



**EXAMINING BEHAVIOURAL INTENTIONS ON ONLINE HOTEL
BOOKING AMONG MALAYSIAN GUESTS**

By

DAWOOD ISMAIL AMIN

**Thesis Submitted to the School of Graduate Studies, Universiti
Putra Malaysia, in Fulfilment of the Requirements for the Degree
of Doctor of Philosophy**

September 2021

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Abstract of thesis presented to the Senate of Universiti Putra Malaysia
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September 2021

Chairman : Associate Professor Anuar Shah Bali Mahomed, PhD
Faculty : School of Business and Economics

The development in Information and Communication Technology (ICT) has changed the distribution channels in the hotel industry. Virtual platforms, such as hotel websites, have become a major channel for customers' communication, marketing and selling points. Previous studies discuss the benefits of ICT to hoteliers and their customers. The hotel websites provide customers with a tremendous volume of information such as room rates, hotel features, visualized presentations and customers' reviews. On the other hand, hotel operators can reduce the distribution costs by reaching their customers directly and targeting a bigger market share.

Nevertheless, online hotel booking is different from purchasing a product from the Internet because the hotel industry has to deal with a complex issue, which is intangibility. The consumers might not be sure whether the hotel rooms will match their expectations or not. Therefore, researchers have argued that hoteliers need to develop their websites to attract customers through visual presentations and online reviews. However, it is not clear how visual presentations and online reviews jointly influence online consumers' behaviour toward hotel booking. Moreover, understanding how hotel customers behave toward online hotel booking is indispensable as the behaviours of hotel consumers change along with the changes in the ICT world.

Although most of the previous studies investigating the relationships between various factors and consumers behaviour for online hotel booking were published in leading publications, very little research has

explored the impact of visual presentation and online reviews within the context of Malaysian hotel customers.

Therefore, this research tends to fill the gaps in the literature by exploring the influence of visual presentations and online reviews on consumers' behaviour toward online hotel booking from the point of Malaysian customers. The study integrates visual presentations and online reviews with the technology acceptance model (TAM). A quantitative approach is applied in the current research, and partial least squares structural equation modelling is used to test the proposed hypotheses. The research model is examined based on a sample of 374 respondents from Malaysia, which is collected from an online survey.

The results show that booking intention is mainly determined by perceived usefulness and perceived enjoyment. Besides, the statistical analysis supports the notion that visual presentations and online reviews have a positive impact on perceived usefulness, perceived ease of use, and perceived enjoyment. However, neither of them has any significant influence on booking intention directly. Finally, the study concludes that online consumers are more likely to book a hotel online if visual presentations and online reviews appear to be useful and enjoyable.

Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk ijazah Doktor Falsafah

**MENGAJI NIAT TINGKAH LAKU PELANGGAN MALAYSIA
TERHADAP TEMPAHAN HOTEL SECARA DALAM TALIAN**

Oleh

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Perkembangan dalam bidang Teknologi Maklumat dan Komunikasi (ICT) telah mengubah saluran pengagihan bagi industri perhotelan. Platform maya, contohnya laman web hotel, kini menjadi saluran utama komunikasi dengan pelanggan, pemasaran dan tumpuan jualan. Kajian-kajian terdahulu telah membincangkan manfaat ICT kepada pihak pengurusan hotel dan pelanggan-pelanggan mereka. Laman web hotel membekalkan begitu banyak maklumat kepada pelanggan seperti kadar harga bilik, ciri-ciri hotel, persembahan visual serta ulasan pelanggan. Sementara itu, pihak pengendali hotel boleh mengurangkan kos pengagihan dengan membuat capaian pelanggan secara terus dan menyasarkan bahagian pasaran yang lebih besar.

Namun begitu, tempahan hotel secara dalam talian berbeza dengan pembelian produk melalui Internet berikutan kewujudan isu rumit dalam industri perhotelan, iaitu sifat tidak ketara (*intangibility*). Para pengguna tidak dapat memperoleh kepastian sama ada bilik hotel yang ditempah akan memenuhi jangkaan mereka atau tidak. Oleh itu, para pengkaji telah mengemukakan hujah bahawa pihak pengurusan hotel perlu membangunkan laman web mereka dengan persembahan visual dan ulasan dalam talian untuk menarik para pengguna. Namun begitu, pengaruh gabungan kedua-dua faktor ini ke atas tingkah laku pengguna dalam talian terhadap penempahan hotel masih belum jelas. Tambahan pula, pemahaman tentang kelakuan pelanggan hotel terhadap penempahan hotel secara dalam talian sangat diperlukan memandangkan tingkah laku pengguna hotel berubah sejajar dengan arus perubahan dalam dunia ICT.

