly affects individual PEB in the hotel.

Hypothesis 3. The provision of green attributes in the hotel significantly affects customer PEB actualisation in the hotel.

Hypothesis 4. Green mindfulness significantly influences individual PEB in the hotel.

Hypothesis 5. At-home pro-environmental habits significantly influence green mindfulness.

Hypothesis 6. General mindfulness significantly influences green mindfulness.

Customer Loyalty Key Hypotheses (Hypotheses 7-9), addressing research sub-question 2: Hotel green attributes, experience level, service quality, and satisfaction significantly influence positive brand attitude on the hotel brand that prompts customer loyalty.

Hypothesis 7. Hotel green attributes significantly influence positive brand attitude towards the hotel brand that prompts customer loyalty.

Hypothesis 8. Service quality significantly influences customer satisfaction that prompts a positive attitude towards the hotel brand in addition to customer loyalty.

Hypothesis 9. High customer hotel experience results in a greater effect of hotel green attributes on positive brand attitude.

Regarding sub-question 3, a hypothesis may not be relevant since the nature of the study is qualitative. However, research propositions will be developed to address sub-question 3 and these will also serve to benefit future research.

1.6 Justification of research topic

The main theme of this research project covers pro-environmental behaviours (PEB) of hotel management and consumer. Environmental issues have been an important concern to the society that forces businesses to develop pro-environmental strategy. The motivation of going green is various, especially for businesses. Most of businesses establish green programs to follow the regulations and to avoid penalties. Most hotels, particularly, also believe that green management also benefits the hotel by reducing operational costs and attracting more customers. From the consumer perspective, the benefit of green attributes in the hotel still remains questionable whether the green attributes add the value of their hotel stay and prompt customer loyalty behaviour.

The minimum consideration of the consumer in formulating company's pro-environmental strategy has become an issue in business to date (Shaw et al., 2006). Additionally, studies in green practices to date still focus on management perspective, whereas green benefits for the consumer is dependable on psychological and behavioural factors of the individual customer (such as mindfulness and habits). When the customers can enjoy the green benefits during their hotel stay, it would be likely for them to be loyal and return the benefits to the hotel. By examining the role of management and consumer in creating sustainability in hotel, this research contributes insights to empower the consumer as well as to assist hotel management in creating sustainability in hotels.

In order to cover management and consumer perspectives, this research utilises the stakeholder theory (Polonsky, 1995a, 1996) that suggests a multi-perspective approach in investigating stakeholders' stakes. This research scrutinizes PEB from both consumer and hotel management perspectives. In analysing consumer PEB, this research includes both psychological and behavioural (habits) factors underlying consumer PEB in hotel. Further, this research elaborates customer loyalty in hotel by including management efforts (service quality and hotel green attributes provision by management) as determinants of customer loyalty. From the management perspective, this research studies on the strategic process of pro-environmental management in hotel, including manager's motivation, scope, process, monitoring, and customer communications in establishing green attributes in hotel.

This research connects the three nodes: consumer PEB in hotel, hotel green attributes in customer loyalty, and customer communications in green attributes by management.

Hence, by connecting the three nodes, this research delivers a new perspective of green collaboration between hotel management and consumer in creating sustainability that extends relevant literature in the topic (e.g. Steg and Vlek (2009) and Miller, Merrilees, and Coghlan (2015) in consumer PEB; Gustin and Weaver (1996) in hotel green attributes and consumer behavioural intentions; Bansal and DesJardine (2014) in the actualisation of sustainable strategy in hotels).

1.7 Methodology

Methodologically, *pragmatist paradigm* was adopted since this research addresses pro-environmental behaviours from multiple perspectives (hotel management and consumer). Mixed-methods strategy of inquiry was used in this research. The mixed-methods strategy includes three phases: qualitative (consumer focus group discussions), quantitative (two consumer surveys), and qualitative (hotel manager interviews).

The hotel consumer focus group discussions aim to assist in developing some items for *experience*, *green mindfulness*, and *hotel green attributes* variables. Consumer focus group participants are those who had previously stayed at any hotel. Two surveys on hotel customers targeting customers who had stayed at any classified hotels in Indonesia and Australia were conducted to investigate consumer behaviours in hotel, particularly PEB. In the second qualitative phase, one-on-one semi-structured hotel manager interviews are conducted in three regional groups (Indonesia, Australia, and other countries), to explore and examine the actualisation of pro-environmental management process in hotel. Participant hotels were selected in the basis of public reviews (e.g. TripAdvisor) and the chance to meet the managers. Data analysis in this research involves manual coding for qualitative data and Structural Equation Modelling (SEM) for quantitative data.

1.8 Structure of the Thesis

The thesis comprises ten chapters (see the thesis map in Figure 1.1). Firstly, Chapter one introduces the background and the content of the research. Chapter one presents the reasons for conducting this research, the research aim, research question, preview of the

methodology, and the outline of key hypotheses. As an ‘entrance gate,’ this chapter directs the reader to explore the content of the thesis.

Chapter two advances the research background about the Indonesian context and cultural justification between Indonesia and Australia. Indonesia has some unique cultures and characteristics that are different to Australia. The cultures and characteristics difference might influence the result of this research. This chapter presents statistics about Indonesian tourism and hotels, tailed by an explanation of the facts, arguments, and justifications supporting the background and scope of this research.

Chapter three comprises a literature review on major concepts addressed in this research; such as, consumer PEB, consumer loyalty, hotel services, and hotel green attributes. This chapter commences with a brief description of consumer PEB, customer experience and loyalty, and then continues to hotel services and green attributes, including an assessment of the existing pro-environmental regulations that apply to the context of this research. At the end of this chapter, there is an explanation of the literature gap that can be addressed with the findings of this research (see Table 3.3, 3.4, and 3.5).

Chapter four provides further explanations on the conceptual research framework. This chapter includes specific reviews on the variables in this research. Two key hypotheses are developed and justified, with an advanced identification of the relationships among the variables. This chapter also includes the literature-based criteria development for the qualitative study of pro-environmental hotel management.

Chapter five elaborates the selection of the research paradigm, justification of the selected research design, the data collection process, instrument development, sampling method, research techniques, and data analysis method. This research follows the pragmatist paradigm and utilises mixed-methods as the strategy of inquiry. The mixed-methods approach utilised in this research consists of three phases (qualitative – quantitative – qualitative). Each phase is explained and justified in this chapter.

Chapter six presents the results of the study of PEB in hotels. The chapter comprises preliminary results of Indonesian and Australian samples, as well as instrument validity and reliability tests. Hypothesis testing is conducted using Structural Equation Modelling (SEM) for the merged dataset from both countries. The final part of this chapter summarises the results of the study of PEB in hotels.

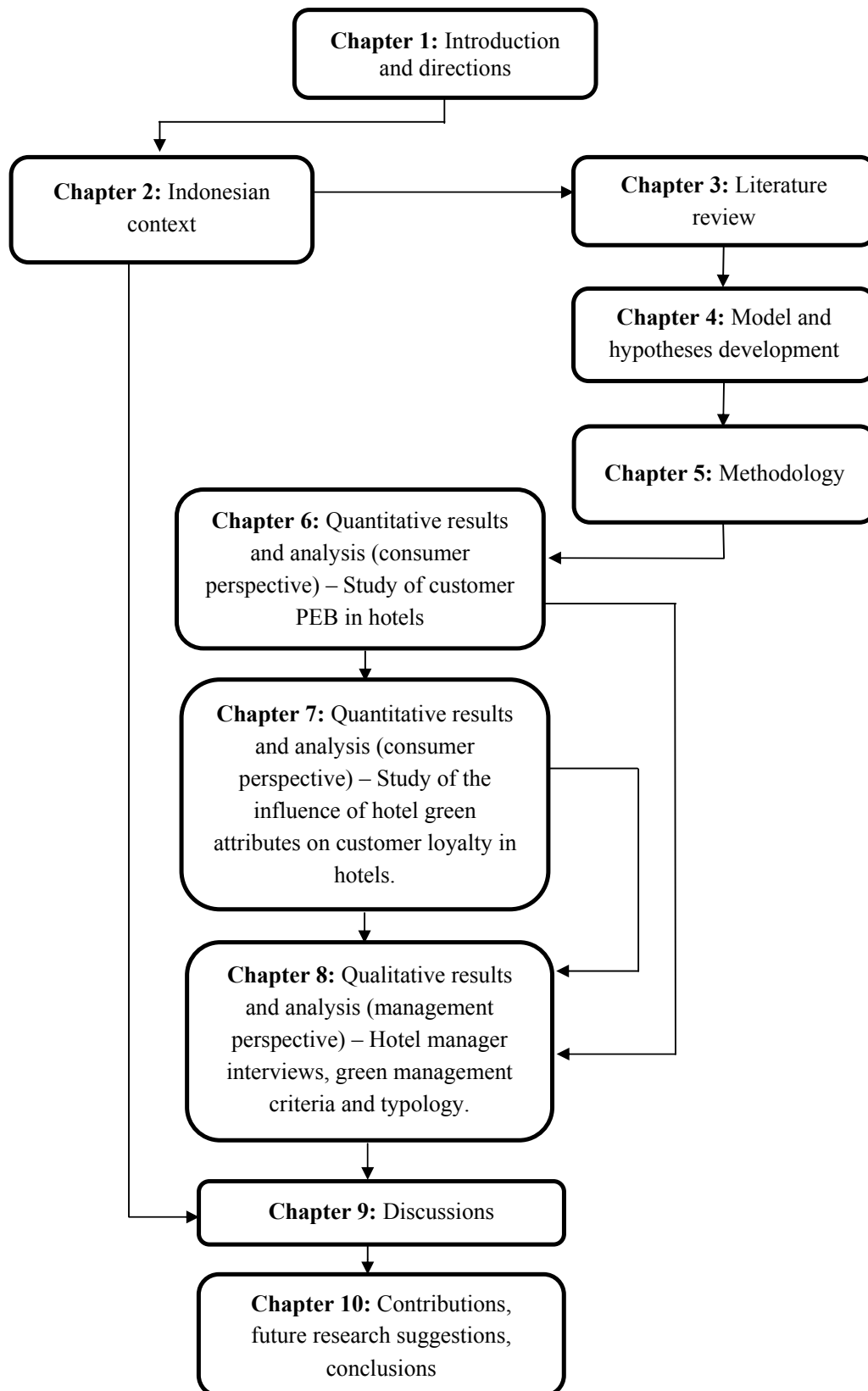


Figure 1.1. Thesis map

Chapter seven provides the analysis of the influence of hotel green attributes on customer loyalty. In line with the previous quantitative study, this chapter confirms the instrument validity and reliability and finally presents the analysis results of the study of hotel green attributes' influence on customer loyalty, using SEM. The summary of the study of the influence of hotel green attributes on customer loyalty results is provided at the end of this chapter.

Chapter eight contains the results and data analysis of the study of pro-environmental management processes in mainstream hotels. A considerable number of hotel managers have been interviewed. A summary of transcripts, and their analysis, are discussed in this chapter. The criteria of pro-environmental management in hotels have been developed from the interview data and existing literature. This chapter also presents a typology of pro-environmental management that is applicable to predict pro-environmental management in hotels.

Chapter nine provides integrated discussions of the results. This chapter includes the discussion of the study of PEB in hotels, the study of hotel green attributes' influence on customer loyalty, and the study of hotel pro-environmental management results. This chapter further justifies the overall results and findings of this research project.

Chapter ten concludes this research and explains the implications and contributions of this research. This chapter also states the limitation of this research, followed by suggestions for future research.

1.9 Glossary of Key Concepts

For the purpose of this research, there are some key terminologies that need to be clarified. This section outlines the definitions of key concepts used in this research. The definitions of relevant concepts which subject to this research and which have either not been presented, or only briefly presented in this section are detailed as they present in the subsequent sections of the thesis. The key concepts used in this research are described in Table 1.1.

Table 1.1 Glossary of key concepts in this research

Key concept	Definition	Source(s)
Behavioural intentions	The intentions to perform some loyalty actions as the manifestation of customers' positive evaluation towards their previous experience. The term 'behavioural intention' in this research is represented by the intention to spread positive word-of-mouth (WOM) communications.	Lee, Hsu, Han, and Kim (2010)
Service quality	In this research, service quality in a hotel is represented by the hotel's physical ambience and service delivery (staff responsiveness).	Wilkins, Merrilees, and Herington (2007)
Customer – perceived value	The comparison of benefits and sacrifices made to obtain the benefits. Customer-perceived value is also compared to the customer's experience with similar product/service providers.	Nasution and Mavondo (2008); Yang and Peterson (2004)
Brand attitude	The positive perception of hotel customers towards the hotel's brand, based on their beliefs and evaluation of their experience in a hotel. Brand attitude is an emotional phenomenon based on a customer's evaluation. On the note, when green or pro-environmental factors are involved in shaping brand attitude, the terminology 'brand attitude' is further advanced to become 'eco-brand'.	Wilkins, Merrilees, and Herington (2009)
Pro-environmental behaviour (PEB)	Any behaviour that supports the wellbeing of nature and the environment. Examples of pro-environmental behaviour are recycling activities, and energy- and water-saving behaviours.	Grønhøj and Thøgersen (2012)
Hotel green attributes	The hotel's efforts in supporting, protecting, and conserving the natural environment that can be seen or experienced by customers when they stay in the hotel. Green attributes in this research encompass recycling facilities, energy and water saving, and pro-environmental campaigns.	Manaktola and Jauhari (2007)
Green habit	Habit refers to the way pro-environmental behaviour choices are made. In this research, green habit focuses on pro-environment behaviours that hotel customers have been doing in 'autopilot mode' while at home and while staying at a hotel. Green habit in this research covers recycling activities, energy-saving and water-saving habits.	Stern (2000); Steg and Vlek (2009)
Green influence	Individual's references on their pro-environmental behaviour. The idea of green influence is derived from social norm and perceived behavioural control of Theory of Planned Behaviour (TPB). Green influence in this research consists of important family and friends, government, media, and green groups.	Ajzen (1991); Chan (2000)
Mindfulness	The relatively greater awareness of the surrounding environment and of other people or the consideration of the environment and other people in the decision-making process. This research also specifies 'mindfulness' into considering the wellbeing of the natural environment in every behaviour or decision and thus advances 'mindfulness' into green mindfulness .	Langer (1989)
Attitudes toward environment (ATE)	The perceived consequences of pro-environmental behaviour and the individual's evaluation of the significance of the consequences. In this research, ATE covers love for nature, individual environmental responsibility, willingness to behave pro-environmentally when travelling, and concerns about environmental destruction.	Perkins (2010); Miller et al. (2015)

1.10 Chapter Summary

Hotel management and consumer pro-environmental behaviours are the main theme of this research. Attempting to address the tendency of a one-sided green policy of hotel management and increase consumer empowerment in hotel green policy, this research aims to investigate pro-environmental behaviours of hotel management and consumers to achieve sustainability. Two key hypotheses are developed in order to answer the primary research questions ‘What is the role of the consumer and management in creating sustainability in a hotel context?’ This research employs mixed-methods (qualitative – quantitative – qualitative) as the strategy of inquiry. This thesis consists of ten chapters. Thesis map and the outline of each chapter are provided as guidelines for the reader. The definition of the ten key concepts in this research is also presented in the glossary of this chapter.

CHAPTER

2

INDONESIA AT A GLANCE

CHAPTER TWO: INDONESIA AT A GLANCE

2.1 Introduction

Chapter two is dedicated to sharpening understanding of the research background. This chapter begins with a brief information about Indonesian tourism and its environment, the cultural differences between Indonesia and Australia, and environmental lifestyle in Indonesia. Pro-environmental hotel management and the green standards that apply in Indonesia are presented as well in this chapter.

This chapter commences with the tourism potential and environmental impact as they relate to Indonesia. The beauty of the country attracts tourists and thus creates a lucrative market for hotels. The cultural differences between Indonesia and Australia are explained prior to the presentation of the unique characteristics of an Indonesian environmental-related lifestyle. The hotel industry and the standards of pro-environmental management in Indonesian hotels are further explained. A summary of chapter two is provided at the end of this chapter.

2.2 Indonesian Tourism and Environment

Environmental and cultural tourism have been the main reasons for visiting Indonesia since most tourists are attracted to the beauty of Indonesia's nature and its unique culture (Cochrane, 2006; Dodds, Graci, & Holmes, 2010; Timothy & Wall, 1997). As the largest renowned tropical archipelago located between Asia and Australia, Indonesia is a significant emerging market for environmental and cultural tourism. The most popular area for tourism includes Bali (predominantly for beaches) and Yogyakarta (generally for cultural tourism). The capital of Indonesia, Jakarta, is the centre of government and business and records a large number of travellers each year. Indonesia has more than 230 airports with 27 being international airports (Ministry of Transportation Republic of Indonesia, 2017).

Beaches and national conservation parks are the most popular natural tourism attractions in Indonesia, for both domestic and international tourists. Ironically, when a natural tourism object becomes popular and attracts many tourists, more is the chance of it

suffering from environmental problems. Some small islands and beaches in Indonesia, for example, are suffering from a lack of fresh water resources, expensive generator-produced electricity, waste disposal issues, beach degradation, and land development that has no formal planning (Dodds et al., 2010). Similar problems also occur in cultural heritage areas due to poor economic conditions, lack of expertise, and the lack of understanding of the environmental impact by local government and residents (Timothy, 1999).

2.3 Cultural comparison: Indonesia and Australia

Previous research regarding tourism in Indonesia noted mixed findings related to tourist behaviour (Saufi, O'Brien, & Wilkins, 2014). As presented in Figure 2.1, the number of domestic tourists/travellers staying at classified hotels exceeds the number of international travellers.

Noesjirwan (1978) suggested that in a cultural comparison, Indonesia represents an 'Eastern' culture and Australia represents a 'Western' culture. The behaviours of tourists are highly influenced by culture. Utilising Hofstede's approach, Reisinger and Turner (1997) explained that Indonesian culture is a high power distance culture, where people tend to obey any decision made by authorities without question. Indonesians also respect older people, parents, and elderly. In comparison, the Australian culture encourages low power distance and equality.

The Indonesian culture is highly collectivistic and group oriented. In the Indonesian culture, family is important. Individuals may feel that they are strong as a group or family. People do care about what others say about themselves. In collectivistic cultures with high power distance, group members are willing to spend more time in social relationships. In contrast, Australian culture is individualistic and networks of relationships are looser than in Indonesia (Reisinger & Turner, 1997).

In terms of flexibility, Reisinger and Turner (1997) suggest that Indonesians are mostly flexible about time, compared to Australians. Indonesian culture is also an uncertainty-avoidance culture, where the society feels that ambiguity and risk must be avoided. People tend to disapprove of competitions and avoid risk by not accepting foreigners with new ideas. In regards for gender, Indonesian culture is classified as a masculine culture, where males tend to play more roles in the society. The high context nature of Indonesian culture influences people's communication processes. People sense the rules of behaviour

and tend to use spiral logic, and implicit (explicit communication is considered as impolite) and indirect non-verbal communication. With the high context culture, Indonesian travellers are likely to be cautious when making initial contact with a stranger. Being collectivist in nature, people may ask more questions and have fewer self-disclosures. Unlike Indonesians, Australians prefer straight logic, direct verbal communication, clear-written rules, explicit instructions, signs, and procedures to decide their behaviours.

The above-explained cultural differences between Indonesia and Australia influence tourists' attitude and behaviour. For example, in the Indonesian culture, more than one person is involved in the decision-making process, such as choosing a tourism destination. The flexibility of time enables Indonesians to accept waiting as a natural phenomenon, without stress or anxiety. When the service cannot be delivered on time, for example, in hotels, Indonesian tourists may take it as a feeling of the smooth flow of activities (relax). Being concerned with others' opinions, appearances and formal outfits is important to build a good image, rather than for the efficiency of the process. Good formal outfits and appearance also reflect the social status of the person. However, outfits that show most parts of the body are considered as impolite in the Indonesian culture. Indonesia is also a Muslim majority country, where the acceptance of halal (non-pork and alcohol) products is high (Gayatri, Hume, & Sullivan Mort, 2011). In relation with high context culture, people may hesitate to consume strange foods or personal products due to the halal concern. Alcohol consumption is also forbidden in Islam. Therefore, Indonesians tend to perceive bars or 'drinking places' as negative (in the contrast to Westerners' perspective that drinking alcohol is an important part of the socialising culture).

Connecting culture and pro-environmental education, family is expected to be the strongest influence in education, since Indonesians are family-oriented. However, Timothy (1999) and Cole (2006) noted the lack of 'tourism awareness' in local Indonesian heritage and ecotourism communities that may impact domestic Indonesian tourists' PEB. The lack of knowledge about heritage and natural conservation has resulted in low awareness of enacting PEB among Indonesian domestic tourists (Cochrane, 2006). Cochrane (2006) also stated that low environmental awareness is indicated by domestic Indonesian tourists' motivation to visit ecotourism objects, with the focus of hedonistic enjoyment of the environment, so they may not portray PEB while enjoying the tourism object. In comparison, Australian tourists' motivation seemed to be more about nature appreciation and conserving natural heritage

(Packer, Ballantyne, & Hughes, 2014). In PEB enactment, for example, Kang and Moscardo (2006) mentioned that Australian tourists have a greater willingness to understand and obey the PEB regulations in a tourist destination.

2.4 Indonesian environmental lifestyle

Indonesia has a hot and humid climate. Hence, the usage of air conditioners or electric fans in Indonesian households is very common (Novianto, Gao, & Kuroki, 2015). According to Badan Pusat Statistik Indonesia (2013e), 36.78% of households having air conditioning system often set their air conditioner (AC) below 25°C, while 40.99% of households sometimes set their AC below 25°C, due to the hot weather. Setting the AC below 25°C requires higher energy usage and increases the potency of carbon pollution. In 2012, 92.08% of Indonesian households relied on the state electricity provider for their main source of electricity, although the electricity provided by the Indonesian state company is limited (Wijaya & Tezuka, 2013). Following this supply issue, Badan Pusat Statistik Indonesia (2013c) recorded that 61.09% of Indonesian households have installed energy-saving lighting in their homes in 2013, which indicates a good sign of energy-saving habits.

Indonesians mainly use water for consumption and sanitation purposes. Indonesian government statistics agency, Badan Pusat Statistik Indonesia (2012) indicated that 29.79% of Indonesian households use a protected well as their main source of water. Traditional Indonesian bathrooms contain a trough of clean water (as presented in Figure 2.1). Indonesians have a bath by scooping water from the trough using a plastic dipper and pouring it over the body while standing on the floor of the bathroom. After soaping up, more dippers full of water are used to rinse off the body. The same practice is utilised when using the toilet (traditional households have a wet toilet). Indonesians are very conscious of personal cleanliness and bathe at least twice a day. Traditionally, only room temperature water is used in Indonesian households as warm water is only for babies, the elderly, and the sick (Expat Web Site Association Jakarta, 2014). Based on this bathing habit, Indonesians tend to use more water in their daily life, compared to people who live in cooler, drier or less humid countries. According to Gleick (1996), the total domestic water use of Indonesia was recorded as 34.2 litres per person per day.



Figure 2.1. Indonesian bathroom

In terms of recycling behaviour, most Indonesian households have unsorted garbage. As of 2013, only 23.69% of Indonesian households sorted their garbage into recyclable and unrecyclable garbage (Badan Pusat Statistik Indonesia, 2013d). As a good sign of recycling behaviour, a study by Aretha, Tetsuo, and Gert (2012) showed that Indonesians have started to sort their household garbage and demonstrate recycling behaviour in the big cities, such as Jakarta. This finding is indicated by various devices for waste storage found in front of houses in Jakarta (see Figure 2.2).



Figure 2.2. Various devices for waste storage (plastic waste bin, brick waste bin, and plastic bag) in front of houses in Jakarta (Aretha et al., 2012)

According to Reisinger and Turner (1997), Indonesia is classified as a collectivist country in South East Asia. The term ‘collectivism’ here refers to the closeness of the relationship between one person and other persons. In a collectivist society, everybody is

supposed to look after their in-group interest and to have no other opinions and beliefs other than the opinions and beliefs of their in-group. Indonesians have a very strong sense of community and they do care about what others say (Expat Web Site Association Jakarta, 2014). Hence, people in a society where they care about environment may influence others to care about environment, in a positive way. Contrarily, in a society with environmentally-unfriendly behaviour, people may sway others to carry out environmentally-unfriendly behaviour, e.g., the behaviour of throwing garbage in the river.

A plethora of research in hotel consumer behaviour observed positive attitudes, intention to visit and loyalty behaviour by the establishment of a hotel's green attributes (e.g., Dalton, Lockington, and Baldock (2008) in Australia; Chen and Tung (2014) in Taiwan, Han, Hsu, Lee, and Sheu (2011) in the United States). However, these studies explored consumer behaviour in developed countries, where people have more awareness about the environment. Early pro-environment education has been generally applied in the developed countries, while in developing countries pro-environment instruction is not necessarily in the curriculum. Hence, people's awareness toward the environment has induced their pro-environment habits in their daily life, such as recycling behaviour and pro-environment energy usage. People's pro-environmental behaviours (PEB) relating to their stay in a hotel are evidenced by the way they use air conditioning, lighting, water, and the way they treat their garbage. Therefore, it is interesting to investigate Indonesian customers' PEB, as well, when they stay at a hotel.

2.5 Hotel industry in Indonesia

Situated between Asia and Australia, Indonesia is considered as the 'entrance gate' of both continents. Supported by the great number of tourists arriving in Indonesia (Booth, 1990), this country has great potential as a tourism destination, followed by the blossoming of the hotel industry.

According to HVS Global Hospitality Services (2013), 250 million tourists arrived in Indonesia in 2012 and the number is expected to rise each year. In 2013, 1778 classified (star) hotels have been established to support tourism in Indonesia, with an average occupancy rate of 52.22% (Badan Pusat Statistik Indonesia, 2013f). With the rising economy, increased tourism and mobility, classified hotels in Indonesia had 9 million international guests visit,

while hotel domestic guests accounted for 38 million people in 2013 (Badan Pusat Statistik Indonesia, 2013a, 2013b) (see Figure 2.3).

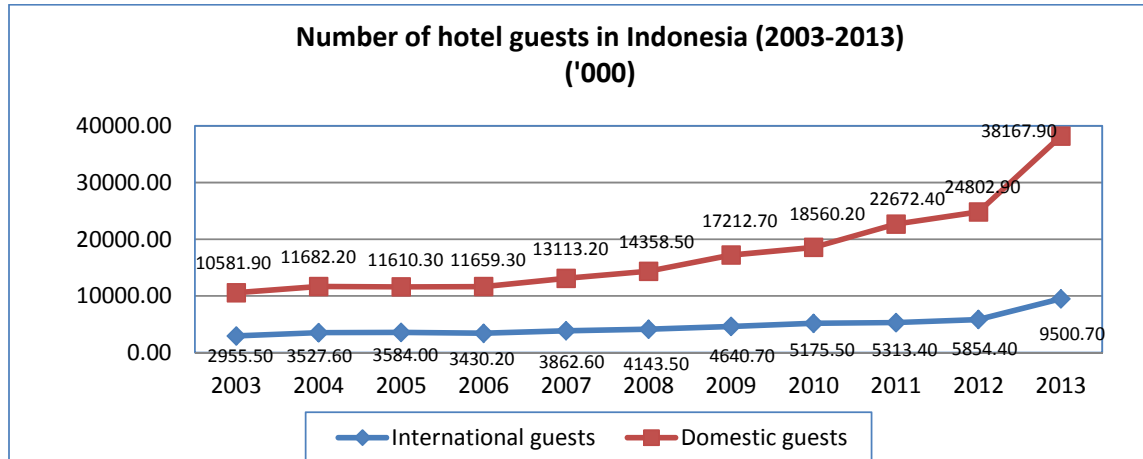


Figure 2.3. Number of hotel guests in Indonesia (2003-2013) (Badan Pusat Statistik Indonesia, 2013a, 2013b)

The rapid growth of the tourism industry has positively impacted the hotel industry in Indonesia. According to the Indonesian government statistics records, the number of classified hotels in Indonesia reached 2197 in 2015 (Badan Pusat Statistik Indonesia, 2015). The number is continuously growing, in line with tourism growth and development in Indonesia.

The hotel and tourism industry supports the local economy; however, the lack of well-planned development has caused some environmental problems, such as drought in some areas. Yogyakarta, for example, is suffering from a water crisis due to the construction of many new hotels, apartments, malls, and other commercial buildings (Universitas Gadjah Mada, 2016). This phenomenon urges hotels to immediately implement pro-environmental management.

2.6 Pro-environmental management in Indonesian hotels: Standards and application

Indonesia is situated in a tropical belt with plenty of sun exposure and tropical tourism features, such as beaches and rainforests. Ayala (1995) and Litvin and Ng (2001) noted Indonesia as one of those tourism destinations that offer sun, nature, and indigenous

materials. According to their research, hotels that are seen as pro-environmental hotels in Indonesia are incorporating cultural wisdom in their management system. In order to be fully pro-environmental, a hotel has to start from the building to plan and manage their hotels according to well-recognised pro-environmental standards.

In June 1995, the Indonesian Government launched a program to rate environmental performance in organisations; it is called the Program for Pollution Control, Evaluation and Rating (PROPER) (Afsah & Vincent, 1997). To date, PROPER has been used to measure the environmental performance of manufacturing and service companies, including hotels, in Indonesia. There are five colour ratings under PROPER: gold, green, blue, red, and black—from excellent to very poor, respectively (Afsah & Vincent, 1997). PROPER measures an organisation's compliance with standard environmental practices in Indonesia in some aspects, such as waste and pollution discharge and treatment, monitoring and reporting systems, and pro-environmental self-monitoring programs. PROPER covers various industries, such as mining, oil and gas, consumer goods, plantations, food industry, electronic and automotive, pharmaceutical, hospital, transportation (dock), and hotel (Indonesian Ministry of Environment and Forestry, 2014). Since the hotel industry is included in PROPER, hotels in Indonesia are now required to conduct their management according to the PROPER standard.

As a member of the Association of South-East Asian Nations (ASEAN), Indonesian hotels also refer to ASEAN Tourism Standards in implementing their pro-environmental management. The most recent ASEAN Tourism Standards comprise energy efficiency, day-to-day recycling behaviour, water-usage management, management of social and cultural issues, air quality and noise control, wastewater management, solid waste management, environmentally harmful substances management, workplace health and safety, staff pro-environmental training, staff pro-environmental behaviour, organic product procurement, risk management, customer green communications, corporate social reporting, legal compliance, environmental partnership, and certification (ASEAN Secretariat, 2016).

In order to appreciate and encourage pro-environmental practices, since 2009 the Indonesian Ministry of Tourism have held a biennial event named the Indonesia Green Hotel Awards. The assessment criteria used by the Indonesia National Green Hotel Awards are almost similar to the ASEAN Green Hotel Standard (please see Chapter 3 for details).

In their day-to-day management, hotels in Indonesia tend to minimise their waste and improve their internal efficiencies, establish partnerships with any pro-environmental regulation bodies, involve the community in their day-to-day activities, improve the rooms to introduce a pro-environmental lifestyle to the guests, and promote their pro-environmental efforts (Darnall, 2008). In addition, Cole (2013) recommends the importance of water management in Indonesian hotels, in order to be sustainable and encourage better relationships with local communities and other stakeholders.

2.7 Chapter Summary

As this research takes place in Indonesia and Australia, this chapter provides information about Indonesia and compares some cultural aspects with the Australian culture. Indonesia is an emerging tourist destination, with heritage and natural tourism objects as the main drivers of its tourism. The tourism industry in Indonesia supports the hotel industry very well. Culturally, Indonesian culture is considered as an ‘Eastern’ culture, while the Australian culture is considered as a ‘Western’ culture (Noesjirwan, 1978). The approach of Hofstede (adopted from Reisinger and Turner (1997)) was used to explain Indonesian and Australian cultures in this chapter. The uniqueness of Indonesia’s tropical nature and culture influences people’s behaviours as tourists, and in their domestic lifestyle.

The increasing growth of Indonesian tourism influences the lucrative market of the hotel industry in Indonesia. Eco-tourism is one of the main tourist attractions in Indonesia; hence, hotels are required to support the wellbeing of Indonesia’s nature by implementing pro-environmental management. A number of pro-environmental standards that apply to Indonesian hotels are described in this chapter, followed by some study recommendations for Indonesian hotels.

CHAPTER

3

PRO-ENVIRONMENTAL BEHAVIOURS OF CONSUMERS AND HOTEL MANAGEMENT

CHAPTER THREE: PRO-ENVIRONMENTAL BEHAVIOURS OF CONSUMERS AND HOTEL MANAGEMENT

3.1 Introduction

Chapter three presents the literature review for key concepts in this research. The review consists of consumer pro-environmental behaviours (PEB), general consumer behaviour, the link between hotel green management and consumers, and pro-environmental practices in hotels.

This chapter consists of five parts. The first part explains the stakeholder theory approach to addressing company-consumer stakes. The second part of this chapter reviews the development of consumer pro-environmental behaviours and the application of consumer pro-environmental behaviour in the hotel context. The hotel consumer pro-environmental behaviour is then followed by hotel consumer behaviours in general; such as, consumer satisfaction and loyalty in the hotel context (part three). Part four of this chapter reviews the link between hotel green practice and consumer pro-environmental behaviours. The fifth part presents pro-environmental management in hotels, initiated by a general overview about so-called 'green' hotels, followed by the reason for going 'green', the regulations, and the implementation of pro-environmental hotel management. The final part of this chapter discusses the gap in the literature and presents a summary of the literature review.

3.2 Company and consumers as stakeholders in sustainable business

An organisation does not stand alone in developing a sustainable business. Stakeholder theory suggests 'social' aspects of an organisation, since the theory highlights all of the 'groups' that influence the organisation's activities. In terms of business sustainability, Polonsky (1995a) and Polonsky (1996) recommends the identification of all key stakeholders that help build sustainable business, determine the stakes, and monitor the stakes-fulfilment in order to achieve sustainable objectives.

Company and consumers are considered as the two key stakeholders in marketing. To develop a pro-environmental marketing strategy, the cooperation between company and

consumer is necessary (Polonsky, 1995a, 1996). According to marketing theory, consumers seek products and services to satisfy their needs and wants, while companies aim to gain profits by providing such products and services to the consumer. Thus, the stakeholder theory reciprocally meets the marketing theory.

Sustainable business requires pro-environmental practices from both companies and consumers. The escalation of environmental concerns in society has influenced both parties to shift from generic production and consumption to environmentally-responsible production and consumption. In pro-environmental practices, the stake of the consumer is to seek products and services that match their environmental values, while companies respond to consumer demand based on the environmental values.

Previous literature has noted that a sustainable business environment may occur with reciprocal stakes fulfilment among companies and consumers. Several researchers have provided valuable insights in this area: Polonsky, Rosenberger III, and Ottman (1998) and Polonsky and Ottman (1998) in green product development; Bansal and Roth (2000) in strategic ecological responsibility practice; and Bansal, Gao, and Qureshi (2014) in corporate environmental commitment. In stakeholder theory, the needs, expectations and demands of each stakeholder ideally have to be met to achieve the ultimate sustainable business (Bansal et al., 2014; Polonsky, 1995a). Currently, consumers demand green products and companies try to satisfy consumers by developing green products and services (Polonsky & Ottman, 1998; Polonsky et al., 1998). Continuous consumption based on pro-environmental value fulfilment may return a profit for the company and thus, the mechanism shall be sustainable.

3.3 Consumer pro-environmental behaviours (PEB)

3.3.1 PEB and consumers as stakeholders

Corresponding with the stakeholder theory approach (Polonsky, 1995a), consumers are considered as important stakeholders of a business that adopts a green marketing strategy. Consumers demand products or services that match their values. Reasons to seek green products over other products may vary among consumers. Some consumers may possess high environmental values and expectations on green products. From the consumer perspective, environmental values can be manifested in pro-environmental behaviours (PEB).

PEB can be viewed as a mixture of self-interest and concern for other people, their offspring, other species, or the whole ecosystem. Self-interest (internal) and external environment are the triggers of an individual's pro-environment behaviour. Using the norm-activation model, PEB can be seen as a pro-socially motivated behaviour (external cause), while the Theory of Planned Behaviour (TPB), views it as a self-interest behaviour (Bamberg & Möser, 2007). Based on the norm-activation model, PEB is determined by moral and personal norms. The activation of a moral norm is based on the interplay of cognitive, emotional and social factors. Examples of behaviours which are determined by moral and personal norms are energy conservation, recycling, travel mode choice, and pro-environmental buying behaviour. The awareness, knowledge about environmental problems, and causal attribution are the probable cognitive triggers for developing moral norms. The internal attribution often causes emotional reactions or guilt feelings, which is related to social norms. Moral norms are influenced by social norms, since social norms deliver the standards of appropriate behaviour in a social reference group. The internalisation of these standards by an individual provides his/her personal moral norms (Bamberg & Möser, 2007). According to the TPB, a decision-making process is guided by a rational evaluation of behavioural consequences (Bamberg & Möser, 2007). TPB further examines attitude-behaviour relationship, and considers the situational influences that refer to constraints and restrictions on behaviour beyond people's control (Kaiser, Wölfling, & Fuhrer, 1999). In the framework of TPB, social norms are perceived as a social pressure to perform or not to perform behaviour. TPB assumes that perceived behavioural control is a reliable predictor of behaviour (Bamberg & Möser, 2007).

As an alternative to TPB, Grob (1995) proposed a model of environmental behaviour. According to this model, PEB is formed by perceived behavioural control, emotions, personal philosophical values, and environmental awareness, while personal philosophical values influence environmental awareness and environmental awareness influences perceived behavioural control. Therefore, loyalty behaviour and satisfaction towards green products are determined by social norms, knowledge, attitudes, emotions, and perceived behavioural control. Pickett-Baker and Ozaki (2008) mentioned that consumer values and beliefs relating to the environment influence their PEB. Values and beliefs form consumer's personal norms and will lead to their perception of environmental concern. The research also found that consumers with high pro-environmental values are more likely to believe that green products will perform as expected and these consumers are more likely to purchase green products. A

research by Young, Hwang, McDonald, and Oates (2010) explains a sequence of pro-environmental purchase behaviour; namely (1) pro-environmental values and knowledge, (2) 'green' criteria, (3) barriers and facilitators, (4) product purchase, and (5) feedback. It can be seen from the previously-mentioned research that PEB involves values, beliefs, knowledge, and awareness. Nevertheless, some actions are still required in order to actualise PEB.

Apart from self-interest, an individual's social ties affect his/her pro-environmental behaviour (green influence). The intensity of one's connections with family, co-workers, and neighbours may affect the 'greenness' and pro-environmental norms that lead to PEB. Social ties between co-workers are visible for pro-environmental behaviours in cost-saving activities, while social ties between neighbours are visible for pro-environmental behaviours in solving a local problem, volunteering, and recycling (Videras, Owen, Conover, & Wu, 2012).

The development of an individual's PEB related to consumer purchase decisions can be seen from time-to-time in Figure 3.1 below. Beginning with the Theory of Reasoned Action (Fishbein, 1979) the development of PEB is depicted up to the most recent development, which relates to an individual's purchase behaviour (Park & Ha, 2012).

In relation to loyalty behaviour, Chang and Fong (2010) mention that green product or service quality leads to green customer satisfaction and green customer loyalty, while Park and Ha (2012) note that customers have limited abilities to evaluate the product or service quality although they may favour green products. Therefore, consumers may judge the quality of an unfamiliar product or service through the brand or company's marketing efforts. Hence, the literature confirms the importance of pro-environmental management and green marketing from the consumer's perspective.

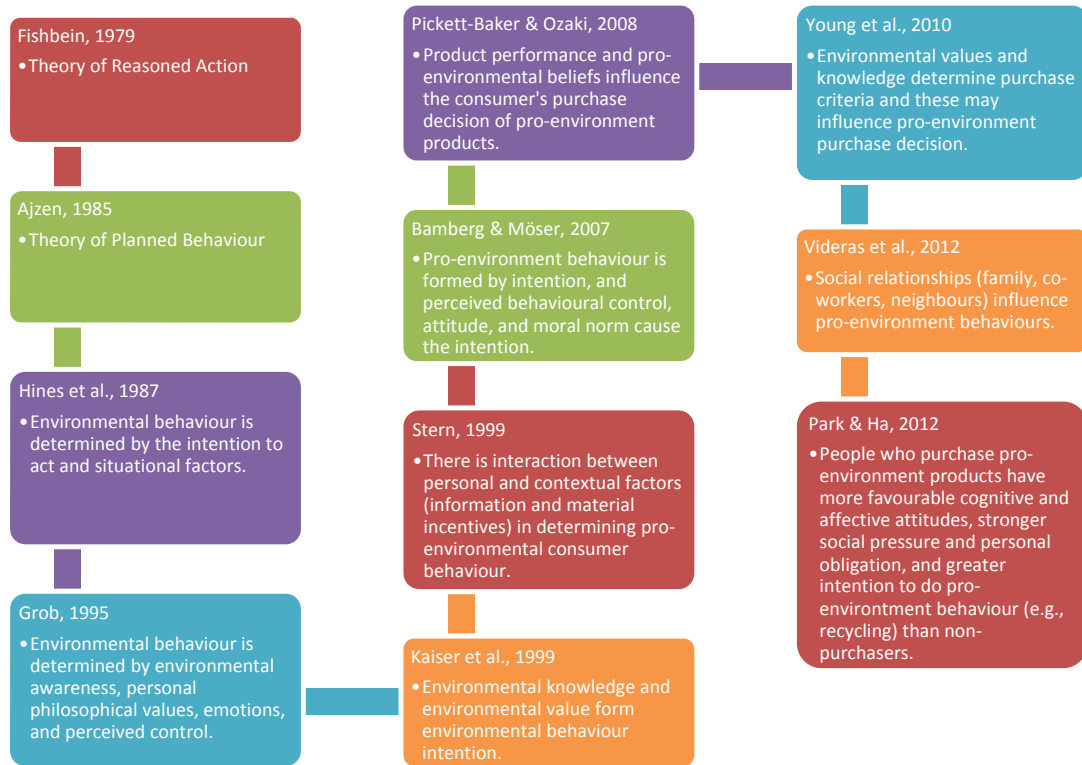


Figure 3.1. The development of pro-environmental behaviour theory in consumer purchase decisions

3.3.2 Reviewing the TPB approach of pro-environmental consumer behaviour in hotels

This section presents a review on the application of The Theory of Planned Behaviour (TPB) in predicting pro-environmental behaviours (PEB), to elaborate more about the self-interest factor of PEB (Bamberg & Möser, 2007). TPB has been widely used to predict PEB.

There are four stages to reviewing the articles of pro-environmental consumer behaviour in hotels. The first stage is finding an article to initiate the review, expanding the search (Miller, Merrilees, & Yakimova, 2013), grouping the articles, and synthesising the theory development based on the literature.

Stage 1: Finding an article to initiate the review

The theoretical foundation of pro-environmental behaviour in hotels begins with the behavioural model by Han, Hsu, and Lee (2009) that offers more comprehensive approach with similar context to this research (hotels). The model shows that attitudes toward green behaviours (ATGB) may result in a perceptive image towards the hotel and leads customers to loyalty behaviours. Following Han et al. (2009), Han, Hsu, and Sheu (2010) investigated the formation of visit intention of green hotels through the Theory of Planned Behaviour (TPB). Their study expands the previous model by investigating the cause of the intention and customers' decision-making processes.

Stage 2: Expanding the search

There are several sources for tourism and consumer behaviour articles, such as ABI/INFORM Complete (ProQuest), ScienceDirect, Emerald, Ingenta, and Google Scholar. The search of pro-environmental tourism and pro-environmental consumer behaviour articles was conducted in these databases using the following keywords: pro-environment* consumer behaviour, green consumer behaviour, pro-environment* behaviour, pro-environment* hotel*, pro-environment* behaviour hotel*, pro-environment* loyalty hotel*, green loyalty hotel*, pro-environment* hospitality, pro-environment* behaviour hospitality, pro-environment* behaviour hospitality, pro-environment* loyalty hospitality, eco-friendly loyalty, eco-friendly consumer behaviour. For Google Scholar, it was necessary to refine the results (e.g., look for the journal's name and rank in trusted lists, such as ERA and ABDC). A snowball search was also conducted to locate articles. The databases sometimes provide a recommended articles section which relates to the displayed article; for example, ScienceDirect, and the search then can be expanded from this list. To strengthen credibility, there are two criteria applied to the search results. First criterion is that the article must be from a double-blind peer-reviewed, English-language journal, and second, the article has to be having academic rigour.

Stage 3: Grouping the articles

This review includes only the pro-environmental themed articles from the search results. The pro-environmental articles were grouped based on their perspective, customer perspective, company/business perspective, or both. Next, the background of customer perspective articles was examined and the articles which had a hotel background were

separated from those with different backgrounds. The company perspective articles were used in a separate section of this literature review.

Stage 4: Synthesising the theory development

Next, the theory and model in the article were examined and synthesised according to its relevancy to Han et al. (2009) model, since their model offered a detailed explanation of PEB (see Table 3.1) . The ecological awareness led individuals to the environmentally friendly behaviours in their everyday lives (Han et al., 2009). Individuals' perceived that environmental concern represents their consciousness of environmental issues. Individuals' attitude toward green behaviour can be measured by the level of awareness of several 'green' behaviours, e.g., conservation of electricity, water, trees, and recycling. Previous research findings mention that more environmental concern tends to lead to environmentally friendly buying behaviours, such as purchase intention, word-of-mouth communication, and repeat purchase in the hospitality context (Han et al., 2009).

A study by Han et al. (2010) mentioned that the Theory of Reasoned-Action (TRA) and the Theory of Planned Behaviour (TPB) play some roles in determining customers' intention to stay in a hotel. According to Ajzen (1991), TPB has strong predictive utility for a wide range of human behaviours, while TRA explains more about the influence of personal determinants and social surroundings as well as non-volitional determinants on intention. In this case, customers will enact an actual repeat purchase with some reasons or conditions. It could be satisfaction, perception toward a company's image, benefits, and so on.

The Theory of Planned Behaviour postulates three determinants of intention: attitude toward the behaviour, subjective norm, and perceived behavioural control. Attitude toward certain behaviour is based on salient behavioural beliefs and outcome evaluations (Han & Kim, 2010). Customers who have consumed certain products or services have a perceived image of the company or service provider, based on their experience. Therefore, the perceived image results in a certain attitude that leads to certain behaviour. The subjective norm is believed to be a social factor in nature. The subjective norm is a function of normative beliefs and motivation to comply, while normative beliefs are perceived as behavioural expectations of the referents (e.g., family and friends) (Han & Kim, 2010). Perceived behavioural control is a non-volitional factor, which reflects an individual's perception of the ease or difficulty of performing a certain behaviour (Han & Kim, 2010).

Attitude, personal effectiveness and knowledge also drive an individual's intention to pro-environmental behaviour (Gustin & Weaver, 1996).

The Theory of Planned Behaviour itself is a model to predict customer intentions or behaviour, including the post-consuming intentions or behaviour. There is always a reason behind an action. Consumers will choose to stay at a 'green' hotel according to their intrinsic triggers, such as perceived value, knowledge, personal effectiveness, and attitudes toward pro-environmental behaviour (Gustin & Weaver, 1996). Customers will be satisfied when the company fulfils or exceeds their expectations. However, customers have their own perceptions towards certain companies or service providers. Perceptions are built by customers' experience; therefore, the companies or service providers need to ensure that their services (and products) meet their customers' expectations.

Researchers that used TPB mostly predict PEB in purchase decision and behavioural intentions contexts. A number of considerable studies (e.g. Han et al. (2010); Han et al. (2009); Gustin and Weaver (1996)) found that individuals who have pro-environmental attitudes will have a stronger intention to choose green products or stay at an environmentally friendly hotel. Consumers are likely to stay at a hotel for many reasons: where recycling bins are made available for guest use, where there are disposable shampoo bottles in the shower and soap dispensers in guest rooms, where energy efficient lights are installed, where the hotels set cooler corridor temperatures during the winter and warmer corridor temperatures during the summer, where guests are encouraged to turn off lights not being used, where sheets are not changed daily unless specifically requested for a guest staying more than one night, where polystyrene foam is not used for serving containers, and where recycled paper is used for printing brochures and displays (Gustin & Weaver, 1996). The pro-environmental hotel is a plus for consumers who specifically value the hotel for its environmentally friendly practices.

