



Faculty of Economics and Business

**Modelling e-Satisfaction and e-Loyalty of Online Travel Agencies (OTAs)
in the Accommodation Sector**

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Modelling e-Satisfaction and e-Loyalty of Online Travel Agencies (OTAs) in the Accommodation Sector

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A dissertation submitted

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DECLARATION

I declare that the work in this dissertation was carried out in accordance with the regulations of Universiti Malaysia Sarawak. Except where due acknowledgements have been made, the work is that of the author alone. The dissertation has not been accepted for any degree and is not concurrently submitted in candidature of any other degree.



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ABSTRACT

In the rapidly evolving online travel industry, digital technologies have transformed consumer behaviour, presenting both opportunities and challenges for online travel agencies (OTAs). One major challenge is the erosion of user loyalty, as users can easily switch between OTAs with a single click. The “billboard effect” where users connect directly with properties for future bookings, further intensifies competition. This study identifies factors influencing OTA users’ satisfaction and loyalty, addressing gaps in the literature by focusing on the online-to-offline-to-online (O2O2O) mode. Integrating Expectation Confirmation Theory (ECT) and the Theory of Consumption Values in the context of OTAs (OTA-TCV), this study explores the relationship between consumption values, perceived risk, e-WOM, expectation confirmation, e-satisfaction, and e-loyalty among 267 Malaysian OTA users. Quantitative data were analysed using SPSS for demographic information and descriptive statistics, and SmartPLS for measurement and structural models. The results reveal that monetary value, quality of benefits value, social status value, and electronic word of mouth (e-WOM) significantly influence expectation confirmation, which in turn significantly influences e-satisfaction and e-loyalty. Policymakers are encouraged to enforce regulations that promote transparency and fairness within the industry, while accommodation providers can optimize strategies by tailoring their offerings and services to better align with the preferences and expectations of the customers to enhance customer satisfaction and loyalty. Furthermore, OTAs can leverage insights from this study to prioritize transparency in pricing and harness the power of e-WOM by actively soliciting and showcasing authentic guest reviews and recommendations to build trust and confidence among users.

Keywords: e-loyalty, e-satisfaction, consumption values, perceived risk, electronic word of mouth

***Pemodelan Kepuasan dan Kesetiaan Terhadap Agensi Pelancongan Dalam Talian
(OTA) dalam Sektor Penginapan***

ABSTRAK

Dalam industri pelancongan dalam talian yang berkembang pesat, teknologi digital telah mengubah tingkah laku pengguna, memberikan peluang dan cabaran kepada agensi pelancongan dalam talian (OTA). Salah satu cabaran utama ialah penurunan kesetiaan pengguna, disebabkan oleh kemudahan di mana pengguna boleh bertukar antara OTA dengan hanya satu klik. Kesan "papan iklan" di mana pengguna membina hubungan langsung dengan penginapan dan mengelakkan OTA untuk tempahan masa depan, turut meningkatkan persaingan. Kajian ini mengenal pasti faktor-faktor yang mempengaruhi kepuasan dan kesetiaan pengguna OTA, dengan menangani kekurangan dalam kajian terdahulu yang memberi tumpuan kepada mod dalam talian-ke-luar talian-ke-dalam talian (O2O2O). Dengan menggabungkan Teori Pengesahan Jangkaan (ECT) dan Teori Nilai Penggunaan dalam konteks OTA (OTA-TCV), kajian ini meneroka hubungan antara nilai penggunaan, risiko yang dirasakan, e-WOM, pengesahan jangkaan, e-kepuasan dan e-kesetiaan dalam kalangan 267 pengguna OTA di Malaysia. Data kuantitatif dianalisis menggunakan SPSS untuk maklumat demografi dan statistik deskriptif, serta SmartPLS untuk model pengukuran dan struktur. Keputusan menunjukkan bahawa nilai kewangan, nilai kualiti manfaat, nilai status sosial, dan e-WOM mempengaruhi pengesahan jangkaan dengan ketara, yang seterusnya mempengaruhi e-kepuasan dan e-kesetiaan. Pembuat dasar digalakkan untuk menguatkuasakan peraturan yang mempromosikan ketelusan dan keadilan dalam industri, manakala penyedia penginapan boleh mengoptimumkan strategi mereka dengan menyesuaikan perkhidmatan dan tawaran mereka untuk memenuhi keutamaan dan jangkaan pelanggan bagi meningkatkan kepuasan dan kesetiaan pelanggan.