Meskipun kebanyakan kajian terdahulu yang menyiasat perhubungan antara pelbagai faktor dengan tingkah laku pengguna berkenaan tempahan hotel secara dalam talian telah diterbitkan dalam penerbitan terkemuka, sangat sedikit kajian yang telah meneliti impak persembahan visual dan ulasan dalam talian dalam konteks pelanggan hotel di Malaysia.

Oleh itu, kajian ini cenderung untuk mengisi kelompongan dalam literatur dengan meneroka pengaruh persembahan visual dan ulasan dalam talian ke atas tingkah laku pengguna terhadap tempahan hotel secara dalam talian dari sudut pandang pelanggan di Malaysia. Kajian ini menyepadukan persembahan visual dan ulasan dalam talian dengan model penerimaan teknologi (Technology Acceptance Model, TAM). Pendekatan kuantitatif diaplikasikan dalam kajian ini, dan model persamaan berstruktur kuasa dua terkecil separa digunakan untuk menguji hipotesis yang dicadangkan. Model kajian diperiksa berdasarkan sampel yang terdiri daripada 374 responden dari Malaysia yang dikumpul melalui tinjauan dalam talian.

Hasilnya menunjukkan bahawa niat menempah dipengaruhi terutamanya oleh tanggapan kebergunaan dan tanggapan keseronokan. Di samping itu, analisis statistik menyokong idea bahawa persembahan visual dan ulasan dalam talian memberi kesan yang positif terhadap tanggapan kebergunaan, tanggapan mudah digunakan, dan tanggapan keseronokan. Walau bagaimanapun, kedua-dua faktor didapati tidak mempunyai pengaruh yang signifikan terhadap niat menempah secara langsung. Akhir sekali, kajian ini menyimpulkan bahawa pengguna dalam talian lebih berkemungkinan membuat tempahan hotel secara dalam talian jika persembahan visual dan ulasan dalam talian dilihat sebagai berguna dan menyeronokkan.

Kajian ini juga memberikan pandangan dan pemahaman yang berguna untuk membantu pihak pengurusan hotel dan penyedia perkhidmatan dalam industri hospitaliti menambah baik platform maya mereka supaya dapat menarik lebih ramai pelanggan.

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This thesis was submitted to the Senate of the Universiti Putra Malaysia and has been accepted as fulfilment of the requirement for the degree of Doctor of Philosophy. The members of the Supervisory Committee were as follows:

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LIST OF ABBREVIATIONS

AVE	Average Variance Extracted
CFA	Confirmatory Factor Analysis
CR	Composite Reliability
DIT	Diffusion of Innovation Theory
EDI	Electronic Data Interchange
EFT	Electronic Funds Transfer
EWOM	Electronic Word Of Mouth
HTMT	Heterotrait-Monotrait
ICT	Information And Communication Technology
MOCAT	Ministry of Culture, Arts And Tourism
MOTAC	Ministry of Tourism And Culture
MOTOUR	Ministry of Tourism
MTPB	Malaysian Tourism Promotion Board
MYBHA	Malaysia Budget Hotel Association
OTA	Online Travel Agencies
PE	Perceived Enjoyment
PEOU	Perceived Ease of Use
PLS-SEM	Partial Least Square Structural Equation Modeling
PU	Perceived Usefulness
SEM	Structural Equation Modelling
SPSS	Statistical Package For Social Sciences
TAM	Technology Acceptance Model
TPB	Theory of Planned Behaviour
TRA	Theory of Reasoned Action
UCLA	University of California, Los Angeles

UNWTO	World Tourism Organization
UTAUT	Unified Theory of Acceptance And Use Of Technology
VIF	Variance Inflation Factor
WHO	World Health Organization
WOM	Word of Mouth
WWW	World Wide Web



CHAPTER 1

INTRODUCTION

1.1 Overview

Hospitality industry has been growing tremendously throughout the world, especially during the last two decades due to the fast development of the Internet and E-commerce. According to the World Tourism Organization (2020), the number of international tourists increased from 674 million travellers in 2000 to 1.46 billion travellers in 2019. During the same period, the expenditure of international travellers also increased from 496 billion in 2000 to 1,480 billion U.S. dollars in 2019.