Table 3.1 Literature on consumer pro-environmental behaviours in hotel

Articles	Theoretical basis
Han et al. (2009)	Using a single independent variable, Attitude Toward Green Behaviours (ATGB) as the part of TPB (attitude) to predict behavioural intentions, with consumer's perceptive image of overall service as the mediator. The loyalty behaviours examined are visit intention (hotel), Word-of-Mouth intention, and willingness to pay more.
Lee et al. (2010)	Explores the role of pro-environmental hotel image in determining behavioural intentions (repeat visit intentions, Word-of-Mouth intention, and willingness to pay more) in TPB framework. The antecedents include value, quality attributes, affective and overall image.
Han et al. (2010)	Explains customer's decision-making process to visit a certain hotel using TPB that includes attitude, subjective norm, and perceived behavioural control.
Chen and Tung (2014)	Extends Han et al. (2010) model and develops TPB by adding environmental concern, attitude toward visiting green hotels, and perceived moral obligation to determine consumer intention to visit pro-environmental hotels.
Han and Kim (2010)	This research expands the antecedents of loyalty behaviour (repeat visit intention). Additional variables such as service quality, satisfaction, control beliefs, overall image, and frequency of past behaviour were added to the model. The modification of TPB is used in the model to determine repeat visit intention.
Gustin and Weaver (1996)	Examines customer's intention to stay in a hotel using an adapted version of Hines' environmental behaviour model. In addition to attitude, personal effectiveness and knowledge were added to determine PEB.
Han, Hsu, et al. (2011)	Examines consumer pro-environmental attitudes and their impact on loyalty behaviour (visit intention, Word-of-Mouth intention, and willingness to pay more) towards a pro-environmental hotel and the intention difference across consumer characteristics.
Han, Kim, and Hyun (2011)	This research model suggests customer satisfaction as the mediator of the hotel service performance and hotel switching intention relationship. It extends the previous model by Han et al. (2009) since it uses switching intention to measure customers' loyalty.
Lee, Han, and Willson (2011)	Investigates customers' expected outcomes of staying in a pro-environmental hotel and customers' intention to demonstrate loyalty behaviour based on their expectation.
Teng, Wu, and Liu (2013)	Examines consumer intention to visit pro-environmental hotels using TPB, and further, develops a TPB model that focuses on altruism, to predict consumer intention to visit pro-environmental hotels.

Han et al. (2009) contributes a model which covers the relationship between attitudes (from TPB), perceptive image, and behavioural intentions. Other researches stretch the model to the antecedents. For example, Gustin and Weaver (1996) incorporate knowledge and personal effectiveness to determine pro-environmental consumer behaviour in hotels, Lee et al. (2011) include customers' expectation of pro-environmental hotels as the antecedent of their visit intention. Some researches add mediating and moderating variables to enrich Han et al. (2009) model, such as customer satisfaction as a mediator (Han, Kim, et al., 2011) and customer characteristics as moderators (Han, Hsu, et al., 2011). Almost all articles have behavioural intentions (visit intention, intentions to do Word-of-Mouth, willingness to pay more, low switching intention) as the consequences of their antecedents.

TPB is still considered as a powerful model to predict purchase decision related PEB. Although Han and Kim (2010) have added the frequency of past behaviours to the model, it points out the limitation of TPB that the theory does not include other behavioural factors in determining certain behaviour.

3.3.3 Tourists pro-environmental behaviours (PEB) in hotel

A large portion of pro-environmental research in tourism regarding the sustainability of a particular eco-tourism site (tourism object) is located in the context of eco-tourism, where pro-environmental behaviours were observed on the site (Imran, Alam, & Beaumont, 2014; Ramkissoon, Smith, & Weiler, 2013; Saufi et al., 2014). Mainstream pro-environmental behaviour research in tourism seems to emphasise attitudinal pro-environmental responses toward an existing object, for instance, an eco-tourism site (Ramkissoon et al., 2013) and green attributes in hotels (Manaktola & Jauhari, 2007), and place less emphasis on highlighting actual pro-environmental behaviour development at the individual level. The theory of planned behaviour (TPB) is mostly employed as the underlying theory in relevant studies in tourism pro-environmental behaviour (Han, 2015; Han et al., 2009; Han et al., 2010; Kiatkawsin & Han, 2017) (see Sections 3.5.1 and 3.5.2). TPB (Ajzen, 1991) covers psychological aspects, such as attitude, norms, and perceived behavioural control. Nevertheless, the scope of research focusing on TPB is mostly up to the intentional level of pro-environmental behaviour. Extensive considerable research to date typically addresses pro-environmental behaviour as green product or service usage, not as pro-environmental behaviour itself.

In developing precursors of pro-environmental behaviour, there is an argument that intentions may or may not lead to the actual behaviour. Based on this argument, researchers have been speculating on the intentions-behaviours gap in explaining pro-environmental behaviours (Brown, Ham, & Hughes, 2010; Kang & Moscardo, 2006; Kiatkawsin & Han, 2017; Lee & Moscardo, 2005).

Continuous debate on pro-environmental behaviour antecedents in tourism has suggested that pro-environmental behaviour in this context is worthy of attention. Among the studies on individual pro-environmental behaviour development in the tourism context, several researchers have proposed substantial sets of attitudinal and behavioural antecedents of pro-environmental behaviour. Lee and Moscardo (2005), for example, integrated an attitudinal factor (environmental awareness) and practices (involvement and activities) in increasing tourist's interest in eco-tourism. Lee (2011) also stated that involvement, place attachment, and conservation commitment influenced pro-environmental behaviour. Thus far, most of the proposed antecedents include awareness, concerns, and responsibility (Chiu, Lee, & Chen, 2014; Dodds et al., 2010; Lee & Moscardo, 2005; Miller et al., 2015). Individual travellers will be more likely to behave pro-environmentally when they are aware of environmental issues that may be caused by their behaviours (Brown et al., 2010). Accordingly, when tourists are aware of the environmental issues that may endanger an eco-tourism object, they may have feelings to protect the eco-tourism object and this may also manifest in their behaviours.

In their conceptual paper, Steg and Vlek (2009) indicate that habit, as the individual's choice of behaviour, influences the conduct of pro-environmental behaviours. The concept also advises that pro-environmental behaviour is transferable across contexts. Some scholars also empirically found that individual behaviours differ across contexts, such as while at home and traveling or holidaying (Barr, Shaw, Coles, & Prillwitz, 2010; Dolnicar & Grün, 2009; Dolnicar & Leisch, 2008; Miao & Wei, 2013). A notable finding by Budeanu (2007) and Barr et al. (2010) indicated that daily routines may influence pro-environmental consumption behaviours when travelling. Results of previous research in this area varied. For instance, Barr et al. (2010) and Barr, Shaw, and Coles (2011) indicated that most of their participants were least committed to pro-environmental behaviours while on holiday. Miller et al. (2015) reported a slight decrease in the practice of pro-environmental behaviour when travelling, compared to domestic practice. In the same study, some pro-environmental

activities, such as using eco-friendly transportation, were most likely being accomplished in holiday condition, rather than in the domestic scenario. The variance of behaviours was due to 'special' conditions in the travel context that influence individual tourists to behave pro-environmentally (Juvan & Dolnicar, 2014; Kiatkawsin & Han, 2017). The limitations may include options, finances, time, knowledge, and facilities that differ in the travel context compared to the daily life context (Juvan & Dolnicar, 2014). The 'special' condition when travelling is evident when both psychological and contextual factors played some roles in shaping an individual's pro-environmental behaviours (Miller et al., 2015; Steg & Vlek, 2009). Although the aforementioned studies were assessing different contexts of PEB, none of them contrasts individual customer's PEB at home and when in hotel.

Different research viewpoints were noticed in hotel pro-environmental behaviour. The first mainstream viewpoint addressed consumer's behavioural responses toward pro-environmental attributes in the hotel (Manaktola & Jauhari, 2007; Millar & Baloglu, 2011). These studies viewed hotels as the subject of pro-environmental behaviour. Hotels provide green attributes that may shape consumer pro-environmental behaviours when staying in hotel, such as recycling bins in the hotel lobby and guest room (Millar & Baloglu, 2011), visible pro-environmental signs (Manaktola & Jauhari, 2007), and a towel reuse policy (Manaktola & Jauhari, 2007; Millar & Baloglu, 2011). Some previous studies with this viewpoint also used TPB to connect a hotel's provision of green attributes and consumer's response or intentions in green hotels (Han, 2015; Han, Hsu, et al., 2011; Han et al., 2010). A TPB model that consists of attitudes, subjective norms, and perceived behavioural control was useful to predict and explain psychological antecedents and intentions in performing pro-environmental behaviours; for instance, intention to stay at a green hotel (Han, 2015; Han, Hsu, et al., 2011; Han et al., 2010) and intention to pay more for green attributes (Kim & Han, 2010; Line & Hanks, 2016).

The second research segment focuses on the individual consumer as the subject of pro-environmental behaviour. Miao and Wei (2013) have noted that pro-environmental behaviour was most pervasive in the private lifestyle, which can be represented when staying at a hotel. The scope of pro-environmental behaviours in a hotel include recycling, reuse, reduction, conservation, green consumption, curtailing, and compromise (Miao & Wei, 2016). Some studies tend to more closely examine the antecedents of a particular activity in the hotel context, such as towel and linen reuse programs (Dimara, Manganari, & Skuras,

2017; Goldstein, Cialdini, & Griskevicius, 2008; Goldstein, Griskevicius, & Cialdini, 2007) and water-saving behaviour (Untaru, Ispas, Candrea, Luca, & Epuran, 2016).

Literature to date has proposed various models to explain an individual's actual pro-environmental behaviours in a hotel. Miao and Wei (2016), for instance, classified psychological factors that may underpin pro-environmental behaviours as trade-offs, egocentric determinants, and hotel-centric determinants. Miao and Wei (2013) also identified that hedonic (pleasure in practising pro-environmental behaviours) motives are strong predictors of pro-environmental behaviours in a hotel (e.g., energy and water saving). Another model that was adopted in research by Untaru et al. (2016) confirmed that behaviour in everyday life influences an individual's intention to practise similar behaviour in a hotel.

Most of the leading research has elaborated psychological aspects that shape an individual's actual pro-environmental behaviours in a hotel (e.g. Miao and Wei (2013) in identifying motives of PEB at home and in hotel contexts) and does not include behavioural factors as suggested by Steg and Vlek (2009). Additionally, very limited research has examined actual pro-environmental behaviours, although maybe previous studies have included behavioural factors as the antecedent of the PEB intention (e.g. Untaru et al. (2016)).

3.3.4 The new perspective of pro-environmental behaviour: Mindfulness

The terminology of mindfulness refers to the process of examining information from a new perspective (being attentive) and being aware about the surrounding situation (Choe, Lee, & Kim, 2014; Dutt & Ninov, 2016; Moscardo, 1996) or from a practical view, mindfulness is considering others' wellbeing in the decision-making process (Barber & Deale, 2014). Certain conditions have to be fulfilled to develop mindfulness. As an internal requirement, mindfulness requires an individual's awareness and attention to initiate the senses and to engage in activities of the mind (Brown, Ryan, & Creswell, 2007). As the external trigger, according to Langer (1989), individuals can be mindful in the presence of opportunity to control and influence a situation, when the individuals believe that the available information is relevant, and when there is something special or extraordinary in a situation. Hence, individuals with mindfulness are aware of more than one perspective on a certain situation (Dutt & Ninov, 2016). A number of researchers have claimed that mindfulness can engage in different contexts; for instance, the learning process or education and experience (Bishop et al., 2004; Langer, 1992; Langer & Moldoveanu, 2000), tourism

(Choe et al. (2014), Dutt and Ninov (2016), Frauman and Norman (2004)), and pro-environmental behaviour (Amel, Manning, & Scott, 2009; Barbaro & Pickett, 2016; Ericson, Kjøenstad, & Barstad, 2014).

Since being mindful contributes to positive behaviours, it raised interest among researchers to include mindfulness specifically in the development of sustainable behaviours (Amel et al., 2009; Barbaro & Pickett, 2016). The findings of substantial literatures in tourism, for example, indicate that tourists with mindfulness are more likely to appreciate the tourism object (e.g., natural environment, heritage) and have the willingness to conserve such object (Frauman & Norman, 2004; Law & Ting, 2011; Moscardo, 1996; Moscardo & Pearce, 1986).

In conceptualising mindfulness and an individual's pro-environmental behaviour, Ericson et al. (2014) employed the idea of others' wellbeing by considering the nature of mindfulness as a stimulus of sustainable behaviours. Therefore, 'others' may comprise society (Barber & Deale, 2014) and nature (Barbaro & Pickett, 2016). The terminology 'green mindfulness' arises in regards to considering the wellbeing of nature and society.

'Green mindfulness' previously has been represented by Chen, Chang, Yeh, and Cheng (2015) as 'a state of conscious awareness in which individuals are implicitly aware of the context and content of environmental information and knowledge' in organisational and human resources contexts. Chen et al. (2015) suggested that green mindfulness increases an individual's attention to environmental problems and engagement in the environmental problem-solving process. Accordingly, individuals with green mindfulness would likely act pro-environmentally.

Barber and Deale (2014)'s research on mindfulness in the hotel context examined individuals' preferences for hotel's green attributes based on their level of mindfulness. In their argument, Barber and Deale (2014) also mentioned that mindful individuals pay more attention and acquired more information about environmental impacts than those regarded as not mindful. The individuals then use such information to choose products that have less negative impact on the environment. Thus, according to Barber and Deale (2014) approach, mindfulness was described as immediate behaviour with green consequences.

The similarity between Chen et al. (2015) and Barber and Deale (2014) in explaining green mindfulness was that mindful individuals would likely to be more attentive and obtain

more information to save nature. However, Chen et al. (2015) approach is more proactive while the approach by Barber and Deale (2014) is more anticipative.

Combining the definitions of green mindfulness by Chen et al. (2015) and Barber and Deale (2014), this study proposes green mindfulness as ‘being aware of environmental information and knowledge, as well as considering society and nature’s wellbeing in the decision-making process.’ The definition of green mindfulness in this study emphasises the environmental aspects of mindfulness itself. When an individual possesses green mindfulness, the particular person may utilise any available information and knowledge about the environment but still consider the decision’s impact on society and nature. An example of green mindfulness in a hotel is when a customer considers how much energy will be wasted if unused room lights remain on. The consideration then leads the individual customer to switch the lights off when not in use.

As the advancement of awareness, attention, knowledge processing and attitude proceeds, it is possible that mindfulness may significantly influence consumer behaviours. In the environmental context particularly, mindfulness advances TPB components and therefore, mindfulness is very likely to influence an individual’s pro-environmental behaviours.

3.4 Consumer loyalty in hotels

3.4.1 Hospitality services

The term ‘hospitality’ is rarely defined or explained in a clear way. In a broad definition, hospitality is a human exchange that is characterised as being contemporaneous, voluntary, mutually beneficial, and based on specific products or services (Brotherton, 1999). To be more specific, Ariffin and Maghzi (2012) compiled some definitions of hospitality: ‘friendly and generous behaviour towards visitors and guests, intended to make them feel welcome’; ‘food, drink, and entertainment given to customers by a company or organisation;’ and ‘entertainment provided by companies for their customers, for example at major sports events, in order to get more business’ (Macmillan Dictionary, 2013). King (1995) defines hospitality as a relationship between host and guest. The host provides things for the wellbeing, comfort, and entertainment of the guest, so that the guest feels welcome. Therefore, ‘hospitality’ can be defined as a combination of products and services delivered by

an individual or organisation to make their customers or guests feel welcome and to please them.

As service providers, hotels tend to focus on their services because service is the key of the business. A hotel has to maintain its services in order to show their service quality to their customers. The nature of service drives the way hotels do their business; for example, if a hotel room is empty one night, there will be a loss because the room's sale can never be regained. Hospitality service is more than the provision of food, drink, and accommodation alone, and it is more than hospitable behaviour (Brotherton, 1999). The extra service that constitutes hospitable behaviours was described by Ariffin and Maghzi (2012) as personalisation, warm welcoming, special relationship, straight from the heart, and comfort.

Services offered by a hotel influence customers' decision to stay. According to Nightingale (1985), there are services related to customers' experience of staying in a hotel, such as deciding which hotel to stay at, making a reservation, getting to the hotel, arrival at the hotel, obtaining ancillary services and information, staying in room, having a bath, wash, shower, keeping clothes, sleeping, working in the room, making contact with people, meeting people, having a drink or food, relaxing in the hotel (sauna, spa, etc.), doing recreational activities (casino, games, etc.), and finally, settling the account and leaving the hotel.

The decision-making process starts when potential customers choose the hotel. Potential customers have a certain expectation of the hotels they want and they may look for any information related to their criteria, e.g., services, location, price, atmosphere, and hotel image. The information is needed to choose hotels in the travel destination (Mauri & Minazzi, 2013; Sparks & Browning, 2011; Ye, Law, & Gu, 2009). When the potential customers find a suitable hotel, they will book the hotel. When the customer arrives at the hotel for the first time, they will confirm the information they had when they booked the hotel with their real experience, and finally, at the end of their stay, hotel customers will have a complete experience of the hotel and they will make a post-purchase decision based on this experience. From this decision-making sequence, hotel services range from the information service for its potential customers, booking service, on-site services, to the post-purchase service (e.g., customer complaint handling and customer loyalty programs).

The hotel's nature of business is dependent on its customers, since the hotel provides a 'temporary home' service for its customers. Thus, a hotel's services performance influences

customer's behavioural intentions and decision-making during and after their stay. A hotel's business model and customer service scheme according to Kotler and Keller (2012) can be seen in Figure 3.2 below.

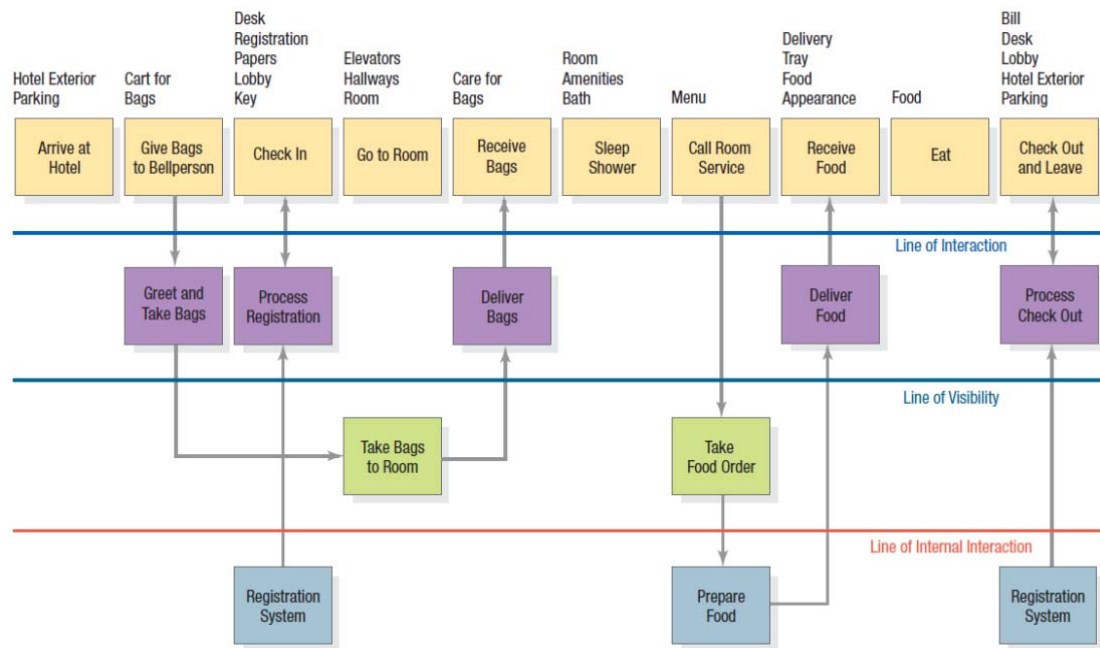


Figure 3.2. Hotel's customer service scheme (Kotler & Keller, 2012).

Superior service quality differentiates a hotel from others in the market. There are benefits of increasing service quality for a company, include increasing customer satisfaction, improving customer retention, positive Word-of-Mouth, reducing staff turnover, decreasing marketing and operating costs, enlarging market share, increasing profitability, and improving the firm's financial performance (Ladhari, 2009). In the fact that customers seek for more than functional services at the hotel, satisfaction is more emotional and based on the previous experience (Giese & Cote, 2000; Ladhari, 2009). Therefore, it is necessary for a hotel to provide good service experiences for their customers (Ladhari, 2009).

3.4.2 Experience

Experience is associated with an individual's sensory, affective, behavioural and intellectual faculties (Brakus, Schmitt, & Zarantonello, 2009). A broad set of literature has

conceptualised experience in various contexts. According to Meyer (2007), customer experience is the customer's internal and subjective response towards any direct or indirect contact with a company, where direct contact occurs in the course of purchase, use, and service and indirect contact occurs through information exposure, such as advertising or positive Word-of-Mouth (WOM) communications. Meyer (2007) also noted the timing of experience based on the customer's evaluation patterns. Accordingly, experience may ensue in the past, present, and potential future. Verhoef et al. (2009) focused on the present experience and its antecedents; namely, social environment, service interface, physical atmosphere, assortment, price, alternatives, brand, and previous experience. Thus, in the present service experience, how customers feel and sense the service-encounter environment, supported by their knowledge about the service, contributes to the development of customer experience. The affective aspect of experience is manifested in the customer's feelings during the service encounter. By experiencing all the senses and feelings, customers can decide their attitude toward the service. From the affective aspect, customers may recognise more about the service, how to get the service, the duration and process of the service, and so on. Further, the behavioural aspect of experience is experienced when customers are involved in building good service experience, e.g., when a customer requires a special diet in a restaurant, then he/she tells the waiter to provide him/her with certain foods and the waiter follows the request, even providing something extra of what the customer likes.

Among the experience literature in the hotel industry, the budget hotel context discussed by Ren, Qiu, Wang, and Lin (2016) demonstrates a link between experience and customer satisfaction. Ren et al. (2016) work is perhaps the most relevant to the current study and uses three dimensions of experience: tangible-sensory experience (e.g., cleanliness, quietness); staff interactional experience; and aesthetic experience (visual appeal). The sensory experience component has the greatest impact on hotel customer satisfaction. However, service quality is not included in their model. Brunner-Sperdin, Peters, and Strobl (2012) show that a leisure experience variable (essentially flow) outperforms what are essentially two service quality variables (ambience, staff services) in influencing emotions and satisfaction in high quality Austrian hotels. Three facets of experience are examined. The link between experience and satisfaction was not strong without any experience facet (statistically significant) though sensory experience was relatively the largest of the experience facets.

3.4.3 Determinants of behavioural intentions

Customers feel satisfied when a company or service provider meets their perceived value. Customer's perceived value is the result of the customer's perceived quality or benefits compared to their sacrifice to get the product or service. Previous studies by Zeithaml (1988) and Bojanic (1996) show that there are relationships between hotel attributes, service quality, price, customers' perceived value, and customer satisfaction. Value is defined as low price, whatever the customer wants in a product, the quality the customer gets for such a price or what the customers get in exchange for what they have sacrificed (Zeithaml, 1988). Research by Bojanic (1996) shows that service quality and price determine hotel customer satisfaction.

In general, Buttle and Bok (1996) summarised the satisfaction factors of a hotel's service: responsive and competent employees, empathy, appearance, reliability, quality of equipment and utilities, security, and quality of restaurant and food service. Customer intention of repeat purchase behaviours in a hotel depends on his/her behavioural and normative beliefs toward the hotel selection, as described in the model depicted in Figure 3.3 below.

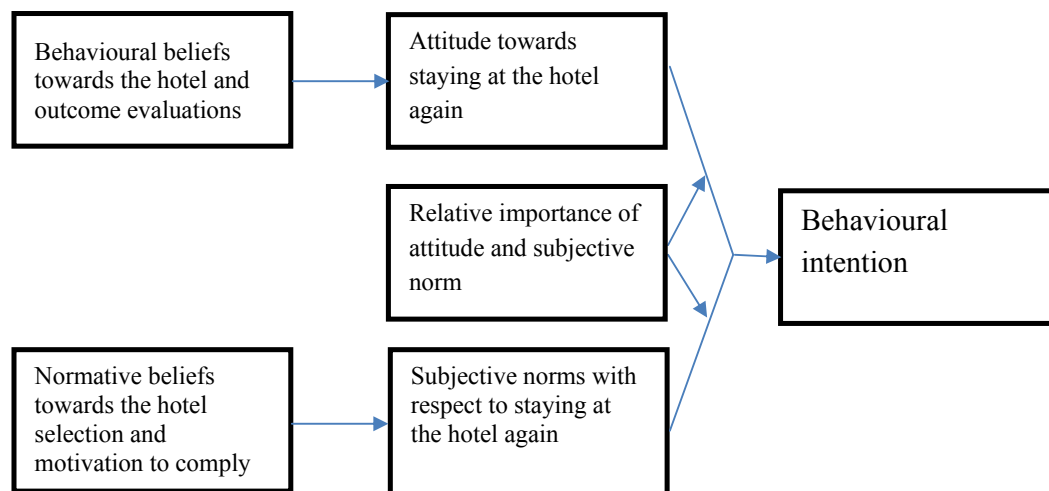


Figure 3.3. Relationships between beliefs and intention to stay at a hotel (Buttle & Bok, 1996)

A large number of researchers have examined the antecedents of loyalty in hotels (Choi & Chu, 2001). Furthermore, some of these factors are important in determining

customer satisfaction and loyalty behaviours. Staff service quality, room qualities, and value have the most influence in determining customer satisfaction and loyalty behaviours in hotels.

According to Markovic and Jankovic (2013), a customer may stay at the same hotel or a particular hotel chain due to the indifference to the hotel chain, familiarity, the chain property being the only one acceptable to the traveller, the chain considered as the best of a poor set of available alternatives at the destination, the avoidance of switching inconvenience, and the convenience of location. Therefore, company image is important in determining hotel customer loyalty behaviour, because the image can support or undermine the value that customers feel they are getting. It is important to build good image and reputation for a hotel. Good service quality and good reputation can lead the customers to satisfaction and further loyalty behaviour (Loureiro & Kastenholtz, 2011).

There are several reasons for a hotel to keep their customers loyal, because loyalty behaviour is increasing their profit and sales, as well as reducing their marketing and operational costs. Loyal customers are less likely to switch to other service providers and tend to make more purchases. Moreover, loyal customers will also help to promote the hotel which they loyal to, by providing strong positive Word-of-Mouth communications. With their previous experiences, loyal customers act as ‘voluntary staff’ for the hotels, because they know the products and tell other hotel customers about the great facilities in the hotel (e.g., tell others about the good food and how to play casino games) (Bowen & Chen, 2001). A hospitality service has to be extraordinary to bring back the customers in the future. Increasing service quality and developing a strong bond with the customers are two of many ways to build a competitive advantage (Ariffin & Maghzi, 2012).

Customer satisfaction and service quality are antecedents of loyalty, according to large numbers of considerable research (Cronin Jr & Taylor, 1992; Kandampully & Suhartanto, 2000; Ladhari, 2009). An empirical study by Caruana (2002) also indicates the mediating role of customer satisfaction in the relationship of service quality and service loyalty.

Despite service quality and satisfaction, Bloemer and de Ruyter (1999) suggest that the level of customer involvement in a service influences the customer’s emotions and further

may affect the loyalty. Therefore, considering service quality, satisfaction, and customer involvement, this research explores further the antecedents of customer loyalty in hotels.

3.5 Hotel green responsibility, branding, and green co-responsibility

This section of the literature review corresponds to the stakeholder theory in Section 3.2 by highlighting the cooperation between hotel management and consumer to create pro-environmental win-win solutions in the hotel industry. The connection of hotel management and consumer behaviour is explained in this section. Hotels' 'green responsibility' and consumers' responses may influence the formation of 'green co-responsibility' or green collaboration between hotels and consumers in enacting PEB.

Environmentally-friendly products are favoured in the hospitality industry (Tzschentke et al., 2004; Tzschentke et al., 2008). The UNEP-UNWTO report shows that some travellers were loyal to environmentally-friendly tourism and in the future there will be more travellers who favour environmentally-friendly tourism.

Today, organisations also use sustainable practices to generate branding benefits (Miller & Merrilees, 2013). Noting the branding benefits, Kitchin (2003) argues a company's implementation of sustainable green programs may affect its brand. In addition, Chan (2013a) states that green practices could differentiate a company from its competitors. This sustainable green practice can be termed as 'green responsibility.' While corresponding with the terminology of brand, sustainable green business practice is considered a brand responsibility as companies carry their identities in the execution of their green programs. By actualising green responsibility, companies potentially build more consumer trust and thus strengthen their brand equity and reputation.

Leading by customer green awareness, the integrating sustainable practices have become an important strategy in building brand image and company reputation for many companies (Chan, 2013a; Peng, Zhao, & Mattila, 2015; Ryu & Han, 2011). Previous studies showed that the implementation of sustainable green programs has a positive effect on brand (Kitchin, 2003). This study supported Chua, Lee, Goh, and Han (2015), who found that a well-implemented sustainable program could influence customers' judgments and perceptions. In a similar study, Gallarza, Arteaga, Del Chiappa, and Gil-Saura (2015) also

found there is a positive relationship between green responsible practices and consumer evaluations of the company (see also Oh, Fiore, and Jeoung (2007)). On the other hand, customers reacted negatively against ineffective green practices (Gallarza et al., 2015).

On the rising consumer critical concern for green issues, hotel managements have also been warned about 'greenwashing' in their promotions (Chan, 2013a; Polonsky, Grau, & Garma, 2010). 'Greenwashing' is a misleading green behaviour. Greenwashing companies employ tactics of posing or labelling as environmentally friendly, while actually doing very little or causing harm to the environment (Henderson, 2007). Greenwashing misleads consumer perception regarding the environmental benefits of a product or service (Geerts, 2014), while hotel customers tend to perceive that the hotel's green initiative is attached to the service offerings (Rosenbaum & Wong, 2015). Instead, greenwashing practice in hotels instigated negative impressions on customer perception (Nyilasy, Gangadharbatla, & Paladino, 2014) and further, formed negative brand attitudes (Wheeler, Sharp, & Nenycz-Thiel, 2013). In order to avoid greenwashing and thus provide true or authentic eco-branding, hotels have to be responsible for their service provisions and deliver the promised benefits.

Research to date in branding has identified signs of consumer interactivity and co-creation in building brand attitudes (Merrilees, Miller, & Shao, 2016; Suhartanto, Clemes, & Dean, 2013). With the interactivity and co-creation process, brand is no longer absolutely created and controlled by the company since consumers can be engaged in co-creating value of the brand based on their consumption experiences.

As with the link between green responsible practice and branding, few articles have demonstrated a clear link between environmental activities and branding. The study by Liu, Wong, Shi, Chu, and Brock (2014) includes green responsibility that indicated a positive link to brand. Though the link was positive, no attempt was made to control for other brand influences. In fact, only one article empirically demonstrates a link between company environmental practices and a positive influence on customers' evaluation of the company brand. Miller and Merrilees (2013) studied Canadian discount department store customers and assessed the differential effect of customers' identification of environmental practices on the customers' perceptions of brand attitude of the retailer corporate brand. Two types of environmental practices are classified. A basic (minimalist) indicator was the retailer using recycled bags for packing as the only recognisable environmental practice. A second environmental practice indicator covered all other practices, including selling

environmentally-friendly products and using energy-saving lighting, such as sensors. The basic environmental practice indicator had a very small and marginally statistically significant effect on consumer's brand perceptions, while the advanced environmental practices had a medium-sized branding effect, significant at the one percent level.

Establishing good and ethical consumption has become the responsibility of both companies and individual customers. In the hotel context, Chan (2013a) noticed both hotel green responsibility practice and the way customers value the green practices in hotel. From the managerial perspective, actualising green management, particularly green practice, contributes to advantage the company. From the customer's perspective, consumption of ethical products or services manifests the individual social responsibility as well as enhances customer empowerment in consumption behaviour (Lee, Lee, & Yoo, 2000). This research proposes a scope to consider both management and consumer perspectives jointly, which is termed as *green co-responsibility*.

3.6 Hotel Green Management

Considerable literature has evolved around the theme of pro-environmental behaviour in hospitality practice recently. Some studies have highlighted the importance of being 'green' in the hospitality context (Chan, 2013a; Pizam, 2009), along with criteria to be considered as a green hotel and measurement of the practices (e.g., Bastič and Gojčič (2012); Chan (2009)), and current implementation of pro-environmental management in hotels (e.g., Butler (2008); Gilmore, Fuller, and Jo (2014); Kasim, Gursoy, Okumus, and Wong (2014)).

3.6.1 Current 'Green' hotels

What is 'green' hotel? Manaktola and Jauhari (2007) refer to eco-friendly hotels and green hotels as lodging establishments that have made a commitment to ecological practices, such as saving water, saving energy, and reducing solid waste. According to "Green" Hotels Association (2013), a 'green' hotel is defined as an environmentally-friendly property whose managers are eager to institute programs that save water, save energy, and reduce solid waste, while saving money, to help protect the earth. ASEAN Tourism Standard defines Green Hotel as an establishment for the promotion of environmentally-friendly and energy conservation to the property and business (ASEAN Secretariat, 2016).

From the definition, a hotel is considered as a green hotel when it has programs that save water, save energy, and reduce solid waste. It is hard to describe real pro-environmental practices in hotels. However, some studies found that certain hotels exhibit the ‘green hotel’ label to attract customers without practising all aspects mentioned in the definition; this is known as ‘greenwashing’ (Pizam, 2009). In raising the ‘greenwashing’ issues, it is suggested that hotels carefully communicate their green attributes to the consumer.

There is ongoing debate about the measurement and range of pro-environmental activities in hotels. For example, Chan (2013b) indicated that it is still not clear how green strategies are being adopted and measured by hotel managers. In line with the green hotel definition by the ‘Green’ Hotels Association, Bohdanowicz (2006) attempts to detail pro-environmental activities that can be applied in hotels, such as narrowing down energy conservation into energy-efficient lighting and equipment installations and leaflets encouraging guests to save energy, in addition to the application of a towel reuse program to achieve water conservation. In the practice so far, different standards may suggest different scopes of hotel pro-environmental management (see Table 3.2). Although some hotel chains may adopt some considerable regulations, there is no single guidance of hotel pro-environmental management that can be applied to hotels in general.

3.6.2 Why go green?

There are various reasons underlying pro-environmental practices in hotels. A qualitative study by Tzschentke, Kirk, and Lynch (2004a) revealed that the prospect of reducing costs was the prime motive behind the pro-environmental activities in small serviced accommodations. According to the study, the second prime motivation was ethics and moral obligation of the owners or managers. In line with the finding of Tzschentke et al. (2004a), Starwood Hotels and Resorts (2016), for instance, claims that Starwood hotels can save up to 49.2 gallons of water, 0.18 kWh of electricity, 25,000 British thermal unit (BTU) of natural gas, and 7oz. of cleaning product chemicals per night (may vary by brand and region) by implementing their green program.

Expanding the motives, Pizam (2009), Rosenbaum and Wong (2015), Chan (2013b), and Chan (2013a), advanced recognition and marketing motive for hotels to be green from management perspective, which is to show green image and attract more customers. Previous research also showed that customers’ demand and requirement to achieve customer satisfaction drive hotel management to provide green attributes in the hotel (Bohdanowicz,

2006; Manaktola & Jauhari, 2007). In company level, Gilmore et al. (2014) and Rosenbaum and Wong (2015) clarify that hotels may contribute some efforts in conserving and protecting the earth and environment by applying green management. Recent studies have also noted that pro-environmental management allows hotels to improve their performance and competitiveness (Fraj, Matute, & Melero, 2015; Tarí, Claver-Cortés, Pereira-Moliner, & Molina-Azorín, 2010).

Overall, Bansal and Roth (2000) link companies' motivation of going green with the stakeholders and intrinsic company motives. When stakeholders in the business have similar desire in green practices, then all parties will have to follow the green stream. There is as well, internal motivation in going green, namely ethical motives that rooted in leadership corporate values. Therefore, the main motivation is back to the pro-environmental values of the organisation.

3.6.3 Pro-environmental scope and existing standard in hotels

Various scopes of hotel's pro-environmental practice standards have been identified (see Table 3.2). A number of institutions have developed and established pro-environmental standards that apply in hotels, such as EarthCheck and Green Globe, which operate internationally, and ASEAN Tourism Standards for hotels in South-East Asia region. Some hotel chains also have developed pro-environmental practice standards to guide their hotels in day-to-day practices, such as PLANET 21 by AccorHotels and Make A Green Choice (MAGC) by the Starwood hotels chain. Previous researches also assessed and developed pro-environmental criteria for the hotel industry, such as Chan and Wong (2006), Chan (2009), Bastič and Gojčič (2012), and Mensah (2014).

Chan and Wong (2006) and Chan (2009) introduced Environmental Management System (EMS) that contain hotel pro-environmental practice measurement criteria based on ISO 14001. Conducted in Hong Kong, the study also noted detailed technical attributes such as hotel lighting maintenance, establishment of non-smoking guest floors, donations to the needy, and envelope reuse. The scope of the measurement includes energy usage (i.e., electricity, diesel, gas, and water), room occupancy, number of guests, average outdoor temperature, number of cooling warranted days, gas usage per food cover, air pollutants, recycling, and solid waste management. ISO 14001 is a technical, detailed and advanced international standard for good pro-environmental practice in general. Therefore, the standard

has less coverage in managerial behaviours and is not suitable for smaller hotels with limited facilities.

In terms of the hotel as a service provider, Bastič and Gojčič (2012) developed four components of environmentally-friendly hotel services; namely, environmentally-friendly and healthy equipment, eco-behaviour of hotel staff, efficient use of energy and water, and bio-food. The standard also covers building and equipment procurement; however, one of the limitations with this study is that it does not include much explanation on waste-water and solid-waste treatments as well as a reporting system on pro-environmental practices in hotels. Comprehensively, Mensah (2014) classified pro-environmental practices in hotels in nine categories: compliance with legislation and by-laws, conservation projects, certification, environmental auditing, environmental education and communication, environmental health and pollution prevention, green marketing, green purchasing, support for local communities, and waste management and recycling activities. This study's pro-environmental scope is based on manager surveys and secondary data, but is limited to hotels in Accra, Ghana region.

EarthCheck is an independent organisation specialising in environmental advisory and benchmarking for travel and tourism industries (EarthCheck, 2016). Given the three-tiered rating of Bronze, Silver, and Gold status, EarthCheck certification confirms how far each property or institution meets the criteria. Green Globe is another independent international certification organisation in environmental sustainability performance. Green Globe developed a standard which includes 44 core criteria covering sustainable management, social economic, cultural heritage, and environmental. Green Globe has three ranks of certified members; namely, Green Globe Certified Member for those who met all requisite criteria, Green Globe Gold Member for five consecutive years of compliance, and Green Globe Platinum Member for ten consecutive years of compliance (Green Globe, 2016).

The ASEAN Green Hotel Standard is the implementation of the ASEAN Tourism Strategic Plan 2011-2015, which was adopted by ASEAN Tourism Ministers and is set as the minimum requirement for hotel businesses in South East Asia (ASEAN Secretariat, 2016).

Some big hotel chains, such as AccorHotels and Starwood have their own established standards to conduct green management in their hotels. The PLANET 21 program by AccorHotels aims to guide hotels under AccorHotels management to protect the earth, its

people and their environment (Accor Hotels, 2016). PLANET 21 involves human resource management, purchasing, technology, design, marketing, and quality (Accor Hotels, 2016). The Starwood hotel group encourages the adoption of Make A Green Choice (MAGC) which applies mostly to their customers. This group implements MAGC through their customers' stay experience, both individual and meeting group (organisational) customers. Starwood customers can choose to behave pro-environmentally during their stay by foregoing full housekeeping up to three days in a row (excluding their check-out day). Starwood offers incentives in this program by giving 250-500 loyalty points or a \$5/5€ food and beverage voucher to every customer who opts for MAGC (Starwood Hotels and Resorts, 2016).

Pro-environmental standards have been established and implemented by the government in most developed countries. However, in some developing countries, pro-environmental standards for businesses have just been initiated and are still under development. For example, the Indonesian Ministry of Environment launched a program to rate environmental performance in organisations — Program for Pollution Control, Evaluation and Rating (PROPER) in 1995 (Afsah & Vincent, 1997). PROPER measures an organisation's compliance toward standard environmental practices in Indonesia. It covers various industries, such as mining, oil and gas, consumer goods, plantations, food industry, electronic and automotive, pharmaceutical, hospital, transportation (dock), and hotels (Indonesian Ministry of Environment and Forestry, 2014). There are five colour ratings under PROPER: gold, green, blue, red, and black, equating from excellent to very poor, respectively (Afsah & Vincent, 1997; Reliantoro, 2012).

Refer to Chapter 2, the biennial event by Indonesian government called Indonesia Green Hotel Awards requires participating hotels to include (1) organisational policy and green team, (2) pro-environmental site management, (3) eco-friendly material usage, eco-friendly and local products, (4) energy conservation and efficiency, (5) water conservation and efficiency, (6) room health and comfort, (7) waste treatment, (8) workplace health and safety, (9) noise and air pollution management, (10) chemical and hazardous material management, (11) local organisation and community partnership, and (12) human capital development (Sylva, 2015).

Table 3.2. Comparison of Existing Pro-environmental Criteria

Components	Earth Check (2016)	Green Globe (2016)	ASEAN Tourism Standards (ASEAN Secretariat, 2016)	PLANET 21 (Accor Hotels, 2016)	MAGC (Starwood Hotels and Resorts, 2016)	PROPER (Indonesian Ministry of Environment and Forestry, 2014)	EMS (Chan, 2009)	Bastič and Gojčič (2012)	Mensah (2014)
Energy efficiency	✓	✓	✓	✓	✓	✓	✓	✓	-
Day-to-day recycling behaviour	✓	✓	✓	✓	✓	-	✓	-	-
Water usage management	✓	✓	✓	✓	✓	✓	✓	-	-
Ecosystem conservation and management	✓	✓	-	✓	✓	✓	-	-	✓
Management of social and cultural issues	✓	✓	✓	✓	✓	✓	-	-	-
Donations to the needy community	-	-	-	-	✓	-	✓	-	-
Building, land use planning and management	✓	✓	-	✓	-	✓	✓	-	-
Greenhouse gas emissions	✓	✓	-	✓	✓	✓	✓	-	-
Air quality and noise control	✓	✓	✓	✓	-	✓	✓	-	-
Wastewater management	✓	✓	✓	✓	-	✓	✓	-	-
Solid waste management	✓	✓	✓	✓	✓	✓	✓	-	-
Environmentally harmful substances management	✓	✓	✓	-	-	✓	✓	✓	-
Workplace health and safety	✓	✓	✓	-	-	✓	✓	✓	-
Staff pro-environment training	✓	✓	✓	✓	-	✓	-	-	✓
Staff pro-environment behaviour	-	-	✓	✓	-	-	-	✓	-
Pro-environment and organic product procurement	✓	✓	✓	✓	✓	-	-	✓	-
Risk management	✓	-	✓	✓	-	-	✓	-	-
Customer green communications	-	✓	✓	✓	✓	-	-	-	-
Corporate social reporting	✓	-	✓	✓	✓	✓	-	-	✓
Legal compliance	-	✓	✓	-	✓	✓	-	-	-
Environmental partnership and certification	N/A ^a	N/A ^a	✓	✓	✓	✓	-	-	✓

^a The organisation is a benchmarking and certification body

3.6.4 Literature on pro-environmental practices in hotels

Since hotels began to consider pro-environmental aspects in their operational activities, researchers have tried to capture pro-environmental practices that have been conducted in hotels so far. Some hotels in the United States have adopted sophisticated features to be green, such as building aspect, low water-flow faucets, water-flow monitoring system, and waste-water management (Butler, 2008; Gilmore et al., 2014; Kasim et al., 2014). In Sweden and Poland, Bohdanowicz (2006) pointed out that due to greater demand for green practices from customers, hotels have tried to apply energy and water conservation, waste management, provide pro-environmental training to their staff, provide healthy food and beverages, establish environmental partnership, and pursue green certification.

A renowned pro-environmental management system, Environmental Management System (EMS), has been implemented world-wide in various industries. However, literature to date covers limited EMS implementation specifically in the hotel industry. Previous studies exposed that some hotels in Hong Kong have been implementing EMS-based pro-environmental management (Chan, 2011; Chan, Hon, Chan, & Okumus, 2014; Chan & Wong, 2006). The study found that top management motivation is important to initiate pro-environmental activities in hotels (Chan & Wong, 2006), as well as managerial processes and employee involvement to establish pro-environmental management in the hotel (Chan et al., 2014).

Additionally, Tzschentke, Kirk, and Lynch (2004b) and Tzschentke, Kirk, and Lynch (2008b) noted pro-environmental practices in small accommodations with limited scope in Scotland. In their study in Ghana, Mensah (2014) explained that pro-environmental practices can be implemented in hotels with adequate capability and facilities in developing countries, although there are limited pro-environmental references available for those hotels to determine their pro-environmental scope and practices. With a similar argument, the Indonesian Ministry of Environment and ASEAN Secretariat apply their standards only to classified hotels in the region (ASEAN Secretariat, 2016; Indonesian Ministry of Environment and Forestry, 2015).

Tapping the relationship between pro-environmental management and customers, Pizam (2009) and Geerts (2014) warned hotel managements to avoid ‘greenwashing’ practices by delivering real pro-environmental services and information to their customers. Honest communications and accurate information to customers about the hotel’s pro-

environmental practices are important actions in order to increase customers' awareness of green attributes and to maintain sustainable business in the hotels (Bohdanowicz, 2006; Chan, 2013b; Geerts, 2014; Lee & Oh, 2014; Pizam, 2009; Rosenbaum & Wong, 2015).

Existing literature has reviewed green practice in hotels and some hotels mentioned that they have implemented pro-environmental management in their reports and marketing efforts. However, the reality of green practice in the hotel business still remains questionable. Previous studies indicated that no business has accomplished 100% pro-environmental activity in their day-to-day operations, since every business has different motivation, scope, process, monitoring system, and communications for implementing pro-environmental management (Bansal & DesJardine, 2014; Bansal & Gao, 2006; Bansal & McKnight, 2009).

Hence, using the strategic management approach (Bansal, 2005; Bansal & DesJardine, 2014; D'Souza, Taghian, & Sullivan-Mort, 2013; D'Souza, Taghian, Sullivan-Mort, & Gilmore, 2015; Mensah & Dei Mensah, 2013), this research provides comprehensive best pro-environmental practices in hotels, in terms of motivation, scope, process, monitoring, and customer communications, by showing evidence from hotels in various regions. Practically, the research findings are expected to encourage the hospitality businesses to apply green practices in their day-to-day management.

3.6.5 Pro-environmental behaviour: hotel management perspective

Environmental issues and damages have made the international regulations and conventions of environmental protection stricter (Chen, Lai, & Wen, 2006). The environmental pollution and damage are often associated with business and nowadays, society pays attention to those environmental issues. In assessing environmental issues, the stakeholder theory suggests a multi-perspective approach (Polonsky, 1995a, 1996), starting with identifying the stakeholders in the hotel pro-environmental management, identifying the stakes of each stakeholder, goal measurement, and strategy adjustment or recommendation. Besides hotel managers and staff, consumers are key stakeholders in hotel management. Therefore, in the stakeholder theory and in response to management-centric policies (Shaw et al., 2006), it is suggested that hotel management consider and involve their customers in the policy-making process.

The growing number of people who are willing to purchase environmentally friendly (or 'green') products has led company managements towards the green management concept.

In the hospitality service (hotel) industry, green management aims to mitigate the environmental effects of excessive nondurable goods consumption, energy use, water wastage and the release of pollutants into air, water and soil. This includes key green management practices in the hotel industry, such as saving energy and water, managing waste and educating guests about the environment (Kotler et al., 1999; Middleton & Hawkins, 1998, quoted in Lee et al., 2010).

When green management was first introduced, the major reasons for a hotel to 'go green' centred on complying with government regulations and saving money by reducing waste and energy usage (see Section 3.2.2). However, since a growing number of customers are now demanding green hotels, green management has become directly associated with product quality, employee morale, customer satisfaction and demand, willingness to pay a premium for green products and corporate image (Lee et al., 2010). Kim, Palakurthi, and Hancer (2012) compiled a list of implementations of environmentally-friendly practices in hotels, such as fitting energy-saving devices, using low-flow shower heads or sink aerators, installing dual-flush toilets, installing solar hot water systems, providing energy-efficient appliances, using eco-friendly cleaning products, reusing linen and towels, composting food leftovers and garden waste, sorting the waste, educating guests on environmentally friendly practices, using natural cleaning alternatives, improving insulation, installing water saving devices, using economy wash cycles, communicating environmental policy to customers, purchasing ethical and environmentally friendly products, establishing a wildlife area in the garden, and becoming members of environmental bodies/charities. These activities may benefit hotels by improving public relations, saving money, and increasing business (Gustin & Weaver, 1996).

Company's investments in green activities (e.g., green management, green innovation, and green marketing) will increase the business costs in the short-term; however, these investments will improve the company image, capture new opportunities, and increase the company's performance and competitive advantage (Chen, 2010; Tzschentke et al., 2004a, 2008a). Nowadays, 'green' practices in the mainstream hotel business are growing to serve the pro-environmental practices markets. When customers find that the hotel is a desirable place to stay, they will likely choose to stay at that hotel.