Selain itu, OTA boleh menggunakan pandangan daripada kajian ini untuk memberi keutamaan kepada ketelusan dalam penetapan harga dan memanfaatkan kuasa e-WOM dengan secara aktif mendapatkan serta mempamerkan ulasan dan cadangan tetamu yang tulen untuk membina kepercayaan dan keyakinan dalam kalangan pengguna.

Kata kunci: *e-kesetiaan, e-kepuasan, nilai penggunaan, risiko yang dirasakan, e-WOM*

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LIST OF ABBREVIATIONS

ACSI	American Customer Satisfaction Index
ADRs	Average Daily Rates
AI	Artificial Intelligence
APAC	Asia-Pacific
AVE	Average Variance Extracted
CAGR 2016-19	Compound Annual Growth Rate between 2016 and 2019
CB-SEM	Covariance-Based Structural Equation Modeling
CFA	Confirmatory Factor Analysis
CGS	Centre for Graduate Studies
CR	Composite Reliability
CRM	Customer Relationship Management
DOSM	Department of Statistics Malaysia
e-WOM	Electronic Word of Mouth
ECM	Expectation Confirmation Model
ECT	Expectation Confirmation Theory
FMI	Future Market Insights
HTMT	Heterotrait-Monotrait
IS	Information System
LM	Linear Regression Model
MCO	Movement Control Order
MIDF	Malaysian Industrial Development Finance Berhad
MTPB	Malaysia Tourism Promotion Board
O2O2O	Online to Offline to Online

OTA-TCV	Theory of Consumption Value in the Context of OTAs
OTAs	Online Travel Agencies
PLS-SEM	Partial Least Squares Structural Equation Modeling
RMSE	Root Mean Square Error
SOR	Stimulus-Organism-Response Model
TAM	Technology Acceptance Model
TCV	Theory of Consumption Value
TPB	Theory of Planned Behaviour
UNIMAS	Universiti Malaysia Sarawak
UNWTO	United Nations World Tourism Organization
VIF	Variance Inflation Factor
WTTC	World Travel & Tourism Council

CHAPTER 1

INTRODUCTION

1.1 Introduction

This chapter provides an overview of the study, encompassing several key aspects. The chapter commences with a description of background of the study, proceeds to articulate the problem statement, research questions, research objectives, elucidates the significance of the study and scope of the study and provides definitions of key terms. The chapter concludes by outlining the organization and structure of the subsequent chapters.

1.2 Background of the Study

The background of the study begins with an overview of the global tourism industry, narrowing down to the tourism industry in Malaysia. It then shifts to the accommodation services sector, discussing it from both global and Malaysian perspectives. The background further explores the context of online travel agencies (OTAs), followed by a discussion on e-loyalty, e-satisfaction, consumption values, perceived risk, and electronic word of mouth (e-WOM).

1.2.1 Global Tourism Industry

The tourism industry plays a vital role in the global economy. The emergence of various low-cost carriers in different regions, such as easyJet, Ryanair, and AirAsia, has made travel more affordable. In today's society, where people face increasing levels of stress, travel has transitioned from a luxury to a necessity, as it serves as an effective stress reliever. According to Dr. Tamara McClintock Greenberg, a clinical psychologist, the pressures of work and daily responsibilities can distract people from what is truly meaningful and

captivating. Therefore, it is crucial to pause and step away from hectic routines to give the mind an opportunity to relax, recharge, and revitalize (Nazish, 2018).

According to research conducted by the World Travel and Tourism Council (WTTC, 2023), prior to the COVID-19 pandemic, the tourism industry created 20% of new jobs globally between 2014 and 2019. The industry employed 334 million people, accounting for 10.3% of all jobs, with a contribution of US\$10 trillion, representing 10.4% of global GDP (WTTC, 2023). Despite being one of the hardest-hit sectors by the pandemic, the tourism industry is making progress toward recovery, though it has not yet fully returned to pre-pandemic levels.