The Malaysian Tourism Promotion Board (MTPB) (2021) also stated that the number of tourist arrivals had been increased from 17.55 million travellers with revenue of 36.27 billion RM in 2006 to 26.1 million travellers with revenue of 86.14 billion RM in 2019 in Malaysia. Around 24 per cent of the total revenue from the tourism industry in Malaysia was generated from hotel industry only, which was 20.67 billion RM approximately in 2019.

Besides, MTPB (2020) reported that the number of local travellers had been increased from 131 million in 2011 to 239 million domestic tourists in 2019. As a result, the tourism industry's contribution to GDP for Malaysia was 13.3% in 2019.

These figures show the importance of the travel industry in general and the hotel sector in particular. Hence, the tourism industry is substantial and significant due to its contribution not only to one particular country but to the whole world economy.

Looking at the hotel industry in Malaysia, the number of hotels also increased in the last decade. In 2018, the number of registered hotels was 4750, with a total room supply of 308,207, whereas 435 of these hotels are in Kuala Lumpur, with room occupancy equals 57,286 421 hotels located in Selangor with 31,668 room occupancy. The number of hotels increased to 4826 in 2019 (Malaysia Tourism Promotion Board, 2019).

Although the number of hotels has been increasing, the hotel industry is an awfully competitive sector. Every business fights for its reward and survival.) Hotels are losing their profits due to these intense competitions and fragmented markets (Phelan *et al.*, 2011; Chaw & Tang, 2019). The upsurge of online travel agencies (OTA) did not only cause the reduction of the number of traditional distribution channels and physical travel agencies, but it also made them new and robust competitors with hotel industry (Liu & Zhang, 2014).

Moreover, Dogru *et al.* (2019) reported that the rapid growth of sharing economy firms in the US had a negative impact on hotels since hotels started to lose profit. Although Airbnb, a single sharing economy firm, is not under hotel industry, it is very hard to deny that it can be a tough competitor to hotels and even OTAs. According to Yeap (2018) from Edge Malaysia Weekly, the revenue of Airbnb had increased from US\$ 23.3 million in 2016 to more than US\$ 48 million in 2017 in Malaysia. Moreover, Malaysia has become the fastest-growing market in Southeast Asia for Airbnb. More than 44,000 accommodation were available through their platform, and they received more than two million guests in 2017 (New Straits Time, 2018).

Keeping a healthy profit can be challenging for many hoteliers (Neirotti *et al.*, 2016). This issue has become a severe problem and a potential risk among the hoteliers. According to (Deloitte, 2017), these substantial market competition threats may cause additional costs to the distribution channel of lodging firms and adverse effects on revenue and eventually on profit.

Therefore, researchers suggest hoteliers enhance their marketing strategies and website designs through understanding the behaviour, the needs and the expectations of their guests in order to survive the competitiveness, aggressiveness and complexity of the hotel industry (Amaro & Duarte, 2015; Chan *et al.*, 2020; Wang *et al.*, 2015).

1.2 Problem Statement

The tourism and hospitality industry has entered a new era of growth and revolution in Malaysia. According to UNWTO (2020), Malaysia is listed in the Top-20 most visited countries in the world. This particular industry is a vital factor for boosting economic growth through creating job opportunities, increasing foreign investments, and contributing to the country's GDP. As reported by the Department of Statistics of Malaysia (2021), the tourism and hospitality industry is one of the most significant contributors to the country's revenue (the industry generated

RM102 billion in 2019) and is responsible for employing more than 23 per cent of the total workforce in Malaysia. Due to the growth in hospitality in Malaysia, the number of hotels has increased gradually from 1,492 hotels in 2000 to 4,826 hotels in 2019 (Malaysia Tourism Promotion Board, 2019).