3.7 Gap in the literature

Some research gaps have been found in the literature (see Table 3.3, 3.4, and 3.5). Table 3.3 presents the research gap, how to address the gap, and contributions from the findings to answer research sub-question 1: *What factors contribute to consumer PEB in hotel?* Table 3.4 describes the research gap, how to fill the gap, and contributions, to answer research sub-question 2: *What is the role of hotel management green practices in determining customer loyalty in hotel?* Table 3.5 also presents the literature gap related to research sub-question 3: *How are management pro-environmental practices in mainstream hotels organised?* Similar to Table 3.3 and 3.4, how to fill the gap and contributions of the findings as the response to research sub-question 3 are also presented in Table 3.5.

A plethora of research to date in the development of PEB tends to focus on the Theory of Planned Behaviour (TPB), with the note of PEB as green product usage behaviour. Very limited research examines PEB as the actual environmentally-friendly behaviour and includes other behavioural factors in the model. Following Steg and Vlek (2009) conceptual PEB model, habits as the ‘autopilot’ of behaviour may determine an individual’s choice of a particular behaviour in a different context. A few number of considerable studies have attempted to include habits in determining PEB, such as Miller et al. (2015) that contrasts domestic PEB and general tourists PEB. The first gap found in the literature is that comparatively less research addressed domestic habits to determine actual PEB.

Steg and Vlek (2009) argue that PEB is actualisable in different contexts. A very little number of substantial studies have examined PEB in different contexts in a single model, such as home and general tourism contexts (Miller et al., 2015), and home and lodging contexts (Untaru et al., 2016). Although contrasting home and lodging contexts, Untaru et al. (2016) study examines the intention (not yet behaviour) to conduct water conservation behaviour in the lodging context, from similar habit at home. Thus, the second gap identified from the literature review is that very limited studies have addressed PEB in different contexts, such as home and hotel in a single model.

The third gap found in the literature is the lack of inclusion of mindfulness in the hotel consumer PEB literature. Mainstream research that focuses on individual-intrinsic triggers of PEB (e.g. TPB-based research) does not yet include mindfulness in the model. In contrast to habit, mindfulness as the advanced stage of awareness may act as a ‘brake’ on excessive

hedonic behaviours ('non-autopilot', according to Langer (1989)). Mindfulness is widely utilised in psychology and medical studies, particularly in behavioural-change topics. Considering the power of mindfulness in previous research, this research attempts to fill the gap by incorporating mindfulness and green mindfulness in the hotel customer PEB model. Considerable previous studies in PEB (such as Amel et al. (2009) in general PEB context and Barber and Deale (2014) in hotel consumer PEB context) examine mindfulness in general to determine PEB. This research proposes a novel concept of green mindfulness that is more powerful in determining customer PEB in hotel.

The fourth gap relates to the dyadic view of green collaboration or green co-responsibility from both hotel management and consumer perspectives. There are a number of well-developed literatures linking green responsible practice, branding, and loyalty. However, most of them are conceptual (e.g., Baumgarth and Binckebanck (2011); Hoeffler and Keller (2003)). There are some empirical studies, but most of these do not control for other variables besides the company's green responsible policy and practice (Liu, Sparks, and Coghlan (2016); Han and Jeong (2013)) or consumer preference (Gustin & Weaver, 1996). Therefore, there are very few studies that isolate the differential effect of hotel green attributes (green responsibility) on the corporate brand and further, on customer loyalty. While most of the studies do point to a positive role for green responsibility on branding, there is scope for more rigorous empirical testing. Although extensive prior research has been carried out on brand attitude, brand co-creation, green marketing, hotel management, hotel consumer behaviour, and PEB, none of this research specifically tapped into the green collaboration or green co-responsibility process between hotel management and consumer in creating loyalty within the hotel context. The lack of study that incorporates the attempts of green collaboration between hotel management and consumer guides this research to fill the gap and follow the suggestion of stakeholder theory (Polonsky, 1995a) by elucidating determinants and a hotel management-consumer co-creation process of green brand attitude that prompts customer loyalty in the hotel context.

Table 3.3. Literature gap and contributions to address research sub-question 1

Research sub-question 1. What factors contribute to consumer PEB in hotel?		
Gap in the literature	How to fill the gap	Contribution
Research to date on the antecedents of pro-environmental behaviours (PEB) tends to focus only on psychological factors underlying PEB (e.g., Theory of Planned Behaviour/TPB) (e.g. Lee et al. (2010), Han et al. (2010)). Frequent behaviours may also affect the conduct of PEB in different context, according to conceptual model by Steg and Vlek (2009). Very small number of empirical studies consider behavioural element (e.g., habit) in individual PEB model.	This research is to include behavioural aspects (habits) in an individual PEB model.	This research contributes insights on consumer behaviour literature by incorporating habits or routines as determinants of similar behaviours in different contexts, and thus empirically tests and extends Steg and Vlek (2009) conceptual model.
Individuals may perform different behaviours in different contexts, since the environment and situation would be different, according to Steg and Vlek (2009) conceptual PEB model. Only a few studies empirically contrast PEB in different contexts, such as Miller et al. (2015) that contrasts daily and general travel contexts and Untaru et al. (2016) that focuses on water usage behaviour in daily life and while staying in hotel (lodging) contexts.	This research examines two different contexts of individual PEB: home (domestic) and in hotels that includes recycling, energy and water saving behaviours.	Contrasting home and hotel contexts of consumer PEB, findings of this research empirically support Steg and Vlek (2009) conceptual model, extends Miller et al. (2015) by addressing daily and hotel stay contexts and Untaru et al. (2016) by including recycling, energy, and water saving actual behaviours.
Considerable literature in consumer behaviour (e.g., TPB-based research) suggests that attitudes, perceived behavioural control, subjective, and social norms affect PEB. In health and psychology literature, it is suggested that mindfulness plays an important role in behavioural change (e.g. Baer, Fischer, and Huss (2005), Kristeller and Wolever (2010)). Mindfulness covers a set of psychological aspects in the TPB model (such as awareness, attitudes) (Langer, 1989), and also considers others in the environment (Chen et al., 2015). Current studies adopting mindfulness in PEB use general term of mindfulness (Amel et al., 2009; Barber & Deale, 2014). No current study uses green mindfulness as the antecedent of individual PEB in hotels.	This research introduces the concept of 'green mindfulness' that is more specific to the concern of environmental wellbeing. This research includes both general mindfulness and green mindfulness in the hotel consumer PEB model in this research.	The inclusion of general mindfulness and green mindfulness as determinants of consumer consumer PEB in hotel extends the hotel consumer PEB model by Barber and Deale (2014). The novel concept of green mindfulness in consumer PEB particularly adds to Langer (1989) and Chen et al. (2015) definitions of mindfulness.

Table 3.4. Literature gap and contributions to address research sub-question 2

Research sub-question 2. What is the role of hotel management green practices in determining customer loyalty in hotel?		
Gap in the literature	How to fill the gap	Contribution
Stakeholder theory (Polonsky, 1995a, 1996) suggests that hotels (companies) identify their stakeholders' (including consumer) goals and expectations on the organisational performance. Thus, to achieve favourable behavioural intentions, the hotel has to meet customer's expectations. Gustin and Weaver (1996) in measuring consumer attitude towards hotel green attributes suggest that green attributes are favourable among hotel customers and prompt to behavioural intentions. Limited number of literature to date has empirically analysed the influence of hotel green attributes on hotel's brand and prompt to hotel customer loyalty, with such multi-perspective approach.	This research investigates the influence of hotel green attributes on brand attitude and loyalty with multi-perspective rationale.	The inclusion of green attribute establishment by hotel management in determining customer's favourable behavioural intentions extends Gustin and Weaver (1996) behavioural intentions model, as well as contribute to a novel framework of green collaboration between hotel management and consumers. The green collaboration framework supports the stakeholder theory (Polonsky, 1995a, 1996).
Experience involves multi-sensory and interactions. Yet, experience immerses hotel customers into services and attributes in hotels. Pizam (2010) suggests the conceptual explanation of the moderating role of experience. A limited number of empirical studies regarding customer experience level has been conducted in services context, such as Bloemer and de Ruyter (1999) in general services that examine customer loyalty across different service types (high- and low-involvement services). However, in the hotel context, there is very limited research addressing different levels of customer experience in influencing loyalty in hotels.	This research examines the process of behavioural intentions in hotel within different levels of experience (high and low). Experience in this research includes multi-sensory and interactions.	Findings on how different levels of customer experience influence the behavioural intentions process in hotel empirically support Pizam (2010) on the role of experience in creating favourable consumer behavioural intentions. Related findings also extends Bloemer and de Ruyter (1999) model by including multi-sensory dimension of experience in hotel context.

Table 3.5. Literature gap and contributions to address research sub-question 3

Research sub-question 3. How are management pro-environmental practices in mainstream hotels organised?		
Gap in the literature	How to fill the gap	Contribution
Some official hotel pro-environmental practice standards have been developed and applied to hotels worldwide (e.g., EarthCheck, Green Globe). However, the practice in every hotel is vary and dependable on the hotel's strategy, including motivation, scope, process, and monitoring (adapted from sustainable business strategy by Bansal and DesJardine (2014)). Additionally, the stakeholder theory in environmental marketing (Polonsky, 1995a) also advises hotels to include their customers (stakeholders) in the green practices. Very few studies in hotel pro-environmental management assess the actual pro-environmental practices using strategic management and stakeholder theory approaches.	This research examines the reality of pro-environmental practices in hotels and builds a typology from the hotel manager's perspective, using five criteria adopted from the strategic management approach and stakeholder theory. The criteria includes motivation, scope, process, monitoring, and customer communications.	This research contributes a typology with the five criteria from strategic management approach to predict the extent of pro-environmental management in hotels (motivation, scope, process, monitoring, and customer communications). The typology extends Bansal and DesJardine (2014) advice on creating sustainability in hotels by incorporating customers in the criteria, also extends the application of environmental stakeholder theory (Polonsky, 1995a) in hotel context.

The fifth gap in the general hotel consumer behaviour literature is the study that specifies the role of hotel consumer experience in influencing behavioural intentions. Pizam (2010) has advised the possible role of experience in moderating the relationships of customer loyalty and its antecedents. Empirical studies to date still focus on elaborating the concept of experience (e.g. Brakus et al. (2009) in brand experience and Ren et al. (2016) in budget hotel experience). There is very little research examining different levels of customer experience (high and low) in affecting loyalty. A research by Bloemer and de Ruyter (1999), for instance, contrasts customer experience in high- and low-involvement services and the finding suggests that customers of high-involvement services are more likely to be loyal due to more interactions happened during the service delivery. None of the previous research examines high and low customer experience in hotel context. Resolving this gap is the purpose of the current study, which also tests whether different guest experience levels results in different effects of hotel green attributes, and brand attitude on behavioural Word-of-Mouth (WOM) intentions in hotels.

The sixth gap is found among hotel management studies. Although literature to date mentioned some green attributes in hotels, the reality of green practice in hotels still remains questionable. Previous studies contend that no hotel has achieved 100% pro-environment activity in their day-to-day operations, since every hotel has different green strategies (motivation, scope, process, monitoring system, and communications). Different standards were imposed to measure pro-environmental management in hotels and some criteria cannot be applied to certain hotels. Hence, using a strategic management approach (Bansal, 2005; Bansal & DesJardine, 2014; D'Souza et al., 2013; D'Souza et al., 2015) and incorporating stakeholder theory (Polonsky, 1995a, 1996), this research attempts to fill the gap by examining comprehensive pro-environmental practices in hotels through the motivation, scope, process, monitoring, and customer communications from hotels in various regions.

3.8 Chapter summary

Chapter three mainly consists of five parts. This chapter firstly reviews the stakeholder theory as the underpinning theory in establishing sustainability in hotels. In the second part, the review commences with consumer PEB development as well as a review of the Theory of Planned Behaviour (TPB). TPB is the most popular theory that has underpinned existing pro-environmental behaviour research. This chapter introduces *mindfulness* as a novel perspective to view consumer pro-environmental behaviour. The third part of this chapter starts with hotel services review and service quality. The review is then followed by the introduction to the hotel customer experience concept and consumer behavioural intentions (loyalty) determinants. Part four of this chapter links green marketing with the consumer. Part four reviews the green collaboration efforts between the hotel and the consumer and the development of consumer pro-environmental behaviour in response to hotel green management practice. Part five of this chapter elaborates existing pro-environmental practices in hotels, including reasons to go green, the scope and standard of green practice, and hotel green practice assessment reported in previous literature. Six research gaps have been discussed and summarised in this chapter (see Table 3.3, 3.4, and 3.5). The next chapter (chapter four) will provide the hypotheses development and model justification.

CHAPTER

4

MAIN HYPOTHESES AND MODEL DEVELOPMENT

CHAPTER FOUR: MAIN HYPOTHESES AND MODEL DEVELOPMENT

4.1 Introduction

This chapter includes discussions on hypotheses development and justification in developing models. Two key hypotheses are developed in response to the main research question, ‘*What is the role of consumer and management in creating sustainability in a hotel context?*’ Sub-hypotheses are then posited under each key hypothesis. Underpinned by existing literature, two models are developed in this chapter. The first model determines PEB in hotels and the second model explains the influence of hotel green attributes on customer loyalty.

Part one of this chapter constructs the hotel PEB model. The first key hypothesis is discussed in the first part, along with five sub-hypotheses. Part two of this chapter crafts the influence of hotel green attributes on customer loyalty model. The second key hypothesis is justified in this part and sub-hypotheses are developed. Part three of this chapter justifies the hotel pro-environmental management model using a strategic management and stakeholder theory approach. A summary of hypotheses and model development is provided at the end of this chapter.

4.2 Consumer PEB in hotel

In reviewing existing literature, we noticed different research viewpoints in hotel pro-environmental behaviour. The first mainstream position addressed consumer’s behavioural responses toward pro-environmental attributes in the hotel (Manaktola & Jauhari, 2007; Millar & Baloglu, 2011). These studies viewed hotels as the subject of pro-environmental behaviour. Hotels provide green attributes that may shape consumer pro-environmental behaviours when staying in hotel, such as recycling bins in the hotel lobby and guest room (Millar & Baloglu, 2011), visible pro-environmental signs (Manaktola & Jauhari, 2007), and towel reuse policy (Manaktola & Jauhari, 2007; Millar & Baloglu, 2011).

An extensive number of studies also used TPB to connect the hotel’s provision of green attributes and consumer’s response or intentions in green hotels (Han, 2015; Han, Hsu,

et al., 2011; Han et al., 2010). In this viewpoint, consumer PEB is seen as the intention to choose or use green products or services (consumption behaviour). The TPB model that consists of attitudes, subjective norms, and perceived behavioural control was useful to predict and explain psychological antecedents and intentions in enacting pro-environmental behaviours; for instance, intention to stay at a green hotel (Han, 2015; Han, Hsu, et al., 2011; Han et al., 2010) and intention to pay more for green attributes (Kim & Han, 2010; Line & Hanks, 2016).

The third research segment focuses on individual consumers as the subjects of actual environmentally-friendly behaviour. This segment is adopted in the consumer PEB in hotel model of this research. Miao and Wei (2013) have noted that pro-environmental behaviour was most pervasive in private lifestyles, which can be represented when staying at a hotel. The scope of pro-environmental behaviours in a hotel include recycling, reuse, reduction, conservation, green consumption, curtailing, and compromise (Miao & Wei, 2016). Some studies tend to more closely examine the antecedents of a particular activity in the hotel context; such as, towel and linen reuse programs (Dimara et al., 2017; Goldstein et al., 2008; Goldstein et al., 2007) and water-saving behaviour (Untaru et al., 2016). Although Miao and Wei (2013) addresses recycling, energy saving, and water saving behaviours at home and in hotel, their research focuses on the motives of the behaviour and thus does not contrast similar behaviours at home and in hotel.

Literature to date has proposed various models to explain an individual's actual pro-environmental behaviours in a hotel. Miao and Wei (2016), for instance, identified motives that may underpin pro-environmental behaviours as trade-offs, egocentric determinants, and hotel-centric determinants. Another model by Untaru et al. (2016) confirmed that water saving behaviour in everyday life influences an individual's intention to practise similar behaviour in hotels. Most of the leading research elaborated psychological aspects that shape an individual's actual pro-environmental behaviours in a hotel (Miao & Wei, 2013, 2016), while very limited research include behavioural factors in forming actual pro-environmental behaviours.

By integrating psychological and behavioural factors in developing a pro-environmental behaviour model, this research proposes habits, normative factor, different contexts and mindfulness to promote pro-environmental behaviour in the hotel context. Pro-environmental habit is seen from daily routines and 'in hotel' situations. The closest

environment of an individual (family and friends) is the source of learning about ‘good things to do’ (norms). The understanding gained from their closest environment that pro-environmental practices are ‘good things to do’ may influence individuals to practise pro-environmental behaviour while in a hotel. Contextual means to focus on the hotel as the context of an individual’s pro-environmental behaviour. The hotel provides certain programs and attributes (e.g., providing eco-friendly products) that support or influence an individual’s pro-environmental behaviour. As an advancement of awareness, mindfulness psychologically drives individuals to be aware of and consider others in decision-making processes. Being mindful of nature and environment, it also means that an individual considers the wellbeing of nature in their behaviours and thus the individual is more likely to practise pro-environmental behaviours.

Customer PEB Key Hypotheses: Pro-environmental habits at home, mindfulness, and hotel green attributes significantly influence individual customer’s PEB in hotels.

4.2.1 Home vs. Hotel behaviours

Major research in pro-environmental behaviour (PEB) to date tends to focus only on psychological factors underlying individual PEB, for example Theory of Planned Behaviour (TPB)-based PEB research, as reviewed in Section 3.3.2 of the thesis. Although psychological factors may be the prominent antecedents of pro-environmental behaviour, habits may also contribute to determining pro-environmental behaviour across different contexts. In their behavioural change concept, Steg and Vlek (2009) view habits in the way behavioural choices are made instead of frequency of behaviour. Hence, habit incorporates decision-making process and a pro-environmental habit is when an individual chooses to behave pro-environmentally. Literature review indicates very limited studies in individual PEB incorporate behavioural (habits) factors in influencing PEB (see Section 3.3.3 and Table 3.3 in Chapter 3).

Habit is an ‘autopilot’ decision of behaviour. According to Steg and Vlek (2009) description of habit, it can be assumed that individual’s habit does not easily change across different contexts. For example, when individuals practise PEB as their domestic habits, they would likely adopt similar pattern of behavioural decision-making process in other contexts. Steg and Vlek (2009) and Miller et al. (2015) advise that it is possible to transfer similar habits to different contexts. Untaru et al. (2016) also indicate that individuals with water

saving behaviour at home intend to practise similar behaviour when staying in hotel (lodging).

Some researchers also argue that the choice of being pro-environmental can apply to different contexts, such as domestic and travel (Miller et al., 2015; Steg & Vlek, 2009). At home, people have freedom to make choices, whether to separate the rubbish, use electricity and water. When they travel or stay in hotels, the environment may be different as the facilities and options in actualising PEB may be limited (Juvan & Dolnicar, 2014). In a hotel, customers cannot control the hotel's policy, such as the towel reuse program. However, they can choose whether they want fresh towels every day. Therefore, individuals with pro-environmental habits at home may be encouraged to practise similar habits while travelling or staying in a hotel. On this rationale basis, the following hypothesis is posited.

H1: Pro-environmental habits (recycling, energy saving, water saving) at home significantly influence similar behaviours in hotels.

4.2.2 Normative

Literature to date has suggested the influence of closest social environment (family and close friends) on an individual's PEB. Considerable studies that include family and friends in the PEB model include Han et al. (2010) in green hotel choice, Grønhøj and Thøgersen (2012) in adolescent PEB, and Chan (2000) in green product consumptions. Very limited number of research to date that includes normative influence from family and close friends in determining PEB in hotel.

Additionally, culture may influence individual's normative beliefs. Based on Hofstede's cultural model, Reisinger and Turner (1997) have identified the cultural differences between Indonesia and Australia (please see Section 2.3 in Chapter 2). Previous considerable research that includes family and friends influence as a factor of PEB has been conducted in different countries with different culture, such as Han et al. (2010) in the U.S., Grønhøj and Thøgersen (2012) in Denmark, and Chan (2000). Very little studies to date compare family and friends influence on PEB across different cultures.

Family and friends constitute the closest learning environment for an individual. The closeness of the relationship allows individuals to learn through exposure, observation, reinforcement process, social interaction, and experiences (Grønhøj & Thøgersen, 2012). For

example, children in a family learn from their parents' behaviours and preferences. When the parents recycle their household rubbish, the parents set the normative perception of 'good behaviours' in their children's mind (social norms, according to Chan (2000)). Their children will see that recycling is a good thing to do, and most likely will follow such behaviour.

For adults, close friends are also likely to influence an individual's subjective norms that prompt to behaviours, particularly through social interactions. In everyday life, people interact with their closest social environment. From the interactions, people may learn on good and bad things to do (norms) (Chan, 2000). Environmental issues and some relevant pro-environmental behaviour may be the topic of the conversation or interaction. For example, when some friends suggest that some pro-environmental behaviour can make their lives better; other individuals in the social environment may be interested to follow the suggestion.

Reisinger and Turner (1997) advise that individual's perception on social norms is affected by their culture. Accordingly, the rationale to include individual's closest social environment is also based on the collectivism nature of social culture. Hofstede's cultural approach in Reisinger and Turner (1997) also suggests that individuals in high-collectivism countries consider family and close friends as important. Based on Hofstede's classification, Indonesia is considered as high-collectivist country, while Australia is slightly collectivist. Hence, it is suspected that family and friends influence an individual's pro-environmental behaviours.

H2: Family and friends significantly influence individuals to behave pro-environmentally in hotels.

4.2.3 Contextual

Beginning with Steg and Vlek (2009) argument that pro-environmental behaviour is contextual, different contexts may influence one to practise the behaviour. As indicated in Section 3.3.3 and Table 3.3 in Chapter 3, only a few considerable studies have investigated different contexts of individual actual PEB in a single model. For example, Miller et al. (2015) that contrast domestic individual PEB and PEB as tourists, Miao and Wei (2013) in determining motivations of individual PEB in household and hotel, and Untaru et al. (2016) that examines the influence of home water conservation habit on the intention of similar

behaviour in lodging context. None of these considerable studies thus far investigates home pro-environmental habits as determinants of actual PEB in hotel context.

In comparison to home and workplace, the hotel for a stay purpose is a different environment. Steg and Vlek (2009) also suggest that the requirements for pro-environmental behaviour need to happen contextually. Contrasting home and lodging contexts, Untaru et al. (2016) state that individuals that conserve water at home have greater intentions to conserve water in hotel (lodging context).

Across contexts, Steg and Vlek (2009) argues that intrinsic motivation and or psychological factors are not enough to realise pro-environmental behaviour. When travelling, individual's options and freedom are limited (Juvan & Dolnicar, 2014). In general travel context, Miller et al. (2015) also indicate the difference between performing daily PEB at home and when travelling for individual tourists. For example, in recycling behaviour, hotel guest cannot separate their rubbish if hotels do not provide separate rubbish bins. Supporting facilities may result in more favourable attitudes toward pro-environmental behaviour practice, since it is more convenient for guests to convert their psychological intentions into actions. Hence, the provision of green attributes in hotels may support hotel guests' pro-environmental behaviours.

H3: The provision of green attributes in the hotel significantly affects customer PEB actualisation in hotels.

4.2.4 Green mindfulness

Mindfulness is the opposite of 'autopilot mode' of behaviour (Langer, 1989; Langer & Moldoveanu, 2000) (please also see Table 1.1 in Chapter 1). Mindful people are more attentive and possess extra awareness of the surrounding situation that may be considered prior to deciding what to do (Amel et al., 2009). As the advanced-state of awareness, mindfulness is widely used in psychology and medical literature for behavioural change purpose. In treating binge eating, for instance, Baer et al. (2005) and Kristeller and Wolever (2010) indicate that the nature of mindfulness acts as a 'brake' in the hedonic eating behaviour.

Although the concept of mindfulness has been used in numerous psychology and health studies, there is very limited research that incorporates mindfulness in investigating

PEB. PEB-related considerable research thus far uses general terminology of mindfulness (as developed by Langer (1989)) in general PEB context (Amel et al., 2009) and in hotel context (Barber & Deale, 2014). The concept of green mindfulness was firstly proposed by Chen et al. (2015), related to employee creativity in human resources management context. Literature to date indicates that no current study uses green mindfulness to determine consumer PEB in hotels (please see Section 3.3.4 and Table 3.3 in Chapter 3).

Pulling mindfulness into pro-environmental behaviour context, the advanced-awareness of mindfulness refers to the well-being of surrounding situation that includes other individuals as well as the natural environment. For example, people bring their reusable bags for shopping since they are mindful of land damage due to the excess of plastic residuals. Thus, green mindfulness in this research is an advanced awareness on the nature's well-being that results in individual's considerations of nature in their behaviours. In correspondence with the environmental stakeholder theory (Polonsky, 1995a), mindfulness is an individual level of stakeholder theory's application since green mindfulness is considering others' stakes (particularly nature) in the behaviour.

In line with Chen et al. (2015) definition of green mindfulness, when individuals are mindful of the importance of protecting the natural environment, they may consider the less environmentally harmful option prior to their action in every situation. Mindfulness can also be applied in the hotel stay situation. Within the limited nature of travel (Juvan & Dolnicar, 2014), there is still an opportunity for hotel guests to be environmentally mindful. When using water in hotels, for instance, guests with mindfulness may consider people who are suffering from drought and control their water usage wisely. Therefore, individual green mindfulness may be counted as a trigger to execute pro-environmental behaviour.

H4: Green mindfulness significantly influences individual PEB in hotels.

4.2.5 Daily routines that influence green mindfulness

The terminology of 'mindfulness' derives from the English translation of the word *sati* from the Pali language (the original language in which Buddhism was taught), meaning *awareness*, *attention*, and *remembering* (Siegel, Germer, & Olendzki, 2009). The concept of mindfulness has been used for meditation and psychotherapy (Langer, 1989; Siegel et al., 2009). Health practitioners also use mindfulness for behavioural change purposes, such as eating behaviour (Baer et al., 2005; Hobson, 2003; Kristeller & Wolever, 2010). According to

previous research in health, behavioural routines may result in greater awareness on the particular matter, such as when someone is mindful of a good body shape and practise healthy-eating habit, he/she would likely develop greater mindfulness regarding good body shape and healthy-eating.

Following the Hobson (2003) logic that daily routines help individuals to build more awareness of such behaviours, mindfulness can actually be ‘trained’ with routine practices. In eating disorder treatment, for example, Kristeller and Wolever (2010) suggested daily practice at home to cultivate mindfulness and further to achieve mindful eating behaviour. The logic can also be applied to pro-environmental behaviour. Based on Hobson (2003) and Kristeller and Wolever (2010) studies, environmental mindfulness can also be cultivated through everyday practice. Although it is believed that routines can influence individual’s mindfulness, there is very limited study addressing the matter (please refer to Section 3.3.4 and Table 3.3 in Chapter 3).

The ‘autopilot’ nature of habit is opposed to the ‘non-autopilot’ nature of mindfulness. Pro-environmental habit suggests individuals to automatically choose to behave pro-environmentally (Steg & Vlek, 2009), while mindfulness suggests to stop behaviours that may harm nature. According to Hobson (2003) rationale, pro-environmental daily routines enable individuals to build more awareness and attention to environmental issues by automatically practising pro-environmental behaviours, so that the individuals may build awareness, remember, and consider the environment in their actions (being environmentally mindful). Hence, the following hypothesis is posited.

H5: Green habits at home significantly influence an individual’s green mindfulness.

4.2.6 Mindfulness in general that influences green mindfulness

Refer to the review in Section 3.3.4 and Table 3.3 in Chapter 3, there has been very limited research investigating mindfulness in individual PEB context. The idea of general mindfulness proposed by Langer (1989) involves awareness, attention, recognition, information processing, and thus is considered as the opposite of ‘autopilot mode’ in behaviour. Despite the limited literature addressing green mindfulness, Barber and Deale (2014) investigate how general mindfulness contributes to green behaviours in hotels. Accordingly, mindfulness is described in general as the feeling of being involved and in

control of a situation, as the outcome of awareness and others' stakes consideration. As described in the stakeholder theory, being mindful is taking others' stakes into consideration when conducting certain behaviour.

Combining the concept of general mindfulness of Langer (1989) and Barber and Deale (2014), the awareness, attention, recognition, information processing, and involvement in a situation where the situation is being applied to the conservation or wellbeing of nature, or being mindful in general may affect green mindfulness. When individuals maintain the feeling of general mindfulness, they may also easily advance their general mindfulness into green mindfulness. The possession of general mindfulness may affect the formation of green mindfulness in an individual's mind.

H6: General mindfulness significantly influences green mindfulness.

4.2.7 Hotel PEB model development

In the consumer behaviour literature to date, there is still a debate about whether PEB is doable in various contexts. A number of studies have examined PEB intentions in the hotel context, such as the intention to choose green hotels over mainstream hotels. PEB in the hotel context is an interesting concept to be examined, due to the limited travel circumstances that may limit individual customers to behave pro-environmentally (Juvan & Dolnicar, 2014; Kiatkawsin & Han, 2017). Despite the limitations, there are some factors that may influence individual PEB in hotels. Some hotel customers may develop green habits at home. Steg and Vlek (2009) suggest that developing a PEB habit means involving cognitive processes and awareness for individuals to opt to PEB. Accordingly, similar habits may occur in different contexts. Individuals that opt to instil PEB at home may also present similar behaviours when staying in hotels. Family and close friends are considered to be the closest social environment to an individual. The influence of social environment may also affect an individual's PEB.

Different environments between the domestic household and hotels may influence an individual's actualisation of PEB. In accommodating limitations in travel conditions (Juvan & Dolnicar, 2014; Kiatkawsin & Han, 2017), some hotels provide green attributes that may assist customers to behave pro-environmentally when staying at a hotel.

Table 4.1. Hotel consumer PEB model hypotheses

Hypothesis	Key Supporting Literature	Content
H1	Steg and Vlek (2009), Miller et al. (2015)	Habit regards an individual's choice to actualise PEB. Habitual aspects of PEB may be actualised in different contexts, such as domestic and travelling contexts.
H2	Grønhøj and Thøgersen (2012)	As the closest social environment, family and close friends may influence an individual to perform PEB.
H3	Steg and Vlek (2009), Miller et al. (2015), Untaru et al. (2016)	Although there is a certain environmental requirement for PEB to occur, PEB may happen in different contexts.
H4	Amel et al. (2009), Chen et al. (2015), Langer (1989), Barber and Deale (2014)	People with green mindfulness are more attentive and possess extra awareness of the surrounding situation that may be considered prior deciding to enact PEB in hotel.
H5	Hobson (2003), Kristeller and Wolever (2010)	Mindfulness can be developed by practising certain behaviours. Thus, green PEB at home may influence green mindfulness.
H6	Langer (1989), Barber and Deale (2014)	When general mindfulness is being brought into nature's wellbeing, being mindful in general may affect green mindfulness.

Recent studies in PEB have adopted a novel concept of mindfulness from the health and psychology context (Amel et al., 2009; Barber & Deale, 2014). In a short description, mindfulness is *thinking and considering others' stake in behaviour*. PEB is most likely to occur when individuals consider the natural environment's wellbeing in their behaviours. A model of hotel PEB is developed in this research based on the rationale of the relationships of domestic PEB habits, family and friends' green influence, hotel green attributes, and mindfulness with customer PEB in hotels (see Figure 4.1). Table 4.1 presents the summary of literature for hypotheses development.

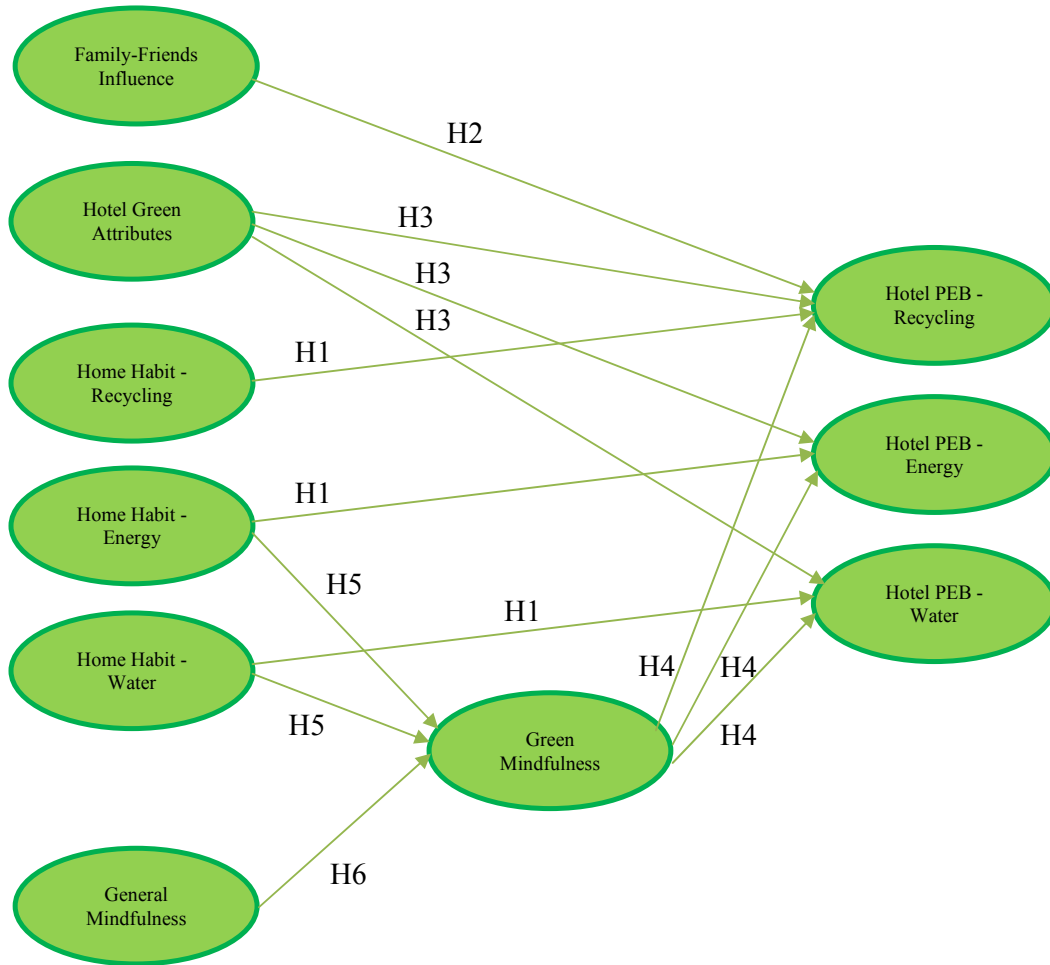


Figure 4.1. Hypotheses in PEB in hotel model

4.3 The influence of hotel green attributes on customer loyalty

To date, sustainable (green) business practice has been a main issue in the hotel industry since the United Nations Environment Programme and World Tourism Organization (2012) claimed that the hotel industry utilised significant energy in their service operations. Responding to the issue, many hotels have adopted green management to be responsible in their business practice. Other than regulation and industrial forces, the increasing demands of pro-environmental products also motivate hotels to go green. Kitchen (2003) advises that by being environmentally responsible, it benefits the hotel's brand.

Consumers' awareness on environmental issues has shifted their preference from normal products into green products. For instance, a large number of research in hotel

consumer behaviour indicate the consumer willingness to visit or stay at green hotel (Han et al., 2009; Han et al., 2010; Han & Kim, 2010). Research by Gustin and Weaver (1996) also suggest that hotel customers favour green attributes in hotel and the establishment of hotel green attributes influence their behavioural intentions. Additionally, Han and Kim (2010) hint that excellent service quality alone is not enough in achieving behavioural intentions for consumers with pro-environmental value. Accordingly, green attributes in hotel have to be presented in achieving behavioural intentions (loyalty) for such green consumers.

Bloemer and de Ruyter (1999) indicate that the different level of customer involvement across service types (high vs. low) affects customers' emotions that prompt to behavioural intentions in services context. Accordingly, customers in high-involvement service type are more likely to be loyal to the particular service. Similarly, experience holds sensory and interactivity as its elements (Brakus et al., 2009). In hotel context, Ren et al. (2016) propose that customer experience influences customer satisfaction, while a plethora of studies in similar context suggest satisfaction as the main antecedent of loyalty (behavioural intentions) (e.g. Wilkins et al. (2009)).

Customer Loyalty Key Hypotheses: Hotel green attributes, experience level, service quality, and satisfaction significantly influence positive brand attitude on the hotel brand that prompt to customer loyalty.

4.3.1 Hotel green attributes, brand, and loyalty

Noting the motivation for going green, the provision of green attributes is often used to build a sustainable image of a hotel and fulfil consumer demand for green products (Bansal & Roth, 2000; Polonsky et al., 1998). Referring to the stakeholder theory in marketing (Polonsky, 1995a), sustainability goals can be ultimately achieved when all stakeholder stakes are met.

Affected by the environmental issues, consumers begin to adopt pro-environmental values and further create the demand for green hotel services. Green initiatives by hotels so far have gained positive responses from customers (Gustin & Weaver, 1996; Kang, Stein, Heo, & Lee, 2012). In a plethora of studies examining consumer hotel preference, many of them conclude that consumers would like to visit or stay at hotels with green attributes (Han et al., 2010; Han & Kim, 2010; Lee et al., 2010). Customer's evaluation of a hotel's green features may lead to certain attitudes toward the hotel's brand.

Linking the company green motivation and consumer needs, there is reciprocal reason for green attributes to be established in hotels. Although the concept of stakeholder theory in green marketing has already well-established (Polonsky, 1995a, 1996), the empirical research of the concept is very limited (please see Section 3.2 and Table 3.4 in Chapter 3).

In examining consumer's attitudes toward hotel green attributes, Gustin and Weaver (1996) also suggest that consumer favours green attributes (positive consumer attitude) in the hotel, since the green attributes match with the consumer's values. According to Gustin and Weaver (1996), consumers with positive attitude towards green attributes in hotel are more likely to be loyal to such hotel. Kitchin (2003) also argues that the provision of green attributes (as a sign of company's responsibility) positively affects the brand of the company.

Thus, based on the rationale of the stakeholder theory (Polonsky, 1995a, 1996) and consumer behaviour as suggested by Kitchin (2003) and Gustin and Weaver (1996), it is assumed that when hotels are able to satisfy the green customer's demand, it prompts the desirable behavioural intentions of the customers that return the benefit to the hotel. According to the systematic-reciprocal process of green stakes fulfilment among hotels and consumer, the following hypothesis is posited.

H7: Hotel green attributes significantly influence positive brand attitude towards the hotel brand that prompts customer loyalty.

4.3.2 Service quality, satisfaction, brand, and loyalty

A plethora of research in consumer behaviour has pointed to service quality as the antecedent of customer satisfaction, positive brand attitude, and loyalty (Wilkins et al., 2007, 2009). For instance in banking service, Caruana (2002) indicates that service quality positively induces customer satisfaction and leads to the customer loyalty. Similarly, in general services context, Selnes (1993) identifies that service quality influences customer satisfaction, brand reputation, and ends in loyalty.

Service is the key of the hotel business. Wilkins et al. (2007) indicate elements of service quality in hotel, including physical ambience of the hotel and staff-responsiveness in service delivery. Further in determining loyalty in hotel context, service quality may

contribute to customer satisfaction, positive brand attitude to the hotel's brand, and finally customer's behavioural loyalty to the hotel (Wilkins et al., 2009).

The connections between service quality, customer satisfaction, and behavioural intentions are generally recognised. Based on the literature, the nature of intangibility and heterogeneity of services may result in different individual perceptions of the outcome (please see Section 3.4 in Chapter 3). Hotel customers may perceive the provided services as excellent and induce positive behavioural intentions, and vice versa. On the basis of the rationale, the following hypothesis is posited.

H8: Service quality significantly influences customer satisfaction that prompts a positive attitude towards the hotel brand, and customer loyalty.

4.3.3 Hotel customer experience levels

Customer experience is noted as a prominent variable in research to date, since experience 'leverages' customer's engagement to the company's marketing efforts. Customer experience research has been done in various contexts, such as retail (Puccinelli et al., 2009) and services contexts (e.g. Ren et al. (2016), So and King (2010), and Torres, Fu, and Lehto (2014) in hotel customer experience). Considerable major research has connected experience with other variables, a number of studies to date are still exploring the elements of experience (e.g. Ren et al. (2016) and Xu and Chan (2010) in hotel experience, Brakus et al. (2009) in brand experience). Although many studies have explored the elements of experience and various contexts of experience, there is less research investigating moderating effect or effect of different levels of experience on any variable relationships in consumer behaviour, particularly in hotel experience (for example, Bloemer and de Ruyter (1999) that differs high- and low-involvement service experience) (please see Section 3.4.2 and Table 3.4 in Chapter 3).

Pizam (2010) proposed the quality of the experience as a considerable driver of customer satisfaction for 'hospitality' products. Accordingly, the quality of the experience is suggested as the moderating variable between the independent variables of quantity and quality of tangible and intangible products and services, and the dependent variable of

customer satisfaction (Pizam, 2010). Another research on hotel experience, Ren et al. (2016) argues that customer experience influences hotel customer satisfaction.

Experience in this study is adopted from Brakus et al. (2009) that define the experience elements as individual's sensory, affective, behavioural and intellectual characteristics. In this study, experience includes multi-sensory experience and interactional experience. Ren et al. (2016) argue that experience that leads to satisfaction in the hotel may ensure when the level of customer experience is high. Customers with high hotel experience may notice better tangible and intangible products and services in the hotel.

One of the hotel's motivations for establishing green attributes is to respond to the customer's demand. Most hotels commenced the implementation of green management by establishing green signs, towel/linen reuse options around the hotel, and green programs to attract customer's attentions via promotional items (Chan, 2013a). However, customer experience may affect the 'appearance' of these attributes to the hotel customers.

In general service context, Bloemer and de Ruyter (1999) argues that customers of high-involvement services have greater positive emotions towards the service, due to greater interactions with the provider. Hotel is considered as high-involvement service provider. Unlike in banking service where customers emphasise on functional services, in hotel context, customers tend to interact with the hotel attributes, including physical ambience and social interactions. Hence, in the nature of high-involvement hotel services, customers with high levels of experience may understand the green attributes in the hotel and when customers have low experience in the hotel, they may not aware of green attributes in hotel. Brakus et al. (2009) argues that positive attitude toward a brand can be formed through experiences on the particular brand. Therefore, when customers are able to understand the hotel's green attributes, they would likely to enjoy the stay experience and it can create a positive attitude toward the hotel's brand. On the other side, when customers have low experience and do not aware about the green attributes in the hotel, it may result in different attitude towards the hotel's brand.

H9: High customer hotel experience results in greater effect of hotel green attributes on positive brand attitude.

4.3.4 The development of hotel customer loyalty model

Loyalty is favourable consumer behaviour that contributes to sustainability of a company. In marketing context, the stakeholder theory (Polonsky, 1996) suggests companies to address the stakeholders' stakes, including identify and address consumer's needs and wants.

Numerous research have examined the antecedents of behavioural intentions (loyalty). In services context, service quality is identified as the main antecedent of loyalty, since excellent service meets customers' expectations and satisfied customers are more likely to be loyal to the service provider (Caruana, 2002; Selnes, 1993; Wilkins et al., 2009). Researchers also identify that positive attitude toward a company's brand prompts to favourable behavioural intentions toward the company (Brakus et al., 2009; Wilkins et al., 2009).

Studies in hotel consumer PEB indicate higher demand of green attributes in hotels (Gustin & Weaver, 1996; Han et al., 2010). Addressing the environmental stakeholder theory suggestions (Polonsky, 1995a, 1996) and the business motivation of fulfilling consumer demands (Bansal & Roth, 2000), hotels start to provide green attributes in addition to their excellent service quality.

When consumer expectations are fulfilled, behavioural intentions are more likely to occur. Particularly for 'green' consumer, the provision of hotel green attributes would meet their expectations. When consumer's expectations are met, it may result on satisfaction, positive attitude toward the hotel's brand, and further favourable behavioural intentions that return the benefits to the company.

Although hotels have provided excellent service quality and green attributes, the level of customer experience may influence the outcome of hotels' efforts. Brakus et al. (2009) suggest that experience involves sensory, affective, intellectual, and behavioural interactions. Research by Brakus et al. (2009) indicate that positive experience contributes to positive attitude toward the brand that connects to satisfaction and loyalty.

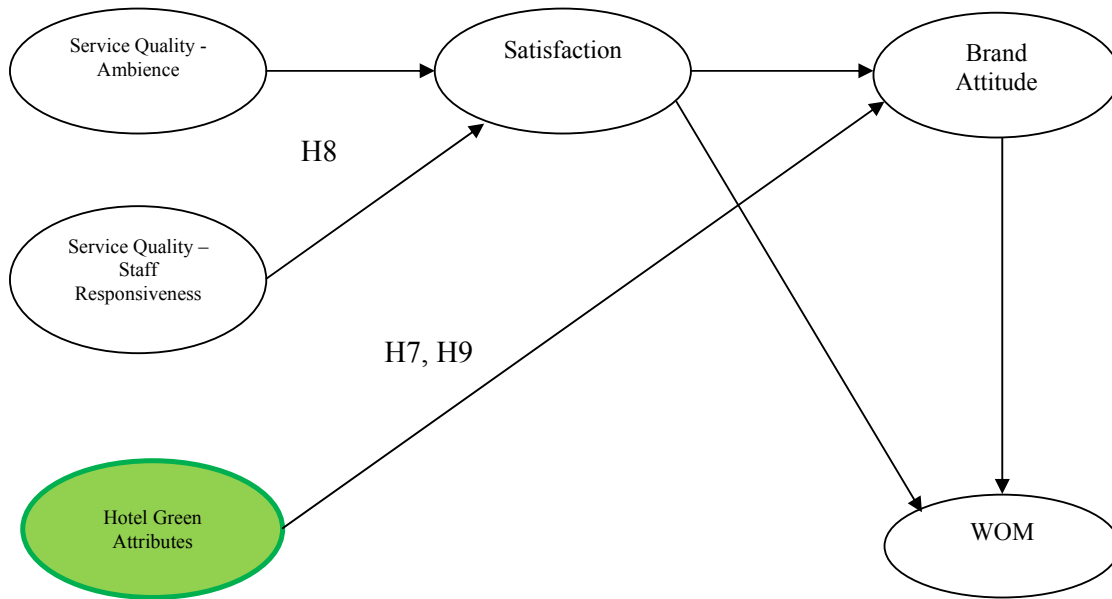


Figure 4.2. Hypotheses in hotel customer loyalty model

In hospitality context, Pizam (2010) recommends the moderating role of experience. It means, customers with higher level of experience are more likely to perform favourable behavioural intentions, compared to those with lower level of experience. Empirically, Bloemer and de Ruyter (1999) find that customers of high-involvement services are more likely to be loyal to the service provider, compared to customers of low-involvement services. The reason is due to more interactions between customer and service provider that results in positive emotions of the customers. Hence, high and low level of customer experience may result on different customer perceptions and behavioural intentions to the service provider.

Figure 4.2 describes the model of hotel customer loyalty. The summary of literature hypotheses development for the hotel customer loyalty model is provided in Table 4.2.

Table 4.2. Hotel customer loyalty model hypotheses

Hypothesis	Key Supporting Literature	Content
H7	Polonsky (1995b); Polonsky et al. (1998); Gustin and Weaver (1996)	Stakeholder theory suggests an organisation ought to address its stakeholders' stakes to achieve the goal. In going green, hotels satisfy consumer demand by providing green attributes. As a result, hotel customers may return the benefit with the favourable behavioural intentions.
H8	Wilkins et al. (2007); Wilkins et al. (2009)	The intangibility and heterogeneous nature of services may result in different customer perceptions of the hotel services that may prompt different behavioural intention responses.
H9	Pizam (2010); Ren et al. (2016); Bloemer and de Ruyter (1999); Brakus et al. (2009)	The nature of experience involves multi-sensory and interaction aspects. When hotel customers feel and interact more with the hotel services, it may add to their knowledge and sensation of the particular service, including the hotel's effort in providing green attributes. Thus, customers with a high level of experience may notice more green attributes in the hotel and result in a more positive attitude toward the hotel's brand.

4.4 Strategic hotel pro-environmental management

Theory and literature in strategic management recommend that a strategy has to commit for long time orientation (Bansal, Jiang, & Jung, 2015). The recommendation indicates that the particular strategy has to hold long-term vision from the beginning. The initial step in strategy formulation is to develop vision, mission, values, and goals for the business, followed by analyses (e.g. SWOT) to determine the scope or level of the strategy. The execution of the strategy involves certain processes in the organisation and at the end, monitoring is conducted to review the strategy (Hill, Jones, & Schilling, 2014).

Combining the strategic management theory and the stakeholder theory, Freeman (2010) suggests organisations to include and consider all stakeholders in formulating and executing the strategy. According to Freeman (2010), it is better for the vision of the strategy to incorporate the stakeholders' stakes, so that it directs the organisation to wisely maintain relationships between the organisation and its stakeholders.