In 2022, the tourism industry contributed 7.6% to global GDP (WTTC, 2023). Although worldwide tourism market size increased by 41% compared to the previous year, it was still 9% below pre-pandemic levels (Statista, 2023d). In 2023, the global tourism sector grew by nearly 14% compared to the previous year, with revenue reaching approximately US\$2.29 trillion, surpassing pre-pandemic levels (Statista, 2024a).

Before the pandemic, global international tourism receipts were US\$1,467 billion, with Europe holding the largest share (40%), followed by Asia-Pacific (APAC) at 30%, America at 23%, the Middle East at 7%, and Africa at 1% in 2019. According to the United Nations World Tourism Organization (UNWTO, 2023), global international tourism receipts dropped to US\$550 billion in 2020 and slightly recovered to US\$627 billion in 2021. In 2022, despite a 61% increase, global international tourism receipts remained 31% below pre-pandemic levels at US\$1,012 billion, with APAC's regional share decreasing to 13%. However, the Asia-Pacific Tourism Market Outlook by Future Market Insights (FMI, 2023) projects that the region will receive 535 million tourists, accounting for 30% of global tourists by 2030, with a projected market size of US\$415 billion.

1.2.2 Malaysia Tourism Industry

Tourism is one of the largest industries in Malaysia, contributing 7.9% to GDP before the COVID-19 pandemic in 2019. Nearly a quarter of Malaysia's labor force was employed in the tourism sector (Statista, 2022a). According to Malaysia Tourism Statistics by the Malaysia Tourism Promotion Board (MTPB, 2024), tourist arrivals and receipts in 2019 were 26.1 million and RM86.1 billion, respectively, before the pandemic (Figure 1.1). Due to the pandemic and the implementation of movement control orders (MCO), tourist arrivals dropped to 4.33 million, and receipts fell to RM12.7 billion in 2020, further declining to 0.13 million arrivals and RM0.24 billion receipts in 2021 (MTPB, 2024).

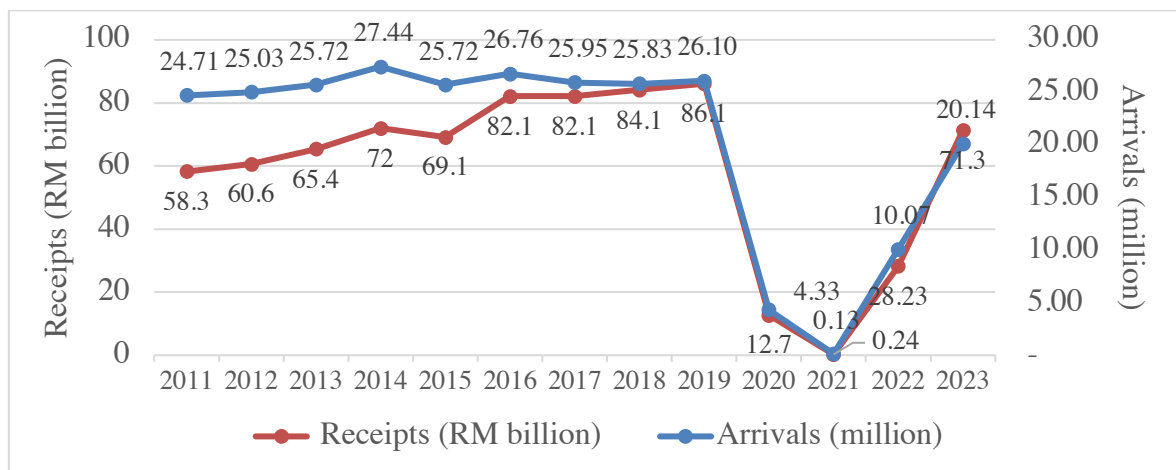


Figure 1.1: Malaysia Tourist Arrivals and Receipts: 2011-2023
Source: Malaysia Tourism Promotion Board (2024).