While Statista (2020) stated that the Malaysian hotel sector generated more than US 1.1 billion in 2019, the average occupancy rate is still under 60 per cent, and many hotels struggle to maintain their profits due to the harsh competitive environment in the hotel sector. Therefore, it is important for hotel operators to understand the behaviour of their customers and the factors that impact the behaviour toward online booking in order to enhance their performance and increase the occupancy rate.

Furthermore, ICT has an enormous impact on the tourism and hospitality industry and people. As the Internet becomes accessible and available for everyone, hotel customers prefer to utilise online hotel booking systems. In Malaysia, more than 80 per cent of the booking was made through online in 2019 (Statista, 2020).

It is astonishing how the Internet has changed all aspects of people's lives, especially the way they travel and conduct business within the tourism and hospitality industry (Law et al., 2019). In point of fact, the Internet has helped people to change their way of booking and purchasing travel products (Pencarelli, 2020). In the near past, travel customers used to contact their travelling agencies physically or ask their friends and family members for advice and information related to accommodations, locations, prices and other related information (Phelan et al., 2011). Nowadays, hotel customers can obtain the needed information at their fingertips (Chu et al., 2019).

As a result, scholars discuss the benefits of the Internet to hoteliers and their customers. The hotel websites provide customers with a tremendous volume of information such as room rates, hotel features, visualised presentations and customers' reviews at any time without location constraint (Talwar et al., 2020). On the other hand, hotel operators can reduce the distribution costs by reaching their customers directly and targeting a bigger market share.

Nevertheless, online hotel booking is different from purchasing a product from the Internet because the hotel industry has to deal with a complex issue, which is intangibility (Laroche et al., 2005; Morosan & Jeong,

2008). As the main feature of this industry, intangibility makes service products, such as hotel rooms, different from physical products. Thus, Laroche et al. (2001) point out that customers behave differently when purchasing an item online because online products are intangible products by their very nature at the moment of purchasing.

Furthermore, acquiring hotel rooms from the virtual platform is even more challenging and complex. The consumers might not be sure whether the purchased service products will match their expectations or not (Grove et al., 2002). Therefore, Zhao et al. (2015) argue that hotels should offer additional assistance to their customers to help them overcome the uncertainties and ambiguities during the booking over the Internet.

Researchers have suggested that hoteliers need to develop their websites to attract their customers through visual presentations and online reviews. Visual presentations within websites provide information about the service products (Wu et al., 2020). On the other hand, online reviews are another source of information that helps in reducing the uncertainties about the service products for online customers (Buhalis, 2019; El-Said, 2020).

Despite the fact that visual presentations and online reviews are the main factors in providing information (Chaw & Tang, 2019; (Baek & Michael Ok, 2017), it is not clear how visual presentations and online reviews jointly influence online consumers' behaviour toward hotel booking. Recent research points out that it is rare to find a study that combines these two factors to explore their impact on hotel booking intention (Zeng et al., 2020).

From the academic point of view, the increasing number of studies related to information and communication technology (ICT) within the tourism context has been noticeable during the last three decades due to the vast development in technology and the Internet environment (Law et al., 2019). Nonetheless, Law et al. (2014) state that "Although the impact of ICT on the industries has never been that strong throughout its history, it is generally unknown what the latest research efforts are in hospitality and tourism" (p.743).

Researchers still believe that there is a need to conduct more research on ICT within tourism for several reasons. First, the tourism consumers' behaviour is changing over time due to the ICT development and business structure (Stringam & Gerdes, 2010; Buhalis, 2019). It is a fact

that hotel customers' habits and behaviour are evolving from one generation to another. In the near past, hotel customers have relied on information obtained from family, friends, and travel agencies (Chu et al., 2019). Nowadays, online travellers obtain the needed information from virtual platforms in the form of online reviews and visual presentations available on websites (El-Said, 2020).

As a result, the development in ICT has changed the distribution channels in the hotel industry. Virtual platforms, such as websites, have become a major channel for customers' communication, marketing and selling points. Thus, the behaviours of hotel consumers change along with the changes in the ICT world (Buhalis, 2019).