Integrating the stakeholder theory with the marketing theory in environmental context, Polonsky (1995a) advises consumer and environment as key stakeholders in a business. In marketing theory, businesses develop their strategies to address the consumer's needs and wants. Hence, in formulating green strategy, an organisation has to particularly consider consumer and natural environment.

'Green' or pro-environmental strategy has been widely adopted in hotel context. Some hotel chains, such as Starwood and Accor have implemented the pro-environmental strategy in their day-to-day operations (Accor Hotels, 2016; Starwood Hotels and Resorts, 2016). Although major hotel chains have adopted pro-environmental strategies, the implementation of the strategy may be different among individual hotels. Therefore, underpinned by the strategic management theory and the environmental stakeholder theory (Polonsky, 1995a), this research develops five criteria to predict the implementation of pro-environmental management in hotels.

The five criteria include the sequence of organisational strategic management process consists of vision – mission (paradigm), scope, process, and monitoring (Bansal & DesJardine, 2014; Bansal et al., 2014; Hill et al., 2014). The fifth criterion is customer communication, to address consumer's stakes in the implementation of pro-environmental strategy in hotel, as suggested by the stakeholder theory (Polonsky, 1995a).

4.4.1 Motivation

Vision, mission, and direction of pro-environmental strategy of an organisation reflect on the management motivation in establishing pro-environmental management. Literature in sustainable management has suggested various motives for a company to introduce green practices (Bansal & Roth, 2000; D'Souza et al., 2013; Dief & Font, 2010).

According to Bansal and Roth (2000), the motives of an organisation to establish pro-environmental management include regulation obedience, pressure from the stakeholders, opportunities to gain more profit, and intrinsic company motives.

The fundamental motives for a business to adopt green management are competitiveness in relations to long-term profitability and external pressure (Bansal & Roth, 2000). In this research, profit-related motivation is defined as 'commercial'. Regulations and other stakeholders' pressure (external pressure) can force hotels to implement pro-

environmental management. Despite the two fundamental motives, environmental responsibility motive is considered as 'higher' motivation in implementing pro-environmental management. Environmental responsibility comes from internal organisation (intrinsic) and may contain voluntary aspects that reflect the organisation's ecological value.

In formulating the levelling of motivation of a hotel's pro-environmental strategy, this research adopts Bansal and Roth (2000) emphasis on the 'genuine' intrinsic motives. When a hotel is conducting green practices genuinely and voluntarily with strong framework of environmental responsibility (as the sustainability paradigm in Bansal and DesJardine (2014)), the hotel's green motivation is considered as high. When cost and profit are considered as the main motivation of pro-environmental management in a hotel, then the motivation would be rated as 'low'.

4.4.2 Scope

The second criterion is the scope of hotel green attributes. An extensive research of green attributes has been documented in the literature (Bansal, 2005; Bansal & Kilbourne, 2001; Bohdanowicz, 2006; D'Souza et al., 2015; Enz & Siguaw, 1999).

The scope of green attributes is mostly tangible and accessible to all stakeholders. Bansal and Kilbourne (2001), for example, define the scope of ecological retailers as green distribution, green location maintenance, green processes (building and packaging), and green merchandising. In general firms context, D'Souza et al. (2015) suggest green supplier and research-development as the additional scope to pro-environmental management.

Specifically in hotel context, this research adopts Bohdanowicz (2006) and Enz and Siguaw (1999) in developing scope criterion of pro-environmental management. Bohdanowicz (2006) describes the scope of pro-environmental hotel as energy conservation, water conservation, responsible waste management, and communications to customers. Similarly, Enz and Siguaw (1999) indicate that best green hotels include those aspects, as well as emphasising in stakeholder inclusions (employee and consumer) in implementing green practices in the hotel.

In measuring the scope, this research focuses on the impact of green attributes scope, as suggested by Enz and Siguaw (1999), Bansal and Kilbourne (2001), and Bansal and DesJardine (2014). The more positive impact of the attributes on the hotel and its

stakeholders (particularly consumer and environment) results in a higher rating of pro-environmental management.

4.4.3 Process

The measurement of the process criterion of pro-environmental management refers to the organisation of the pro-environmental activities in the hotel (Bansal & DesJardine, 2014; Bansal & McKnight, 2009; Enz & Siguaw, 1999; Polonsky, 1995a; Polonsky & Rosenberger, 2001). Process of pro-environmental management in hotel is the heart of the strategy.

In vein with the motivation and scope, process translates the motivation into actions. In the environmental stakeholder theory, Polonsky (1995a) advises to identify and include all stakeholders in executing a strategy. In best green practice hotels, Enz and Siguaw (1999) explain that the best environmental operations involve ‘organised teamwork’ to actualise the strategy. Enz and Siguaw (1999) suggests that the top managers of the hotel ‘translate’ the vision and mission of the strategy to the managers of every department, then the department managers involve the employees to actualise the pro-environmental strategy, with the participation of hotel customers.

Adopting Enz and Siguaw (1999), good process means good organisation of the conduct of pro-environmental management and involving stakeholders in the hotel (particularly consumer). A hotel is rated as ‘high process’ when the green management implementation procedure and task appointments are clear and well-organised (e.g. who-doing-what).

4.4.4 Monitoring

In strategic management, evaluation is needed to review the strategy. Similar to process, literature suggests teamwork to monitor the pro-environmental management processes (Bansal & Kilbourne, 2001; Bansal & McKnight, 2009; Hsiao, Chuang, Kuo, & Yu, 2014; Polonsky, 1995a, 1996; Polonsky & Rosenberger, 2001).

In retailer context, Bansal and Kilbourne (2001) suggest commitment from senior management and communication within the organisation in monitoring the green strategy implementation. The senior management commitment and organisation communications approach can be implemented in monitoring strategy in hotels. Other than commitment and

communications, existing pro-environmental criteria, such as EMS and ISO 14000 are also useful to measure the strategy implementation (Hsiao et al., 2014).

This research mainly adopts Bansal and Kilbourne (2001) approach in developing hotel pro-environmental monitoring criteria. Senior manager commitment and internal communications (such as clear Key Performance Indicators/ KPIs) is the key of monitoring process. It is assumed that senior managers would understand the strategy motivation or direction better than other staff. KPIs reflect to the 'translation' of the strategy directions to other staff members. At the end of the strategy process, senior manager is to check whether KPIs are met. Therefore, hotels that practice strong senior manager commitment and regularly communicate the green strategy with the employee are rated as 'high' in the pro-environmental management monitoring. The example of the best practice in monitoring pro-environmental management is when the General Manager chairs regular meeting about pro-environmental strategy in the hotel.

4.4.5 Customer communications

The final criterion, customer communication, is adopted from the stakeholder theory (Polonsky, 1996, 2011; Polonsky et al., 2010; Polonsky & Rosenberger, 2001). Accordingly, the consumer is one of the key stakeholders in pro-environmental management.

In best hotel practices, Bohdanowicz (2006) and Enz and Siguaw (1999) already noted the importance of involving customers in hotel green practices. As key stakeholder, consumer needs to know and understand the hotel's vision and implementation process of pro-environmental strategy. In hotel, consumer is stakeholder that directly responds to the hotel's green practices. Enz and Siguaw (1999) indicate that best green practice hotels gain more profit in return, by involving consumer in their green practices.

In the increasing environmental concerns in the society, more consumers (particularly green consumer) demand green products, including green attributes in hotel (Han et al., 2009; Han & Kim, 2010). In accordance with the environmental stakeholder theory (Polonsky, 1995a, 1996), it is necessary for hotels to identify the stakeholders' stakes, including consumer. When the consumers notice the hotel's efforts in satisfying their 'green' needs, consumers would likely to be loyal and return the benefits to the hotel. In opposite, without letting the consumer know about hotel's green attributes, other internal green processes would not reach and translate into the customer loyalty behaviours.

Hence, in establishing customer communications criterion in pro-environmental hotel management, a high rating would be given to hotels that engage their customers with their pro-environmental practices. Low rating will be given when the particular hotels do not communicate their green practices to the customers.

4.5 Summary of the chapter

Chapter four presents the development of three models in this research project. The first model explains hotel consumer PEB that includes domestic habits and a novel concept of green mindfulness. The hotel consumer PEB model consists of six sub-hypotheses that explain consumer PEB in hotels. The second model examines hotel customer loyalty. Three sub-hypotheses involving hotel green attributes, service quality, and customer experience were developed to construct this model. The third model provides the development of the five criteria of hotel pro-environmental management, derived from the strategic management approach and stakeholder theory.

CHAPTER

5

RESEARCH DESIGN

CHAPTER FIVE: RESEARCH DESIGN

5.1 Introduction

This chapter presents and justifies the strategy of inquiry selection for this research. The initial part of this chapter discusses the research paradigm underlying the conduct of the research. Three phases of research design were employed as the strategy of inquiry of this research. These are discussed following the research paradigm.

The strategy of inquiry selected for this research consisted of three phases: qualitative, quantitative (two surveys) and qualitative approaches. Research design Phase One comprised customer focus group discussions to aid item development for the survey questionnaire. Phase Two (quantitative) consisted of two surveys of hotel customers from Indonesian and Australian hotels. In Phase Three, the inquiry involved hotel manager interviews in three regions: Indonesia, Australia, and some other countries. Justification, instrument development, and the operation of the research design are explained further for each phase. The summary of chapter five is provided at the end of this chapter.

5.2 Research Paradigm

The first step in research design is selecting a research paradigm. A paradigm is a philosophical worldview that is built on implicit assumptions, accepted definitions, comfortable habits, values defended as truths, and beliefs projected as reality (Patton, 2002). In selecting a paradigm, Creswell and Clark (2007a) suggest that researchers ask fundamental questions based on the following worldview elements:

- Ontology – What is the nature of reality?
- Epistemology – What is the relationship between the researcher and that being researched?
- Axiology – What is the role of values?
- Methodology – What is the process of research?
- Rhetoric – What is the language of research?

There are four fundamental worldviews used in research: *positivism*, *constructivism*, *advocacy and participatory*, and *pragmatism* (Creswell & Clark, 2007a).

To describe the nature of reality as suggested by Creswell and Clark (2007a), a mixed-method research best fits the pragmatism worldview. This research follows the pragmatism paradigm since it combines participant's views and existing theory. Ontologically, the pragmatist sees the nature of reality as singular and multiple realities. Therefore, researchers test hypotheses and provide multiple perspectives.

Epistemologically, pragmatic researchers acknowledge their research as 'practical' research. Researchers stand at one point, observing certain phenomenon, and developing research questions. Then, researchers collect data that might 'work' to answer their research questions. This implies an independent and separate position between researcher and the research object.

In order to answer axiological questions, pragmatists would like to see the role of values from multiple stances. Regarding value as an object, pragmatic researchers include both biased and unbiased perspectives in their study. Thus, the current research is not value-free as in some disciplines (e.g., economics).

As a development and enrichment of consumer behaviour theory, this research attempts to investigate the role of PEB (pro-environmental behaviour) in determining consumer loyalty behaviour by collecting qualitative and quantitative data. Therefore, methodologically, this research combines qualitative and quantitative strategies of inquiry.

Pragmatic researchers may employ both formal and informal styles of writing, since they may incorporate participant views and also test an a priori theory. Stylistically, the quantitative is more formal and the qualitative is more informal.

5.3 Research Design

Research design is a set of procedures for conducting research. In general, this research attempts to investigate the collaboration of hotel management and consumers in actualising PEB in hotels, from management and consumer perspectives. The combination of qualitative and quantitative data provides a more complete picture than a single method in both depth and generalisability (Creswell & Clark, 2007a). In order to embrace management and consumer perspectives in this research, a mixed-methods design is required. Therefore, a mixed-methods approach was selected to correspond with the pragmatic worldview and research aims.

This research aims to determine the actualisation of pro-environmental management in hotels from the management perspective. Although a number of managerial aspects in hotels may be measured quantitatively (e.g., financial performance), the process of pro-environmental management in hotels cannot be measured using quantitative design only. Qualitative design is the appropriate approach to better understand the phenomenon, since a qualitative research design tends to be open-ended in nature, and allows the researcher to explore real-world practices in more detail (Creswell, 2008). The explorative nature of qualitative design allows researchers to understand the detailed situation underlying the research problem. Hence, a qualitative design is needed in this research to explore and understand the *process* of pro-environmental management in hotels.

This research investigates PEB and behavioural intentions among hotel customers in Indonesia and Australia. The theory underpinning consumer PEB and general consumer behaviour has already been well developed (e.g., the Theory of Planned Behaviour). Therefore, a quantitative design is appropriate to investigate the consumer's perspective of PEB and behavioural intentions in the hotel context. The nature of quantitative study is confirmative, means that the utilisation of quantitative research design is to confirm the coherence between the theory and the phenomena (Creswell, 2008). Quantitative design is also suitable for a known and large population, such as hotel users in Indonesia and in Australia.

The strategy of inquiry of this research consists of three phases. Phase One is a customer focus group discussion to aid questionnaire item development for consumer experiences in hotel, hotel green attributes, and mindfulness. Phase Two includes hotel customer surveys in Indonesia and Australia. The surveys are utilised to address the hotels' PEB models and the influence of hotel green attributes on customer loyalty (see Chapter 4). Phase Three consists of semi-structured manager interviews that explore the process of hotel pro-environmental management.

5.4 Focus group discussion (Qualitative – Phase One)

Phase One of the research design is customer focus group discussion. The purpose of this phase is to lead the researcher into a better understanding on the research context (hotel green management and consumer green behaviour). Results of the focus group discussion further assist in the development of some items in the survey questionnaire (see Figure 5.1).

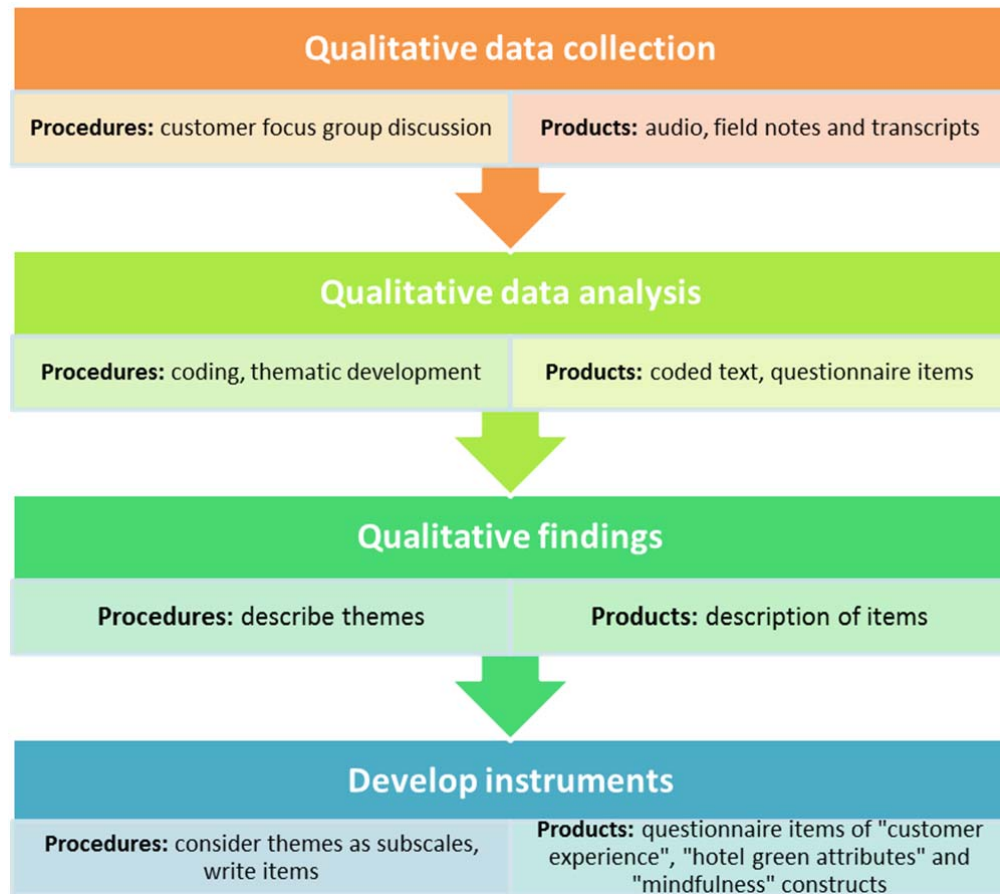


Figure 5.1. Item development from hotel customer focus group discussions (modified from a qualitative research scheme by Creswell and Clark (2007a), p. 53)

Questions to be discussed in the focus group discussion are adapted from Pizam (2009), Miller et al. (2015) and Steg and Vlek (2009). The protocol consists of an engagement question, five exploratory questions, and an exit question (see Appendix C: Focus Group Discussion Protocol). Questions in the focus group discussion include the following points below.

- Customer's opinion on hotels that are going 'green'
- Attributes to include in 'green' hotel
- Customer's opinion about hotel's pro-environmental campaign
- Customer's responses to pro-environmental signs in hotel.

After granted Ethical Clearance (see Appendix A: Ethical Clearance Approval – Qualitative Study), customer focus group discussions were held in Australia and Indonesia. Participants were selected from volunteers at Griffith University (Australia) and Universitas Gadjah Mada (Indonesia) who had previously stayed at any classified (three to five star) hotels. Focus group discussions were conducted in person.

Protocol validity for the focus group discussion phase was assessed through background questions, such as ‘Have you stayed at any 3, 4, or 5-star hotels in the past 12 months?’ Qualitative research credibility for the focus group discussion was confirmed when the targeted participant had the skills, competency, and rigorousness to answer the focus group questions (Patton, 2002).

As described in Figure 5.2, results from customer focus group discussions were utilised to develop the survey instrument, particularly on the hotel experience items, hotel green attributes items, and green mindfulness items. In the first phase of the items development, focus group discussions audio, field notes, and transcripts were analysed. Following this, some themes were developed from the discussions. For example, some participants mentioned ‘relaxing facilities’ as their favourite hotel features (see Table 6.3 and 6.4 in Chapter 6). Thus, relaxing facilities and feeling relaxed rated as important on their hotel experience. Another example is participants’ comments on green attributes in hotel. Some participants mentioned visible pro-environmental signs in the hotel. Several hotel green features were also noted from the focus group discussions. The keywords mentioned by focus group participants were then developed and designed to be questionnaire items for customer experience, hotel green attributes, and mindfulness constructs.

5.5 Surveys (Quantitative – Phase Two)

The quantitative strategy of inquiry of this research involved two surveys in two countries: Indonesia and Australia. The quantitative design is meant to assess consumer behaviours in hotels, particularly PEB. A step-by-step diagram of the quantitative phase is provided in Figure 5.2.

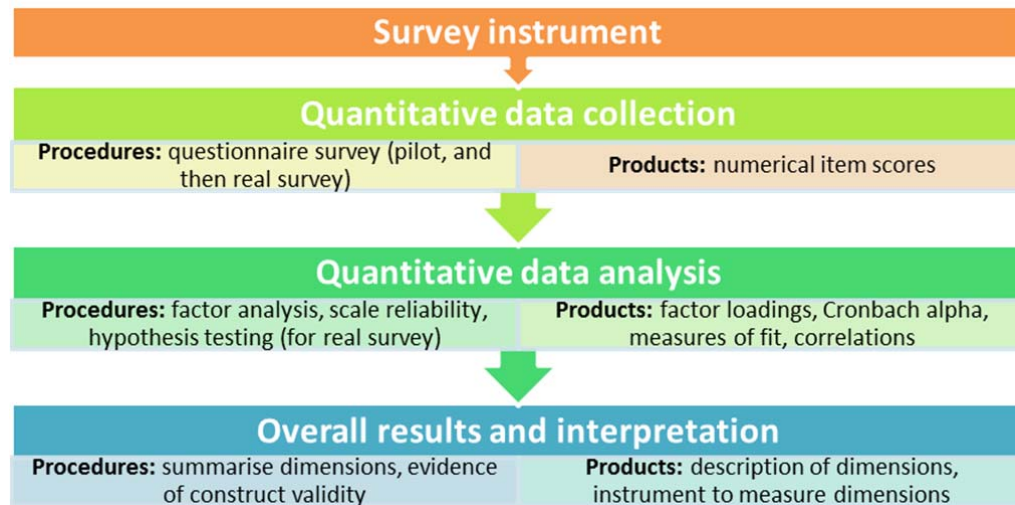


Figure 5.2. Quantitative research scheme (from Creswell and Clark (2007a), p. 53)

5.5.1 Survey instrument development

A two-section questionnaire was utilised as the survey instrument (see Appendix F: Final Questionnaire). The first section of the questionnaire contains items measuring variables involved in this research. Section two was placed at the end of questionnaire, since it consisted of personal background and demographic questions, such as age, gender, last time visit, and so on. Questionnaire items that are used to assess customer perspective variables in section one are measured on a five-point Likert-type scale, ranging from 1 (strongly-disagree) to 5 (strongly-agree). Prior to the first part of the survey, respondents were required to answer preliminary questions which included, ‘Have you stayed at any classified hotel in (Indonesia/Australia) in the past 12 months?’, followed by ‘If yes, what is the hotel’s classification for the most recent stay?’ and ‘in which city is the hotel is located?’ The first part of the instrument was developed according to the following sources:

- 1 Items for service quality were obtained from Wilkins et al. (2007), e.g., ‘Exquisite food presentation’ as an item measuring quality of food and beverage.
- 2 Items for hotel customer experience were generated from customer focus group discussions, Brakus et al. (2009); Knutson, Beck, Kim, and Cha (2009); Otto and Ritchie (1996) and SAP (2015), e.g., ‘The hotel simplifies my life.’
- 3 Items for customer satisfaction were modifications of Kandampully and Suhartanto (2000) instrument, e.g., ‘Overall, I am satisfied with the hotel.’

- 4 Questionnaire items of behavioural loyalty were developed from Lee et al. (2010), Han and Kim (2010), and Han, Hsu, et al. (2011) for repeat visit intention, e.g., 'I am willing to revisit the hotel in the future.'; as well as Lee et al. (2010) and Han et al. (2009) for WOM communications, e.g., 'I will encourage my friends and relatives to stay at the hotel.'
- 5 Questionnaire items of brand attitude were adapted from Wilkins et al. (2009) instrument, e.g., 'The hotel is excellent.'
- 6 Items for green habits at home were developed from Steg and Vlek (2009) and Stern (2000), e.g., 'I use energy efficient lighting.'
- 7 Items for green attitudes comprised love for nature, tourist social responsibility, vacation break green behaviours, and environmental concerns. Love for nature items were developed from Perkins (2008) and Perkins (2010), e.g., 'I have a deep love for nature.' Tourist social responsibility, vacation break green behaviours, and environmental concerns items were adopted from Miller et al. (2015), e.g., 'I am worried about environmental pollution.'
- 8 Items for green influence were modified from Chan (2000) instrument, e.g., 'Family members and friends who are important to me suggest that I should buy or use environmentally-friendly products.'
- 9 Items for green habits in hotels covered individual's recycling behaviour and green energy usage, and modification of items in Stern (2000) and Robinot and Giannelloni (2010), e.g., 'I follow the signs about reusing bed linen and towels in the hotel.'
- 10 Items for general mindfulness and green mindfulness were developed from focus group discussion results and Barber and Deale (2014), e.g., 'When staying at a hotel, I like to feel in control of what is going on around me' and 'When showering in the hotel, I carefully consider the environment.'
- 11 Hotel green attributes items were developed from customer focus group discussions. Along with Manaktola and Jauhari (2007), these questions will also apply to measure customer's perception of a hotel's green attributes, e.g., 'The hotel has visible communications about green practices.'
- 12 Items for customer-perceived value were obtained from Yang and Peterson (2004), e.g., 'Comparing what I pay to what I might get from other competitive hotels, I think this hotel provides me with good value.'

This thesis uses only variables relevant to the research aim, which is to examine the role of hotel management and consumers in establishing sustainable hotel business practice (see Section 1.3 in Chapter 1).

5.5.2 Instrument translation

The questionnaire for the Indonesian and Australian surveys was delivered in English and Indonesian languages. The language translation and back-translation was provided by professional translators and academics in Indonesia. The English questionnaire was firstly translated into the Indonesian language by a professional translator (for the language grammar), followed by some Indonesian academics (emphasising the context). The Indonesian questionnaire was then back-translated into the English language by a professional translator. The researcher examined whether the language and wordings matched the intended survey questions. After the translation, a pilot survey was conducted prior to the launch of the final survey.

5.5.3 Survey population and unit of analysis

Population refers to the entire group of people, events, or things of interest that the researcher wishes to investigate (Sekaran, 2003). This research investigates hotels' consumer behaviour and their perception of hotels' pro-environmental management. The targeted population is hotel customers in Indonesia and Australia. Beside their geographical closeness, Indonesia is considered as a representative of 'Eastern' culture, while Australia represents 'Western' culture (Noesjirwan, 1978). Additionally in a tourism context, there are some characteristics (e.g., culture and environment) that have distinct tourist behaviours in Indonesia and in Australia (Reisinger & Turner, 1997; Saufi et al., 2014) (see Chapter 2).

A unit of analysis refers to the level of aggregation of the data collected during the subsequent data analysis stage (Sekaran, 2003). The purpose of this phase is to investigate customer's perception of attributes in hotels and consumer PEB. Therefore, the unit of analysis in this research is the individual hotel patron.

5.5.4 Survey sampling and data collection

New Ethical Clearance for the quantitative study was sought and granted prior quantitative data collection (see Appendix B: Ethical Clearance Approval – Quantitative

Study). Data are collected from the customers of classified¹ hotels in Indonesia, mainly from Java and Bali islands, the most populated island and tourism destinations in Indonesia (Booth, 1990; HVS Global Hospitality Services, 2013). Classified hotels in Bali and Java Islands recorded high occupancy rates in 2014 (Badan Pusat Statistik Indonesia, 2014), thus may increase the opportunity to achieve a larger number of participants. In Australia, data were collected from hotel customers, mainly in big cities in Queensland, New South Wales, and Victoria. Surveys were administered in online and paper forms. Consumer participants were approached directly in the hotels and through social media (Facebook and WhatsApp), social networking, and snowballing to reach more eligible participants. The questionnaires were administered directly and through social media to adult (18 years and older) customers who had stayed at any classified hotels, with the most recent visit being within the past 12 months, to minimise the recall-memory effect.

5.5.5 Quantitative phase validity and reliability tests

For the quantitative phase, content validity was assessed to ensure that the instrument (questionnaire) included an adequate and representative set of items that tapped the concept. Face validity is the basis of content validity. Face validity indicates that the items that are intended to measure a concept look like they measure the concept (Sekaran, 2003). Face validity in this research was assessed by evaluating the relevancy of the scale items to the construct under study through a literature review about the construct, for instance.

Construct validity testifies to how well the results obtained from the use of the measure fit the theories around which the test is designed. Construct validity was confirmed using factor analysis, with the cut-off factor loading of 0.40. Factor analysis is a multivariate technique that confirms the dimensions of the concept that have been operationally defined, as well as indicating which of the items are most appropriate for each dimension (Sekaran, 2003). Exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) were executed using SPSS-AMOS software. Items are valid when the standardised regression weight is more than 0.3 and the squared multiple correlation is more than 0.5 (Hair, 2010).

Correlation matrix and Average Variance Extracted (AVE) of factor analysis were utilised to test convergent validity. Convergent validity ensures that the scales indicate that

¹ Three to five star hotels, as stated in the regulation of Indonesian Minister of Tourism and Creative Economy number PM. 53/ HM. 001/ MPEK/ 2013 about hotel business standard (see Chapter 2).

they measure the same construct and highly correlate with each other (Dillon, Madden, & Firtle, 1994).

Criterion (predictive) validity ensures that the scales used to measure certain constructs behave as expected in relation to other constructs (Dillon et al., 1994). Criterion validity was examined by performing regression on certain constructs based on the theory. According to its purpose, criterion validity is met when the relationship between such constructs is significant, supported by a high r-square value.

The discriminant validity test is conducted to ensure that a construct is separate to other constructs (Dillon et al., 1994). Discriminant validity test in this research was conducted according to Fornell and Larcker (1981), by comparing the square root of AVE and the correlation coefficient between constructs. Discriminant validity is met when the square root of AVE is greater than the correlation coefficient between constructs.

In quantitative measurement, consistency reliability assessment refers to Cronbach's Alpha value (Sekaran, 2003). A construct is reliable when its Cronbach's Alpha is more than 0.7 (Hair, 2010).

5.5.6 Multicollinearity in regression

Multicollinearity is a condition where a variable can be explained by other variables in the analysis. The presence of multicollinearity complicates the interpretation of the regression results.

Tolerance value and Variance Inflation Factor (VIF) are used to test multicollinearity. Tolerance is described as the amount of variability of the selected independent variable not explained by other independent variables. A high value of tolerance represents a small degree of multicollinearity (Hair, Black, Babin, Anderson, & Tatham, 2006). VIF is the inverse of tolerance ($VIF = 1/\text{tolerance}$). According to Hair et al. (2006), no multicollinearity is present when $VIF < 10$.

5.5.7 Quantitative data analysis and hypotheses testing

Once items validity and reliability are confirmed, descriptive analysis is utilised to present the demographic data and average of items. Structural Equation Modelling (SEM) using SPSS-AMOS software was utilised to analyse the data and to test the hotel's PEB model (Chapter 6) and customer loyalty model (Chapter 7).

Structural Equation Modelling (SEM) using SPSS-AMOS software was employed to test the hypotheses of the main model, quantitatively. SEM is a family of statistical models that seek to explain the relationships among multiple variables (Hair, 2010). Compared to multiple regressions, SEM simultaneously tests all relationships among constructs involved in the analysis.

SEM is considered as the most suitable technique to analyse data in this research, as the models developed in this research consist of many equations. SEM estimates multiple and interrelated dependence relationships, provides an ability to represent unobserved concepts and explains measurement error in the estimation process, as well as provides ability in defining a model to explain all relationships in the analysis (Hair, 2010). Therefore, SEM can control estimation bias. SEM also has the ability to handle large sample sizes.

According to Hair (2010), there are six-stages in the process of conducting the SEM analysis technique, as follows:

- Stage 1: Defining individual constructs, deciding items that are to be used as measured variables. SEM is a theory-driven analysis technique. SEM requires a strong theoretical support or a compelling rationale to explain relationships among variables.
- Stage 2: Develop and specify the measurement model by drawing path diagrams for the measurement model.
- Stage 3: Design a study to produce empirical results, assess the adequacy of the sample size, and select the estimation method and missing data approach.
- Stage 4: Assess measurement model validity (goodness of fit and construct validity of measurement model). If the measurement model is not valid, the researcher has to refine the measures and design a new study.
- Stage 5: Specify the structural model by converting the measurement model to a structural model.
- Stage 6: Assess structural model validity (goodness of fit and significance, direction, and size of structural parameter estimates) and hypothesis testing. If the structural model is not valid, the researcher has to refine the model and test with new data.

When the structural model is valid, substantive conclusions and recommendations are drawn from the fit model.

5.6 Manager interviews (Qualitative – Phase Three)

One-on-one semi-structured hotel manager interviews were conducted for Phase Three. The interviews were conducted in three regional groups: Indonesia, Australia, and other countries. The purpose of the interview is to explore and examine the actualisation of pro-environmental management in hotels. The procedure in Phase Three is described in Figure 5.3. From Phase Three, the criteria of mainstream hotel pro-environmental management and mainstream hotel pro-environmental typology are developed.

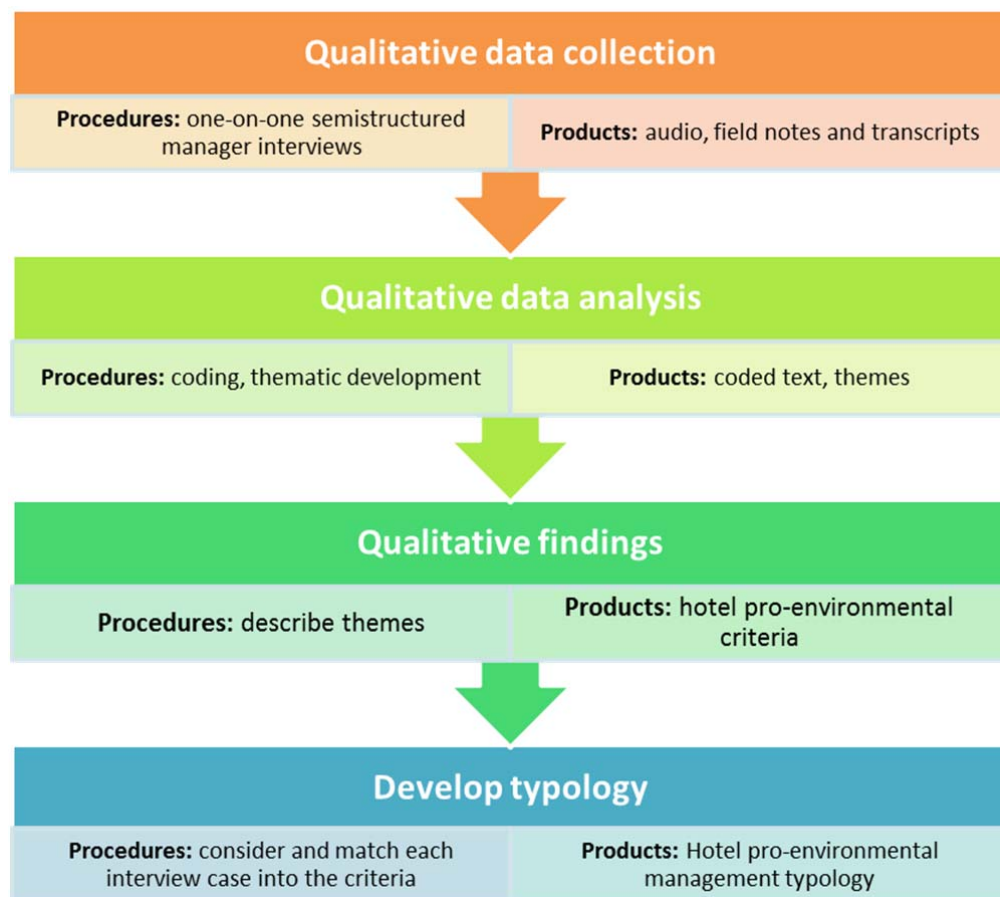


Figure 5.3. Developing typology from manager interviews

5.6.1 Interview instrument development

The design of this research employs in-depth or one-on-one semi-structured interviews and uses the questionnaire survey as the strategy of inquiry. In-depth interviews discuss free association and hidden sources of feelings through a question guide administered by a highly skilled interviewer. Dillon et al. (1994) suggest the following seven basic principles for developing instrument questions to avoid common method bias:

- The questions should be understandable to both researcher and respondent.
- If there is any choice, response choices should not overlap with one another.
- Familiar language should be used in developing instrument questions.
- Avoid biased or leading words or phrases to keep the questions neutral and objective.
- Avoid two opinions in one question (double barrelled).
- The questions have to state explicit and specific alternatives.
- The questions should meet criteria of validity and reliability by considering their relevance and memory-recall effect.

Interview protocol for this research consisted of five main points (see Appendix D: Interview Protocol). Interview questions investigating hotel's pro-environmental strategic management and green attributes were adopted from Bansal and DesJardine (2014), Bansal and Roth (2000), Enz and Siguaw (1999), Kirk (1995), Tzschentke et al. (2004b), and Reese, Loew, and Steffgen (2014). They contain assessments regarding:

1. overall motivation in applying pro-environmental strategy in the hotel
2. scope of green management in the hotel
3. process in establishing green management in the hotel
4. green management monitoring system in the hotel
5. communications to the hotel's customers regarding green attributes in the hotel.

5.6.2 Qualitative – manager interview sampling

One-on-one semi-structured manager interviews with hotel managers were conducted to investigate pro-environmental practice in hotels. One-on-one or an in-depth interview is often used to uncover underlying motivations, attitudes, prejudices, and so on. Under the fully-approved Ethical Clearance (see Appendix A: Ethical Clearance Approval – Qualitative

Study), participating hotels were selected on the basis of the hotel's public reviews (e.g., TripAdvisor), since the research aims to explore the various processes of pro-environmental management from different hotel cases. The Indonesian hotels were contacted from the Indonesian Hotel and Restaurant Association (IHRA) database. Interviews with hotel managers in Australia were conducted by chance when contacting the management, since the interviews were at the manager's convenience. The decision regarding the number of interviews was left to the researcher. Eisenhardt (1989) suggests that the data collection process should continue until it reaches information saturation. In this study, the interviews continued with extra hotel managers in some other countries, to ensure information saturation.

In administering questions, there are several key rules to be followed. The interviewer should use familiar words, avoid appearing superior or condescending, ask questions indirectly and informatively, be objective, allow the respondent first describe his/her thoughts toward an object, not accept 'yes' or 'no' answers, probe all details and underlying feelings, and encourage the respondents to talk freely while keeping the conversation on track (Dillon et al., 1994).

5.6.3 Manager interview validity test

Protocol validity for manager interview was assessed through background questions, such as 'How long have you been working as a General Manager in this hotel?' Qualitative research credibility is confirmed when the interviewee has the skills, competency, and rigour to answer the interview questions (Patton, 2002).

Internal validity for manager interviews was checked using *pattern matching* logic, by asking questions related to the interviewee's background and position (in terms of their job), as well as checking the consistency of the response of each question. If the patterns coincide, it can help the internal validity of the interview and focus group discussion. External validity for manager interviews was checked using *replication logic* by conducting more than one interview (Yin, 2008). Reliability of the interviews was confirmed by examining the pattern of the responses.

5.6.4 Interview data analysis

Referring to Figure 5.3, interview products (audio, notes, and transcripts) were analysed using a manual coding technique. Themes were then developed according to the

content of the information given by the managers. Since the semi-structured interview was used in this phase, a similar pattern of the responses to each question was coded as one theme. Data obtained from the manager interviews were in audio, notes, and transcript forms. Data analysis was conducted using a manual coding technique. According to Creswell and Clark (2007b) qualitative data analysis scheme, firstly, the participant's responses pattern was analysed, in order to determine the theme of each response. Responses were then grouped into certain themes. Some keywords were identified from a particular theme. Further, the researcher identified the connections between themes to develop meaningful findings.

Using the themes as the basis, the criteria of pro-environmental mainstream hotels were developed. Further, participant hotels were classified based on the criteria and a typology of pro-environmental management according to Doty and Glick (1994) guidelines in mainstream hotels was formed accordingly. The guidelines stated that (1) the grand theoretical assertion(s) of the typology should be explicit; (2) the ideal types in the typology have to be completely defined; (3) complete descriptions of each ideal type using the same set of dimensions must be provided; (4) the assumptions about the theoretical importance of each construct used to describe the ideal types have to be explicit; and, (5) the typology has to be tested with conceptual and analytical models that are consistent with the theory.

The criteria were developed with the guidelines from the strategic pro-environmental management literature (e.g., Bansal and DesJardine (2014); Gao and Bansal (2013)), the four-step approach to designing environmental marketing strategy based on stakeholder theory (Polonsky, 1995a) and manager interview data. The criteria development from literature is explained in Chapter 4. Starting with the keywords and the most obvious feature, the scope of pro-environmental management was the first element to be developed, mainly from the interview data. Scope was then followed by manager's motivation (vision, aim) in conducting pro-environmental management. Process, monitoring, and customer communications criteria were developed from the interview data, with the guidance of relevant literature.

Manager's responses were used to describe different levels of pro-environmental management in hotels. The levelling process begins from the extreme low, the extreme high, and the moderate. The criteria must be distinctive and replicable to measure other hotels' pro-environmental management.

5.7 Chapter Summary

Summarising this chapter, this research adopted the pragmatism paradigm which focuses on the research problem, consequences of actions, and a real-world practice orientation (Creswell, 2008). Therefore, three phases of a mixed-methods design (qualitative, quantitative and qualitative) were selected as the strategy of inquiry. Phase One of the research design utilised customer focus group discussions to explore more details about pro-environmental management in hotels and customer's responses to green attributes in hotels. A hotel customer survey was used in Phase Two of the research design, in Indonesia and Australia. Instruments for both Indonesia and Australia surveys were adapted from existing literature and focus group discussions. Phase Three of the research design employed hotel manager interviews to develop insights into pro-environmental management practices in hotels. Instrument development, validity test, reliability test, and data analysis procedures are provided for each research design phase.

CHAPTER

6

STUDY OF CONSUMER PRO-ENVIRONMENTAL BEHAVIOURS IN HOTELS

CHAPTER SIX: STUDY OF CONSUMER PRO-ENVIRONMENTAL BEHAVIOURS IN HOTELS

6.1 Introduction

Chapter six of the thesis presents the results for the first study from data collection Phase Two. Phase Two is customer survey targeting adult respondents who had stayed at any classified hotels in Indonesia and Australia in the past 12 months. The study of pro-environmental behaviours (PEB) in hotels elaborates the model of individual's PEB in a hotel context from a consumer's perspective. The study involves hotel customers in Indonesia and Australia. There are three behaviours assessed in this study: recycling, energy saving, and water-saving behaviours. The proposed antecedents include domestic habits, green influence from family and friends, green attributes in hotel, and consumer green mindfulness.

This chapter provides the quantitative data analysis procedure and results for the individual PEB model in a hotel context. The beginning of this chapter shows preliminary results covering the sample profile and average value of items in the scales. The section continues to describe scale items and the testing of the reliability of the scales, including content validity, convergent validity, criterion validity, construct validity, predictive validity, and discriminant validity. The subsequent section then delivers the results of the SEM model testing in a hotel PEB context. The last part of this chapter concludes the quantitative results for the study of consumer PEB in hotels.

6.2 Demographics

6.2.1 Indonesian sample demographics

Indonesia was chosen as the setting of this empirical study given its strategic location and the increasing number of hotel users (see Chapter 2). The perspective of Indonesian customers gives more insights on pro-environmental behaviour in hotels. As described in

Chapter 5, the sampling frame of this research is hotel customers who had stayed at 3-star, 4-star, and 5-star hotels² in Indonesia within the past twelve months.

A pilot survey was conducted prior to the launch of the final questionnaire to the targeted respondents. With the participation of 66 respondents (n=66), factor analysis and reliability analysis were performed on the pilot questionnaire. Minor changes to the questionnaire were made following pilot analysis results (see Appendix E: List of items in pilot questionnaire and F: Final Questionnaire).

Approximately 500 potential respondents were invited to complete the survey while a total of 330 participants completed the survey (66.0% response rate). Among 330 completed questionnaires, 324 were judged to be usable for further analysis. Table 6.1 shows hotel classification distributions and demographic profiles of the 324 participated respondents. The hotel class where respondents had stayed include 5-star and above (28.7%), 4-star and equivalent (40.1%), and 3-star and equivalent (31.2%). Most hotels are situated in major business and tourism destinations in Indonesia, such as Jakarta (20.1%) and Bali (17.3%).

The majority of respondents were Indonesian (93.9%). More than half of the total respondents were female (53.4%). Most of the respondents visited the hotel once (55.9%). Based on the age distribution, the majority can be categorised in the senior–working age group (35-60 years, 32.7%). According to their status, 58.3% of the total respondents were married. As much as 52.2% of total respondents held a bachelor degree or equivalent. As much as 74.4% of total respondents were currently employed. Respondents' travel purposes were described as leisure (36.7%), business (35.2%), and business and leisure (28.1%).

The Indonesian survey contained Likert-scale questions (1=strongly disagree; 5=strongly agree) that were adapted and modified from existing literature and customer focus group results (see Table 6.3 and 6.4 in Chapter 6). The questionnaire was delivered in both English and Indonesian (see Appendix F: Final Questionnaire).

² 'Classified hotels' consist of 3-star and above hotels, according to the regulation of Indonesian Minister of Tourism and Creative Economy number PM. 53/ HM. 001/ MPEK/ 2013 about hotel business standard.

Table 6.1. Indonesian hotel and sample characteristics

Hotel classification			
<i>5-star and above</i>	28.7%	<i>3-star and equivalent</i>	31.2%
<i>4-star and equivalent</i>	40.1%		
Hotel location			
<i>Jakarta</i>	20.1%	<i>Bandung</i>	8.6%
<i>Bali</i>	17.3%	<i>Surabaya</i>	8.3%
<i>Yogyakarta</i>	12.0%	<i>Others</i>	33.7%
Customer stay frequency			
<i>Once</i>	55.9%	<i>4 times</i>	5.9%
<i>Twice</i>	19.8%	<i>5 times</i>	4.9%
<i>3 times</i>	9.0%	<i>More than 5 times</i>	4.5%
Age			
<i>18-24</i>	20.4%	<i>35-60</i>	32.7%
<i>25-29</i>	22.8%	<i>60 or older</i>	6.2%
<i>30-34</i>	17.9%		
Gender			
<i>Male</i>	46.6%	<i>Female</i>	53.4%
Education			
<i>Some high school</i>	9.6%	<i>Postgraduate degree</i>	38.3%
<i>Bachelor degree or equivalent</i>	52.2%		
Occupational status			
<i>Employed</i>	74.4%	<i>Unemployed</i>	4.0%
<i>Retired</i>	4.0%	<i>Student</i>	17.6%
Home country			
<i>Indonesia</i>	93.9%	<i>Others</i>	6.1%
Travel purpose			
<i>Leisure</i>	36.7%	<i>Business and leisure</i>	28.1%
<i>Business</i>	35.2%		

6.2.2 Australian sample demographics

Following the results of the Indonesian sample study, a similar survey was conducted with three- to five-star hotel users in Australia (see Chapter 5). The perspective of Australian hotel patrons gives more insights and robustness to pro-environmental behaviour in hotels. Similarly to the Indonesian survey, the sampling frame of Australian survey was hotel customers who had stayed at 3-star, 4-star, and 5-star hotels in Australia. Approximately 500 potential respondents were invited to fill the survey and 347 questionnaires were completed (69.4% response rate). From the 347 completed questionnaires, 339 were deemed usable for further data analysis.

Table 6.2 shows hotel classification distributions and demographic profiles of the 339 participating respondents. The hotel class where respondents had stayed include 5-star and above (18.9%), 4-star and equivalent (59.3%), and 3-star and equivalent (21.8%). Most hotels are situated in major cities in Australia, such as Brisbane (28.0%), Sydney (17.7%), Melbourne (16.2%), and the Gold Coast (11.8%).

The majority of respondents were Australian (76.7%). Females comprised the largest number of respondents in this group (70.2%). Most of the respondents visited the hotel once (62.5%). Based on the age distribution, the majority were categorised in the senior-working age group (35-60 years, 34.8%). As much as 52.5% of the total respondents possessed a bachelor degree or equivalent. As much as 61.1% of total respondents were currently employed. Respondents' travel purposes were described as leisure (60.8%), business (16.2%), and business and leisure (23.0%).

The Australian survey contained Likert-scale questions (1=*strongly disagree*; 5=*strongly agree*) that were adapted and modified from existing literature (see Appendix F: Final Questionnaire). The questionnaire was delivered in English.

Table 6.2. Australian hotel and sample characteristics

Hotel classification			
<i>5-star and above</i>	<i>18.9%</i>	<i>3-star and equivalent</i>	<i>21.8%</i>
<i>4-star and equivalent</i>	<i>59.3%</i>		
Hotel location			
<i>Brisbane</i>	<i>28.0%</i>	<i>Gold Coast</i>	<i>11.8%</i>
<i>Sydney</i>	<i>17.7%</i>	<i>Others</i>	<i>26.3%</i>
<i>Melbourne</i>	<i>16.2%</i>		
Customer stay frequency			
<i>Once</i>	<i>62.5%</i>	<i>4 times</i>	<i>1.2%</i>
<i>Twice</i>	<i>16.2%</i>	<i>5 times</i>	<i>4.4%</i>
<i>3 times</i>	<i>7.4%</i>	<i>More than 5 times</i>	<i>8.3%</i>
Age			
<i>18-24</i>	<i>20.4%</i>	<i>35-60</i>	<i>34.8%</i>
<i>25-29</i>	<i>24.5%</i>	<i>60 or older</i>	<i>5.9%</i>
<i>30-34</i>	<i>14.5%</i>		
Gender			
<i>Male</i>	<i>29.8%</i>	<i>Female</i>	<i>70.2%</i>
Education			
<i>Some high school</i>	<i>10.9%</i>	<i>Postgraduate degree</i>	<i>36.6%</i>
<i>Bachelor degree or equivalent</i>	<i>52.5%</i>		
Occupational status			
<i>Employed</i>	<i>61.1%</i>	<i>Unemployed</i>	<i>1.5%</i>
<i>Retired</i>	<i>2.1%</i>	<i>Student</i>	<i>35.4%</i>
Home country			
<i>Australia</i>	<i>76.7%</i>	<i>Sri Lanka</i>	<i>1.5%</i>
<i>Indonesia</i>	<i>9.4%</i>	<i>USA</i>	<i>1.5%</i>
<i>South Africa</i>	<i>1.5%</i>	<i>Others</i>	<i>9.4%</i>
Travel purpose			
<i>Leisure</i>	<i>60.8%</i>	<i>Business and leisure</i>	<i>23.0%</i>
<i>Business</i>	<i>16.2%</i>		

6.3 Scale items and reliability

All measures utilised in the study of PEB in hotel were adapted and modified according to existing literature and customer focus group discussion results (see Chapter 5 and Table 6.3 and 6.4 below).