In 2022, as travel restrictions eased and the Malaysian government encouraged domestic travel, tourist arrivals and receipts increased to 10.07 million and RM28.23 billion, respectively (MTPB, 2024). By 2023, tourist arrivals rose to 20.14 million, with receipts totaling RM71.3 billion (MTPB, 2024). However, these numbers remain below pre-pandemic levels, with tourist arrivals and receipts falling short by 22.8% and 17.2%, respectively.

In Southeast Asia, Malaysia remains the second most popular destination within ASEAN, though Thailand overtook Malaysia in 2015. Prior to the pandemic, Thailand welcomed 40 million international arrivals with a Compound Annual Growth Rate (CAGR) of 7% between 2016 and 2019. In comparison, Malaysia attracted 26.2 million arrivals, lagging behind Thailand by 34.5%, and experienced a declining CAGR of -0.7% (GlobalData, 2022). Meanwhile, Vietnam and Indonesia saw robust CAGRs of 21.6% and 12.2%, respectively.

After reopening its borders in April 2022 and relaxing vaccination and testing requirements in August, Malaysia anticipated a resurgence in international visitors. However, despite these efforts, the country has struggled to compete with its Southeast Asian counterparts (Ferrarese, 2023). Malaysia welcomed approximately 3 million visitors in 2022, a significant improvement from the previous year's 134,728 visitors. Nevertheless, this only represented 12% of the number of visitors that arrived in 2019.

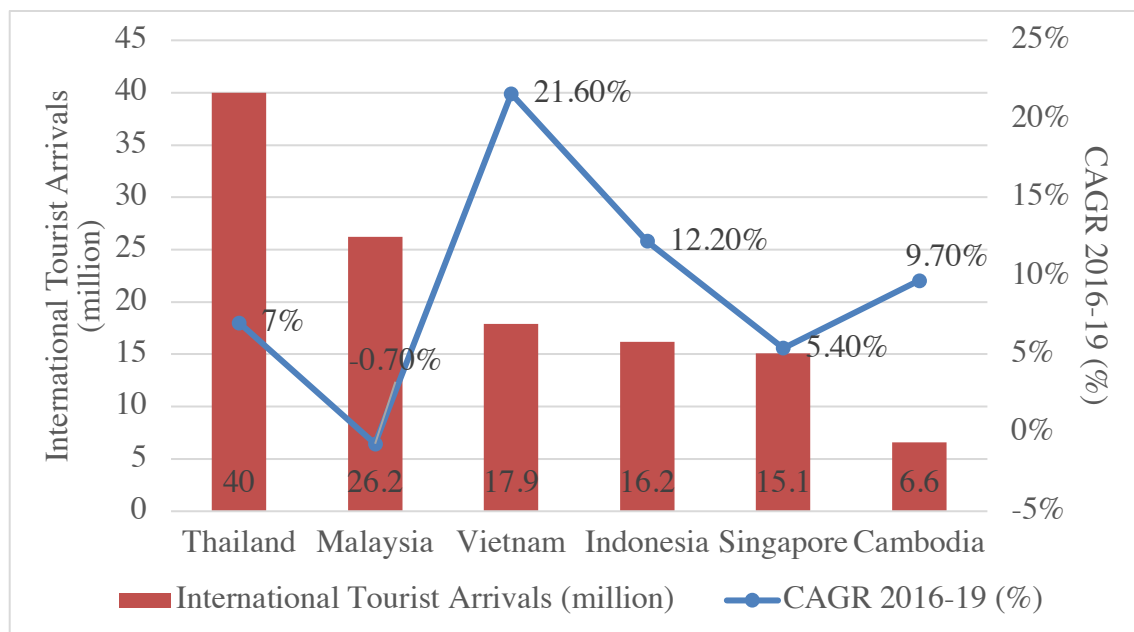


Figure 1.2: International Tourist Arrivals in 2019 and CAGR Between 2016-2019
Source: GlobalData (2022).

Thailand, Singapore, and Indonesia saw a return of visitor arrivals to about 25% of their pre-pandemic levels, with Thailand receiving 10 million visitors, and Singapore and Indonesia welcoming 4.6 million and 4.58 million visitors, respectively. Vietnam received around 3.6 million international tourists, which is 20% more than Malaysia, representing 20% of its pre-pandemic intake in 2019 (Ferrarese, 2023).