In addition, Law et al. (2014) published a review paper on the progress of ICT in the tourism and hospitality industry based on 107 published articles between 2009 and 2013. They concluded that "although rapid technological advancement has provided new and convenient tools through which consumers can purchase tourism and hospitality products, it is something of a surprise to note that research on online purchase behaviour is relatively limited" (p.731). Therefore, understanding how hotel customers behave toward online hotel booking is indispensable.

Although most of the previous studies investigating the relationships between various factors and consumers behaviour for online hotel booking were published in leading publications, very little research has explored the impact of visual presentation and online reviews within the context of Malaysian hotel customers. Malaysia is a country with a fast growth rate in terms of Internet usage and online purchase. According to the Malaysian Communication and Multimedia Commission (2020), 88.7% of the Malaysian population use the Internet, and 74.3% of them search for information online.

Moreover, the International Trade Administration of the Department of Commerce of the United States of America (2019) stated that over half of the Malaysian citizens were considered to be online shoppers. Also, they predicted high growth in this particular business sector in the near future due to the support and encouragement of the Malaysian government toward e-commerce. In 2020, the total revenue generated from the Malaysian e-commerce market was estimated to reach 4.5 billion U.S. dollars (Statista, 2020).

Likewise, Amaro & Duarte (2015) points out that there is a lack of studies on the actual behaviour regarding online hotel booking because most of the previous research concentrated on booking intentions. In order to have a deeper understanding of how to convert the consumers' behaviour from intentional behaviour into actual behaviour, the current study utilises the technology acceptance model (TAM). The model is popular and effective in exploring the factors that affect consumer behaviour (Sahli and Legohérel, 2016; Mahomed, 2015; Mahomed, McGrath, & Keating, 2015; Mahomed, McGrath, & Yuh, 2017a). TAM does not explore the influence of external factors on intentions only, but it also explores the relationship between behavioural intentions and actual behaviour (Davis and Venkatesh, 1996).

Law et al. (2019) recently conducted a systematic review by analysing 288 journal articles published between 2014 and 2017. They stated that TAM was the most frequent theoretical model used among studied articles. However, limited research has explored the consumers' intention toward online hotel booking in Malaysia, as most of the studies were conducted in different regions in the world.

Therefore, this research tends to fill the gaps in the literature by exploring the influence of visual presentations and online reviews on consumers' behaviour toward online hotel booking in the context of Malaysia. At the same time, the study aims to develop a theoretical model that extends TAM with visual presentations and online reviews.

1.3 Scope of Study

This study explores the factors affecting online consumers' behaviour toward online hotel booking, with special focus on visual presentations and online reviews (as the main external factors) from the perspectives of Malaysian guests. A quantitative research method design is conducted in this research in order to examine between visual presentations and online reviews affect consumer behaviour within hotel booking settings based on TAM. Moreover, Partial Least Square Structural Equation Modeling (PLS-SEM) is used for empirical validation.

1.4 Research Questions

In order to attain the research objectives, the current study addresses the following specific research questions:

1. Does booking intention lead to the actual behaviour of online hotel booking?
2. Do visual presentations have an impact on the online booking intention of online customers?
3. Do online Reviews have an impact on the online booking intention of online consumers?
4. Do perceived usefulness, perceived ease of use and perceived enjoyment mediate the relationship between visual presentations and online hotel booking intention?
5. Do perceived usefulness, perceived ease of use and perceived enjoyment mediate the relationship between online reviews and online hotel booking intention?

1.5 Research Objectives

In this research, the main objectives are to explore the relationship between external factors (visual presentations and online reviews) and Malaysian consumers' behaviour toward online booking intentions, and the mediating effects of perceived usefulness, perceived ease of use and perceived enjoyment on the association between the external factors and booking intentions. Therefore, the current research has concentrated on the following objectives:

1. To examine the relationship between the behavioural intentions toward online hotel booking and the actual behaviour of hotel booking.
2. To determine if visual presentations have a significant impact on booking intention.
3. To ascertain whether online reviews affect booking intention.
4. To determine whether the relationship between visual presentation and booking intention is mediated by perceived usefulness, perceived ease of use and perceived enjoyment.
5. To examine whether the relationship between online reviews and booking intention is mediated by perceived usefulness, perceived ease of use and perceived enjoyment.