Table 6.3. Focus Group Discussion Results – Australia

#	Participant A	Participant B	Participant C	Participant D
Favourite feature(s)	Comfy bed, cleanliness.	Nice room service, bed, Jacuzzi, air conditioning.	Location, facilities (e.g., pool).	Relaxing facilities, Jacuzzi, sauna, spa, vegetarian food, air conditioner.
Opinion on 'green' hotel	Good, but already paid for the hotel services. Thus, will enjoy the facilities. Will do pro-environmental behaviours at home.	It is good to put it in everyone's perception to behave pro-environmentally.	Good. Do pro-environmental behaviours at home, but not necessarily on holiday.	Hotels want to get some more money and protecting their bottom line by asking the guests to behave pro-environmentally.
Green attributes in hotel	Towel reuse.	Water conservation.	Hotel system automation, lamps, keys, etc. Towel and linen reuse.	Eco-friendly food, air conditioning system, towel reuse, forest and water conservation, donations.
Hotel green campaign	Do not care. As a customer, will enjoy every comfort facility.	Good. In religion, they also do campaigns about pro-environmental behaviours, such as water.	Controlling the customers.	Do not care. Hotel is trying to tell customers for their own benefit, not being genuine.
Pro-environmental sign pictures	Will not follow. Ignore the signs.	Will try to follow the signs. Depends on the situation.	Not necessarily follow the signs.	Offended. Will not follow. Hotel tries to tell the customers what to do with their own money.
Additional comments	Do not notice pro-environmental campaigns in the hotel.	Better establish recycling bins for guests, so they can support recycling programs.	Rewards for customers for supporting hotel's pro-environmental programs.	Will follow the green programs if the hotel is genuine about saving the environment.

Table 6.4. Focus Group Discussion Results – Indonesia

#	Participant E	Participant F	Participant G	Participant H
Favourite feature(s)	Neat and tidy room.	Hot bathtub, comfy bed.	Complete bathroom kits, fresh towels.	Clean room.
Opinion on 'green' hotel	It is a responsibility for hotels to be green. It is important to create green environment and reducing the waste/pollution.	Good concept, but will not follow the concept as a customer; want to maximise the hotel stay benefit. 'Green' hotel is management's policy.	Agreed. Green concept makes customers more comfortable to stay in the hotel. Customers are care about environment; they choose eco-friendly products. Being green is also the hotel's green marketing effort.	Agree with the 'green' concept, but hotels need to socialise the concept to the customers and inspire them to do so.
Green attributes in hotel	Waste treatment installation. Card to activate the electricity in the guest's room. Eco-friendly drinking water, reducing plastic water bottles. (Note: in Indonesia, tap water is not potable)	Plants in the hotel, building that allows natural lighting.	Green campaigns to educate guests. Glass walls and open spaces in the hotel, also pro-environment waste treatment. Customer communications, as well, e.g., not to waste food and plates.	Announcement about being pro-environment to customers. Automatic lamps and sink taps. Eco-friendly amenities (using less packaging material/cartons) and eco-friendly products (e.g., recycled papers).
Hotel green campaign	The hotel staff are not aware of green behaviours. For example, the staff keep changing towels everyday although the guest follows the sign suggestions.	Green campaign should be a procedure in the hotel, so that consumers are aware about it.	No visible/not aware of green campaigns in mainstream hotels, so far.	Not aware of the hotel's green campaign.
Pro-environmental sign pictures	Will follow the signs.	If it is voluntarily, then will not follow the signs. No rewards/benefits for following the signs.	Will follow the signs, use water wisely.	Will follow the signs, when possible.
Additional comments	Hotels still have to improve their internal pro-environment management, such as waste treatment system.	Let the customers know about hotel green practice. The merchandise idea was good, so that customers will spread positive WOM about hotel's green attributes when they go home.	Current mainstream hotels still have to improve their green attributes. Will tell management if something bad affects the wellbeing of the environment in the hotel.	Hotels should add visible green facilities to the customers, such as separated rubbish bins in guest rooms.

Table 6.4 (Continued). Focus Group Discussion Results – Indonesia

#	Participant I	Participant J	Participant K	Participant L
Favourite feature(s)	Clean room.	Hot bath/shower, hair dryer.	Porter services.	Laundry, tidy room, fresh towels, free soaps.
Opinion on ‘green’ hotel	Good concept. However, more than establishing the green facilities, hotel has to educate the customers.	Good to reduce environmental contaminations. Hotels have to pay the compensation of reducing land/spaces.	Land that was supposed to grow plants replaced by hotel building. Hotels and customers have to be green to pay for that.	Supporting the concept, but hotels in Indonesia can do more, e.g., more visible green signs, and planting programs for customers.
Green attributes in hotel	Sink taps with sensor, electricity and water-saving technology. Merchandise to remind guests to behave pro-environmentally.	Waste treatment and green campaign. Plants in the hotel and rooftop garden. Energy-saving facilities.	One-push tap water with low flow. Glass walls to allow natural lightings.	Plants in the hotel, green atmosphere. Separated smoking place, signs in the restaurant on ‘not to waste food’.
Hotel green campaign	The green campaign is usually not very clear. When it is visible, people will know that it is the rule to be green in the hotel.	Current hotels are still unclear about the green campaign. It should be clearly written.	It is good to have green campaign. However, the message has to be clear. The more touching the words, the more participation they will get.	Not aware of any pro-environmental campaign in the hotel.
Pro-environmental sign pictures	The signs are the rules. Will try to follow the rules, where possible.	Will try to follow it, depends on the situation.	It depends on the message. If the sign and messages are clear, then will follow them.	Will follow the pro-environmental suggestions.
Additional comments	Hotels have to be more encouraging and involve customers in their green programs. Staff as well. The hotel staff even taught us to cheat the electricity sensor in the room by replacing the key card with any card, and it worked.	It is a consumer’s habitual thing to turn the lights off when not in use. It is better for hotels to communicate their green programs to customers.	Let the guests know about green facilities in the hotel. When the management has done everything but it is invisible to the guests, they will not participate.	Green facilities in current hotels still need to be improved. It could be from small things in daily life, such as efficient drinking water.

Items of *green mindfulness* construct were developed from Barber and Deale (2014) and the consumer focus group discussion results. Some opinions such as ‘using water wisely’ (Table 6.3, Participant B and Table 6.4, Participant G), ‘turn the lights off when not in use’ (Table 6.4, Participant J), and ‘customers are care about the environment’ (Table 6.4, Participant G and K) were accommodating *green mindfulness* items. Combined with Manaktola and Jauhari (2007), the focus group discussion results also contributed to some of *hotel green attributes* items. Several key pro-environmental attributes in hotels were picked up from the focus group discussions, such as ‘clear sign and messages’ (Table 6.4, Participant K), ‘waste treatment and recycling’ (Table 6.4, Participant E, G and H), and ‘eco-friendly product’ (Table 6.4, Participant H).

Considering that the measures used in this research have been previously tested, a reliability test was conducted first in order to confirm the consistency of the scales. As indicated in Section 6.2, the total sample size for Indonesia was 324 and for Australia was 339. The sample for the PEB in hotel study reached an adequate number, indicated by the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO-MSA) value of 0.87 for all variables, that was greater than 0.50 (Ren et al., 2016).

Tables 6.5 and 6.6 provide detailed initial reliability test results. Hair et al. (2006) suggest a Cronbach’s Alpha value greater than 0.70 as a cut-off value for reliability. However, when the (sub)scales hold few items, a Cronbach’s Alpha value, even as low as 0.60 can be statistically accepted for the purpose of behavioural studies (Loewenthal, 2001). These conditions apply particularly to home energy saving habits and general mindfulness of the Australian sample. On the same note, family and friends’ green influence were represented by a single item. Thus, Cronbach’s Alpha is not applicable for this single item. Summarising the results, all variables in this research met reliability criteria. Results of validity tests are presented in the next section of this chapter.

Table 6.5. Initial Reliability Test Results – Indonesia

Variable names	Cronbach's Alpha	Cronbach's Alpha based on standardised items	N of items
Home recycling habit	0.86	0.86	2
Home energy saving habit	0.70	0.71	3
Home water saving habit	0.85	0.86	2
Hotel recycling habit	0.76	0.77	2
Hotel energy saving habit	0.74	0.74	2
Hotel water saving habit	0.84	0.84	3
General mindfulness	0.79	0.79	2
Green mindfulness	0.84	0.84	5
Hotel green attributes	0.85	0.85	5
Green influence	N/A	N/A	1

Table 6.6. Initial Reliability Test Results - Australia

Variable names	Cronbach's Alpha	Cronbach's Alpha based on standardised items	N of items
Home recycling habit	0.89	0.89	2
Home energy saving habit	0.65	0.65	3
Home water saving habit	0.87	0.88	2
Hotel recycling habit	0.87	0.87	2
Hotel energy saving habit	0.77	0.77	2
Hotel water saving habit	0.78	0.78	3
General mindfulness	0.67	0.67	2
Green mindfulness	0.82	0.82	5
Hotel green attributes	0.87	0.87	5
Green influence	N/A	N/A	1

6.4 Validity tests

A set of validity tests was undertaken in order to confirm whether the items in the questionnaire used in this research measured the constructs they were supposed to measure (Hair et al., 2006; Sekaran, 2005). This section addresses each validity test carried out for the aforesaid purpose, starting with content validity, and progressing to convergent validity, criterion validity, construct validity, predictive validity, and discriminant validity.

6.4.1 Construct validity

The construct validity test confirms the extent to which differences in the observed scale scores reflect true differences in the construct under study (Dillon et al., 1994). In this study, construct validity was assessed by conducting factor analysis. For this purpose, Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) were undertaken using varimax rotation in SPSS 21 software and any factor loading below 0.45 was omitted. As presented in Table 6.9 for the Indonesian sample and Table 6.10 for the Australian sample, all items used in this research showed good factor loadings (>0.50) and were grouped in certain factors. Factor analysis results indicated the differentiation of each construct and its dimensions.

6.4.2 Content validity (Face validity)

Content validity is a non-statistical process to ensure that scale items measure the desired construct. Content validity indicates the representativeness of the content of a measurement scale. The validity analysis focuses on whether the scale items sufficiently cover the whole domain of the construct under study (Dillon et al., 1994). Content validity can be assessed by evaluating the closeness of the scale items to the studied construct. For content validity test purposes, firstly, all scales were taken and adapted from the existing literature. Therefore, the closeness of the scale items to a particular construct can be confirmed by reviewing the literature and the items. For example, the main items of *general mindfulness* were taken from Barber and Deale (2014). From the literature, it is recognised that such items have been utilised to measure consumer mindfulness in hotels. Hence, in the current research, the items were also used to measure the same construct.

6.4.3 Convergent validity

Convergent validity for the measurement scales in this research was confirmed using correlation matrix and factor analysis. Convergent validity of a set of scales is met when the

measurement scales indicate they measure the same construct correlated to each other (Dillon et al., 1994). Correlation results between constructs are shown in Table 6.7 for the Indonesian sample and Table 6.8 for the Australian sample. Tables 6.9 and 6.10 exhibit the results of factor analysis, including factor loadings of each item and Average Variance Extracted (AVE) of each construct under study. Convergent validity is met for all constructs in this research, supported by correlation matrix, good factor loadings (>0.55), and AVE.

6.4.4 Criterion (predictive) validity

A criterion validity test was undertaken for the purpose of this study. The criterion validity test was conducted by investigating whether the measurement scales used in this study behaved as expected in relation to other constructs (Dillon et al., 1994). As displayed in Table 6.7 and 6.8, the correlation between constructs is lower than the AVE. Thus, supported by Table 6.9 for the Indonesian sample and Table 6.10 for the Australian sample, the results indicate that all items have assembled into designated constructs.

6.4.5 Discriminant validity

Discriminant validity in this research was assessed by examining the correlation between the measure of interest and other measures that supposedly measure a different – but related – construct (Dillon et al., 1994). Discriminant validity ensures that a construct is separate from other constructs. Therefore, as suggested by Fornell and Larcker (1981), discriminant validity of a set of constructs used in this research were assessed using the square root of Average Variance Extracted (AVE) and the correlation coefficient between constructs. Accordingly, discriminant validity is met when the square root of AVE is greater than the correlation coefficient between constructs. As presented in Table 6.7 and Table 6.8, all constructs in this research indicated a greater square root of AVE, compared to correlation between constructs. In conclusion, discriminant validity is met (Fornell & Larcker, 1981).

Table 6.9 and 6.10 summarise the factor loadings, AVE values, and Cronbach's Alpha values of the relevant variables of the hotel consumer PEB model. This model utilised a single item to measure 'family and friends' green influence. Hence, factor analysis, AVE, and Cronbach's Alpha are not relevant to the family and friends' green influence item.

Table 6.7. Discriminant validity between constructs - Indonesia: Inter-factor correlation
(diagonal indicates \sqrt{AVE}).

Construct correlations (r_{ij})	Home Recycling Habit	Home Energy Saving Habit	Home Water Saving Habit	Hotel Recycling Habit	Hotel Energy Saving Habit	Hotel Water Saving Habit	General Mindfulness	Green Mindfulness	Hotel Green Attributes
Home Recycling Habit	0.94								
Home Energy Saving Habit	0.34	0.79							
Home Water Saving Habit	0.35	0.62	0.93						
Hotel Recycling Habit	0.44	0.31	0.26	0.90					
Hotel Energy Saving Habit	0.30	0.60	0.52	0.42	0.89				
Hotel Water Saving Habit	0.35	0.51	0.67	0.42	0.70	0.88			
General Mindfulness	0.35	0.23	0.22	0.43	0.36	0.34	0.91		
Green Mindfulness	0.41	0.53	0.52	0.48	0.74	0.70	0.47	0.79	
Hotel Green Attributes	0.18	0.13	0.22	0.34	0.14	0.26	0.26	0.29	0.79

Note: \sqrt{AVE} > correlation coefficient (r_{ij}), discriminant validity met (Fornell & Larcker, 1981).

Table 6.8. Discriminant validity between constructs - Australia: Inter-factor correlation
(diagonal indicates \sqrt{AVE}).

Construct correlations (r_{ij})	Home Recycling Habit	Home Energy Saving Habit	Home Water Saving Habit	Hotel Recycling Habit	Hotel Energy Saving Habit	Hotel Water Saving Habit	General Mindfulness	Green Mindfulness	Hotel Green Attributes
Home Recycling Habit	0.95								
Home Energy Saving Habit	0.39	0.77							
Home Water Saving Habit	-0.02	0.40	0.94						
Hotel Recycling Habit	0.30	0.38	0.28	0.94					
Hotel Energy Saving Habit	0.24	0.56	0.33	0.47	0.90				
Hotel Water Saving Habit	-0.03	0.38	0.69	0.41	0.57	0.84			
General Mindfulness	0.18	0.08	0.14	0.26	0.09	0.19	0.87		
Green Mindfulness	0.24	0.47	0.41	0.52	0.69	0.61	0.28	0.89	
Hotel Green Attributes	-0.05	0.13	0.30	0.25	0.26	0.44	0.28	0.27	0.81

Note: \sqrt{AVE} > correlation coefficient (r_{ij}), discriminant validity met (Fornell & Larcker, 1981).

Table 6.9. PEB in hotels model variables scales validity and reliability - Indonesia

Variable Items	Factor Loading	AVE	Cronbach's Alpha
<u>Green Habit</u>			
<i>Recycling</i>		0.88	0.86
I recycle paper products.	0.94		
I recycle plastic and glass.	0.94		
<i>Energy</i>		0.63	0.70
I switch lights off which are not being used.	0.82		
I use energy efficient lighting.	0.82		
I use air conditioners moderately rather than to extreme temperatures.	0.75		
<i>Water</i>		0.87	0.85
I save water when showering.	0.94		
I use water wisely in my house.	0.94		
<u>Hotel Green Habit</u>			
<i>Recycling</i>		0.81	0.76
In hotel, where possible, I carefully sort my waste into either recycling or rubbish.	0.90		
I support recycling behaviour during my stay in the hotel.	0.90		
<i>Energy</i>		0.80	0.74
At the hotel, I switch off the lights that are not in use.	0.89		
I use air conditioners in my hotel room moderately rather than to extreme temperatures.	0.89		
<i>Water</i>		0.77	0.84
I try to save water when showering in hotel.	0.93		
I use water wisely during my stay in hotel.	0.93		
I follow the signs about reusing bed linen and towels in hotel.	0.76		
<u>Green Influence – Family and friends</u>			
Family members and friends who are important to me suggest that I should buy or use environmentally friendly products.	N/A	N/A	N/A
<i>Note: Family and friends green influence is a single item.</i>			
<u>Mindfulness</u>			
<i>General mindfulness</i>		0.83	0.79
When staying at a hotel, I like to feel involved in what is going on around me.	0.91		
When staying at a hotel, I like to feel in control of what is going on around me.	0.91		
<i>Green Mindfulness</i>		0.62	0.85
For getting my towels changed, I reflect on the environment.	0.90		
For getting my linen changed, I reflect on the environment.	0.89		
When showering in hotel, I carefully consider the environment.	0.87		
When leaving the hotel room, I am mindful of turning off the power.	0.67		
When throwing out my rubbish, I am mindful where to put it.	0.54		
<u>Hotel Green Attributes</u>		0.62	0.85
The hotel establishes active recycling program for materials in all sections.	0.83		
The hotel provides environmentally friendly products (i.e. low toxicity, organic or locally grown/made).	0.82		
The hotel participates in environmental partnership or certification.	0.81		
The hotel has energy-saving light bulbs in all rooms.	0.74		
The hotel has visible communications about green practices.	0.73		

Table 6.10. PEB in hotels model variables scales validity and reliability - Australia

Variable Items	Factor Loading	AVE	Cronbach's Alpha
<u>Green Habit</u>			
<i>Recycling</i>		0.90	0.89
I recycle paper products.	0.95		
I recycle plastic and glass.	0.95		
<i>Energy</i>		0.59	0.65
I use energy efficient lighting.	0.81		
I switch lights off which are not being used.	0.76		
I use air conditioners moderately rather than to extreme temperatures.	0.74		
<i>Water</i>		0.89	0.88
I save water when showering.	0.94		
I use water wisely in my house.	0.94		
<u>Hotel Green Habit</u>			
<i>Recycling</i>		0.89	0.87
In hotel, where possible, I carefully sort my waste into either recycling or rubbish.	0.94		
I support recycling behaviour during my stay in the hotel.	0.94		
<i>Energy</i>		0.81	0.77
At the hotel, I switch off the lights that are not in use.	0.90		
I use air conditioners in my hotel room moderately rather than to extreme temperatures.	0.90		
<i>Water</i>		0.71	0.78
I use water wisely during my stay in hotel.	0.94		
I try to save water when showering in hotel.	0.92		
I follow the signs about reusing bed linen and towels in hotel.	0.63		
<u>Green Influence – Family and friends</u>			
Family members and friends who are important to me suggest that I should buy or use environmentally friendly products.	N/A	N/A	N/A
<i>Note: Family and friends green influence is a single item.</i>			
<u>Mindfulness</u>			
<i>General Mindfulness</i>		0.75	0.67
When staying at a hotel, I like to feel involved in what is going on around me.	0.87		
When staying at a hotel, I like to feel in control of what is going on around me.	0.87		
<i>Green Mindfulness</i>		0.80	0.82
For getting my linen changed, I reflect on the environment.	0.87		
For getting my towels changed, I reflect on the environment.	0.85		
When showering in hotel, I carefully consider the environment.	0.78		
When leaving the hotel room, I am mindful of turning off the power.	0.70		
When throwing out my rubbish, I am mindful where to put it.	0.61		
<u>Hotel Green Attributes</u>		0.66	0.87
The hotel participates in environmental partnership or certification.	0.86		
The hotel provides environmentally friendly products (i.e. low toxicity, organic or locally grown/made).	0.83		
The hotel has energy-saving light bulbs in all rooms.	0.81		
The hotel establishes active recycling program for materials in all sections.	0.80		
The hotel has visible communications about green practices.	0.77		

6.5 Hotel consumer pro-environmental behaviour (PEB) model

A merged data file of Indonesian and Australian quantitative data was used in testing the hotel consumer PEB model. The hotel PEB model was tested using Structural Equation Modelling (SEM) with AMOS 21 software. A multi-group analysis was applied to the data. The merged sample file was then labelled into two groups, on the basis of the hotel's country (Indonesia and Australia).

An evaluation of the assumptions was performed before conducting the model test. The normality assumption for the variables was tested by examining data skewness and kurtosis using SPSS 21 software. Skewness and kurtosis have to be zero, to achieve normality (Hair et al., 2006). The values of skewness and kurtosis for each variable are presented in Table 6.11. The results revealed that the study variables were negatively skewed. However, with the large sample size (200 or more), a variable with significant skewness often does not deviate from normality and make a substantive difference in the analysis (Fidell & Tabachnick, 2003). Using AMOS 21 software, the normality of the data was checked using Mahalanobis Distance. As many as 14 outliers were removed to improve the normality of the data and model fit. Multicollinearity was also been tested and results of VIF < 10 (ranged from 1.10 to 2.98, among all variables). This outcome met the criteria of good data according to Hair et al. (2006).

Table 6.11. Hotel PEB model variables normality test (n=663)

Variable	Mean	Std. Deviation	Variance	Skewness	Kurtosis
Family-friends Influence	3.46	1.06	1.12	-0.31	-0.68
Hotel Green Attributes	3.25	0.81	0.65	-0.18	0.11
Home Habit - Recycling	3.85	1.05	1.11	-0.64	-0.43
Home Habit - Energy	4.34	0.67	0.45	-1.04	0.90
Home Habit - Water	3.93	0.96	0.92	-0.63	-0.31
General Mindfulness	3.42	0.82	0.67	-0.36	0.21
Green Mindfulness	3.87	0.78	0.61	-0.53	0.24
Hotel PEB – Recycling	3.63	1.02	1.05	-0.45	-0.52
Hotel PEB – Energy	4.22	0.85	0.73	-1.24	1.46
Hotel PEB – Water	3.88	0.91	0.83	-0.72	0.21

The results of the SEM revealed that the structural model was a good fit with the data (see Table 6.12). In particular, the hotel consumer PEB model provided a satisfactory fit ($\chi^2 = 702.65$, $df = 234$, $p < 0.01$, $\chi^2/df = 3.00$, RMSEA = 0.06, CFI = 0.93, GFI = 0.90, SRMR = 0.04, HOELTER (0.05) = 251). Overall, the results of model evaluations implied that the proposed hotel PEB model predicted hotel customers' PEB well when they were in hotels.

Table 6.12. PEB in hotels model explanatory power and fit indices.

Fit indices	Suggested value	Model fit indices
χ^2		702.65
df		234
χ^2/df	≤ 2 to ≥ 5	3.00
RMSEA	≤ 0.08	0.06
CFI	≥ 0.90	0.93
GFI	≥ 0.90	0.90
SRMR	≤ 0.08	0.04
HOELTER (0.05)	> 200	251

Note: Suggested values were based on Hair et al. (2006), Hu and Bentler (1998) and Hu and Bentler (1999).

In order to compare the structural model across the two countries, the multi-group analysis compared differences in the standardised coefficients of the corresponding structural paths of the two groups of models (Indonesia and Australia). The results of the multi-group analysis appear in Figure 6.1 and 6.2.

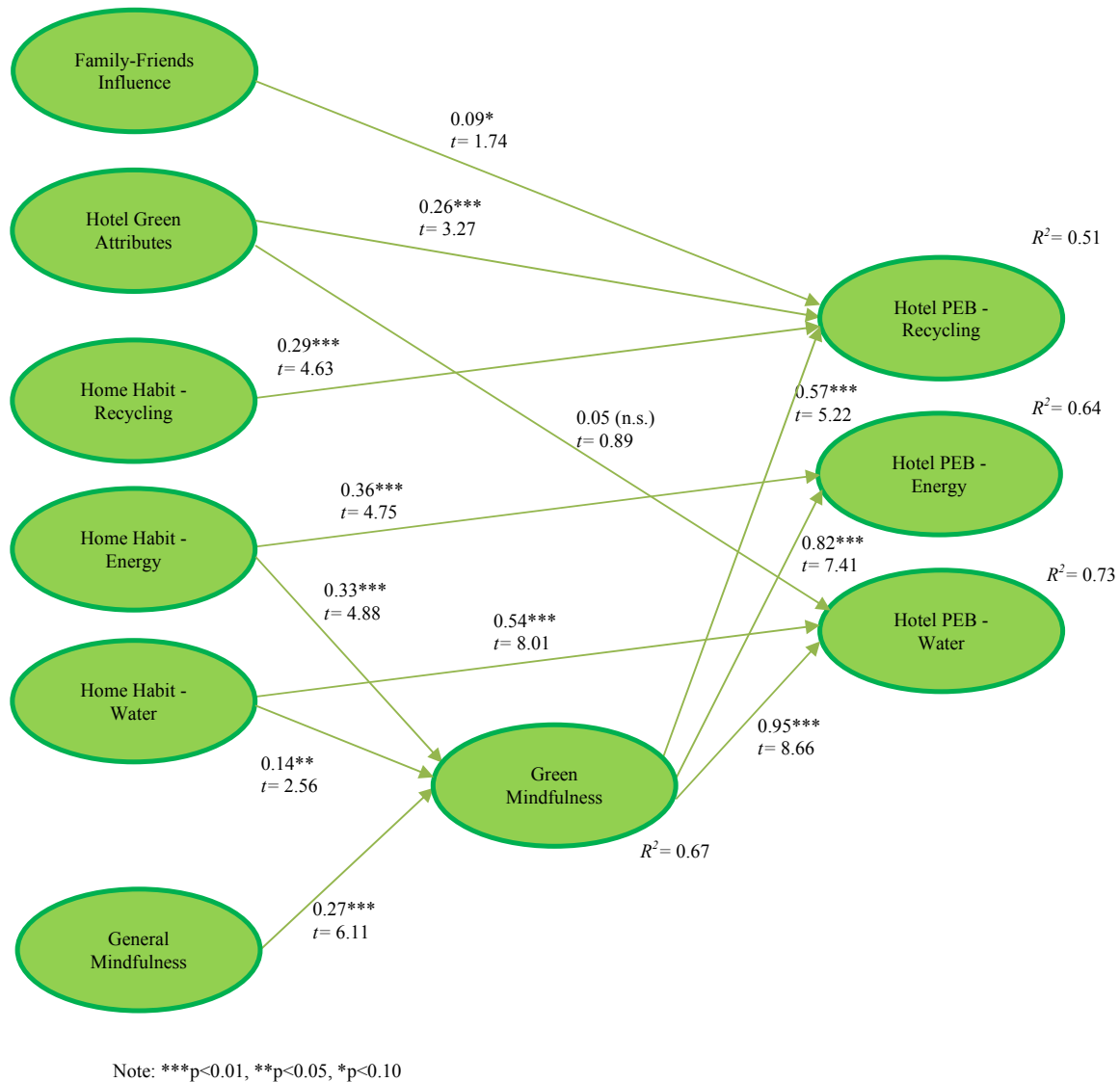
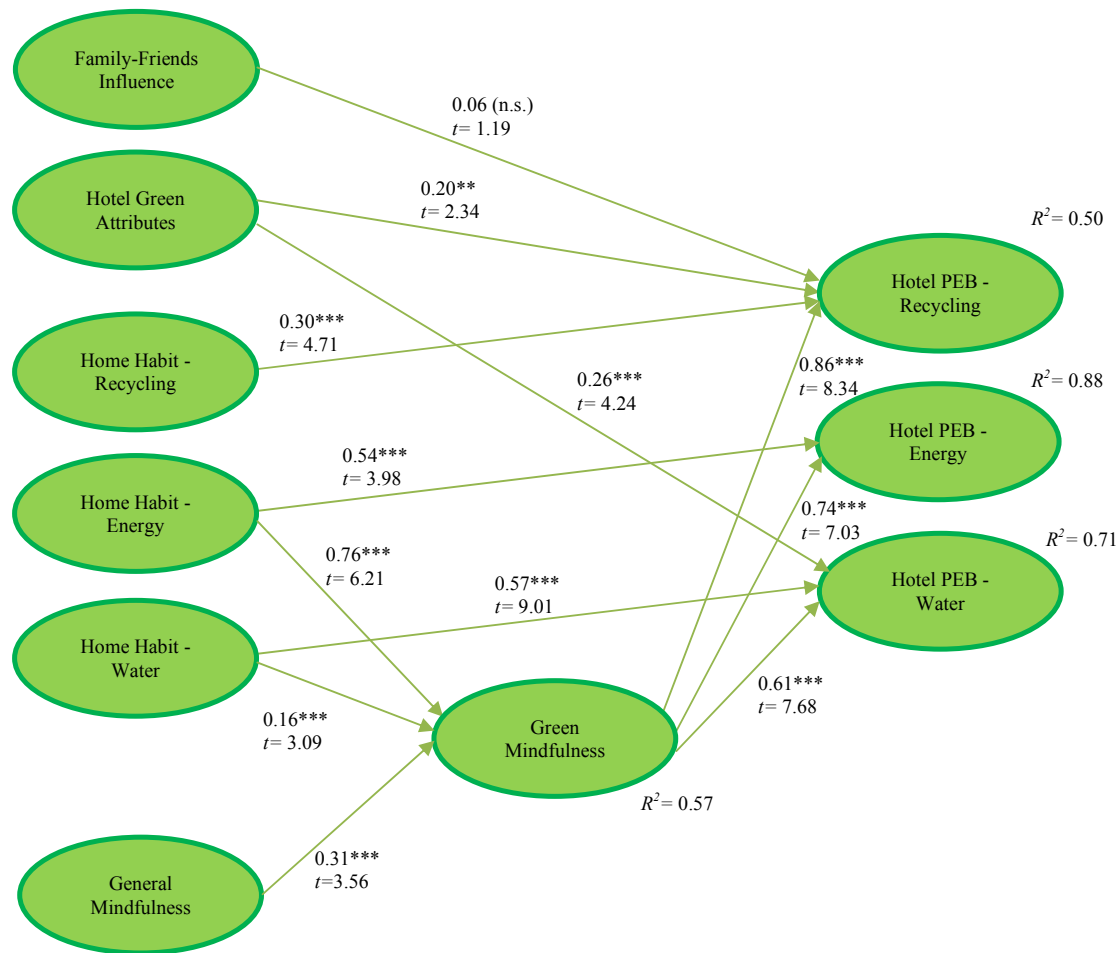


Figure 6.1. Consumer PEB in hotels model – Indonesia

In both the Indonesian (I) and Australian (A) models, all domestic green habits show significant paths to similar PEB in hotels. The *water-saving behaviour at home* presents a strong coefficient ($\beta_I = 0.54$; $\beta_A = 0.57$) in its relationship with *water-saving behaviour in a hotel*. The path of *energy-saving behaviour at home* to *energy-saving behaviour in a hotel* results in a stronger coefficient for the Australian sample, compared to the Indonesian sample ($\beta_I = 0.36$; $\beta_A = 0.54$). The *home-hotel recycling behaviour* path as well shows significant coefficients for Indonesian and Australian samples ($\beta_I = 0.29$; $\beta_A = 0.30$). Hence, **H1 is supported**.



Note: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$

Figure 6.2. Consumer PEB in hotels model – Australia

All groups suggested significant strong paths of *green mindfulness* to PEB in hotel. The *green mindfulness* \Rightarrow *hotel energy-saving behaviour* path appears to be the strongest for both Indonesia and Australia ($\beta_I = 0.82$; $\beta_A = 0.74$). The influence of *green mindfulness* on *hotel water saving behaviour* for the Indonesian sample seems to be stronger ($\beta_I = 0.95$), compared to the Australian sample ($\beta_A = 0.61$). As for *green mindfulness* \Rightarrow *hotel recycling behaviour* path, the Australian sample delivers a stronger coefficient ($\beta_A = 0.86$), compared to the Indonesian sample ($\beta_I = 0.57$). Thus, results on *green mindfulness* \Rightarrow *hotel PEB* paths support H4.

The *hotel green attributes* \Rightarrow *hotel PEB* paths reveal a significant influence among Indonesian and Australian samples. *Hotel green attributes* significantly influence *recycling behaviour in hotels* for both Indonesian and Australian samples ($\beta_I = 0.26$; $\beta_A = 0.20$). The effect of *hotel green attributes* is also significant on *water saving behaviour in hotels* for the Australian group ($\beta_A = 0.26$), whereas for the Indonesian group the coefficient is insignificant. **H3 is partially supported** due to insignificant *hotel green attributes* \Rightarrow *water saving behaviour* path for the Indonesian sample.

Indonesian and Australian groups present different results on the effect of *green family and friends' influence* on *recycling behaviour* in hotels. The *influence of family and friends* is significant for the Indonesian group ($\beta_I = 0.09$), while for Australian group the *influence of family and friends* is insignificant. Therefore, **H2 is partially supported**.

Both Indonesian and Australian sample groups suggest a significant influence of *home PEB habits* on *green mindfulness*. The path of the *energy saving habit* to *green mindfulness* results in a stronger significant coefficient for the Australian sample ($\beta_A = 0.76$), compared to the Indonesian sample ($\beta_I = 0.33$). The *home water saving habit* for both Indonesian and Australian samples results in a significant influence on *green mindfulness* ($\beta_I = 0.14$; $\beta_A = 0.16$). Thus, the results of *home PEB habits* \Rightarrow *green mindfulness* paths **support H5**. In addition, the path of *general mindfulness* \Rightarrow *green mindfulness* produces a significant coefficient for both Indonesian and Australian samples ($\beta_I = 0.27$; $\beta_A = 0.31$). The result thus **supports H6**.

Table 6.13 summarises the hypotheses testing results. In general, the multi-group SEM analysis suggests similar results across Indonesian and Australian samples.

Table 6.13. PEB in hotels model hypotheses testing results.

Hypotheses	Statement	Supported/Not Supported
H1	Pro-environmental habits (recycling, energy saving, water saving) at home significantly influence similar behaviours in hotels.	Supported
H2	Family and friends significantly influence individuals to behave pro-environmentally in hotels.	Partially supported
H3	The provision of green attributes in the hotel significantly affects customer PEB actualisation in hotels.	Partially supported
H4	Green mindfulness significantly influences individual PEB in hotels.	Supported
H5	Green habits at home significantly influence individual's green mindfulness.	Supported
H6	General mindfulness significantly influences green mindfulness.	Supported

6.6 Conclusions

The study of a hotel customer PEB model was analysed in this chapter. The quality of the instrument used to measure variables in the model proved satisfactory. Validity and reliability tests were performed on the survey instrument. A pilot study was initiated with 66 respondents prior to conducting the final survey. Minor corrections were made to the questionnaire as a result of the pilot study. Results of correlation matrix and factor analysis showed good validity of the constructs under study. Cronbach's Alpha value of 0.70 and more indicated good reliability for all constructs.

Hotel PEB model testing was conducted using multi-group SEM. Two groups were formed on the basis of country (Indonesia and Australia). The hotel PEB model indicated a good fit with the data. Domestic habits presented significant paths on similar behaviours in hotels for both countries. Green mindfulness presented strong coefficients on hotel PEB in Indonesia and Australia. Multi-group analysis suggested different results across countries on *green family and friends Influence* \Rightarrow *hotel recycling behaviour* path. The influence of *hotel green attributes* \Rightarrow *recycling behaviour in hotels* was significant only for the Indonesian sample and the influence of *hotel green attributes* \Rightarrow *water saving behaviour in hotels* was significant only for Australian sample. All hypotheses under the hotel customer PEB model are supported (note that H2 and H3 are partially supported). In general, both Indonesian and Australian groups presented similar results.

Findings of this study suggest the prominent role of hotel green attributes for hotel customers to actualise their PEB in hotels. Although the customers are mindful and have strong intentions of behaving pro-environmentally, with the lack of supporting attributes in the hotel, customers may have difficulty actualising their PEB when staying in hotels.

CHAPTER

7

STUDY OF THE INFLUENCE OF HOTEL GREEN ATTRIBUTES ON CUSTOMER LOYALTY

CHAPTER SEVEN: STUDY OF THE INFLUENCE OF HOTEL GREEN ATTRIBUTES TO CUSTOMER LOYALTY

7.1 Introduction

Chapter seven of the thesis focuses on the study of the influence of hotel green attributes on customer loyalty. The model elaborates the antecedents of hotel consumer behavioural intentions (loyalty) and highlights the role of hotel green attributes in supporting customer loyalty in hotels. This study contributes to strengthen the hotel management perspective on the important role of pro-environmental attributes in the hotel.

With a similar structure to the previous chapter, this chapter provides a quantitative data analysis procedure and results for this study. Data for this study were obtained from hotel customers in Indonesia and Australia (Phase Two). The beginning of this chapter presents the instrument quality (validity and reliability). The section continues by describing scale items and testing the reliability of the scales, including content validity, convergent validity, criterion validity, construct validity, predictive validity, and discriminant validity. The subsequent section then delivers the results of the hotel customer loyalty model and model testing. The last part of this chapter concludes with the overall results of this study.

7.2 Sample profiles

The study of the influence of hotel green attributes on customer loyalty examines hotel customers from 3-star, 4-star, and 5-star hotels in Indonesia and Australia. As explained in Chapter 5 (research methods) and Chapter 6 (study of pro-environmental behaviours in hotels), the data were collected consecutively in Indonesia and Australia. Hotel characteristics and sample demographics are presented in Section 6.2 of Chapter 6.

7.3 Scale items and reliability

All measures utilised in this study were adapted and modified from existing literature (see Section 5.5.2 of Chapter 5) and focus group discussion results (see Table 6.3 and 6.4 in Chapter 6) for some of *experience* variable items. From the consumer focus group

discussions, opinions such as ‘relaxing’ (Table 6.3, Participant D) and ‘complete bathroom kits to fit customer’s needs’ (Table 6.4, Participant G) were valuable in the development of *experience* items.

This section presents results of the reliability test, followed by the validity test results. The sample for this study reached an adequate number, as indicated by the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO-MSA) value of 0.94 for all variables in customer loyalty model, this being greater than 0.50 (Ren et al., 2016).

Table 7.1 and 7.2 provide detailed initial reliability test results. Summarising the results, all variables in this research have met reliability criteria with Cronbach’s Alpha values greater than 0.70 (Hair et al., 2006). Results of validity tests are furnished in the next section of this chapter.

Table 7.1. Reliability Test Results – Indonesia

Variable names	Cronbach’s Alpha	Cronbach’s Alpha based on standardised items	N of items
Service quality – Ambience	0.89	0.89	6
Service quality – Staff Responsiveness	0.89	0.89	7
Experience	0.91	0.91	6
Customer satisfaction	0.92	0.92	2
Word-of-Mouth communication (WOM)	0.95	0.95	2
Brand attitude	0.82	0.82	3
Perceived hotel green attributes	0.85	0.85	5

Table 7.2. Reliability Test Results - Australia

Variable names	Cronbach's Alpha	Cronbach's Alpha based on standardised items	N of items
Service quality – Ambience	0.86	0.87	6
Service quality – Staff Responsiveness	0.90	0.90	7
Experience	0.90	0.90	6
Customer satisfaction	0.94	0.94	2
Word-of-Mouth communication (WOM)	0.95	0.95	2
Brand attitude	0.89	0.90	3
Perceived hotel green attributes	0.87	0.87	5

7.4 Validity tests

Using similar procedures to Chapter 6 Section 6.3, this section confirms whether the items in the questionnaire used in the customer loyalty model measure the constructs they were supposed to measure (Hair et al., 2006; Sekaran, 2005). This section addresses each validity test, and comprises content validity, convergent validity, criterion validity, construct validity, predictive validity, and discriminant validity.

As presented in Table 7.3 and 7.4, all constructs in the study of customer loyalty in hotels indicated a greater square root of AVE, compared to correlation between constructs. In conclusion, discriminant validity is met (Fornell & Larcker, 1981). All constructs were found to be valid according to the validity test results.

Tables 7.5 and 7.6 present factor loadings, AVE values, and Cronbach's Alpha values of all relevant variables to the hotel customer loyalty model. On the note, this model utilises the grand mean of hotel experience construct items to determine the level of hotel customer experience for multi-group structural model (SEM) analysis.

Table 7.3. Discriminant validity between constructs - Indonesia: Inter-factor correlation
(diagonal indicates $\sqrt{\text{AVE}}$).

Construct correlations (r_{ij})	Service Quality – Ambience	Service Quality – Staff Responsiveness	Hotel Experience	Customer Satisfaction	WOM	Brand Attitude	Hotel Green Attributes
Service Quality – Ambience	0.81						
Service Quality – Staff Responsiveness	0.61	0.78					
Hotel Experience	0.68	0.72	0.83				
Customer Satisfaction	0.65	0.60	0.82	0.96			
WOM	0.72	0.48	0.67	0.69	0.86		
Brand Attitude	0.52	0.53	0.66	0.59	0.55	0.98	
Hotel Green Attributes	0.36	0.35	0.45	0.29	0.34	0.43	0.79

Note: $\sqrt{\text{AVE}}$ > correlation coefficient (r_{ij}), discriminant validity met (Fornell & Larcker, 1981).

Table 7.4. Discriminant validity between constructs - Australia: Inter-factor correlation
(diagonal indicates $\sqrt{\text{AVE}}$).

Construct correlations (r_{ij})	Service Quality – Ambience	Service Quality – Staff Responsiveness	Hotel Experience	Customer Satisfaction	WOM	Brand Attitude	Hotel Green Attributes
Service Quality – Ambience	0.77						
Service Quality – Staff Responsiveness	0.47	0.79					
Hotel Experience	0.64	0.71	0.82				
Customer Satisfaction	0.58	0.60	0.79	0.97			
WOM	0.49	0.57	0.76	0.74	0.91		
Brand Attitude	0.62	0.62	0.63	0.52	0.56	0.97	
Hotel Green Attributes	0.33	0.30	0.42	0.33	0.26	0.33	0.81

Note: $\sqrt{\text{AVE}}$ > correlation coefficient (r_{ij}), discriminant validity met (Fornell & Larcker, 1981).

Table 7.5. Loyalty model variables scales validity and reliability - Indonesia

Variable Items	Factor Loading	AVE	Cronbach's Alpha
<u>Service Quality</u>			
<i>Ambience</i>		0.65	0.89
The hotel ambience is first class.	0.87		
The hotel lobby is grand.	0.84		
The hotel has deluxe appliances.	0.83		
The hotel atmosphere is stylish.	0.81		
The artefacts and paintings added to the image of the hotel.	0.75		
The ambience of hotel is relaxing.	0.71		
<i>Staff responsiveness</i>		0.61	0.89
The hotel has high quality staff that are well trained.	0.82		
The staff provide immediate service during my hotel stay.	0.81		
The hotel has staff that are quick to respond to requests.	0.81		
The hotel has respectful and polite staff.	0.78		
The hotel's staff are nice to me at checkout.	0.75		
Not being kept waiting for a long time during my hotel stay.	0.75		
Every need is anticipated during my stay in the hotel.	0.72		
<u>Hotel Experience</u>			
<i>Multi-sensory</i>		0.76	0.84
The hotel reassures me and gives me peace of mind.	0.90		
It is easy to relax in the hotel.	0.88		
The hotel appeals to all the senses (sight, scent, sound, touch, and taste).	0.83		
<i>Interactive</i>		0.79	0.87
The hotel meets my personal needs.	0.90		
The hotel simplifies my life.	0.90		
The hotel really engages with me.	0.87		
Note: Chi-square= 1199.68; Sig.0.000; Total variance explained= 69.04%. The grand mean of hotel experience is used to group the data into high (above grand mean) and low (below grand mean) experience level.			
<u>Satisfaction</u>		0.92	0.92
Overall, I like the hotel.	0.96		
Overall, I am satisfied with the hotel.	0.96		
<u>Brand Attitude</u>		0.74	0.82
From its brand, there is something special about this hotel.	0.87		
The hotel's brand is excellent.	0.86		
This hotel's brand has a great reputation.	0.84		
<u>Loyalty</u>			
<i>Word-of-Mouth (WOM) communications</i>		0.96	0.96
I will encourage my friends and relatives to stay at the hotel.	0.98		
If someone is looking for a hotel, I will suggest him/her to stay at the hotel.	0.98		
<u>Hotel Green Attributes</u>		0.62	0.85
The hotel establishes active recycling program for materials in all sections.	0.83		
The hotel provides environmentally friendly products (i.e. low toxicity, organic or locally grown/made).	0.82		
The hotel participates in environmental partnership or certification.	0.81		
The hotel has energy-saving light bulbs in all rooms.	0.74		
The hotel has visible communications about green practices.	0.73		

Table 7.6. Loyalty model variables scales validity and reliability - Australia

Variable Items	Factor Loading	AVE	Cronbach's Alpha
<u>Service Quality</u>			
<i>Ambience</i>		0.60	0.87
The hotel ambience is first class.	0.83		
The hotel atmosphere is stylish.	0.82		
The hotel has deluxe appliances.	0.81		
The hotel lobby is grand.	0.77		
The ambience of hotel is relaxing.	0.74		
The artefacts and paintings added to the image of the hotel.	0.69		
<i>Staff responsiveness</i>		0.63	0.90
The hotel has staff that are quick to respond to requests.	0.85		
The hotel has high quality staff that are well trained.	0.84		
The hotel has respectful and polite staff.	0.80		
The staff provide immediate service during my hotel stay.	0.77		
The hotel's staff are nice to me at checkout.	0.76		
Not being kept waiting for a long time during my hotel stay.	0.75		
Every need is anticipated during my stay in the hotel.	0.75		
<u>Hotel Experience</u>			
<i>Multi-sensory</i>		0.74	0.83
It is easy to relax in the hotel.	0.89		
The hotel reassures me and gives me peace of mind.	0.88		
The hotel appeals to all the senses (sight, scent, sound, touch, and taste).	0.82		
<i>Interactive</i>		0.75	0.84
The hotel simplifies my life.	0.90		
The hotel really engages with me.	0.87		
The hotel meets my personal needs.	0.83		
Note: Chi-square= 1175.98; Sig.0.000; Total variance explained= 67.09%. The grand mean of hotel experience is used to group the data into high (above grand mean) and low (below grand mean) experience level.			
<u>Satisfaction</u>		0.94	0.94
Overall, I like the hotel.	0.97		
Overall, I am satisfied with the hotel.	0.97		
<u>Brand Attitude</u>		0.83	0.90
The hotel's brand is excellent.	0.93		
This hotel's brand has a great reputation.	0.91		
From its brand, there is something special about this hotel.	0.89		
<u>Loyalty</u>			
<i>Word-of-Mouth (WOM) communications</i>		0.95	0.95
I will encourage my friends and relatives to stay at the hotel.	0.98		
If someone is looking for a hotel, I will suggest him/her to stay at the hotel.	0.98		
<u>Hotel Green Attributes</u>		0.66	0.87
The hotel participates in environmental partnership or certification.	0.86		
The hotel provides environmentally friendly products (i.e. low toxicity, organic or locally grown/made).	0.83		
The hotel has energy-saving light bulbs in all rooms.	0.81		
The hotel establishes active recycling program for materials in all sections.	0.80		
The hotel has visible communications about green practices.	0.77		

7.5 Hotel customer loyalty model analysis

In testing the loyalty model, Indonesian and Australian quantitative data were merged into a single file. The hotel customer loyalty model was tested using Structural Equation Modelling (SEM) with AMOS 21 software. Multi-group analysis was applied to the data. The merged sample was grouped based on the hotel country (Indonesia and Australia) and the level of experience (high and low). The level of experience was divided on the basis of the grand mean of experience variable. Four groups namely Indonesia – high, Indonesia – low, Australia – high, and Australia – low (see Table 7.7) were classified, coded, and analysed.

Table 7.7. Data grouping for loyalty model

Group	Label	Notes
Group 1	Indonesia – High Experience (IH)	Indonesian respondents with experience value > grand mean of experience.
Group 2	Indonesia – Low Experience (IL)	Indonesian respondents with experience value < grand mean of experience
Group 3	Australia – High Experience (AH)	Australian respondents with experience value > grand mean of experience.
Group 4	Australia – Low Experience (AL)	Australian respondents with experience value < grand mean of experience.

Table 7.8 presents the values of skewness and kurtosis to explain the normality for each variable. The results revealed that the study variables were negatively skewed. However, Fidell and Tabachnick (2003) suggested that with the large sample size (200 or more), a variable with significant skewness often does not deviate from normality to make a substantive difference in the analysis. Normality of the data was also checked using Mahalanobis Distance. One outlier was removed to improve the normality of the data and model fit. Multicollinearity test results $VIF < 10$ (ranged from 1.87 to 2.67, among all variables which meets the criteria of good data according to Hair et al. (2006).

Table 7.8. Loyalty model variables normality test (n=663)

Variable	Mean	Std. Deviation	Variance	Skewness	Kurtosis
Service Quality - Ambience	3.63	0.74	0.55	-0.29	-0.26
Service Quality – Staff Responsiveness	4.00	0.63	0.39	-0.53	0.17
Satisfaction	4.07	0.75	0.56	-0.78	0.97
Brand Attitude	3.69	0.81	0.65	-0.27	-0.43
Loyalty	3.81	0.88	0.78	-0.79	0.68
Hotel Green Attributes	3.25	0.81	0.65	-0.18	0.11

The results of the SEM revealed that the model was a good fit with the data (see Table 7.9). In particular, the hotel customer loyalty model provided a satisfactory fit ($\chi^2 = 463.84$, $df = 180$, $p < 0.01$, $\chi^2/df = 2.58$, RMSEA = 0.05, CFI = 0.93, GFI = 0.90, SRMR=0.06, HOELTER (0.05) = 305). Overall, the results of model evaluations implied that the proposed hotel customer loyalty model predicted hotel customers' behavioural intentions to spread positive WOM well.

Table 7.9. Model explanatory power and fit indices.

Fit indices	Suggested value	Model fit indices
χ^2		463.84
df		180
χ^2/df	≤ 2 to ≥ 5	2.58
RMSEA	≤ 0.08	0.05
CFI	≥ 0.90	0.93
GFI	≥ 0.90	0.90
SRMR	≤ 0.08	0.06
HOELTER (0.05)	> 200	305

Note: Suggested values were based on Hair et al. (2006), Hu and Bentler (1998) and Hu and Bentler (1999).

In order to compare the structural model across the two countries and hotel experience levels, this study conducted a multi-group analysis by comparing differences in the standardised coefficients of the corresponding structural paths of four models (see Table 7.7). Results of the multi-group analysis appear in Figures 7.1, 7.2, 7.3, and 7.4.

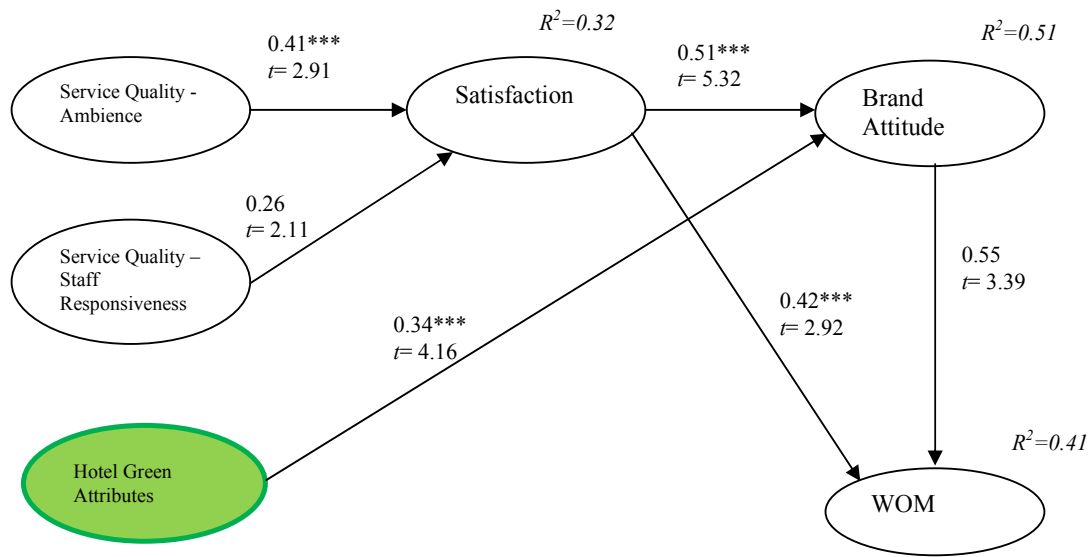
Focusing on *hotel green attributes* \Rightarrow *brand attitude* path, *hotel green attributes* in high experience groups had a greater positive impact on *positive attitude towards the brand* of the hotel, compared to low experience groups (Indonesia, $\beta_{IH} = 0.34$, $\beta_{IL} = 0.28$; Australia $\beta_{AH} = 0.16$, and β_{AL} is insignificant). Hence, **H9 is supported**.

Results indicate that *service quality* affects *satisfaction* in general. The *ambience* dimension of service quality shows a significant path to *satisfaction* for all groups ($\beta_{IH} = 0.41$; $\beta_{IL} = 0.65$; $\beta_{AH} = 0.28$; $\beta_{AL} = 0.59$). The *staff responsiveness* dimension presents significant coefficients on the *satisfaction* path for Group 1, Group 3, and Group 4 ($\beta_{IH} = 0.26$; $\beta_{AH} = 0.53$, $\beta_{AL} = 0.41$). For Group 2, *staff responsiveness*' influence on *satisfaction* is insignificant.

Satisfaction shows another strongly significant influence on *brand attitude* for all groups ($\beta_{IH} = 0.51$; $\beta_{IL} = 0.44$; $\beta_{AH} = 0.74$; $\beta_{AL} = 0.41$), although low experience groups suggest slightly lower coefficients. The influence of customer *satisfaction* on customer *WOM* is significant for both customers with high and low experience levels in Indonesian and Australian samples ($\beta_{IH} = 0.42$; $\beta_{IL} = 0.87$; $\beta_{AH} = 0.56$; $\beta_{AL} = 0.81$).

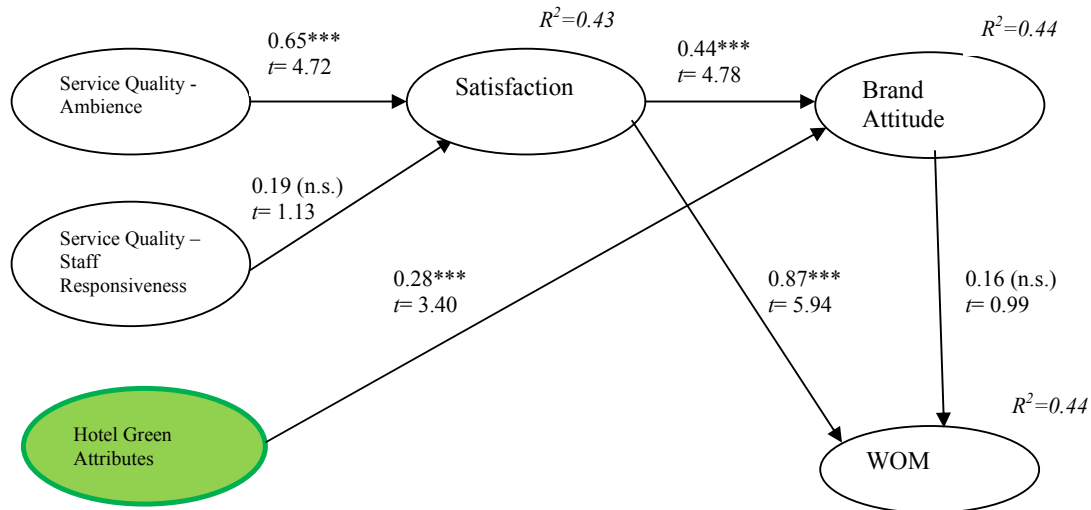
On the *brand attitude* \Rightarrow *loyalty path*, there is a significant difference between Indonesian groups of high (Group 1) and low (Group 2) experience levels. As shown in Figure 7.2 and 7.3, *brand attitude* for Group 1 ($\beta_{IH} = 0.55$) significantly influences *WOM*, while in Group 2 experience group, *brand attitude*'s influence on customer *WOM* is insignificant. In both Australian groups of high and low experience levels, *brand attitude* significantly affects *WOM* ($\beta_{AH} = 0.16$; $\beta_{AL} = 0.34$).

Summarising the path results, *satisfaction* \Rightarrow *brand attitude* and *brand attitude* \Rightarrow *loyalty* paths are significant for all groups. *Hotel green attributes* significantly influence *brand attitude* in Group 1, 2, and 3. However, the path of *hotel green attributes* \Rightarrow *brand attitude* is shown as insignificant for Australian sample group with low experience level. Therefore, **H7 is partially supported**. The *ambience* dimension of service quality significantly affects *satisfaction* for all groups. The *staff responsiveness* dimension of service quality shows a significant influence on *satisfaction* for Group 1, 3, and 4. However, for the Indonesian sample with low experience level, the path of *staff responsiveness* \Rightarrow *satisfaction* is shown to be insignificant. Hence, **H8 is partially supported**.



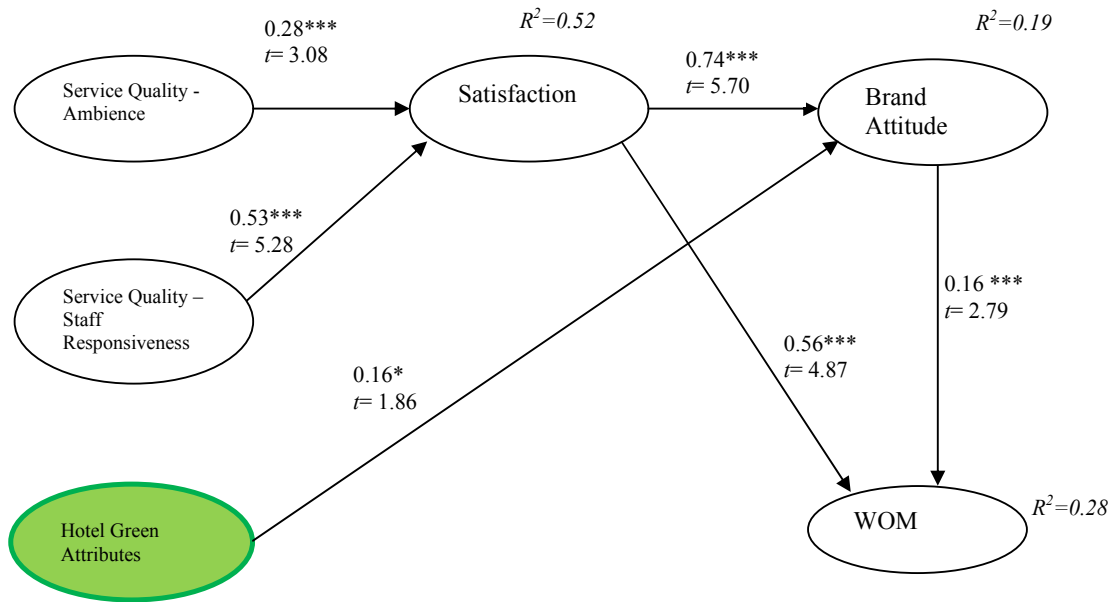
Note: *** $p<0.01$, ** $p<0.05$, * $p<0.10$

Figure 7.1. Indonesian sample – high experience level (Group 1) results



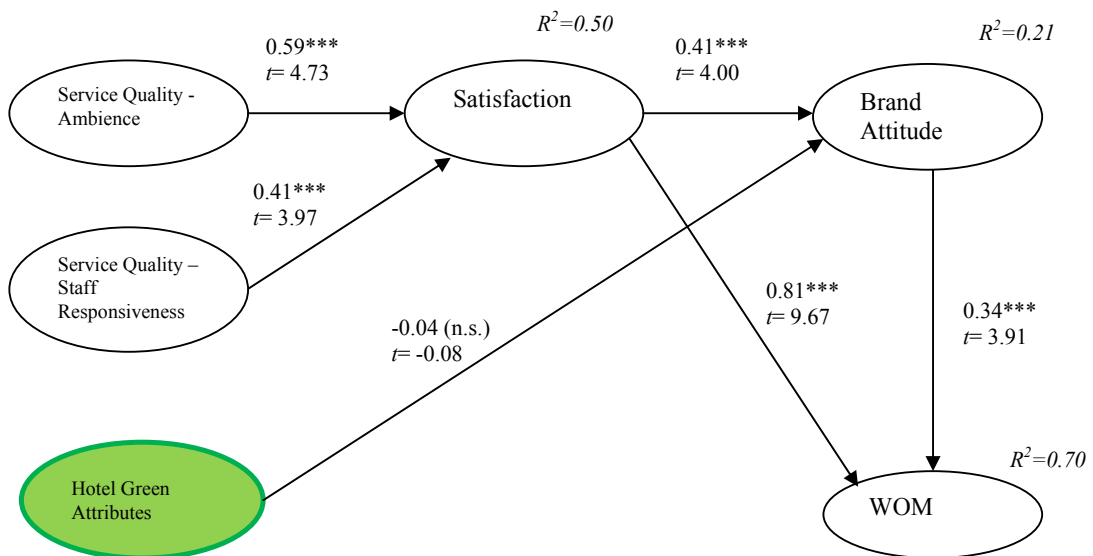
Note: *** $p<0.01$, ** $p<0.05$, * $p<0.10$

Figure 7.2. Indonesian sample – low experience level (Group 2) results



Note: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$

Figure 7.3. Australian sample – high experience level (Group 3) results



Note: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$

Figure 7.4. Australian sample – low experience level (Group 4) results

Table 7.10. Loyalty model hypotheses testing results.

Hypotheses	Statement	Supported/ Not Supported
H7	Hotel green attributes significantly influence positive brand attitude towards the hotel brand that prompts customer loyalty.	Partially supported
H8	Service quality significantly influences customer satisfaction which prompts a positive attitude towards the hotel brand and customer loyalty.	Partially supported
H9	High customer hotel experience results in greater effect of hotel green attributes on positive brand attitude.	Supported

Table 7.10 presents the summary of the hypotheses testing results. The SEM findings suggest that the influence of *hotel green attributes* on *brand attitude* differs across experience levels. High experience groups from both Indonesia and Australia indicate greater influence of *hotel green attributes* on *loyalty (WOM)* compared to the low experience groups.

7.6 Chapter summary

The study of the influence of hotel green attributes on customer loyalty was analysed in this chapter. The quality of the instrument used to measure variables in the model was deemed satisfactory. Testing of the customer loyalty model was conducted using multi-group SEM. Four groups were formed on the basis of country (Indonesia and Australia) and the level of hotel experience (high and low). The level of experience was classified by the grand mean of hotel experience.

The customer loyalty model indicated good fit with the data. Multi-group analysis suggested different results across experience levels on the *hotel green attributes* \Rightarrow *brand attitude* path. *Hotel green attributes* significantly affect *positive attitude towards the hotel's brand* among customers with high experience levels. All hypotheses developed under the loyalty model are supported, although H7 and H8 are partially supported.

Results of this study provide more insights into customer experience and the importance of green attributes in hotel. Practically, the results also encourage hotel management to improve green attributes in their hotels and customer engagement with the hotel experience.

CHAPTER

8

STUDY OF HOTEL MANAGEMENT GREEN ATTITUDES AND PROCESSES

CHAPTER EIGHT: STUDY OF HOTEL MANAGEMENT GREEN ATTITUDES AND PROCESSES

8.1 Introduction

Chapter eight presents qualitative data analysis and results (from Phase Three). The key aim of this chapter is to develop a typology or classification to mainstream hotel's green practices based on the level of each hotel's pro-environmental management practices. Manager interviews have been conducted in three regions (Indonesia, Australia, and other countries) to understand the extent of current pro-environmental practices in the hotels. The interviews are then analysed to develop pro-environmental criteria, as the guidance to classify the hotels into three pro-environmental levels. The pro-environmental typology generated from this study contributes practical reference for hotel managers, to establish best pro-environmental practices in their hotels.

In this chapter, the process of qualitative data collection and analysis will be outlined in the first section. Interviewee and hotel profiles are presented in the next section. A summary of hotel pro-environmental ratings is provided per hotel case. The analysis and description of each level of each criterion according to the interview results are also provided. At the end of chapter eight, the summary of all results will be provided.

8.2 Management interview process

In Phase Three (see Chapter 5), a qualitative approach was used to zoom in on a deeper insight of pro-environmental behaviour (PEB) in hotels. Face-to-face semi-structured manager interviews have been conducted in classified (three- to five-star) hotels in Indonesia, Australia, and other countries (Canada, Finland, China, Hong Kong, United Kingdom, and Singapore). A protocol has been developed from existing literature as a guide for the interview.

8.2.1 Interview protocol

The interview protocol was designed for a 45-60 minutes interview (see Appendix D: Interview Protocol). The preliminary questions were designed to enquire the participant's background, such as job title, responsibility, and brief information about the hotel's pro-

environmental strategy. There were four main questions in the interview. The first main question asks managers to explain green activities or programs in their hotel. A list of activities was prepared and the manager was asked to tick activities which were relevant to the hotel. The second main question enquired about the most important green attributes in the hotel as well as the manager's opinion about each attribute, such as energy management and recycling behaviour. The third main question aimed to elaborate on the pro-environmental process in the hotel, related to management and customers. Finally, the fourth main question enquired about the management process, coordination, and monitoring system for those pro-environmental activities.

8.2.2 Conducting the interview

Face-to-face semi-structured interviews with hotel managers have been conducted in eight hotels in Indonesia, seven hotels in Australia, as well as eleven other hotels in Hong Kong, China, Finland, Canada, United Kingdom, and Singapore from December 2014 until February 2017. In this study, the researcher determined how many hotel cases were developed (refer to Romano (1989) case study method). The three- to five-star hotels were selected by the likelihood of an interview with management, as the study is very dependent on the hotel manager's convenience. The average length of the interview was 60 minutes. All interviews were conducted as informal conversations. Prior to the interview, the participants received an explanation of the project and signed the consent form. The interviews were audio-taped, where possible, and transcribed after collection. Eisenhardt (1989) suggested that the data collection process stops once it reaches information saturation; that is, when there is no new information added by the participant. Hence, following Lincoln and Guba (1985) and Wong and Merrilees (2005) this study adopted the convergent interview technique, where new interviews were added until the theory reached saturation, followed by a few more manager interviews to ensure the information saturation.

8.2.3 Data analysis

Prior to analysing the interview data, the transcripts were checked for completeness of content and similarity to the audio-tape. Firstly, the internal and external validity of the interviews were checked using *pattern matching logic* and *replication logic*, by matching the response of each interviewee to each interview question (Yin, 2008). All patterns were matched and coincided.

This study employed a combination of a priori and emergent manual coding strategy. Keywords were collected from each interview and a pattern was sought. As per the analysis steps provided in Chapter 5, Figure 5.3, five themes were developed from the interview data. The five themes consisted of green motivation, green scope, pro-environmental process and monitoring, and finally pro-environmental communications to the customers.

The end product of this study is a typology of mainstream hotel pro-environmental management. According to Doty and Glick (1994) guidelines, the typology differentiates the extent of the mainstream hotel's pro-environmental management practice. Criteria that distinguish the level of pro-environmental management are developed using the themes generated from the interview data and developed with the guidance of Polonsky (1995a). As summarised in Appendix G: Interview Results, hotel managements indicated several stakeholders in their green management practices. The main groups identified include hotel management (employee) and consumers. The stakes and roles for each group were explored and some keywords were identified, including motivation, scope, process, monitoring, and customer communications to socialise the hotel management's pro-environmental strategy to the customers. The criteria comprised three levels: low (minimal), moderate (strong environmental management), and high (best practice) pro-environmental management, underpinned by the interview content. The same set of criteria was applied to each hotel case.

The typology emphasises the strategic pro-environmental management in mainstream hotel. Hotel's pro-environmental motivation, scope, process, monitoring, and customer communications are important and relevant for hotel's strategic pro-environmental management practice. In line with the stakeholder theory (Garvare & Johansson, 2010; Polonsky, 1995a), the typology incorporates the interest of mainstream hotel stakeholders, particularly hotel management and consumers, in the pro-environmental context. As the end product of this study, the hotel pro-environmental typology can provide a prediction towards the extent of pro-environmental management in mainstream hotels.

8.3 Interviewee profiles

The management interviews consisted of 26 mainstream hotels, eight of which were hotels in Indonesia and seven of which were hotels in Australia. Other than Indonesia and

Australia, there were 11 participating hotels from Hong Kong, China, Finland, Canada, United Kingdom, and Singapore, to improve the generalisability of the results.

The interviewees representing each hotel ranged from General Managers, owner, managers, and appointed staff with knowledge of pro-environmental management in the hotel. Profiles of the hotel and interviewees can be seen in Table 8.1.

Table 8.1. Hotel characteristics

	Type	Country	Interviewee
Hotel A	5-star	Indonesia	General Manager
Hotel B	4-star	Indonesia	General Manager
Hotel C	5-star	Indonesia	General Manager
Hotel D	5-star	Indonesia	Corporate Social Responsibility Manager and Engineering Manager
Hotel E	3-star	Indonesia	General Manager
Hotel F	3-star	Indonesia	GM/ owner
Hotel G	4-star	Indonesia	General Manager and Engineering Manager
Hotel H	4-star	Australia	Staff
Hotel I	5-star	Australia	Engineering Director and Controller
Hotel J	5-star	Hong Kong	Public Relations Officer
Hotel K	3-star	China	Public Relations Officer
Hotel L	4-star	Finland	General Manager
Hotel M	4-star	China	Chief Engineer
Hotel N	4-star	Australia	General Manager
Hotel O	4-star	Australia	Guest Manager
Hotel P	4.5 star	Australia	Guest Manager
Hotel Q	4-star	Hong Kong	Guest Manager
Hotel R	4-star	Indonesia	Marketing Manager
Hotel S	4-star	Australia	Guest Manager
Hotel T	3-star	Canada	Marketing Manager
Hotel U	3-star	Australia	Guest Manager
Hotel V	3-star	Canada	General Manager
Hotel W	3-star	UK	Guest Manager
Hotel X	4-star	UK	General Manager
Hotel Y	4-star	Singapore	Chief Engineer
Hotel Z	3-star	Canada	Guest Manager

8.4 Analysing and generating classifications

Participant hotels are mainstream three- to five-star hotels. The hotels are not labelled as green hotels. Although the existing pro-environmental criteria that can apply to mainstream hotels have been compiled, this study reviewed and tailored the existing criteria to real practices. Hence, five criteria have been developed from the interview data in accordance with strategic management literature and stakeholder theory (see Chapter 4). The criteria were developed within the guidelines of strategic pro-environmental management literature (e.g., Bansal and DesJardine (2014); Gao and Bansal (2013)) that covers management's vision, aim, and process of the strategy. A four-step approach to designing an environmental marketing strategy based on stakeholder theory (Polonsky, 1995a) and manager interviews data were used to develop the scope, process, and customer communications.

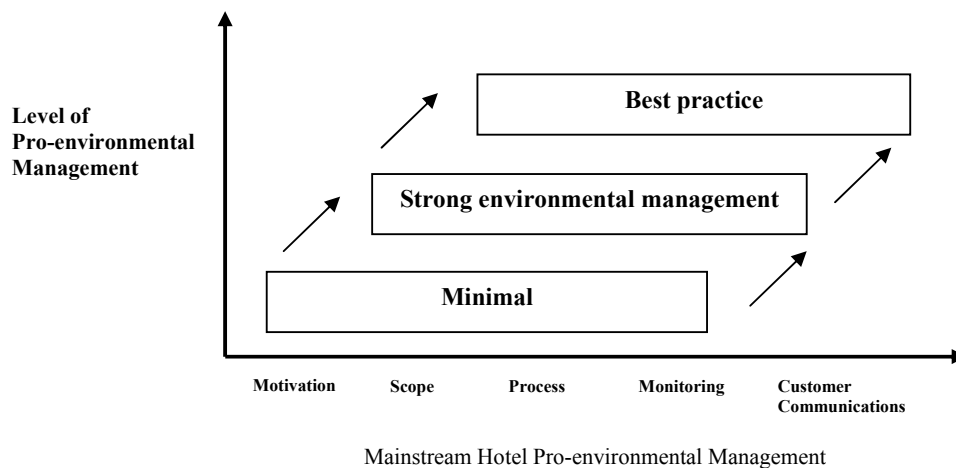


Figure 8.1 Mainstream hotel pro-environmental levelling

The criteria development process starts with the most obvious feature (scope of pro-environmental management). The scope is developed mainly from the interview data. Scope is then followed by manager's motivation (vision, aim) in conducting pro-environmental management. Process, monitoring, and customer communications criteria are developed from the interview data, with the guidance of literature. Different levels of pro-environmental management in hotels are described in line with interview data. The procedure to rate and describe the levelling starts from determining the extreme low, to the extreme high, and then to the moderate. According to Doty and Glick (1994), the criteria of a typology have to be distinctive and replicable to predict other hotel cases.

In the final sequence, the first criterion is green motivation, followed by scope, process, monitoring and dissemination, and customer communication. *Green motivation* is defined as strategic pro-active motivation underlying pro-environmental operational practices in the hotel. *Scope* is defined as the number of pro-environmental activities or elements in the hotel. *Process* is the organisation or the system in executing pro-environmental activities. *Monitoring* and dissemination constitute the pro-environmental activity monitoring system in the hotel, such as the reporting system in the hotel. *Customer communication* is represented by the pro-environmental messages sent by the hotel to the customers.

The 26 hotels were rated as minimal (low), strong environmental management (moderate), and best practice (high) hotels based on their performance in the five criteria given in Table 8.2. The rating was given on each criterion and overall pro-environmental practices. Figure 8.1 depicts the pro-environmental levelling in mainstream hotels based on the five criteria. The three levels are in the following ascending order: minimal, strong environmental management, and best practice. The five-criteria-based pro-environmental ratings were applied to the 26 hotels. Results of the rating are summarised in the Table 8.3.

Table 8.2. Hotel criteria

<i>Criteria</i>	<i>Weak Green Practices (Minimal)</i>	<i>Average Green Practices (Strong environmental management)</i>	<i>Green Best Practices (Best practice)</i>
<p><i>Criterion 1:</i></p> <p>Motivation</p> <p>(D'Souza et al., 2013; Dief & Font, 2010; Gao & Bansal, 2013; Kirk, 1995, 1998; Polonsky, 1995a; Polonsky & Rosenberger, 2001)</p>	<p>Motivation is considered as low when there is only one basic reason, such as commercial, underlying pro-environmental practices in the hotel and the manager feels obliged or forced to behave pro-environmentally and establish pro-environmental attributes in the hotel.</p>	<p>Motivation to do pro-environmental behaviour is considered as average when the manager implies more than a basic reason (basic reason is costs or 'forced' by regulations) in establishing pro-environmental attributes.</p>	<p>Criteria of a best practice hotel include high motivation, where the manager states broader reasons for establishing pro-environmental activities in the hotel and broad-long-term benefits in doing these activities. Motivation is high when there are holistic reasons and genuine/voluntary aspects underlying the practices, such as saving the planet, responsibility, and custodianship.</p>
<p><i>Criterion 2:</i></p> <p>Scope</p> <p>(Bansal, 2005; Bansal & Kilbourne, 2001; Bohdanowicz, 2006; D'Souza et al., 2015; Enz & Siguaw, 1999)</p>	<p>Narrow scope is when the hotel has 0 (maybe) to 1 featured pro-environmental activities and is economically driven. The narrowness also can be seen from the limited impact of the attribute provided.</p>	<p>Pro-environmental scope in a hotel is considered as medium when the hotel has 2-4 featured pro-environmental activities with considerable impacts on the hotel's operations and communities.</p>	<p>A best practice hotel has a wide scope of pro-environmental activities and noticeable impacts on the community. A higher rating will be given when a hotel has something new, such as featured, high impact, distinctive, or unique pro-environmental programs that positively distinguish the hotel from others.</p>
<p><i>Criterion 3:</i></p> <p>Process</p> <p>(Bansal & DesJardine, 2014; Bansal & McKnight, 2009; Enz & Siguaw, 1999; Polonsky, 1995a; Polonsky & Rosenberger, 2001)</p>	<p>Weak process is when pro-environmental activities in the hotel are poorly-coordinated, or no specific department or committee is responsible for organising the activities (random), there is a lack of administration process, and no meeting agenda for pro-environmental features.</p>	<p>Pro-environmental process in a hotel can be considered as good when at least one department (ambassador department) is responsible for pro-environmental activities in the hotel and there is pro-environmental agenda in the meeting, although not frequent.</p>	<p>Process of pro-environmental activities in a best practice hotel has to be in a rigour-focused organisation. A specific committee or department manages pro-environmental activities in the hotel. Very good process is when pro-environmental activities involve central executive coordination, designated committee or department which manages pro-environmental activities in the hotel, and a regular meeting for pro-environmental issues.</p>
<p><i>Criterion 4:</i></p> <p>Monitoring</p> <p>(Bansal & Kilbourne, 2001; Bansal & McKnight, 2009; Hsiao et al., 2014; Polonsky, 1995a, 1996; Polonsky & Rosenberger, 2001)</p>	<p>A hotel has a low monitoring system when there are no key performance indicators (KPIs) to measure the hotel's pro-environmental performance and an unclear reporting system. Pro-environmental reporting system is unclear, for example, random staff check the facilities at some time, without any reporting system to the supervisor.</p>	<p>Along with the process, the moderate monitoring is quite systematic. There are some KPIs and reporting system, although the monitoring frequency is not regular.</p>	<p>Following the process, a best practice hotel has a systematic pro-environmental monitoring (senior management communicates and checks the KPIs) and reporting system. Substantial monitoring system is when there are clear KPIs, and systematic reporting regarding the hotel's pro-environmental activities.</p>
<p><i>Criterion 5:</i></p> <p>Customer Communications</p> <p>(Polonsky, 1996, 2011; Polonsky et al., 2010; Polonsky & Rosenberger, 2001)</p>	<p>Customer communication is low when the hotel communicates only common-sense, minor impact, or low-driven individual activities to its customers, such as no-smoking sign in the hotel (not all customers smoke and people already know that smoking is not good for health and environment).</p>	<p>Customer communication is considered as moderate when the hotel sends messages (or campaigns) about any general to moderate-driven pro-environmental activities or policies to its customers, with limited audiences in the hotel physical area, such as towel reuse sign in guest rooms (most customers use towels) and green packages information in the lobby screens.</p>	<p>Customer communication is high when the hotel sends messages (or campaigns) about any pro-environmental activities to a greater scope of audiences, for example social media usage to regularly promote/update their pro-environmental features/activities.</p>

Table 8.3. Pro-environmental rating

#	Motivation	Scope	Process	Monitoring	Customer Communications	Overall Rating
Hotel A	High	High	Very good	Substantial	High	Best practice
Hotel B	Low	Low	Weak	Low	Low	Minimal
Hotel C	Average	Medium	Very good	Substantial	Moderate	Strong environmental management
Hotel D	High	High	Very good	Substantial	High	Best practice
Hotel E	High	Medium	Good	Low	Moderate	Strong environmental management
Hotel F	High	Low	Weak	Low	Moderate	Minimal
Hotel G	Average	Medium	Very good	Substantial	Moderate	Strong environmental management
Hotel H	Average	Medium	Good	Low	High	Strong environmental management
Hotel I	High	Medium	Very good	Substantial	Moderate	Strong environmental management
Hotel J	High	High	Very good	Substantial	Moderate	Strong environmental management
Hotel K	Low	Low	Weak	Low	Low	Minimal
Hotel L	High	Medium	Very good	Substantial	High	Best practice
Hotel M	High	High	Very good	Substantial	Moderate	Strong environmental management
Hotel N	High	High	Very good	Substantial	High	Best practice
Hotel O	Average	Medium	Good	Moderate	Moderate	Strong environmental management
Hotel P	High	Medium	Very good	Substantial	High	Best practice
Hotel Q	High	High	Very good	Substantial	High	Best practice
Hotel R	High	High	Very good	Substantial	High	Best practice
Hotel S	Weak	Low	Weak	Low	Moderate	Minimal
Hotel T	High	High	Good	Moderate	Low	Strong environmental management
Hotel U	Weak	Medium	Weak	Moderate	Low	Minimal
Hotel V	High	Medium	Very good	Substantial	Low	Strong environmental management
Hotel W	Low	Low	Weak	Low	Moderate	Minimal
Hotel X	High	Medium	Good	Moderate	Moderate	Strong environmental management
Hotel Y	High	High	Very good	Substantial	High	Best practice
Hotel Z	High	Medium	Good	Moderate	Moderate	Strong environmental management

8.5 Weak Green Practices

A hotel is rated as having weak green practices when it has few pro-environmental attributes as described in Table 8.2.

- *Criterion 1:* Motivation is considered as low when there is only one basic reason, such as commercial, underlying pro-environmental practices in the hotel and the manager feels obliged or forced to behave pro-environmentally and establish pro-environmental attributes in the hotel.
- *Criterion 2:* Narrow scope is when the hotel has 0 (maybe) to 1 featured pro-environmental activity and the activity is built for economic purposes. The narrowness also can be seen from the limited impact of the attribute provided.
- *Criterion 3:* Weak process is when pro-environmental activities in the hotel are poorly-coordinated, no specific department or committee is responsible in organising the activities, there is a lack of administration process, and no meeting agenda for pro-environmental features.
- *Criterion 4:* A hotel has a low monitoring system when there are no key performance indicators (KPIs) to measure the hotel's pro-environmental performance, and an unclear reporting system. Pro-environmental aspects are conducted by random personnel and the reporting system is unclear; for example, random staff check the facilities at some time, without any reporting system.
- *Criterion 5:* Customer communication is low when the hotel communicates only common, minor, or low-driven individual activities to its customers, such as a no-smoking sign in the hotel (not all customers smoke and people already know that smoking is not good for health and environment).

The five criteria of a minimal level hotel will be elaborated according to the interviews conducted in nine hotels. It begins with the underlying motivation of going green, scope, process, monitoring, and customer communication.

Low motivation (Criterion 1) appears when the managers explain their reasons for introducing pro-environmental measures. As seen in the cases below, regulation and cost are considered as the main motivation for establishing pro-environmental attributes. For example, the Indonesian Ministry of Environment applies standards for companies to be green. Black is

the lowest rank, followed by red, blue, green, and gold as the highest qualification. Low motivation managers explain that pro-environmental attributes in their hotel are a must, in order to comply with government's regulations, though some add cost-saving reasons. Managers perceived low requisition for themselves and they need a strong external force to be pro-environmental.

Therefore, managers in the Weak Green Practices category tend to be forced to incorporate pro-environmental management in the hotel and their true motivation is to comply with government regulations. Alternatively and with similar external influence, adoption of basic environmental standards comes from pressures by industry standards, especially in Australia. The manager's voluntary efforts to implement green management were found to be negligible.

A hotel manager proudly implied that the hotel could improve from black rank to red rank. However, for that manager, there was limited action—being passive, indifferent, unenthusiastic, showing a lack of commitment and a lack of voluntary interest in executing pro-environmental management can be considered as signs of low motivation. Managers in this category think that there is still a low demand for pro-environmental action in the hotel industry and thus need external force to enact pro-environmental management in their hotels. However, initial awareness and willingness to be pro-environmental are shown in the Indonesian manager's statement, noting the expression of satisfaction at the end of the quote.

There is, audit from the Ministry of Environment, our first audit result was red (rank), no... (it was) black (rank). We have to every 6 months report (our) need of raw water. Also we were pushed (by the Government) in 2014... last year, already, (to be) risen from black (rank), like that. We can say that we are moderate. (General Manager, 4-star hotel, Indonesia, Hotel B)

Narrow scope (Criterion 2) is well described by evidence seen or experienced in the hotel. A hotel is categorised as having a narrow scope when it has no more than a few minor or non-systematic pro-environmental activities, such as rubbish separation and plastic avoidance. 'Pro-environmental' only applies to a few operational aspects and sometimes not on a regular basis. Supporting those activities, there are fewer pro-environmental facilities provided in the hotel, such as one rubbish bin for all types of rubbish. A hotel acknowledged

that rubbish separation is already a common sense approach; people will ‘automatically’ do that, while another hotel proudly stated that they already separate their rubbish.

From the interviews, different senses of achievement of a pro-environmental behaviour between hotels were noted. Managers of a narrow scope hotel were satisfied with a minor pro-environmental behaviour activity. Therefore, hotels with a few common and relatively minor pro-environmental activities are considered having a narrow scope of pro-environmental management. Narrow scope, in general, pro-environmental behaviour is still locally applied in the hotel.

...for the bin (separation), it is just common sense, everyone knows it. We encourage our staff to recycle office papers and cardboards. (Guest Manager, 4-star hotel, Australia, Hotel S)

Pro-environmental *processes* (Criterion 3) in a hotel with weak green practices is associated with less coordination involved in the hotel’s pro-environmental activities. For example, in a weak green practice hotel, no department is responsible for managing pro-environmental activities and there is no formal organisational structure for pro-environmental management. Instead, the hotel asks their employees to do certain tasks without any coordination and written regulation.

As a result, random staff interaction limits the degree of coordination with their colleagues’ pro-environmental behaviour. Lack of administrative process is reflected in weak green practice hotels. Some individual staff may take initiatives, but these initiatives get limited traction or may not even be recognised by the hotel.

...we have announced that when it is time to go home, (staff) have to turn the AC off... so each department is responsible. Go home, turn the AC off, the computer off, it is already... already automatically. (General Manager, 4-star hotel, Indonesia, Hotel B)

Following Criterion 3, a weak process may lead to a low monitoring system (Criterion 4), due to lack of a rigour system, no written regulation to establish pro-environmental activities, and a lack of an administration process to be reviewed in the hotel. Minimal level hotels appoint personnel to check some attributes on a daily basis. The task delegation is

temporary and different personnel may be assigned to check these attributes on a daily basis. There are no Key Performance Indicators (KPIs) specifically for pro-environmental management, since pro-environmental attributes and activities are not clearly evident in the hotel. In the interview, manager usually does not state the importance of recording the trend of the activity in a regular report.

Yes, every... evening there is Duty Manager, who goes around checking all... (Whether) offices have been turned off yet... like that. Yes, there is Duty Manager. Check all. If it's for common (area) lightings, they already use timer actually. (General Manager, 4-star hotel, Indonesia, Hotel B)

We have regular meetings, not necessarily for our environmental programs... but yes, sometimes we do. (Guest Manager, 4-star hotel, Australia, Hotel S)

Customer communications (Criterion 5) is low when the hotel does not really let the customer know about their pro-environmental policy or activities update. Minimal level hotels tend to stay 'quiet' about their pro-environmental activities and wait passively until the customers talk to them as seen in the case below. Those hotels do not mention any pro-environmental messages in their communication channel. Some hotels may put small 'no smoking' signs in some area, to tell their customers not to smoke there. However, smoking sign is considered as common sign and people can still smoke in other places with no sign. The message content is not strong enough to pursue customer to do something pro-environmental.

CSR... we have, but not programmed yet. For example from the community, (if) they ask for help... then we help... (General Manager, 4-star hotel, Indonesia, Hotel B)

For the guests... yeah, we do have no smoking signs in most places in the hotel. (General Manager/ Owner, 3-star hotel, Indonesia, Hotel F)

...there is suggestion in guest's room to hang the towel if they still want to use it, also for the linen (Guest Manager, 4-star hotel, Australia, Hotel S)

In summary, minimal pro-environmental hotel criteria are *simply put the green labels into common hotel activities*. The most obvious criterion of a minimal level hotel is its narrow scope of pro-environmental attributes. Pro-environmental scope of a hotel and motivation can be sensed when a manager start explaining the hotel's featured pro-environmental attributes. In a minimal level hotel, pro-environmental activities include only a narrow perspective, for example only one or two featured activities in the hotel. Manager tends to focus on reusing and recycling behaviour to save the costs. In a minimal level hotel, pro-environmental activities are randomly distributed with no specific department assigned to manage those activities. Since pro-environmental activities are randomly done by the hotel's stakeholder, usually the activity check is loose. A minimal level hotel does communicate frequently with the customers. They only put common signs in public area, such as in the hotel lobby, and the content of the message is a common understanding, such as a 'no smoking' sign.

8.6 Average Green Practices

A hotel has a strong environmental management when it adopts moderate pro-environmental attributes in its day-to-day operations (refer Table 8.2).

- *Criterion 1:* Motivation to enact pro-environmental behaviour is considered as average when the manager implies more than basic reason (basic reason is costs or 'forced' by regulations) in establishing pro-environmental attributes.
- *Criterion 2:* Pro-environmental scope in a hotel is considered as medium when the hotel has two to four featured pro-environmental activities with considerable impacts on the hotel's operations and communities.
- *Criterion 3:* Pro-environmental process in a hotel can be considered as good when there is at least one department (ambassador department) that is responsible for pro-environmental activities in the hotel and there is pro-environmental agenda in the meeting.
- *Criterion 4:* Along with the process, moderate monitoring is quite systematic. There are some KPIs and reporting system, although the monitoring frequency is not regular.
- *Criterion 5:* Customer communication is considered as moderate when the hotel sends messages (or campaign) about any general to moderate-driven pro-environmental activities or policies to its customers, with limited audiences in the hotel physical area, such as towel reuse sign in guest rooms (most customers use towels) and green packages information in the lobby screens.

Based on the past interviews, criteria for hotels with strong environmental management will be elaborated in the following passages.

Average motivation (Criterion 1) in the establishment of pro-environmental features in a hotel can be recognised when the manager explains the pro-environmental hotel features, regulations, implies the cost-benefit of the programs and finally mentions personal motivation. In the interview, the manager does not clearly mention the motivation of being green. Managers imply their motivation through the attributes, as in the case below. That is, they are doing some green activities and thus they feel they draw pride from that rather than a more pro-active mission. The managers seem oblivious to the fact that maybe a majority of hotels are doing more or less than what they are doing. Average motivation is more than cost and benefit considerations. Average motivation includes better relationships with stakeholders and more voluntary willingness in establishing pro-environmental features.

Personally, I love green hotel. [...] In our group, we have a standardised sustainable development program. [...] For this hotel, we purchase our decorative ornaments from local communities, such as our *loro blonyo* (wooden crafts of a Javanese couple) for the bathroom kits storage, for male and female guests, in our guest rooms. We have a special local supplier for our *tempeh* (food – soya cake). I really love local products and I believe that we support locals to grow. (General Manager, 5-star hotel, Indonesia, Hotel C).

In a hotel with strong pro-environmental management, the pro-environmental scope (Criterion 2) is not wide, but neither is it narrow as well. Usually, the hotel or the group already have established standardised programs to conduct pro-environmental activities. Since they have to follow the group standards for their internal management, strong pro-environmental hotels already are set for standardised facilities. Along with its own pro-environmental features, hotels with strong pro-environmental management have to put some extra effort into maintaining good relationships with local communities. Hence, it broadens pro-environmental scope in the hotels, vertically and horizontally.

We plant thousands of trees every year with the communities. We held this program. This is part of our group's sustainability program.' (General Manager, 5-star hotel, Indonesia, Hotel C).

Strong environmental hotel management enables *good process* (Criterion 3) in their pro-environmental operations. In general practices, the hotel appoints an existing department to organise their pro-environmental activities. Mostly, they designate the tasks to the Department of Engineering, which is responsible for technical aspects of the hotel. The Department of Engineering then reports the activities to the General Manager. There is no specific structure for pro-environmental activities in the hotel. However, at least a department is in charge of certain pro-environmental activity.

Engineering Department is responsible for our pro-environmental activities, such as for AC maintenance, to set the temperature, to set standardised water debit for our bathroom taps [...] If they can save significantly in a month, they will get reward. Usually we go eat in any restaurant of their choice, and I will pay for all expense. (General Manager, 4-star hotel, Indonesia, Hotel G).

Monitoring system (Criterion 4) in a strong pro-environmental hotel has already been established. However, sometimes it needs ‘stronger power’ to operate continuously in a regular manner. In some hotels, the General Manager is often directly involved in the monitoring process, as in the case below. Strong environmental hotels have already established a monitoring system, with certain personnel responsible for its function. However, the system is based on the voluntary aspect and relies on stronger authority. KPIs are available in these hotels and personnel participation in pro-environmental behaviours is voluntary.

I am the earliest to come every morning. I usually check everything before the regular staffs come. Then in weekly meeting, I usually remind them about our sustainable activities. [...] My staffs will be fined when they are caught littering. [...] We apply 24 hours no smoking day every first date of the month. Staffs and guests will get penalty if they break it. I am not afraid. (General Manager, 4-star hotel, Indonesia, Hotel G)

Customer communications (Criterion 5) in a strong environmental hotel is moderate when there is any socialisation activity of the hotel’s pro-environmental programs involving the customers. The content coverage is not specific and the target audience is limited, mostly hotel guests. In some strong pro-environmental hotels, the audience of the communication is

limited to hotel guests only who can see the message on the lobby and restaurant screens. The message presents specific features of the hotel, so that it gives new information to the customers.

...So if you are going to the hotel, in reception desk, as a 'poster' we have a TV, and we have the Green Stay sign, also we have like welcome people coming [...] In the lobby, it is just like... sometimes it's just show up on the TV. We do have um... if you sit in the restaurant, there is a big TV, if you come to the restaurant... (Staff, 4-star hotel, Australia, Hotel H)

Summarising these five criteria of strong environmental hotel management, a hotel's pro-environmental attributes are considered as moderate when there are more than recycling and energy saving concerns included in the activities. Therefore, stronger motives and willingness are required to be more advanced in pro-environmental attributes. Hotels with strong environmental management have already organised their pro-environmental activities in some departments and have greater power exposure of their pro-environmental control (e.g., General Manager conducts regular meetings with pro-environmental behaviour in the agenda). Strong environmental hotels have 'something' to communicate with the customers. Hence, the communication process involves greater content and media exposure, for example, pro-environmental messages in the hotel lobby's screen.

It was a plus for pro-environmental assessment in the hotel when the manager stated any significant or major development plan related to the hotel's pro-environmental initiatives. A strong environmental hotel is not yet a best practice hotel. It needs some improvement to be a best practice hotel. Hence, it is a plus for a strong environmental hotel if they have any *significant plan of green improvement*. After explaining the scope of pro-environmental activities, the manager usually mentioned some future or on-going improvements in the hotel as stated below.

This city is a main tourist destination in Indonesia. This is a big potential to go green. [...] We are a conventional hotel. We are refurbishing, gradually changing our lamps to LEDs. [...] We are concern about water. We currently have shower promotions for two levels. In the near future, I want to establish timer valves for some facilities in this hotel. (General Manager, 4-star hotel, Indonesia, Hotel G)

8.7 Green Best Practices

A best practice hotel is a hotel that applies high pro-environmental concerns in its day-to-day operations and benefits the community and environment with its activities. Referring to Table 8.2, the criteria of a best practice hotel are as follows:

- *Criterion 1:* Criteria of a best practice hotel include high motivation, where the manager states a broader reason for establishing pro-environmental activities in the hotel and broad-long-term benefits in doing these activities. Motivation is high when there are holistic reasons and a voluntary aspect underlying the practices, such as saving the planet, responsibility, and custodianship.
- *Criterion 2:* A best practice hotel has a wide scope of pro-environmental activities and noticeable impacts on the community. A higher rating will be given when a hotel has something new; such as, featured, distinctive, or unique pro-environmental programs that positively distinguish the hotel from others.
- *Criterion 3:* The process of pro-environmental activities in a best practice hotel has to be in a rigour-focused organisation. A specific committee or department manages pro-environmental activities in the hotel. Very good process is evident when pro-environmental activities involve central executive coordination, a designated committee or department which manages pro-environmental activities in the hotel, and a regular meeting for pro-environmental issues.
- *Criterion 4:* Following the process, a best practice hotel has a systematic pro-environmental monitoring and reporting system. A substantial monitoring system is when there are clear KPIs, senior management commitment, and systematic reporting (to translate hotel's green motivation to the staff) regarding the hotel's pro-environmental activities.
- *Criterion 5:* Customer communication is high when the hotel sends messages (or campaigns) about any pro-environmental activities to a greater scope of audiences; for example, social media usage to update their pro-environmental activities.

Five criteria of best practice hotels will be elaborated according to the interview results as follows.

High motivation (Criterion 1) in being pro-environmental includes some voluntary aspects, where managers state that they are organising pro-environmental attributes for more

than financial reasons. For example, one hotel refers to its role as ‘environmental stewardship’ as mentioned in the case below. Managers also express that the benefit of pro-environmental management is not only for the hotel, but also for the benefit of both customers and the environment. High motivation has been expressed in broader and deeper contexts, with considerations toward other stakeholders, the community and the environment.

Their motivation touches the core of pro-environmental behaviour, which is saving lives, confirmed with the greater scope of motivation—to ‘save the world’. Note that *Mid-Level Green Hotels* might also have messages in the bathroom encouraging patrons to ‘help save the planet’. However, in many cases patrons might be cynical of such exhortations because they might believe that it is more about the hotel trying to save costs. When *Best Practice Green Hotels* say that they want to save the planet, they seem to really mean it. This is based on their actual voice (not simply the cards) and also the passion when they speak about such matters. They really do believe it. Best practice managers think forward and express higher mindfulness of other stakeholders and nature. High motivation is expressed with confidence and optimism such that the manager can lead the whole organisation and other hotels to be as motivated as they are.