1.6 Significance of the Research

The hospitality industry is vital for every country as it contributes to the economy. Malaysia has invested heavily in the hospitality industry for the last few decades since this particular industry generates revenues and job opportunities. Thus, the findings from this research are useful for academics and practitioners.

Academically, this research contributes to the study of consumer behaviour toward online hotel booking and ICT in hotel industry. As Amaro and Duarte (2015) have argued that there have been limited studies on the relationship between behavioural intention and actual hotel booking, this research has aimed to close the gap in examining the relationship between behavioural intention and actual behaviour regarding online hotel booking. Since visual presentations and online reviews are important factors in providing information to hotel customers, previous studies explore their influence on hotel booking intention. However, limited studies combine these two factors for exploring their effects on hotel booking intention (Zeng et al., 2020).

Therefore, this study tends to extend and validate the technology acceptance model by integrating visual presentations and online reviews as external variables. This study also examines the mediating effects of perceived usefulness, perceived ease of use, and perceived enjoyment on the relationship between the external factors and booking intention.

Practically, the findings of this research will be beneficial to the major stakeholders in the hotel industry; hoteliers, travel agencies, hotel customers, and marketers. Certainly, the outcomes of the current study will help hoteliers gain more customers and increase revenue through understanding the relationships between these factors and their consumers' behaviour. Based on the research recommendation, hoteliers need to develop and enhance their websites in order to expound the e-travellers' acuties, behaviours and booking decisions accordingly.

1.7 Definition of Key Terms

- i. Visual presentation is defined as an important IT material that provides information using images, pictures and graphs (Kim & Lennon, 2008)
- ii. Online Review is defined as *“any positive, negative or neutral comment, rating, ranking of a product, a service, a brand, or a person supposedly made by a former customer and that is shared with other consumers in an unstructured format”* (Filieri, 2016)
- iii. Online booking intention is defined as *“desire of a consumer to book a room through the hotel’s website”* (Lien et al., 2015)
- iv. Extended TAM Model is defined as *“a theoretical model to explain the acceptance of new information technologies”* (Huang et al., 2013)
- v. Perceived Usefulness is defined as *“the degree of which a person believes that using a particular system would enhance his or her job performance”* (Davis, 1989)
- vi. Perceived Ease of Use is defined as *“ the degree to which a person believe that using a particular system would be free of effort”* (Davis, 1989)
- vii. Perceived Enjoyment is defined as *“the extent to which the activity of using the computer is perceived to be enjoyable in its own right, apart from any performance consequences that may be anticipated”* (Davis, Bagozzi, & Warshaw, 1992)

1.8 Thesis Outline

This research is divided into the following five chapters.

Chapter 1 – Introduction: This chapter covers the background of the problem, scope of the study, research questions and study objectives, significance of the study, definition of key terms and organization of the thesis.

Chapter 2 – Literature Review: The second chapter reviews the literature related to the hospitality industry, ICT, E-commerce and theories of online customers’ behaviour. This chapter also presents the research framework and hypotheses for predicting the impact of visual presentations and online reviews on hotel booking. The research model includes seven variables and nineteen hypotheses

Chapter 3 – Methodology: The fourth chapter describes the research methodology that explains why and how the data is collected and tested for examining the proposed hypotheses. Initially, this chapter presents an overview of the philosophical research approach. Then, it describes the research method and plan, including sampling, data collection, questionnaire structure, pre-test, pilot test, and data analysis procedure.

Chapter 4 – Data Analysis and Results: The fifth chapter presents the data analysis and results. It covers the process of preliminary data examination in the first section. This is followed by presenting a descriptive analysis of the sample in the study. Finally, a comprehensive description of primary data analysis is presented. This section includes the measurement model analysis, structural model and hypotheses testing, and mediation effect analysis.

Chapter 5 – Conclusion, Contribution, Limitation and Future Research: This chapter is presented in three parts. The first part provides a conclusion that summarises the study. The second part shows the research implication and contribution from theoretical and practical points of view. The last part discusses the limitation of the study and potential future studies.

1.9 Chapter Summary

The introductory chapter provides an overview of the research topic and background of the study. It also highlights the problem statement, research objectives, research questions and significance of the study. The next chapter provides the literature review on hotel booking, E-commerce, consumer behaviour theories, visual presentations and online reviews.

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