Right, it means the guests get benefits, we also get. One, we do not have to use detergent, we do not have to use much water, much electricity, then, we go green. (General Manager, Indonesia, Hotel A)

We concern about environment, especially in this tourist area. Thus why, we want to go green, we want to be the *first one* (stewardship) in this area (in terms of going green). (Marketing Manager, Indonesia, Hotel R)

Wide scope (Criterion 2) can be shown with broader, systematic benefits, and involvement of a program. Best practice hotels have some specific featured programs that distinguish them from other hotels. The best hotels seem to be unimpeded and ‘all-out’ in showing their pro-environmental attributes. The wideness of the scope is associated with hotel’s efforts to be pro-environmental. Best practice hotels consider having adequate facilities as a starting requirement to be green. Beyond facilities, best practice hotels are more advanced and broader in executing their pro-environmental programs; for example, regular green program for customers, hygiene maintenance, pro-environmental education for staff,

public pro-environmental activities, pro-environmental education, and international exposure, as stated in quotes below.

...usually every day (the guests) ask us to change (the bed sheet). If we change (the package) into Green Choice, [...] the guests should be well... no problem. [...] So, it is a win-win solution for both sides. However, we are not allowed to do that (not changing the towels) for more than two days. Why? Because it is not good for hygiene. (General Manager, 5-star hotel, Indonesia, Hotel A)

Bicycle, yes, finally only one key-person, it's better for staff that live nearby to ride bicycle to work. (General Manager, 5-star hotel, Indonesia, Hotel A)

We are trying to encourage our guests, including in water usage, towels usage... in the guest rooms we put suggestions, as well as encouraging our guests to be involved in our special events. For example, last time we had *Gelatik Jawa* (Java sparrow) population observation. In that event, besides *gelatik* (observation), we also educate our guests about environment. We involved the guests. They can see, and so on. Recently, we had visitors from universities in Kyoto (Japan) and also Brunei. So, we had open discussions with them, also survey. We took them to our all-waste treatments. Also, we gave them opportunities to ask any questions and they gave us positive feedback. (CSR Manager, 5-star hotel, Indonesia, Hotel D)

Well-organized environmental processes (Criterion 3) apply to best practice hotels. Best practice hotels organise their pro-environmental activities under an ad hoc committee or a designated department. Therefore, best practice hotels apply *substantial process* to establish their pro-environmental attributes. In one hotel in Indonesia, there is a Department of Corporate Social Responsibility (CSR) which is responsible for pro-environmental activities held in the hotel, from initiation to execution. For the internal process, the responsible department has to encourage staffs and customers to be green. In terms of process, best practice hotels come up with higher involvements of their stakeholders to actualise pro-environmental behaviours. Under a specific department's coordination, pro-environmental

programs in the hotel can be systematically executed. Best practice process may encourage other stakeholders to participate in pro-environmental management programs. Hotel stakeholders can be executives, employees, and customers. Substantial process involves all aspects of hotel's pro-environmental program. In order to gain sustainability, hotels have to continuously incorporate green management and create habitual pro-environmental behaviour. Education is part of the process and good process may lead to voluntary and habitual aspects.

Apart from the rare case of a separate department, usually the Engineering or the Housekeeping departments take the lead role. In one Finnish best practice hotel, the environmental matters are a regular weekly item in the normal General Manager meetings. This approach gives a more strategic perspective to the environment. A different tack occurs in an Australian case, where the regular environmental meetings are not with department heads, but rather more junior staff. This novel approach is intended to create more 'buy-in' from the non-managerial staff and seems to be working very well.

Yes, our green activities are managed under my department, as well as, our CSR programs. [...] Oh we have monthly recyclable rubbish contest here, the department with the most profit for its recyclable office items will be rewarded. Even some departments snatched other departments' recyclable rubbish to win the competition (chuckle). (CSR Manager, 5-star hotel, Indonesia, Hotel D)

In best practice hotels, following the organisation of the process, their *monitoring program* (Criterion 4) has already been well established. A monitoring program in best practice hotels is systematic. KPIs for all pro-environmental activities are clearly stated and monitored in a regular manner. The General Manager or any of the senior managers do not hesitate to become involved and to emphasise pro-environmental behaviour among staffs in the hotel. Practically, all departments in the hotel report to a dedicated department or committee. Then the 'pro-environmental' department or committee reports the activities to the General Manager and higher managerial positions (e.g., Regional Group Manager).

We are part of [The group's name] group. It is a Spanish hotel group. I have to make a monthly report and send it to the General Manager. He has to report to the Regional Manager, anyway. (CSR Manager, 5-star hotel, Indonesia, Hotel D)

Customer communications (Criterion 5) for the best practice hotels are broad and have greater coverage related to the distinguished activities held by the hotel. Pro-environmental involvement is one of the customer communications' purposes. Greater coverage of activities means more people involved in the hotel's pro-environmental programs. In order to encourage people to get involved in their program, hotels need to communicate with their stakeholders. For example, a hotel maintains a sanctuary of an endangered bird species and there is no other place in the city with the same agenda. The sanctuary is a distinguished feature in the hotel. Therefore, public media broadcasted the activity. The case below explains customer communications broadness in a hotel (Criterion 5) as well as the wideness of the hotel's pro-environmental scope (refer Criterion 2).

Here, we have a bird sanctuary. *Gelatik Jawa* (Java sparrow). It is a rare species. We proudly announced that we are the only one in Yogyakarta city; otherwise you have to go to the rural area to see *Gelatik Jawa*. We've had media coverage of this (sanctuary) before. (CSR Manager, 5-star hotel, Indonesia, Hotel D)

In summary of best practice hotel criteria, pro-environmental features in the best practice hotels are *more advanced and have greater positive impacts on the hotel and the community*. The motivation behind these pro-environmental activities should be broader and manager usually relates more causal relationships between features and benefits. A greater power involves in the establishment of pro-environmental facilities and the process is clearly organised with a clear structure. There is an ad hoc committee or department, engaged to these pro-environmental activities, with a clear reporting system from other departments to the designed department. Customer communications contain specific messages, with broader audiences, and customer involvements, such as special pro-environmental events held by the hotel and social media usage to socialise and update hotel's activities.

8.8 Chapter summary

This chapter has presented the qualitative results of the study that focused on pro-environmental management practices in *mainstream* hotels. Twenty-six hotel managers from classified hotels in Indonesia, Australia, Hong Kong, China, Finland, Canada, United Kingdom, and Singapore have participated in this study. Five criteria were developed from existing strategic green management literature and interviews, namely pro-environmental motivation, scope, process, monitoring, and customer communications. The criteria were then utilised to measure the extent of current pro-environmental practices in the hotels.

Based on the pro-environmental practices, the participating hotels were classified into three groups: best practice, strong environmental management, and minimal level hotels. Among the 26 hotels, eight hotels were classified as green best practice hotels. Twelve hotels were categorised as strong environmental management hotels, and six hotels were classified as minimal level pro-environmental hotels.

Interviews with best practice hotel managers indicated a deep motivation for conducting green management, such as to save the world and conserve nature for the wellbeing of future generations. Following this deep motivation, best practice hotels have established a greater scope of pro-environmental management; for example, some hotels already have their own water and waste recycling system. Best practice hotels mostly adopted interactive pro-environmental management with clear KPIs that involved all layers of staff and customers. Therefore, customer communications in best practice hotels have to be well established, to encourage hotel customers to become involved in the hotel's pro-environmental programs.

CHAPTER

9

DISCUSSIONS OF PRO-ENVIRONMENTAL BEHAVIOURS BY CONSUMERS AND MANAGERS

CHAPTER NINE: DISCUSSION OF HOTEL PRO-ENVIRONMENTAL BEHAVIOURS BY CONSUMERS AND MANAGERS

9.1 Introduction

This chapter presents the discussions of the results of the study of individual PEB in hotels (refer to Chapter 6), the study of the influence of hotel green attributes on customer loyalty (refer to Chapter 7), and the study of hotel pro-environmental management, attitudes, and processes (refer to Chapter 8). PEB is considered as the heart of sustainable business. The discussions point out that PEB is doable in any context, such as at home and in a hotel (during travel). Further, to support sustainable business practice, results suggest that hotel green attributes contribute a significant influence on positive brand attitudes and loyalty (WOM). Noting the positive impact of hotel green attributes on hotel businesses, the discussion continues on the establishment of hotel green attributes and the collaboration between hotel management and customers in actualising green practices in hotels.

This chapter consists of three parts. Part one includes a discussion about the role of home habits and mindfulness in shaping individual PEB in hotels. Part two is the discussion related to the role of hotel green attributes and customer experience in shaping positive brand attitudes and WOM in hotels. In part three, the process of pro-environmental management in hotels is discussed from the management perspective. Highlights on the collaborative manner between management and consumers in establishing pro-environmental management in hotels are also explained to connect all studies in this research. A brief of discussion summary is provided at the end of the chapter.

9.2 Domestic habits, influence, and hotel consumer PEB

The first model in the thesis focuses on consumer pro-environmental behaviours (PEB) in the hotel context (Chapter 6, hotel consumer PEB model and Table 6.13). Findings support that both psychological and behavioural (habits) aspects contributes to consumers' pro-environmental behaviours when they stay in hotels (refer to H1: Pro-environmental

habits (recycling, energy saving, water saving) at home significantly influence similar behaviours in hotels). Three categories of behaviour were examined in this research: recycling, energy, and water-saving behaviours. The first finding suggests that hotel guests who practised recycling, and energy- and water-saving behaviours in their home would likely practise similar behaviours when staying in hotels. Choice to behave pro-environmentally at home encouraged individuals to seek similar options when travelling, despite the limitations of the situation when travelling (as mentioned by Juvan and Dolnicar (2014) in general tourism context, in Australia and Slovenia). The finding as well suggests that a domestic pro-environmental behaviour pattern can affect the behavioural pattern in a different context for both Indonesian and Australian samples. It shows that hotel customers in Indonesia and Australia develop pro-environmental habits at home are performed on a daily basis and thus create automations for choosing to conduct such behaviours in hotels.

This finding thus supports and extends Miller et al. (2015) results in practising pro-environmental behaviours in the travelling situation, by adding hotel as the context of PEB. The findings also extend Steg and Vlek (2009) conceptual model and Miller et al. (2015) by including habits in determining hotel consumer PEB. By addressing three actual PEB in hotel (recycling, energy saving, water saving), the findings extend Untaru et al. (2016) that addressed up to the intention to conserve water in hotel.

The second finding of the model suggests that family and close friends influence an individual to act pro-environmentally when staying in a hotel (refer to H2: Family and friends significantly influence individuals to behave pro-environmentally in hotels). Family and friends are considered as the closest social environment to an individual. From the normative perspective, individuals refer to their closest social environment to decide about what is right or wrong in their behaviours. When the closest social environment agrees that pro-environmental behaviour is the right thing to do, individuals in the social environment may follow the norm or what major people do. Interestingly, there is a difference between Indonesian and Australian samples. The Indonesian sample showed that family and friends have a greater influence on recycling behaviour in hotels, while the Australian sample suggests an insignificant influence on a similar path. Family and close friends are important in the Indonesian collectivist culture, while the Australian culture is more individualist (Reisinger & Turner, 1997). It is possible that family and friends have more influence on pro-environmental behaviour for the Indonesian sample, compared to the Australian sample. In

Indonesian collectivist culture, people tend to follow the advices of their important social environment. The finding thus adds insights to Reisinger and Turner (1997) that family is influential in determining hotel consumer PEB in Indonesian context.

9.3 The power of mindfulness

Overwhelmingly, the results of the hotel consumer PEB model suggest green mindfulness as the strongest influence on pro-environmental behaviours in hotels for both the Indonesian and the Australian samples (refer to H4: Green mindfulness significantly influences individual PEB in hotels). In practice, mindfulness is manifested into consideration of the wellbeing of the object, as advised in the stakeholder theory (Polonsky, 1995a), in individual level. Interestingly, while pro-environmental habits work relatively in an automatic manner, the ‘non-autopilot’ concept of mindfulness works as a ‘brake’ in the hedonic enjoyment nature of travelling. In this research, green mindfulness refers to consideration of the wellbeing of nature in the behaviour. Being mindful of the natural environment while staying at a hotel requires awareness, attention, and locus of control about nature itself. Green mindfulness is noted as a strong driver of pro-environmental behaviour in hotels in both Indonesian and Australia samples, since the mindfulness itself comes from an individual’s psychological encouragement. The supported H4 thus suggests that Indonesian and Australian samples have similar mindfulness regarding to the environment (green mindfulness), so that the green mindfulness acts as the powerful trigger of PEB in hotel.

Since green mindfulness contributes more influence on determining individual pro-environmental behaviour in hotels, the hotel consumer PEB model examines the antecedents of green mindfulness in more detail. From the results, it is learned that by practising pro-environmental behaviours in daily routines, these shape sharper awareness and attentions in individuals towards the natural environment (refer to H5: Green habits at home significantly influence an individual’s green mindfulness). Acting pro-environmentally in everyday life also builds more knowledge about the consequences of the behaviour. Hotel guests that practise pro-environmental behaviours in their daily lives possess more awareness and put more attention into their behaviour, for the wellbeing of the natural environment. Finding suggests that both Indonesian and Australian samples develop green mindfulness by practising pro-environmental habits at home. For instance, by separating the rubbish at home,

individuals learn that plastics can be harmful for the soil. Therefore, knowing the consequences, the individuals may be more aware and put more attention into treating the rubbish, as they consider the wellbeing of nature as a result of their behaviours.

The study's results suggest that general mindfulness contributes to the development of green mindfulness (refer to H6: General mindfulness significantly influences green mindfulness). The idea of general mindfulness is related to awareness, extra attention, information processing, and further consideration of the wellbeing of the object. Guests who are mindful are more open to any available information offered by the hotel to facilitate green mindfulness, in comparison with guests who are not mindful. Mindful guests are more likely to be involved and in control in the hotel stay situation. Hence, mindful guests have more awareness, pay more attention, demand and process more information than less mindful guests. When the hotel provides adequate green attributes, guests with general mindfulness are more likely to develop their mindfulness into green mindfulness. Results demonstrate that both Indonesian and Australian sample possess similar mindfulness that contributes to the development of their green mindfulness.

Findings of this research regarding the role of mindfulness extends the concept of mindfulness in general by Langer (1989) and the hotel consumer PEB model by Barber and Deale (2014). This research presents the concept of green mindfulness that extends Langer (1989) and Chen et al. (2015) descriptions of mindfulness. The relationship of general mindfulness and green mindfulness in hotel customer PEB presented in this research also extends Barber and Deale (2014) hotel consumer PEB model.

9.4 The prominent role of hotel green attributes

Refer to H3 in the hotel customer PEB model (H3: The provision of green attributes in the hotel significantly affects customer PEB actualisation in hotels), green attributes in the hotel supports all pro-environmental behaviours in the Australian sample, while it only supports guests' recycling behaviour in the Indonesian sample. The provision of green attributes in a hotel assists hotel guests to enact their pro-environmental intentions. For example, hotel guests cannot separate the rubbish if only one rubbish bin is provided. Guests would not use towel/linen reuse options if there is no clear hotel communication about the program. It would be hard for guests to enact their pro-environmental values if the hotel

provides unclear information and limited facilities. Thus, result indicates that the provision of green attributes in Australian hotels may be clearer or more visible to the guests, so that the guests are more likely to demonstrate pro-environmental behaviours while staying at the hotel. The results are in vein with Dolnicar and Grün (2009) and Miller et al. (2015) suggestions in establishing and upgrading facilities and infrastructure to ease tourists towards practising pro-environmental behaviours. The suggestions can also be applied in the hotel industry, to provide an 'easy and clear' environment for the guests to enact their pro-environmental behaviours.

Focusing on the Indonesian result of hotel consumer PEB model (Chapter 6), there is an insignificant result for the *hotel green attributes* \Rightarrow *hotel water saving behaviour* path. Referring to Chapter 2 about Indonesian bathing habits and the hotel PEB items related to the water-saving habit, the justification for the result is related to the Indonesian climate and bathing culture. Hotel water PEB items suggest hotel customers only use water wisely while staying in the hotel, while the warm and humid weather of Indonesia and the traditional bathing behaviour may encourage customers to use excessive water during their hotel stay (see also Chapter 2 and focus group discussions summary in Table 6.4 of Chapter 6). With the conditions of Indonesian weather and culture, the hotel's visible signs regarding water-saving behaviour are not significant in influencing similar customer PEB in hotels.

Linked with the role of hotel green attributes in the hotel PEB model, results relating to the loyalty model suggest that hotel green attributes contribute to positive brand attitude toward the hotel's brand, and further positive WOM communications (refer to the customer loyalty model, H7: Hotel green attributes significantly influence positive brand attitude towards the hotel brand that prompts customer loyalty). Results suggest that hotel green attributes influence customer's positive behavioural intentions in hotel. However, for Australian sample with low experience, green attributes in hotel were insignificant to influence positive behavioural intentions of the customers, since there was less sensory-exposure and interactions with the hotel attributes. Findings also note the importance of communicating hotel green attributes to the customers; since without enough information, customers can be sceptical about hotel's green practices and may lead to 'greenwashing' accusation (please also see customer focus group summary in Table 6.3 and 6.4 in Chapter 6). Excellent generic service quality in the hotel alone is not enough to impress customers, enhance the hotel's brand, and create sustainable business. Hotel green attribute

establishment is part of the hotel's effort to be sustainable. This research argues that if consumers are impressed with what they perceive about the hotel's green activities, then they may be empowered to tell others about the environmental features. That is, if the hotel is able to demonstrate a high level of responsibility, then this might encourage or indeed empower consumers to take the initiative in spreading the green-positive word. Captivatingly, the effect of hotel green attributes on positive brand attitude is found to be greater on the higher levels of customer experience for both Indonesia and Australia (refer to H9: High customer hotel experience results in greater effect of hotel green attributes on positive brand attitude).

This finding extends Bansal and DesJardine (2014) strategic sustainability concept by taking the concept in hotel context. Moreover, the results of the loyalty model support Polonsky et al. (2010) statement about the importance of 'visible' green attributes to the customers in the hotel, to avoid 'greenwashing' accusations. Findings of this research related to hotel green attributes and loyalty relationships extend Gustin and Weaver (1996) behavioural intentions model, since this research accommodates customer perception on the provision of hotel green attributes by management that links to brand attitude and loyalty (WOM). Findings on hotel green attributes – loyalty relationships also contribute to a novel framework of green collaboration between hotel management and consumers that supports the stakeholder theory (Polonsky, 1995a, 1996).

9.5 Learning from experience

Discussing the supported H9 (H9: High customer hotel experience results in greater effect of hotel green attributes on positive brand attitude, please see Table 7.10), two dimensions of hotel guest experience, namely multi-sensory experience and cohesive and meaningful experience have been extracted (see the items of experience in Chapter 7, Table 7.5 and 7.6). The multi-sensory dimension reflects customers' feelings as the outcome of their sensorial experience. The cohesive and meaningful experience dimension reflects an overall cohesive experience that simplifies the experience in a meaningful way by meeting the needs of the guest and engaging with the guest. The two experience dimensions reflect the need for an overall pleasant (sensory) experience that is also well integrated and meaningful. Guests with high level of experience may have more sensory-exposure and interactions with the hotel attributes. With high sensory-exposure and interactions with such good green

attributes, hotel guests may respond with their positive attitude towards the hotel's brand. On the other side, with low level of experience, customers may not understand the purpose of green attributes in hotel any may result in sceptical view on the green attributes. For example, when hotels apply the towel reuse policy without communicating the policy to the customers may result on upset customers. Overall, experience immerses hotel guests into a deeper appreciation of hotel features (service quality and hotel green attributes, as in the loyalty model, Chapter 7). Hotel is considered as high-involvement service. Thus, hotel customers also want to enjoy the ambience and attributes in the hotel, beside the functional services. The inclusion of sensory aspect of experience extends Bloemer and de Ruyter (1999) study about customer interaction in high- and low-involvement service types.

The results of the loyalty model show that both service quality and experience influence a customer's willingness to spread positive WOM (refer to H8: Service quality significantly influences customer satisfaction that prompts a positive attitude towards the hotel brand, and customer loyalty). Consistent with the literature (Brakus et al., 2009; Verhoef et al., 2009; Xu & Chan, 2010), experience involves feelings, sensations, and interactions among hotel customers. Environmental and interactive differences between hotel and home may affect an individual customer's sense and feelings. Therefore, the presence of experience augments the effects of service quality and hotel green attributes on the consequences (satisfaction and brand attitude), thus demonstrating that a greater level of experience contributes greater effects of both service quality and hotel green attributes on guest satisfaction, positive brand attitude, and prompts to customer loyalty.

More emphatically, the results show that experience contributes different effects on the paths of service quality and hotel green attributes to loyalty that support Pizam (2010) opinion on the moderating role of experience. So although both service quality and hotel green attributes contribute to positive behavioural intentions, it is very important for hotel managers to understand that the differential impact of experience is even more important. Previous literature has given pre-eminence to service quality as the main driver of guest satisfaction (Wilkins et al., 2007), so a new perspective now prevails.

Nonetheless, a major new perspective is now postulated; namely, that service quality per se is not as strategically important for its own sake; rather, it is important only if it is leveraged to provide a better hotel guest experience and to add hotel green attributes. Consumers with high experience means that the consumer captures the excellent senses and

interact with the hotel's attributes when staying at hotel. On the other side, low experience is when the consumer does not engage much with the hotel's attributes. In a similar vein to Hume and Mort (2008) study results, the new emphasis must now be on the overall guest experience and hotel green attributes; not simply on the more operational variables of service quality. Service quality must still be managed by necessity, but managers must give at least equal attention to the overall guest experience and green attributes, to achieve sustainable business.

9.6 Hotel green attributes on management perspective

Using a diverse base of hotels from eight countries and different degrees of pro-environmental activities, the qualitative study differentiates three patterns of results in terms of green practices in mainstream hotels (refer to qualitative study results in Chapter 8). A simple, three-step hierarchy is identified, ranging from weak green practices at the low end, to average green practices at the middle level, to green best practices at the top end.

Note that it is very rare for a mainstream hotel to be doing nothing environmentally. Minimum industry or hygiene factors ensure some attention to the matter. Equally, an Average Green Practice mainstream hotel may seem to be doing a reasonable amount of green activities, but this still falls short of the best practice label. In other words, the Average Green Practice hotels are making a considerable contribution to the industry's environmental effort, but they still have some way to go to reach the highest Best Practice Green hotel status. Also, the study concerns *mainstream hotels* only, not green resorts. The literature and public understanding is replete with discussion of green resorts, including eco-resorts and the like. Moreover, existing criteria mostly apply only to green hotels and not every hotel can follow the criteria. The attention of this study focuses on - the less discussed, but economically much more important - *mainstream hotels*. Thus, this study on management perspective as well indicates the green practices in *mainstream hotels*.

Rather than a simple enumeration of green activities, the study develops a more integrated, holistic and strategic perspective of green activities. The five-criterion approach based on the managerial functions that was developed in this study helps to integrate the strategic facets together.

Weak Green Practice mainstream hotels represent a minimal effort. The small amount of green activities is driven by a simple, essentially reactive strategy of conforming to industry or government standards. An opportunity to obtain some simple cost-savings might be an added objective. The low-key, externally-driven motives are matched by a resulting low level of green activities, often just in one or two basic areas, such as recycling. What is interesting is that the managers in Weak Green Practice hotels are satisfied with their efforts. Low objective plus low activities is equal to happy managers. There is no shame or regret here. These managers have done what they think is appropriate and see that as success. The remaining criteria follow logically. Weak Green Practice hotels are characterised by weak green processes, including limited co-ordination across functional areas of the hotel; there is weak monitoring of the efficiency and effectiveness of the green activities; and there is limited or ineffective customer communication, with simple signs warning or asking for help.

Average Green Practice hotels certainly take the environment more seriously in terms of motivations and objectives. However, equally important is the fact that such hotels then link their green operations (criterion 2) to their green motivation and strategy (criterion 1) through efficient green processes (criterion 3). There is a greater presence for both a better monitoring system and better customer communication, though both of these are more limited compared to the first three criteria.

Green Best Practice sets the standard. In all cases, it constitutes an integrated package of strategies, operations, processes, monitoring and effective customer communication. For the first three criteria, there are strong similarities with Average Green Practice hotels, but these are taken a bit further. Whereas Average Green Practice hotels have discretionary and well-motivated reasons for their environmental agenda, the Green Best Practice hotels go a step further and genuinely want to help their customers, the community and quite genuinely want to 'save the planet'. Both Average and Best Practice hotels have a wide range of green measures. However, the Green Best Practice hotels have further innovative measures, such as the two hotels in Finland and Indonesia that offer bicycles for their guests. Whereas Average Green Practices hotels have good processes (often a lead hotel department such as housekeeping or engineering), Green Best Practices hotels go further with greater co-ordination across the hotel through regular meetings and more active participation across departments. One Australian hotel (Hotel P) extends the committee membership to a lower layer of staff to get more buy-in at that level, while a Finnish hotel (Hotel L) is more strategic

and essentially has the General Manager chair the environmental issues as part of the weekly operational meetings. Both hotels are examples of more creative processes in the Green Best Practice hotels. Another Australian hotel (Hotel N) and a Singaporean hotel (Hotel Y) receive numerous suggestions from all types of staff, including the idea of herb and compost gardens from the chef. The successful suggestions are then acknowledged on notice boards around the hotel.

Continuing the Green Best Practice hotel's profile, it is with criteria four and five that their environmental progressivity drives home. Whereas Average Green Practice hotels do basic monitoring (criterion 4), such as ensuring that general staff understand their roles, Green Best Practice hotels carefully put in place KPIs which are carefully monitored. Electricity, gas and water are the three main energy uses monitored, with regular reports sent from the Environmental Committee to the Department Heads and to the General Manager and often to the hotel headquarters. For example, a Chinese hotel (Hotel M) reports about half a million dollars saved by switching to eco-efficient lighting. Most of the Best Practice hotels interviewed show increases in environmental performance regularly over the previous three years.

Criterion 5 (customer communication) is equally impressive and perhaps the most decisive indicator of Green Best Practices. Whereas Average Green Practices hotels have a range of perfunctory signs and communications with customers, Green Best Practices hotels are able to really *engage with customers* on green matters and gently persuade them to participate. For example, a Hong Kong hotel (Hotel Q) gives very constructive and helpful guidance to guests:

Please consider to only switching on the lights in the area you're working.
Use the heavy blanket curtain to block out the outside heat and minimise loss of temperature from inside the room. To conserve water and cleaning agents, consider to change your bed linen and towels every 2-3 days. Do not leave taps running. Water from the tap can be boiled for perfectly safe drinking water which reduces the amount of plastic. For recycling, separate responsibility by piling together glass bottles and cans. The hotel also encourages public transport to minimise your carbon footprint.

This Hong Kong hotel is one of the more comprehensive examples reaching out to customers, executed through the TV monitor. There is considerable engagement with customers. A Finnish hotel (Hotel L) uses social media to communicate environmental outcomes with customers. An Australian hotel (Hotel P) informs customers through the hotel guest manual about the nature of and outcomes progressed on environmental activities. Another Australian example (Hotel N) encourages customers to provide ideas (customer-brand co-creation), many of which are adopted and recognised on the hotel's notice boards. An Indonesian hotel (Hotel D) makes sure that its eco-friendly attributes are clearly communicated to the local community.

9.7 The synergy of hotel management – customers green collaboration

Linking the consumer perspective (hotel consumer PEB model in Chapter 6 and hotel customer loyalty model in Chapter 7) and management perspective (Chapter 8), this section explains the synergy of hotel management and consumers in creating sustainability in hotels. Much of the previous literature attempts to demonstrate the importance of sustainable business practices (Bansal & DesJardine, 2014; Bansal & McKnight, 2009) and involving consumers in sustainable businesses (Polonsky, 1995a, 2011; Shaw et al., 2006). Consequently, these particular studies have not been able to clearly identify the empirical collaboration between management and consumers in actualising sustainable business practice. The current research has carefully formulated a series of integrative models to explain the green collaboration process in creating sustainable hotel business. More specifically, the study begins with the model of individual customer PEB in hotels that point out the importance of hotel facilities that support PEB in hotels. Results of the customer PEB model indicate strong individual antecedents of PEB in hotels. However, with limited supporting facilities in the hotel, it would be difficult for customers to enact PEB.

Similarly, the loyalty model also highlighted the prominent contribution of hotel green attributes in developing positive brand attitude. Studies in Indonesia and Australia noted that the more immersed is the experience of hotel services and green attributes, the greater is the effect of services and green attributes on satisfaction, positive brand attitude, and loyalty (positive WOM communications). The low coefficient on *hotel green attributes* ⇒ *brand attitude* path in the Australian sample results may indicate the lower consumer

awareness of green attributes in the hotel. Informal discussions with consumers (see Table 6.3 and 6.4 in Chapter 6) suggest a fairly cynical attitude towards hotels exhorting guests to save the planet by re-using their towels or linen. Many guests assume, rightly or wrongly that the main reason hotels are doing this is to reduce their costs. Again, rightly or wrongly, guests perceive such exhortations as ‘greenwashing’ – lacking credibility or authenticity (Polonsky et al., 2010). Hence, the results of the hotel PEB model and the loyalty model suggest hotel management ought to accentuate their pro-environmental hotel management practices, in order to be more visible to the customers and enable management-consumers green co-responsibility in hotel. The green co-responsibility is a win-win-win solution for the stakeholders (management and consumers) and the environment. The green collaboration thus far matches the stakeholder theory (Polonsky, 1995a, 1996) that identifies and addresses the stakes of each main stakeholder (management and consumers). The synergy of management-consumer green collaboration induces the greater positive brand attitude, customer loyalty, and sustainable business practices in the hotel.

Another major finding from the qualitative study of hotel pro-environmental management attitudes and processes suggests that hotel green management can be evaluated using a strategic approach, in line with D'Souza et al. (2015) and the stakeholder theory (Polonsky, 1995a, 1996). Five criteria to assess pro-environmental management in hotels have been developed on the basis of existing literature and management interview data. The criteria include motivation, scope, process, monitoring, and customer communications of hotel green management. Among 26 hotel participants, eight hotels are rated as best green management practice hotels. In line with the stakeholder theory (Polonsky, 1995a, 1996), both parties can play a role in being responsible.

The inclusion of mainstream hotels (normal hotels, non-green hotels) enhances the generalisability of the typology, since mainstream hotels technically do not operate in the ‘green’ frame. Apart from the existing chain system and regulation, the green best practices hotels hold a higher voluntary aspect in enacting pro-environmental management. Hence, pro-environmental activities in the hotel are truly conducted ‘by heart’. Management’s motivation for green management underpins the spirit of their sustainability actions. The analogy of hobby—an individual would likely to do their best on something that they like—applies to a hotel’s motivation on pro-environmental management. When the hotel happily conducts pro-environmental management, they would likely to do their best on it. The

criterion of pro-environmental management scope emphasises the impact of the range of green attributes provided in the hotel. The approach corresponds to the stakeholder theory that advocates fulfilling every stakeholder's stake. Best practices hotels provide green attributes that cause greater positive impact on hotel-customers-environment wellbeing. As an example, an Indonesian hotel (Hotel D) provides a sanctuary for an endangered bird species. The sanctuary delivers great positive impacts for the hotel business, customers, ecosystem and society. The establishment of green attributes in best practice hotels considers all stakeholders in the hotel. A higher rating of the process is given to the hotel with a clear process of green management task assignment and greater involvement of stakeholders (managers, staff, and consumers) in green management actualisation. In best practice hotels, monitoring of the process is also conducted regularly, regarding all relevant management lines' sustainable progresses.

The customer communication criterion in hotel green management typology completes the link between hotel PEB results (Chapter 6), customer loyalty (Chapter 7), and management perspective on hotel green attributes. Communicating hotel green practices to the customers is the key of green collaboration to achieve sustainable hotel business. It is a lesson from the green management study in Chapter 8 that even though a hotel provides excellent green attributes, with a lack of customer communication, green collaboration will not happen. Hotel consumer PEB results in Chapter 6 suggest that individual customers require green attributes to actualise their PEB in hotels, whereas the loyalty model in Chapter 7 highlights hotel green attributes in leveraging positive brand attitude and customer loyalty. When customers do not notice the existence of green attributes in a hotel, it results in zero PEB and loyalty among hotel customers. As previously discussed, there is a reciprocal green-stake between hotels and consumers that needs to be fulfilled. Therefore, it is important to inform and engage customers in hotel green activities to achieve sustainability.

Figure 10.1 in Chapter 10 presents the synergy of hotel management-consumer pro-environmental behaviours. The map in Figure 10.1 suggests that hotel green attributes play important role in addressing hotel consumer's environmental stakes. Thus, customer communications are important to deliver the green attributes messages from hotel management to the consumer. Hotel green attributes also enable consumers to actualise PEB in hotel. The fulfilment of consumer's environmental stakes, it enables hotel customers to perform the favourable behavioural intentions (loyalty) that return the benefit to the hotel.

9.8 Summary of the discussions

Results of this research suggest a synergy between hotel management – consumers green collaboration to achieve sustainable hotel business. The hotel PEB model's results identify that hotel customers need green attributes to support their PEB in hotels. It is also perceived that hotel green attributes contribute to positive brand attitude and customer loyalty in hotels. These empirical results link to the management perspective of hotel green attributes. The importance of communicating hotel green attributes to the customers is also noted in the hotel green management study.

The discussions in this chapter discover and explain the process of actuating hotel green practices and the connection between hotel management and consumer perspectives. In like vein with strategic management and stakeholder theory (Polonsky, 1995a, 1996), hotels provide green attributes to support customer PEB in hotels and customer loyalty that benefits the hotel. Together, the synergy of management-consumers green collaboration may create sustainability in the hotel industry.

CHAPTER

10

CONTRIBUTIONS, FUTURE RESEARCH SUGGESTIONS, AND CONCLUSIONS

CHAPTER TEN: CONTRIBUTIONS, FUTURE RESEARCH SUGGESTIONS, AND CONCLUSIONS

10.1 Introduction

This final chapter provides the conclusions of the three studies conducted in this research. Chapter ten begins with a review of implications and contributions of each study's findings. Overviews of methodology and key results of this research are presented subsequently. The limitations of this research are acknowledged and accordingly, suggestions for future research are proposed. Finally, some key conclusions from the findings of this research are drawn, in line with the main research question and overall aim of this research.

The contributions of this research are categorised into economic contributions, theoretical contributions, and practical contributions. Suggestions for future research are reviewed and proposed in accordance with the limitations of this research. The final part of this chapter concludes with the overall results from this research project.

10.2 Contributions

This research presents green conceptual models that compromise management and consumer perspectives in response to the main research question '*What is the role of consumers and management in creating sustainability in a hotel context?*' A large number of considerable studies in pro-environmental management and green consumer behaviour have presented significant findings on the conduct of hotel pro-environmental management and consumer PEB. However, none of the empirical research to date adopts a multi-perspective approach in examining pro-environmental behaviour and hotel management. Arguably, this research is one of the first in using a multi-perspective approach (management and consumer perspectives) in investigating pro-environmental behaviours in hotels.

10.2.1 Economic significance and contributions

This research presents a typology of hotel pro-environmental management as the model of sustainable hotel business. Best practice examples of green hotel management are presented as the results of this research. Findings of this research enable hotels to recognise

best pro-environmental practices and follow the practice. Hotel consumer empowerment (Shaw et al., 2006) in creating sustainable hotel businesses is also revealed in this research. Moreover, this research indicates the empirical results where green management practices lead hotels to be sustainable businesses that benefit all stakeholders; particularly hotels, consumers, and nature (please see Figure 10.1).

This research introduces a novel terminology, ‘green co-responsibility’ or green collaboration as the integration of hotel management and individual customer’s PEB. To date, environmental policies tend to be company-centred. This research emphasises consumer environmental empowerment that enables consumers to involve more in hotels’ environmental programs. The idea of green co-responsibility applies to the conduct of the hotel’s pro-environmental management as the company’s responsibility, as well as the individual customer’s responsibility to maintain the wellbeing of the nature. The concept of green collaboration between hotels and consumers contributes to the establishment of a sustainable economy when both the hotel industry and individual customer are involved in pro-environmental practices.

10.2.2 Theoretical significance and contributions

Findings of this research contribute insights to the hospitality management literature about current pro-environmental practices in mainstream hotels (please also see Table 3.3, 3.4, and 3.5 in Chapter 3). Firstly, in the business ethics literature, consumer empowerment is less considered in company’s policy making (Holt, 2002; Shaw et al., 2006). This research contributes to the literature and supports the stakeholder theory (Polonsky, 1995a, 1996) by introducing the concept of green collaboration between hotel stakeholders, mainly company and consumers, in actualising pro-environmental practices in hotels.

This research also contributes a typology of green hotel management to the sustainability literature. A set of green management criteria that was developed in accordance with literature (such as Bansal and DesJardine (2014); D'Souza et al. (2015); Enz and Siguaw (1999); Polonsky (1996)) and manager interview data adds more insights into the actualisation of green management in mainstream hotels and guidance to achieve best practices in green management in hotels. The typology extends Bansal and DesJardine (2014) advice on creating sustainability in hotels by incorporating customers in the criteria of sustainable hotel practices. The insight generated from this research outcome also supports

the stakeholder theory (Polonsky, 1995a, 1996) that advocates the involvement of managers, employees, and consumers in enacting pro-environmental management in hotels.

Results of the inclusion of green attribute establishment by hotel management in determining customer's favourable behavioural intentions extends Gustin and Weaver (1996) behavioural intentions model that addressed consumer's attitudes on green attributes in hotel. The findings as well contribute to a novel framework of green collaboration between hotel management and consumers, since hotel management provides green attributes for the consumer and the attributes prompt to behavioural intentions that return the benefit to the hotel management.

The results of this study also contribute better understandings in consumer behaviour by addressing different levels of hotel customer experience in achieving customer loyalty in hotels. Findings that different levels of customer experience (high and low) influence behavioural intentions in hotel extend similar research on consumer behaviour to date that considers customer experience in determining behavioural intentions in the hotel context (e.g. Pizam (2010), Ren et al. (2016), Knutson et al. (2009), Torres et al. (2014)). This research addresses consumer experience as a distinct concept of service quality with the two dimensions of multi-sensory and interaction. This research also further explores the role of consumer experience in shaping customer loyalty in hotels. Hence, findings of this research related to hotel customer experience extend Bloemer and de Ruyter (1999) model by including multi-sensory dimension of experience in hotel context.

Considerable research on individual pro-environmental behaviour in the hotel context has mostly developed on the basis of Theory of Planned Behaviour (TPB) (e.g., Han et al. (2010), Han and Kim (2010)). Contrasting home and hotel contexts of consumer PEB, findings of this research empirically support Steg and Vlek (2009) conceptual model that recommends the inclusion of habit in determining PEB, and extends Miller et al. (2015) by addressing daily and hotel stay contexts. Findings of this research also extend Untaru et al. (2016) water conservation behaviour model by including recycling, energy, and water saving actual behaviours.

This research introduces the concept of mindfulness, which has been mostly studied in the psychology and health contexts (Baer et al., 2005; Langer, 1989; Langer & Moldoveanu, 2000), as a novel perspective to examine pro-environmental behaviour. Very

limited research has included mindfulness in pro-environmental behaviour (e.g., Amel et al. (2009), Barber and Deale (2014), Chen et al. (2015)). Although Chen et al. (2015) mentioned 'green mindfulness' specifically, the research was conducted in the context of human resources management. Mindfulness in the hotel consumer behaviour context has been studied by Barber and Deale (2014). However, the concept of mindfulness in Barber and Deale (2014) study was explored in a general manner, instead of specific green mindfulness. This research contributes a novel concept of green mindfulness to the consumer behaviour literature. Green mindfulness is an advanced awareness and thoughtful manner in considering environmental wellbeing in the decision-making process or behaviour. This research also contributes insights on mindfulness and green mindfulness to influence individual pro-environmental behaviour as the extension of Langer (1989) description of mindfulness and the hotel consumer PEB model by Barber and Deale (2014). Moreover, this research enriches consumer behaviour theory by developing a new approach in the customer point-of-view of individual PEB in hotels that includes behavioural aspects (habit) and mindfulness.

Empirical research to date mostly addressed certain pro-environmental standards in some specific countries, such as Spain and Taiwan (Ayuso, 2007; Chan & Hawkins, 2012; Teng, Horng, Hu, Chien, & Shen, 2012) and previous research also has noted best hotel environmental practices in the U.S. (Enz & Siguaw, 1999). None of these previous studies assessed mainstream hotels' pro-environmental practices in a multi-chain and multi-country scope. This research strengthens the universality of sustainable management practice in the literature by providing examples of hotel pro-environmental best practices from various hotel chains and countries.

10.2.3 Practical significance and contributions

A significant contribution of mainstream hotel green management typology developed in this research is that the typology may help the hotel industry by providing example and guidance to actualise best-practice pro-environmental management among hotels. The criteria developed to predict pro-environmental management in mainstream hotels can be applied to any hotel worldwide. The insights encourage hotel managements to communicate the strategy and consider the consumers, staff, and other stakeholders more when formulating pro-environmental policies. Results of this research may persuade hotel managements to establish and promote their green attributes. Further, findings on the importance of the hotel customer experience act as a suggestion for hotel management to leverage good customer stay

experiences in their hotels. Overall results of this research may also help hotel managements to understand their customers better and tailor a sustainable business environment accordingly.

From the customers' point-of-view, insights that PEB is 'doable' in either the home or in travel situations may impact individual hotel customer's perception in enacting PEB. Since closest social environment influences individual's PEB, it is recommended for consumers to build the pro-environmental culture in the society. This research simply explains individual daily PEB that supports similar PEB in hotels, which may encourage PEB among hotel customers.

10.3 Overview of methodology

This research follows *pragmatist paradigm* to investigate the role of hotel management and consumer in creating sustainability in hotels. As the strategy of inquiry, this research utilises mixed-methods that comprised of three phases: qualitative (Phase One: hotel customer focus group discussions) – quantitative (Phase Two: hotel customer surveys in Indonesia and Australia) – qualitative (Phase Three: hotel manager interviews).

In Phase One, two focus group discussions were conducted in Indonesia and Australia. Participants of the focus group discussions were adults who had previously stayed at any classified hotels. Data from Phase One were analysed using manual coding (see Figure 5.1 in Chapter 5). Results from the focus group discussions were used to develop some questionnaire items for *experience*, *green mindfulness*, and *hotel green attributes* variables.

Phase Two consists of two hotel customer surveys in Indonesia and Australia. Questionnaire items for Phase Two were developed from existing literature and supported by focus group discussion results for some items. The surveys targeted adult customers who had stayed at any classified hotels in Indonesia (for Indonesian survey) and in Australia (for Australian survey). As many as 663 completed questionnaire from Indonesian (n=324) and Australian (n=339) surveys were usable for further analysis. Data from Phase Two were analysed using Structural Equation Modelling (SEM) with SPSS-AMOS software. Two models – hotel consumer PEB model in Chapter 6 and hotel customer loyalty model in Chapter 7 – have been tested using Phase Two data. From six hypotheses in hotel consumer PEB model, two of which are partially supported (H2 and H3, refer to Table 6.13 in Chapter

6). Two out of three hypotheses in the customer loyalty model (Chapter 7) are as well partially supported (H7 and H8, refer to Table 7.10 in Chapter 7).

Phase Three comprised of hotel manager semi-structured interviews. The framework of the interview questions were developed from considerable literature in sustainable hotel management. Participating *mainstream* hotels were selected on the basis of the hotel's public reviews (e.g., TripAdvisor). Indonesian hotel managers were contacted through the Indonesian Hotel and Restaurant Association (IHRA). Manager interviews in Australia and other countries were conducted by chance to meet the manager. As many as 26 hotel managers participated in Phase Three. Data from manager interviews were analysed using manual coding. The interview data result in five themes that were utilised in hotel pro-environmental management criteria development (see Figure 5.3 in Chapter 5). The pro-environmental hotel typology generated from Phase Three consists of five criteria of hotel pro-environmental management (motivation, scope, process, monitoring, and customer communications); with three levels of pro-environmental management, namely minimal (low), strong environmental management (average), best practice (high). Each interview case was rated according to the criteria. The pro-environmental management rating subsequently fits the case (hotel) into certain level of hotel pro-environmental behaviour.

10.4 Overview of key results

This research aims to investigate the role of consumer and management in creating sustainability in hotels. Several significant results have prevailed in the attempts of answering the main research question, '*What is the role of consumer and management in creating sustainability in a hotel context?*'

The first key finding of this research highlights the power of green mindfulness in influencing consumer PEB in hotels. The novel concept of green mindfulness adds to Langer (1989) definition of mindfulness. The inclusion of green mindfulness as a strong factor of hotel consumer PEB extends Barber and Deale (2014) study about the influence of general customer mindfulness in hotel. The insertion of mindfulness in general as a determinant of hotel consumer PEB also extends the existing literature on the application of mindfulness concept in individual PEB context.

The second key results of this research present that domestic pro-environmental habits influence individual hotel consumer to do similar pro-environmental behaviours (PEB) when

staying in hotel and thus confirm that PEB is transferable across different contexts. This result empirically supports and extends Steg and Vlek (2009) conceptual model, Miller et al. (2015) PEB study in general tourism context, and Untaru et al. (2016) water saving intention in lodging context, by including recycling, energy, and water saving habits at home as determinants of similar PEB in hotel.

Since PEB is actualisable in different contexts, individuals need supporting facilities to enact the PEB. This notes the third key findings that the provision of green attributes in hotel by management support customer PEB when staying in hotel. The third key findings add to Steg and Vlek (2009) conceptual PEB model as well as extend Miller et al. (2015) study by contrasting home and hotel contexts. The findings also enrich Untaru et al. (2016) by addressing recycling, water, and energy saving actual behaviours in hotel.

The fourth key findings indicate that hotel green attributes provision by management contribute to customer's positive brand attitude and WOM communications that will return the benefits to the hotel. Green attributes in the hotel are prominent for the customers, especially 'green' customers, to actualise their PEB (as indicated in the third key findings). In managerial perspective, the stakeholder theory also advises management to identify and address their stakeholders' stakes. Therefore, hotel management provides green attributes to fulfil the stakes of the consumer. The fourth key findings add to the implementation of environmental stakeholder theory (Polonsky, 1995a, 1996) in hotel marketing context, as well as contribute to a framework of green collaboration between hotel management and consumer.

The fifth key finding tells that it is important for hotels to create excellent experience for the customers. High customer experience results in greater effect of hotel green attributes on customer positive brand attitude on the hotel's brand that prompts loyalty (positive WOM) and returns the benefit to the hotel management. The fifth key finding extends Bloemer and de Ruyter (1999) study in general services context by incorporating high and low levels of customer experience in hotel customer loyalty model.

The sixth key findings of this research suggest a typology with five criteria to predict the extent of pro-environmental management in hotels (minimal, strong pro-environmental management, and best practice). The five criteria namely motivation, scope, process, monitoring, and customer communications are developed from existing literature and hotel

manager perspective. Eight participant hotels were categorised as best pro-environmental practice hotels. Hotels in best pro-environmental management practice category highly communicate and engage their green practices to the customers. Without engaging the customers, excellent green motivation, scope, process, and monitoring are insufficient to achieve sustainability in hotels (please see the conceptual map in Figure 10.1). The sixth key findings extend the strategic sustainability concept (Bansal & DesJardine, 2014) by incorporating customers in the criteria, as well as add to the application of environmental stakeholder theory (Polonsky, 1995a, 1996) in hotel context.

10.5 Limitations and suggestions for future research

This research is conducted on the basis of stakeholder theory. A multi-perspective approach from management and consumer is utilised to investigate pro-environmental management and behaviours in hotels. It is suggested for future research that more stakeholders in the model, such as government and local communities be included.

The hotel consumer PEB model and loyalty model in this research highlight the importance of hotel green attributes in actualising consumer PEB and promoting customer loyalty. In any future research, it is suggested to include other antecedents of individual PEB, such as attitude towards environment and knowledge. As for the customer loyalty model, the inclusion of more ‘green’ variables ought to be considered.

The novel concept of green mindfulness is assessed in the individual level in this research. Green mindfulness can also be used in different contexts for the future research. It is recommended to explore and test the application of green mindfulness in managerial level or organisational level, as a factor of organisational sustainability practices.

From the qualitative hotel management study, the following propositions are identified for the benefit of future research.

Proposition 1. Each of the green hotel management criteria contributes to explain key constructs of the green management process in hotels.

Proposition 2. Customer communications enable hotels to engage their customers in the green management processes.

Proposition 3. The actualisation of pro-environmental management in hotels can be categorised into minimal, strong environmental management, and best practice levels based on the motivation, scope, process, monitoring, and customer communications in the hotel.

Proposition 4. Motivation, scope, process, monitoring, and customer communications in hotel pro-environmental management practice influence hotel sustainability performance.

The hotel consumer PEB and loyalty models in this research project mainly took place in Indonesia and Australia. Replication of the studies may be conducted in other countries in the future, to improve the robustness of the models.

10.6 Final conclusions

This doctoral research project has investigated the individual PEB in hotels, the formation of hotel customer loyalty, and green management – green collaboration in hotels. Finalising the remarks of three models in this research, the following conclusions are presented (please also see Figure 10.1 for the conclusion map).

The first conclusion of the research is that consumers and hotel management perform green collaboration in actualising sustainable hotel business. Synchronised with the stakeholder theory, every stakeholder plays a role in creating sustainable business. There is a mutual synergy in the collaboration, to create sustainable hotel business practices. Hotels provide green attributes to be environmentally responsible in their day-to-day operations. On the other hand, consumers need hotel green attributes to facilitate their PEB when staying in hotels.

The second conclusion drawn from this research is that home green habits and green mindfulness affect individual PEB in hotels. Home pro-environmental habits are certain behaviours that are performed as routines at home. Individual consumers with pro-environmental habits at home are more likely to do similar behaviours in hotel. Green mindfulness also reminds hotel consumers to consider the wellbeing of the natural environment, while enjoying hotel services. The consumer PEB model also notes that hotel green attributes facilitate the actualisation of individual PEB in hotels.

Thirdly, the level of customer experience in the hotel, service quality, and hotel green attributes contribute to establishing a positive hotel brand attitude and customer loyalty. Customer hotel experience involves multi-sensory and interactive immersions in the hotel

environment. Customers with a high level of experience may appreciate hotel services more than those with a low experience level. Although generic service quality influences customer satisfaction, the hotel’s brand and loyalty, hotels need green attributes to achieve a win-win-win solution for sustainable hotel business, consumers, and nature, respectively.

Five criteria of hotel pro-environmental management can be utilised to predict pro-environmental management in hotels. The five criteria include motivation, scope, process, monitoring, and customer communications. Accordingly, the extent of pro-environmental practices in hotel is classified into three levels; namely, minimal, strong environmental management, and best practice.

Finally, the green collaboration between hotel management and consumers contributes to sustainability. Overall findings of this research support the stakeholder theory ((Polonsky, 1995a, 1996) that underlines each stakeholder’s role (hotel managers, staff, consumers) and meets each stakeholder’s investment in establishing sustainable business practices in the hotel industry.

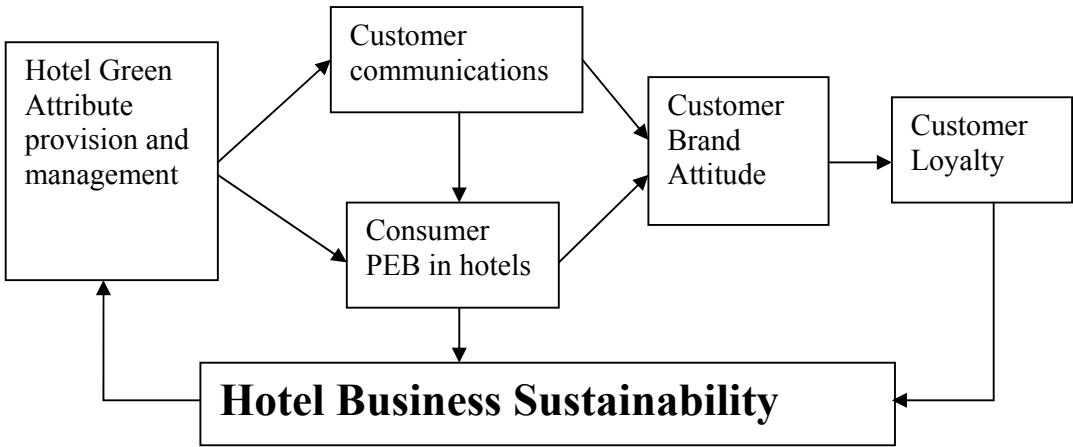


Figure 10.1. Conclusion map

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APPENDICES

Appendix A:

Ethical Clearance Approval (Qualitative study)

GRIFFITH UNIVERSITY HUMAN RESEARCH ETHICS COMMITTEE

15-Dec-2014

Dear Ms. Dharmesti

I write further to the additional information provided in relation to the conditional approval granted to your application for ethical clearance for your project 'NR: The Role of Service Quality, Green Attributes, and Pro-environment Behaviour in Determining Behavioural Loyalty in Hotels' (GU Ref No: MKT/33/14/HREC).

This is to confirm receipt of the remaining required information, assurances or amendments to this protocol.

Consequently, I reconfirm my earlier advice that you are authorised to immediately commence this research on this basis.

The standard conditions of approval attached to our previous correspondence about this protocol continue to apply.

Regards

Ms Marnie Lawson

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Building G11 Room 4.25 Gold Coast Campus
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web:

Cc:

Researchers are reminded that the Griffith University Code for the Responsible Conduct of Research provides guidance to researchers in areas such as conflict of interest, authorship, storage of data, & the training of research students.

You can find further information, resources and a link to the University's Code by visiting <http://policies.griffith.edu.au/pdf/Code%20for%20the%20Responsible%20Conduct%20of%20Research.pdf>

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Appendix B:

Ethical Clearance Approval (Quantitative study)

rims@griffith.edu.au

12/7/15

to m.dharmesti, L.Winata, bill.merrilees, research-ethics, k.madison

GRIFFITH UNIVERSITY HUMAN RESEARCH ETHICS REVIEW

Dear Prof Bill Merrilees

I write further to the additional information provided in relation to the provisional approval granted to your application for ethical clearance for your project 'The Role of Service Quality, Green Attributes, and Pro-environment Behaviour in Determining Behavioural Loyalty in Hotels (Study 2)' (GU Ref No: 2015/895).

This is to confirm that this response has addressed the comments and concerns of the HREC.

The ethics reviewers resolved to grant your application a clearance status of 'Fully Approved'.

Consequently, you are authorised to immediately commence this research on this basis.

Regards

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Appendix C:

Focus Group Discussion Protocol

Customer Focus Group Discussion Protocol

(MKT/33/14/HREC)

Focus Group Confirmation Letter

27 November 2014

Dear (participant's name),

Thank you for your willingness to participate in our focus group. As discussed before, we would like to hear your ideas and opinions about pro-environment attributes in hotel. You will be in a group with 5 to 11 other participants who have experienced staying at hotel(s). Your responses to the questions will be kept anonymous. A token of thank you will be given to you at the end of the focus group discussion. The date, time, and place are listed below. Please look for signs once you arrive, directing you to the room where the focus group will be held.

Date
Time
Place

If you need directions to the focus group or will not be able to attend for any reason, please call Maria Dharmesti at 04xxxxxxx. Otherwise we look forward to seeing you.

Sincerely,

Maria Dharmesti

Introduction to the Focus Group Discussion

Thank you for agreeing to be part of this focus group discussion. We appreciate your willingness to participate. A group consists of 6-12 people who have experiences staying at hotels will be asked to discuss about green attributes in hotel. Time allocated for the discussion will be approximately 90 minutes. There will be engagement question, main questions (exploration questions), and exit question that need to be discussed among group members. The purpose of this focus group discussion is to develop questionnaire items for Green Attributes variable from the customer's perspective. We need your input and want you to share your honest and open thoughts with us. **The discussion will be recorded and all answers will be confidential. Recording of this discussion will be used for research purpose only.**

A Brief of Rules

1. We want you to do the talking. We would like everyone to participate. I may call on you if I have not heard from you in a while.
2. There are no right or wrong answers. Every person's experiences and opinions are important. Therefore, do not hesitate to speak up whether you agree or disagree. We want to hear a wide range of opinions.
3. What is said in this room stays here, as we want folks to feel comfortable sharing when sensitive issues come up.
4. We will be tape recording the group as we want to capture everything you have to say. We do not identify anyone by name in our report. You will remain anonymous.

Questions

Engagement question:

1. What are your favourite service(s)/ facility(s) in hotel?

Exploration questions:

2. What is your opinion about hotels that are going 'green' (support nature protection and conservation)?
3. What kind of attributes should be provided/ available if a hotel wants to 'go green' or what attributes do you notice most when you come to a hotel? Why is it important?

4. What do you think that the hotel should take seriously? (based on attributes mentioned before)
5. How do you feel about the hotel's pro-environment campaign (e.g., poster, sign, pro-environment activities)?
6. (showing sign picture) What goes through your mind when you see sign like this? And what would you like to do? (thinking for your own pleasure or sign)

Exit question:

7. Is there anything else you would like to say about hotel's pro-environment attributes? Or any special experience?

Appendix D:

Interview Protocol

Manager Interview Protocol

(MKT/33/14/HREC)

Dear Hotel Management,

First of all, I would like to thank you for your time and participation in this interview. My name is Maria Delarosa Dipta Dharmesti. I am a PhD Candidate at Griffith University, Australia. The purpose of this interview is to develop questionnaire items for Green Attributes in hotels as part of my PhD research about pro-environment behaviour in hotels. In this interview, I will ask some questions related to pro-environment activities in your hotel. Your responses will be confidential and will be used only for this research purpose.

Interview questions

These questions are designed for a semi-structured interview over 40-60 minutes.

Example of background questions:

What is your job title?

Could you please explain your role/responsibility?

Initial question:

1. Is this hotel classified as a green hotel star scheme? Please explain more about your pro-environment strategy.
2. Do you think hotels have to be pro-environment and why? (motivation)

Main questions:

1. What are the main green attributes/activities in this hotel? Which one is the most important attribute/activity? Why? (Followed by second most important, etc. and could be further questions as below)
 - a. Could you please describe garbage treatment in this hotel?
The purpose of this question is to investigate the hotel's recycling behaviour
 - b. Could you please describe this hotel's energy source(s) and energy usage?
The purpose of this question is to investigate hotel's green energy usage, with follow-up questions, such as 'Could you please explain this hotel's effort(s) to save energy or minimise energy usage?'
 - c. Could you please explain any activity, and/or suggestion/announcement in this hotel for your guests, regarding environment or nature, for example, signs and posters?
The purpose of this question is to investigate hotel's pro-environment campaign that can be seen or experienced by the guests.
2. Could you please tick activities that apply to your hotel and rate the importance of each of those activities in the list? (Interviewer hands the activity list to the manager).
The purpose of the list is to specify green attributes that apply in the hotel and to understand more about green attributes establishment in the hotel.
3. Could you please explain your effort in maintaining guests' pro-environment behaviour?
The purpose of this question is to investigate hotel's pro-environment policy applied to the guests, followed by questions, such:
 - Do you have any policy regarding guest's pro-environment behaviour, such as extra charge for daily towel change?
 - Do you put any sign about this policy in the hotel room or somewhere in the hotel (also refer to main question 1c)?
 - Why do you have this policy? Is it because you want to comply with regulations, satisfy customers, save costs or maintain the environment (awareness) (also refer to initial question 2)?
4. How do you maintain/manage (a specific attribute, based on the answer of importance in question number 1)? (monitoring and evaluation)

Followed by the questions below:

- a. Which departments are involved in establishing these green attributes/activities? And how do you plan to establish these attributes? (It depends on the previous answer and checklist answer) Do you have any regular meeting about pro-environment attributes?
- b. Could you please explain your plan for the future regarding green attributes in this hotel?

The policy question can be followed up with other questions:

- Do you think Indonesian customers will be happy with this policy? Why?
- Is there any complaint regarding this policy? Or is there any statement from your customer that they like the hotel because of this policy?

The purpose of the questions above is to understand Indonesian customers better.

- Based on your experience, mostly customers from which country obey the policy?

The purpose of this question is to understand customers better.

- Add-on questions: How long have you applied this policy? Are there any financial benefits related to this policy? By how many percent from total cost? And by how many percent from total sales?

The purpose of the add-on questions is to investigate whether there are any financial benefits as a result of the implementation of pro-environment management.

Pro-environment	Low	Medium	High
Strategy			
Motivation			
Activity			
Processes			
Monitoring			
Customer			

Appendix E:

List of items in pilot questionnaire

Variable Items
<u>Service Quality</u>
<i>Ambience</i>
The hotel is first class.
The hotel lobby is grand.
The hotel has deluxe appliances.
The hotel atmosphere is stylish.
The artefacts and paintings add to the image of the hotel.
The ambience of hotel is relaxing.
Range of toiletries available in the bathroom
<i>Staff</i>
The hotel has high quality staff that are well trained.
The hotel has staff that are quick to respond to requests.
The hotel has respectful and polite staff.
The hotel's staff are nice to me at checkout.
<i>Responsiveness</i>
During my stay in the hotel, I experience immediate service.
During my stay in the hotel, I experience not being kept waiting for a long time.
Every need is anticipated during my stay in the hotel.
During my stay in this hotel, I experienced not having to queue for more than one minute.
<i>Food and beverage</i>
The hotel provides exquisite food presentation.
The hotel provides a sumptuous breakfast.
The hotel provides a quality dining restaurant.
This hotel provides good bars/places to buy a drink.
<i>Add-ons</i>
I find the floor concierge in this hotel...
I find timesaving services, such as valet parking in this hotel...
I find regular shuttle busses to the airport provided by this hotel...
I find this hotel's provision of gym and other recreational facilities (e.g., swimming pool)...

Variable Items
<p><u>Hotel Experience</u></p> <p><i>Multi-sensory</i></p> <p>The hotel reassures me and gives me peace of mind.</p> <p>It is easy to relax in the hotel.</p> <p>The hotel appeals to all the senses (sight, scent, sound, touch, and taste).</p> <p><i>Interactive</i></p> <p>The hotel meets my personal needs.</p> <p>The hotel simplifies my life.</p> <p>The hotel really engages with me.</p> <p><i>Services</i></p> <p>The hotel shows a ‘can do’ attitude.</p> <p>The hotel connects to the guests in respectful and trusting ways.</p> <p>The hotel shows team member responsiveness.</p> <p>This hotel presents itself professionally.</p> <p><i>Overall</i></p> <p>My overall experience at this hotel is exceptional.</p>
<p><u>Satisfaction</u></p> <p>Overall, I like the hotel.</p> <p>Overall, I am satisfied with the hotel.</p>
<p><u>Loyalty</u></p> <p><i>Revisit intention</i></p> <p>I am willing to revisit the hotel in the future.</p> <p>When I have a need for staying at a hotel around this location, I mostly visit this hotel.</p> <p><i>Word-of-Mouth (WOM) communications</i></p> <p>I will encourage my friends and relatives to stay at the hotel.</p> <p>If someone is looking for a hotel, I will suggest him/her to stay at the hotel.</p> <p>I will post something positive about this hotel to social media after this stay.</p> <p>I will say positive things about the hotel’s environmentally friendly features.</p>
<p><u>Brand Attitude</u></p> <p>From its brand, there is something special about this hotel.</p> <p>The hotel’s brand is excellent.</p> <p>This hotel’s brand has a great reputation.</p>

Variable Items
<p><u>Green Habit</u></p> <p><i>Recycling</i></p> <p>I recycle paper products.</p> <p>I recycle plastic and glass.</p> <p><i>Energy</i></p> <p>I switch lights off which are not being used.</p> <p>I use energy-efficient lighting.</p> <p>I use air conditioners moderately rather than at extreme temperatures.</p> <p><i>Water</i></p> <p>I save water when showering.</p> <p>I use water wisely in my house.</p>
<p><u>Hotel Green Habit</u></p> <p><i>Recycling</i></p> <p>In the hotel, where possible, I carefully sort my waste into either recycling or rubbish.</p> <p>I support recycling behaviour during my stay in the hotel.</p> <p><i>Energy</i></p> <p>At the hotel, I switch off the lights that are not in use.</p> <p>I use air conditioners in my hotel room moderately rather than at extreme temperatures.</p> <p><i>Water</i></p> <p>I try to save water when showering in the hotel.</p> <p>I use water wisely during my stay in the hotel.</p> <p>I follow the signs about reusing bed linen and towels in the hotel.</p>
<p><u>Green Influence</u></p> <p>TV, newspaper, and media contents suggest that I should buy or use environmentally friendly products.</p> <p>The government's publicity campaign suggests that I should buy or use environmentally friendly products.</p> <p>Family members and friends who are important to me suggest that I should buy or use environmentally friendly products.</p> <p>Green groups suggest that I should buy or use environmentally friendly products.</p>

Variable Items
<p><u>Attitudes Toward Environment</u></p> <p><i>Loving nature</i></p> <p>I get joy just being in nature.</p> <p>I have a sense of oneness with nature.</p> <p>I have a deep love for nature.</p> <p><i>Concern and responsibility</i></p> <p>I am worried about environmental pollution.</p> <p>I am responsible for my environmental behaviour, even with limited choices, such as when travelling.</p> <p>I am concerned about the amount of environmental destructions.</p> <p>I am always vigilant about the environmental impact of my behaviour.</p> <p><i>Attitudes when travelling</i></p> <p>It is difficult for a visitor to behave in an environmentally responsible way.</p> <p>When travelling I give myself a break from being strict on being careful environmentally.</p>
<p><u>Mindfulness</u></p> <p><i>General</i></p> <p>When staying at a hotel, I like to feel involved in what is going on around me.</p> <p>When staying at a hotel, I like to feel in control of what is going on around me.</p> <p><i>Environmental hotel services</i></p> <p>For getting my towels changed, I reflect on the environment.</p> <p>For getting my linen changed, I reflect on the environment.</p> <p>When showering in hotel, I carefully consider the environment.</p> <p>When leaving the hotel room, I am mindful of turning off the power.</p> <p>When throwing out my rubbish, I am mindful of where to put it.</p> <p><i>Hotel overall</i></p> <p>Overall, I enthusiastically consider the environment during my stay in hotel.</p> <p>I try to make my hotel experiences respectful of the environment.</p> <p>If I see something bad about the environment, I report it to hotel management.</p>
<p><u>Hotel Green Attributes</u></p> <p>The hotel provides environmentally friendly products (i.e. low toxicity, organic or locally grown/made).</p> <p>The hotel participates in environmental partnership or certification.</p> <p>The hotel establishes active recycling program for materials in all sections.</p> <p>The hotel has visible communications about green practices.</p> <p>The hotel offers a towel reuse option to multiple night guests.</p> <p>The hotel has energy-saving light bulbs in all rooms.</p> <p>The hotel offers a linen reuse option to multiple night guests.</p> <p>The hotel uses sensors or timers (e.g., at doors, air conditioners, etc.).</p>

Variable Items
<p><u>Perceived Value</u></p> <p><i>Hotel services value</i></p> <p>The services of the hotel are useful to me.</p> <p>The benefits provided by the hotel are high.</p> <p>Overall, the value of the hotel brand to me is high.</p> <p><i>Hotel experience value</i></p> <p>My experience in the hotel is valuable to me.</p> <p>My active participation in the total hotel experience is beneficial to me.</p> <p>I enjoy sharing the hotel experience with friends, family, and other guests.</p> <p><i>Financial value</i></p> <p>Comparing what I pay to what I might get from other competitive hotels, I think the hotel provides me with good value.</p> <p>The price paid for the hotel room is reasonable.</p> <p>Compared to alternative hotels, the hotel provides more free services.</p> <p>Comparing what I pay to what I might get from other competitive hotels, I think the hotel provided me with good value.</p>

Appendix F:
Final Questionnaire



THE GRIFFITH BUSINESS SCHOOL

INVITATION TO PARTICIPATE

***The Role of Service Quality, Green Attributes, and Pro-environment Behaviour in
Determining Behavioural Loyalty in Hotels***

(GU Ref 2015/895)

Dear Madam/Sir,

You are invited to participate in a research project being conducted by Griffith University research team. Please read the attached project information sheet carefully and be confident that you understand before deciding to participate. If you have any questions about the project, please do not hesitate to contact one of the research team members listed in the table below.

The purpose of this research project is to understand how you respond to the provision of pro-environment attributes in hotels, based on your previous and most recent stay experience. Therefore, this study targets hotel customers who have stayed at a hotel in the past 12 months.

Your participation is completely voluntary. The results of this study are expected to contribute more understanding about pro-environment attributes and consumer behaviours in hotels and practically help hotel managements to improve their services and attributes as well as to increase pro-environment behaviours among hotel customers. There are no foreseeable risks of your participation and your anonymity will at all times be secured. By ticking the box below, you indicate that you agree to participate in this study. We thank you for your participation.

☐ I agree to participate in this study

Research Team Members	Contact details
Maria Delarosa Dipta Dharmesti	maria.dharmesti@griffithuni.edu.au +62 812 2797 207 (ID)/ +61 416 516 727 (AU)
Professor Bill Merrilees	bill.merrilees@griffith.edu.au +61 7 555 27176
Dr Lanita Winata	l.winata@griffith.edu.au +61 7 555 29083

PRELIMINARY QUESTIONS

Have you stayed at any classified hotel in Australia in the past 12 months? ☐ Yes ☐ No
If yes, what is the hotel's classification for the most recent one?

☐ 3-star ☐ 4-star ☐ 5-star ☐ If you do not know, please mention the hotel's name here

City where the hotel is located: _____

QUESTIONNAIRE

Please rate the QUALITY of features provided by hotel below (tick the circle) based on your most recent stay at a classified hotel ('the hotel'/ 'this hotel'). Please tick NA box if such item is not applicable to you or such feature cannot be found in the hotel.

Section A

1. The hotel atmosphere is stylish.

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>
Strongly disagree	Disagree	Neutral	Agree	Strongly agree	NA

2. The hotel ambience is first class.

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>
Strongly disagree	Disagree	Neutral	Agree	Strongly agree	NA

3. The hotel lobby is grand.

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>
Strongly disagree	Disagree	Neutral	Agree	Strongly agree	NA

4. The artefacts and paintings added to the image of the hotel.

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>
Strongly disagree	Disagree	Neutral	Agree	Strongly agree	NA

5. The ambience of the hotel is relaxing.

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>
Strongly disagree	Disagree	Neutral	Agree	Strongly agree	NA

6. This hotel has deluxe appliances.

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>
Strongly disagree	Disagree	Neutral	Agree	Strongly agree	NA

7. This hotel has respectful and polite staff.

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>
Strongly disagree	Disagree	Neutral	Agree	Strongly agree	NA

8. This hotel has staff that are quick to respond to requests.

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>
Strongly disagree	Disagree	Neutral	Agree	Strongly agree	NA

9. This hotel has high quality staff that are well trained.

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>
Strongly disagree	Disagree	Neutral	Agree	Strongly agree	NA

10. This hotel's staff are nice to me at checkout.

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>
Strongly disagree	Disagree	Neutral	Agree	Strongly agree	NA

11. This hotel provides exquisite food presentation.

☐ Strongly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly agree ☐ NA

12. This hotel provides quality dining restaurant.

☐ Strongly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly agree ☐ NA

13. This hotel provides good bars/places to buy a drink.

☐ Strongly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly agree ☐ NA

14. This hotel provides a sumptuous breakfast.

☐ Strongly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly agree ☐ NA

15. During my stay in this hotel, I experience not being kept waiting for a long time.

☐ Strongly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly agree ☐ NA

16. During my stay in this hotel, I experience immediate service.

☐ Strongly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly agree ☐ NA

17. Every need is anticipated during my stay in this hotel.

☐ Strongly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly agree ☐ NA

Please rate the items below based on your OVERALL EVALUATION of your most recent stay at a classified hotel ('the hotel'), including experience, satisfaction, intention to return, and recommendation (tick the circle). Please tick NA box if such item is not applicable to you.

1. This hotel appeals to all the senses (sight, scent, sound, touch, and taste).

☐ Strongly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly agree ☐ NA

2. This hotel connects to the guests in respectful and trusting ways.

☐ Strongly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly agree ☐ NA

3. This hotel shows a 'can do' attitude.

☐ Strongly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly agree ☐ NA

4. This hotel shows team member responsiveness.

☐ Strongly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly agree ☐ NA

5. My overall experience at this hotel is exceptional.

☐ Strongly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly agree ☐ NA

6. This hotel really engages with me.

☐ Strongly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly agree ☐ NA

7. This hotel simplifies my life.

☐ Strongly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly agree ☐ NA

8. This hotel meets my personal needs.

☐ Strongly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly agree ☐ NA

9. This hotel reassures me and gives me peace of mind.

☐ Strongly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly agree ☐ NA

10. It is easy to relax in this hotel.

☐ Strongly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly agree ☐ NA

11. Overall, I like this hotel.

☐ Strongly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly agree ☐ NA

12. Overall, I am satisfied with this hotel.

☐ Strongly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly agree ☐ NA

13. I am willing to revisit this hotel in the future.

☐ Strongly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly agree ☐ NA

14. When I have a need for staying at a hotel around the location, I visit mostly this hotel.

☐ Strongly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly agree ☐ NA

15. I will encourage my friends and relatives to stay at this hotel.

☐ Strongly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly agree ☐ NA

16. If someone is looking for a hotel, I will suggest him/her to stay at this hotel.

☐ Strongly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly agree ☐ NA

17. I will say positive things about this hotel's environmentally friendly features.

☐ Strongly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly agree ☐ NA

18. I will post something positive about this hotel to social media (e.g., TripAdvisor, Facebook, Instagram, Path, Twitter, etc.).

☐ Strongly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly agree ☐ NA

19. Overall, this hotel has included environmental aspects in their services.

☐ Strongly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly agree ☐ NA

Please rate the items below based on your attitude toward the hotel's BRAND (tick the circle). Please tick NA box if such item is not applicable to you.

1. This hotel's brand is excellent.

☐ Strongly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly agree ☐ NA

2. From its brand, there is something special about this hotel

☐ Strongly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly agree ☐ NA

3. This hotel's brand has a great reputation.

☐ Strongly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly agree ☐ NA

How many times you have stayed at the hotel? times.

Please rate the items below (tick the circle) for items 1 to 7 based on your NORMAL DAILY LIFE.

As for items 8 to 16, please rate them based on your attitude toward the environment.

Please tick NA box if such item is not applicable to you.

1. I recycle paper products.

☐ Strongly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly agree ☐ NA

2. I recycle plastic and glass.

☐ Strongly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly agree ☐ NA

3. I switch lights off which are not being used.

☐ Strongly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly agree ☐ NA

4. I use energy-efficient lighting.

☐ Strongly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly agree ☐ NA

5. I use air conditioners moderately rather than at extreme temperatures.

☐ Strongly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly agree ☐ NA

6. I save water when showering.

☐ Strongly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly agree ☐ NA

7. I use water wisely in my house.

☐ Strongly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly agree ☐ NA

8. I get joy just being in nature.

☐ Strongly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly agree ☐ NA

9. I have a deep love for nature.

☐ Strongly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly agree ☐ NA

10. I have a sense of oneness with nature.

☐ Strongly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly agree ☐ NA

11. I am responsible for my environmental behaviour, even with limited choices, such as when travelling.

☐ Strongly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly agree ☐ NA

12. I am always vigilant about the environmental impact of my behaviour.

☐ Strongly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly agree ☐ NA

13. It is difficult for a visitor to behave in an environmentally responsible way.

☐ Strongly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly agree ☐ NA

14. When travelling I give myself a break from being strict on being environmentally careful.

☐ Strongly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly agree ☐ NA

15. I am concerned about the amount of environmental destruction.

☐ Strongly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly agree ☐ NA

16. I am worried about environmental pollution.

☐ Strongly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly agree ☐ NA

Please rate the items below (tick the circle) with your honest opinion about who might influence you to do GREEN BEHAVIOURS. Please tick NA box if such item is not applicable to you.

1. Family members and friends who are important to me suggest that I should buy or use environmentally friendly products.

☐ Strongly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly agree ☐ NA

2. The government's publicity campaign suggests that I should buy or use environmentally friendly products.

☐ Strongly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly agree ☐ NA

3. TV, newspaper, and media contents suggest that I should buy or use environmentally friendly products.

☐ Strongly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly agree ☐ NA

4. Green groups suggest that I should buy or use environmentally friendly products.

☐ Strongly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly agree ☐ NA

Please rate the items below (tick the circle) based on your honest opinion about your ROUTINES when you stay at hotels, in general. Please tick NA box if such item is not applicable to you.

1. In hotels, where possible, I carefully sort my waste into either recycling or rubbish.

☐ Strongly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly agree ☐ NA

2. I support recycling behaviour during my stay in the hotel.

☐ Strongly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly agree ☐ NA

3. At the hotel, I switch off the lights that are not in use.

☐ Strongly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly agree ☐ NA

4. I use air conditioners in my hotel room moderately rather than at extreme temperatures.

☐ Strongly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly agree ☐ NA

5. I follow the signs about reusing bed linen and towels in hotel.

☐ Strongly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly agree ☐ NA

6. I try to save water when showering in hotels.

☐ Strongly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly agree ☐ NA

7. I use water wisely during my stay in hotels.

☐ Strongly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly agree ☐ NA

Please rate the items below (tick the circle) based on your honest opinion about your ENVIRONMENTAL CONSIDERATIONS when you stay at hotels, in general. Please tick NA box if such item is not applicable to you.

1. When staying at a hotel, I like to feel involved in what is going on around me.

☐ Strongly disagree
 ☐ Disagree
 ☐ Neutral
 ☐ Agree
 ☐ Strongly agree
☐ NA

2. When staying at a hotel, I like to feel in control of what is going on around me.

☐ Strongly disagree
 ☐ Disagree
 ☐ Neutral
 ☐ Agree
 ☐ Strongly agree
☐ NA

3. When getting my towels changed, I reflect on the environment.

☐ Strongly disagree
 ☐ Disagree
 ☐ Neutral
 ☐ Agree
 ☐ Strongly agree
☐ NA

4. When getting my linen changed, I reflect on the environment.

☐ Strongly disagree
 ☐ Disagree
 ☐ Neutral
 ☐ Agree
 ☐ Strongly agree
☐ NA

5. When showering in hotel, I carefully consider the environment.

☐ Strongly disagree
 ☐ Disagree
 ☐ Neutral
 ☐ Agree
 ☐ Strongly agree
☐ NA

6. When leaving the hotel room, I am mindful of turning off the power.

☐ Strongly disagree
 ☐ Disagree
 ☐ Neutral
 ☐ Agree
 ☐ Strongly agree
☐ NA

7. When throwing out my rubbish, I am mindful of where to put it.

☐ Strongly disagree
 ☐ Disagree
 ☐ Neutral
 ☐ Agree
 ☐ Strongly agree
☐ NA

8. I try to make my hotel experiences respectful of the environment.

☐ Strongly disagree
 ☐ Disagree
 ☐ Neutral
 ☐ Agree
 ☐ Strongly agree
☐ NA

9. If I see something bad about the environment, I report it to hotel management.

☐ Strongly disagree
 ☐ Disagree
 ☐ Neutral
 ☐ Agree
 ☐ Strongly agree
☐ NA

10. Overall, I enthusiastically consider the environment during my stay in hotel.

☐ Strongly disagree
 ☐ Disagree
 ☐ Neutral
 ☐ Agree
 ☐ Strongly agree
☐ NA

Please rate the items below based on your experience staying at a classified hotel and your knowledge about the hotel's ENVIRONMENTAL FEATURES (tick the circle).

Please tick NA box if such item is not applicable to you.

1. The hotel has visible communications about green practices.

☐ Strongly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly agree ☐ NA

2. The hotel uses sensors or timers (e.g., at doors, air conditioners, etc.).

☐ Strongly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly agree ☐ NA

3. The hotel establishes active recycling program for materials in all sections.

☐ Strongly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly agree ☐ NA

4. The hotel has energy-saving light bulbs in all rooms.

☐ Strongly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly agree ☐ NA

5. The hotel offers a towel reuse option to multiple night guests.

☐ Strongly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly agree ☐ NA

6. The hotel offers a linen reuse option to multiple night guests.

☐ Strongly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly agree ☐ NA

7. The hotel provides environmentally friendly products (i.e. low toxicity, organic or locally grown/made).

☐ Strongly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly agree ☐ NA

8. The hotel participates in environmental partnership or certification.

☐ Strongly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly agree ☐ NA

Please rate the items below, indicating the VALUE you have received from the hotel you had stayed at based on your most recent stay experience (tick the circle).
Please tick NA box if such item is not applicable to you.

1. The benefits provided by the hotel are high.

☐ Strongly disagree
 ☐ Disagree
 ☐ Neutral
 ☐ Agree
 ☐ Strongly agree
☐ NA

2. Overall, the value of the hotel brand to me is high.

☐ Strongly disagree
 ☐ Disagree
 ☐ Neutral
 ☐ Agree
 ☐ Strongly agree
☐ NA

3. The services of the hotel are useful to me.

☐ Strongly disagree
 ☐ Disagree
 ☐ Neutral
 ☐ Agree
 ☐ Strongly agree
☐ NA

4. My experience in the hotel is valuable to me.

☐ Strongly disagree
 ☐ Disagree
 ☐ Neutral
 ☐ Agree
 ☐ Strongly agree
☐ NA

5. My active participation in the total hotel experience is beneficial to me.

☐ Strongly disagree
 ☐ Disagree
 ☐ Neutral
 ☐ Agree
 ☐ Strongly agree
☐ NA

6. I enjoy sharing the hotel experience with friends, family, and other guests.

☐ Strongly disagree
 ☐ Disagree
 ☐ Neutral
 ☐ Agree
 ☐ Strongly agree
☐ NA

7. Compared to alternative hotels, the hotel provides more free services.

☐ Strongly disagree
 ☐ Disagree
 ☐ Neutral
 ☐ Agree
 ☐ Strongly agree
☐ NA

8. Comparing what I pay to what I might get from other competitive hotels, I think the hotel provides me with good value.

☐ Strongly disagree
 ☐ Disagree
 ☐ Neutral
 ☐ Agree
 ☐ Strongly agree
☐ NA

9. The price paid for the hotel room is reasonable.

☐ Strongly disagree
 ☐ Disagree
 ☐ Neutral
 ☐ Agree
 ☐ Strongly agree
☐ NA

Section B

Please tick the option that best describes you.

1. Your age group:

☐ 18-24 years

☐ 30-34 years

☐ 60 or older

☐ 25-29 years

☐ 35-60 years

2. Gender: ☐ Male ☐ Female

3. Your highest education:

☐ Never attend school

☐ Bachelor degree or equivalent

☐ Some primary school

☐ Postgraduate degree

☐ Some high school

4. Which one of the following best describes your situation?

☐ Employed

☐ Student

☐ Retired

☐ Other, please specify:

☐ Unemployed

5. Where is your hometown/ home country? _____

6. Your travel purpose: ☐ Leisure

☐ Business

☐ Business and leisure

Thank you very much for your participation!

Appendix G:

Interview Results

Hotel A

Type, country	5-star, Indonesia
Motivation	High – This hotel is a pioneer of green activities among hotels in the town.
Scope	High – This hotel provides bicycle ride facilities for the staff and pro-environment meeting package as their featured program for customers.
Process	Very good – GM of this hotel appointed Engineering Department as the Ambassador of pro-environment activities.
Monitor	Substantial – This hotel has KPIs, for example, expense approach to monitor water usage.
Customer Communications	High – This hotel's website provides information about pro-environment behaviours done by management and achieved awards.
Pro-environment Rating	Best practice

Hotel B

Type, country	4-star, Indonesia
Motivation	Low – Manager stated that pro-environment management in the hotel is limited due to owner policy. Therefore, pro-environment management is not considered as an important action.
Scope	Low – This hotel manages its rubbish separation. They do not apply energy and water management yet.
Process	Weak – No specific department or committee assigned to be responsible of green aspects in this hotel.
Monitor	Low – No clear KPI provided and monitoring is checking whether the light is off.
Customer Communications	Low – No specific information about pro-environment management in the hotel.
Pro-environment Rating	Minimal

Hotel C

Type, country	5-star, Indonesia
Motivation	High – Manager implies that the motivation is to save the planet and local community empowerment.
Scope	Medium – The hotel building is old and they want to keep the image of traditional heritage. Therefore, they keep their old building system and have not yet modified some features, e.g., LED lamps vs. traditional lamps.
Process	Very good – The hotel's group already established a green program called Planet 21. The group made green standards for the member hotels.
Monitor	Substantial – Monitoring system is available in the hotel as well as in the group. KPIs are clearly stated. Manager reports to the group annually.
Customer Communications	Moderate – The hotel is strongly aware of its heritage image and they use it as their feature. The hotel has significant customer communication under their group website.
Pro-environment Rating	Strong environmental management

Hotel D

Type, country	5-star, Indonesia
Motivation	High – The hotel is eager to be green internationally. They want to carry the green image and save the planet.
Scope	High – The hotel has been the only Java sparrow bird sanctuary in the city. They have international recognition (Earth Check accredited) and exposure.
Process	Very good – The hotel has a CSR department that manages all eco-friendly process in the hotel.
Monitor	Substantial – Pro-environment management is being monitored monthly. Clear KPIs and reporting system is working well.
Customer Communications	High – The hotel is well-recognised of its pro-environment features. They often hold pro-environment activities involving the communities.
Pro-environment Rating	Best practice

Hotel E

Type, country	3-star, Indonesia
Motivation	High – The hotel is under an educational institution which is mainly focused on plantations. This hotel has eagerness to go green.
Scope	Medium – The hotel is small. However, they have pro-environment programs for their customers and they have replaced some facilities to be pro-environment, such as solar hot water system.
Process	Good – This hotel does not have any specific department for their pro-environment management. The GM directly controls the hotel's pro-environment management.
Monitor	Low – The KPIs are still unclear. Pro-environment reporting system is directed to the government.
Customer Communications	Moderate – The hotel's appearance is green and it shows 'green rules' on its website and in some of their programs for the customers.
Pro-environment Rating	Strong environmental management

Hotel F

Type, country	3-star, Indonesia
Motivation	High – The hotel is adopting Javanese philosophy, culture and tradition as their management guideline. Loving nature, living in balance and harmony are part of the philosophy.
Scope	Low – Built in 2013, the hotel is relatively new and small. They have not done much. They keep the surrounding environment as it is. They also provide some facilities to support local communities.
Process	Weak – No specific department for green activities and no specific pro-environment SOP.
Monitor	Low – No clear KPIs and reporting system. The manager checks almost everything by himself.
Customer Communications	Moderate – The hotel provides local wisdom (Javanese) environment. They put local community and environment supports on the website.
Pro-environment Rating	Minimal

Hotel G

Type, country	4-star Indonesia
Motivation	Average – Manager said that the Government never checked, but he managed to be pro-environment.
Scope	Medium – The hotel is a conventional hotel with new management. The hotel has its own wastewater treatment and strict no smoking policy (they apply fines to smoking staff and guests).
Process	Very good – General Manager put pro-environment agenda on the weekly and monthly meeting. Engineering Department is responsible for most pro-environment aspects.
Monitor	Substantial – Engineering Department has to submit a monthly report to General Manager. If they can save money, they will get rewards.
Customer Communications	Moderate – The hotel does not have any specific green program for the customer. They are currently promoting guests to use shower wisely and strictly no smoking in some areas.
Pro-environment Rating	Strong environmental management

Hotel H

Type, country	4-star, Australia
Motivation	Average – The hotel emphasises its pro-environment program for the customers. Motivation is firstly saving costs and secondly acquiring customers.
Scope	Medium – This hotel has ‘green stay’ program for their guests. This is a featured program that minimise room services in the hotel. However, the facilities are not yet eco-friendly.
Process	Good – No specific department for green activities in the hotel. They have a pro-environment subject in their staff training program and awareness among staff.
Monitor	Low – No KPIs for pro-environment management and unsystematic reporting.
Customer Communications	High – By establishing ‘green stay’ program for the customers, this hotel informed their customers about their green attempt.
Pro-environment Rating	Strong environmental management

Hotel I

Type, country	5-star, Australia
Motivation	High – This hotel regarded themselves as having environment stewardship. They are thinking about the surrounding environment while trying to comply with regulations.
Scope	Medium – This hotel has sophisticated facilities to support their pro-environment management. They do not have any green program for their customers.
Process	Very good – A specific committee is available for pro-environment management in the hotel. Engineering department mainly supports the hotel's green efforts.
Monitor	Substantial – Regular monitoring and reporting system have been established. Clear KPIs and group-standardised management.
Customer Communications	Moderate – The hotel has towel/linen reuse signs in their guest rooms. They have sustainability information on their group's website.
Pro-environment Rating	Strong environmental management

Hotel J

Type, country	5-star, Hong Kong
Motivation	High – In line with its group, this hotel has good motivation to apply pro-environment management. Cost is no longer main motivation.
Scope	High – This hotel already has standardised eco-friendly facilities and programs. Supporting those facilities, they have sensor-taps for sinks in public area and mini-botanical garden.
Process	Very good – Specific pro-environment committee, chaired by GM, is available. Engineering department is the main support.
Monitor	Substantial – The hotel has clear KPIs. They count guests' towel and linen reuse. This hotel has a regular reporting system.
Customer Communications	Moderate – The hotel put eco-friendly signs in their guest rooms; as well as they have sustainability information on their company group's website.
Pro-environment Rating	Strong environmental management

Hotel K

Type, country	3-star, China
Motivation	Low – The hotel is considering cost-saving as their primary motivation.
Scope	Low – This hotel centralised their air conditioning system and set a single temperature for every guest room. This hotel uses soap and shampoo dispensers in their guest bathrooms.
Process	Weak – No specific committee or department as the ambassador of pro-environment management in this hotel.
Monitor	Low – No clear KPIs, due to unclear pro-environment effort in this hotel.
Customer Communications	Low – No pro-environment suggestion in the hotel. Customers cannot see their eco-friendly attempts.
Pro-environment Rating	Minimal

Hotel L

Type, country	4-star, Finland
Motivation	High – The management sincerely showed deep motivation to save the earth.
Scope	Medium – The hotel has a good scope of pro-environmental management. However, the internal pro-environmental management still need improvements, such as waste treatment management.
Process	Very good – Clear green division, everyone knows their part in green management.
Monitor	Substantial – The General Manager chairs the pro-environmental regular meetings.
Customer Communications	High – The hotel has many visible green activities for the customers, such as free bicycle riding.
Pro-environment Rating	Best practice

Hotel M

Type, country	4-star, China
Motivation	High – Indicate the intention to voluntarily go green.
Scope	High – The green programs impact society.
Process	Very good – All staff understand about the programs. Staff participation in green management is high.
Monitor	Substantial – Regular meetings on pro-environmental checking.
Customer Communications	Moderate – Good communications, but seems that this hotel can do more.
Pro-environment Rating	Strong environmental management.

Hotel N

Type, country	4-star, Australia
Motivation	High – High voluntarily motivation from all elements of the hotel.
Scope	High – Scope is wide and detailed, including the own-sourced eco-friendly produces.
Process	Very good – Staff in all levels are free to suggest pro-environmental ideas.
Monitor	Substantial – Regular monitoring chaired by the General Manager.
Customer Communications	High – The signs in the hotel are engaging customers to get more involved in green programs.
Pro-environment Rating	Best practice

Hotel O

Type, country	4-star, Australia
Motivation	Average – This hotel shows some intentions to save the planet, however, the cost-benefit motivation is strong.
Scope	Medium – An average range of green attributes was found, most of them were normal signs.
Process	Good – Most of the staff know about the programs and the task delegation was clear. However, needs more participation.
Monitor	Moderate – This hotel has KPIs, however, the monitoring/ meeting on the green KPIs is not regularly.
Customer Communications	Moderate – The hotel provides many pro-environmental signs.
Pro-environment Rating	Strong environmental management

Hotel P

Type, country	4.5-star, Australia
Motivation	High – The hotel shows genuine motivations to save the planet. Not only for their own benefits.
Scope	Medium – A range of green attributes provided have impacted positively to the hotel and customers. This hotel can improve more for the society.
Process	Very good – All elements of this hotel are well-informed about the green programs. Task delegation is clear.
Monitor	Substantial – There is regular meeting about the green programs, chaired by the senior manager (General Manager)
Customer Communications	High – This hotel informs the customers about their green programs in a very-engaging manner.
Pro-environment Rating	Best practice

Hotel Q

Type, country	4-star, Hong Kong
Motivation	High – This hotel genuinely stated the vision to save the planet.
Scope	High – This hotel provides programs that impact the hotel, customers, and society.
Process	Very good – All staff are well-informed, clear task delegation. Staff participation in green management is high.
Monitor	Substantial – There is regular meeting about green programs, chaired by the General Manager.
Customer Communications	High – This hotel engages the green attributes to customer's experience in hotel.
Pro-environment Rating	Best practice

Hotel R

Type, country	4-star, Indonesia
Motivation	High – This hotel is new. Management has considered pro-environment aspects since they designed the hotel's building.
Scope	High – This hotel has an eco-friendly building concept; as well as recycling-based interior. They incorporate hydroponic techniques to 'recycle' water and supply their organic vegetables.
Process	Good – pro-environment attributes in this hotel are running well; although there is no formal organisational structure for environmental-related aspects. Manager also finds difficulties in introducing eco-friendly concept to other staff.
Monitor	Substantial – Not certified as green hotel yet, this hotel has their KPIs and is currently aiming for international pro-environment certification.
Customer Communications	High – This hotel has introduced their pro-environment attributes on their website. The interior and design lets the guests know that there is an eco-friendly attitude in this hotel.
Pro-environment Rating	Best practice

Hotel S

Type, country	4-star, Australia
Motivation	Weak – Less voluntary aspect in doing green management; cost driven.
Scope	Low – Hotel management establishes up to recycling program for staff.
Process	Weak – The concept of 'green' management is still unclear and green behaviour is done by random staff.
Monitor	Low – No regular pro-environmental monitoring system.
Customer Communications	Moderate – Hotel management assumes that green behaviour is a common sense. They do put signs and inform the customers, but not much.
Pro-environment Rating	Minimal

Hotel T

Type, country	3-star, Canada
Motivation	High – This hotel is voluntarily establish green attributes to save the planet.
Scope	High – The green attributes and programs provided impacted the society.
Process	Good – All staff understand on ‘what-to-do’ in the green program.
Monitor	Moderate – There is regular monitoring by senior manager, however, it does not apply for all green aspects.
Customer Communications	Low – The hotel poorly communicate their green attributes to the customers (they thought that customers do not need to know)
Pro-environment Rating	Strong environmental management

Hotel U

Type, country	3-star, Australia
Motivation	Weak – Emphasising on the cost motive.
Scope	Medium – Provides some green attributes for the hotel internal operations and a few green attributes for the customers (e.g. announcement, common signs).
Process	Weak – Not all staff understand and participate in the green programs.
Monitor	Moderate – There is irregular monitoring by senior management, however, it seems that the manager works alone.
Customer Communications	Low – This hotel does not communicate the green attributes to the customers.
Pro-environment Rating	Minimal

Hotel V

Type, country	3-star, Canada
Motivation	High – Very humble and voluntary motivations to save the earth.
Scope	Medium – Management has done some big efforts in establishing internal green programs and some visible green programs to the customers.
Process	Very good – All elements in the hotel are well-informed and task delegation is clear.
Monitor	Substantial – There is regular green KPIs meeting, chaired by senior management.
Customer Communications	Low – Lack of communication efforts to let customers know about the green attributes.
Pro-environment Rating	Strong environmental management

Hotel W

Type, country	3-star, UK
Motivation	Low – Explicit cost-saving motive.
Scope	Low – Very minimal effort in going green. Only provides common-sense signs.
Process	Weak – The manager even still confused about the ‘green’ idea.
Monitor	Low – No clear green KPIs.
Customer Communications	Moderate – This hotel put some signs to the customers, such as towel reuse.
Pro-environment Rating	Minimal

Hotel X

Type, country	3-star, UK
Motivation	High – This hotel voluntarily establishes the green programs.
Scope	Medium – A significant range of green programs, however, still less green facilities.
Process	Good – The task delegation is clear.
Monitor	Moderate – There is irregular meeting/ KPIs checking by senior management.
Customer Communications	Moderate – The hotel attempts to let customers know about their green programs, however, they still need efforts to engage more with the customers.
Pro-environment Rating	Strong environmental management

Hotel Y

Type, country	3-star, Singapore
Motivation	High – All levels of staff showed enthusiasm and voluntarily involved in hotel's green attributes.
Scope	High – The green management covers almost all aspects in the hotel, including own recycling and own-source of organic food.
Process	Very good – All staff levels are supportive and involved in the green management process.
Monitor	Substantial – Regular monitoring by the General Manager and appointed department.
Customer Communications	High – The hotel is very encouraging and interactive in telling their pro-environmental programs to the customers, e.g., they asked customers to 'join' them in natural environment conservation.
Pro-environment Rating	Best practice

Hotel Z

Type, country	3-star, Canada
Motivation	High – The hotel genuinely stated the deep motive to save the planet.
Scope	Medium – This hotel provides a broad range of green attributes, however, the attributes mostly impact to the hotel itself.
Process	Good – Some elements of the hotel are in charge in conducting the green program. This hotel can improve more staff participation.
Monitor	Moderate – There is irregular monitoring (maybe once a year) to monitor the green KPIs. The hotel needs to increase the frequency of green monitoring.
Customer Communications	Moderate – There are visible signs and green programs involving customers, however, not all activities are visible enough to the customers.
Pro-environment Rating	Strong environmental management