Research from the Malaysian Industrial Development Finance Berhad (MIDF) shows that 38.9 million passengers passed through Malaysian airports in the first half of 2023, reflecting a 76% recovery from the pandemic, with domestic travel recovering by over 80%, partly due to the introduction of a new low-cost carrier, MyAirline. Competition between AirAsia and MyAirline provided consumers with lower fares; however, MyAirline suspended operations in October 2023, reducing competition and available routes.

In light of these challenges, Malaysia's accommodation providers play a key role in attracting international visitors. Collaboration with OTAs is essential to enhancing the visibility of accommodation providers and adapting to market changes.

1.2.3 Accommodation Services Sector

The accommodation services sector is a crucial component of the tourism industry, providing essential services such as lodging, catering, and entertainment while supporting sustainable tourism practices (Çelik & Çevirgen, 2021). The Department of Statistics Malaysia (DOSM, 2023) identifies various accommodation types available to travellers, including hotels, resorts, apartment hotels, chalets, guesthouses, hostels, and camping grounds. Accommodation services cater to diverse needs, offering comfort and convenience during trips and vacations.

Driven by the growth of the tourism industry, the accommodation services sector has experienced significant expansion and transformation, influenced by technological advancements and evolving consumer behaviour. In 2019, the global hotel and resort market reached a peak size of US\$1.52 trillion. However, the market size fell below US\$1 trillion in 2020 and 2021 due to the pandemic. The sector is projected to recover and reach US\$1.21 trillion in 2023 (Statista, 2023c). In 2023, there were at least 187,000 hotels and 17.5 million guestrooms worldwide. The average daily rates (ADRs) increased by 3.4% annually, and occupancy rates rose by 17.6%, with 60% of the global hotel industry recovering to pre-pandemic levels (Condor Ferries, 2023).

In addition to hotels, Airbnb has become a prominent player in the accommodation services sector, offering home rentals. Over eight years, Airbnb's user base grew from 6 million in 2012 to 200 million in 2020. With a 22.9% market share, Airbnb leads over competitors such as Expedia, which holds a 10.58% share (Curry, 2023). Airbnb's rise signals a shifting accommodation landscape and increased competition within the industry.

As of March 2023, there are 3,699 hotels in Malaysia (CEIC, 2023). In 2021, there are approximately 323,500 guestrooms (Statista, 2022b) and the accommodation services sector in Malaysia generated a gross output value of RM6.7 billion, with value-added of RM3.8 billion (DOSM, 2023). The revenue of the hotel market in Malaysia is projected with a growth rate of 6.92% from 2023 to 2027, expecting 11 million users by 2027 (Statista, 2022b). These statistics highlight the significant economic contribution of the accommodation services sector in Malaysia.

The majority of Malaysian travellers, accounting for 70%, choose to book their travel accommodations through online booking sites. Only a small number of them, 11%, prefer direct communication with the accommodation property either through email or phone. The

top online platforms used for accommodation bookings in Malaysia are Agoda, with 69% of travellers using it, followed by Booking.com at 59%, and Trivago at 40% (Vase, 2020). It is estimated that 75% of the revenue from hotel industry will be generated through online market by 2028 (Statista, 2024d). This projection highlights the increasing importance of the online channel in the accommodation service sector as consumers are shifting to online platforms for their accommodation bookings. Furthermore, Anderson and Han (2017) found an increased reservation in the property's own website for those accommodations listed on an OTA site. This phenomenon is referred to as the "billboard effect".

The information presented underscores the significance of the accommodation services sector within the tourism industry and the broader economy. The rise of online booking platforms such as OTAs and TripAdvisor has transformed the sector, increasing competition. The projected growth in both the hotel (Statista, 2022b) and Airbnb markets (Curry, 2023) highlights the ongoing importance of this sector. OTAs serve as a vital marketing tool for Malaysia, helping the country reach a global audience. Given the increasing reliance on online bookings (Statista, 2024d), it is essential for accommodation providers to collaborate with OTAs. Therefore, understanding the relationship between travellers' perceptions of consumption values, perceived risk, and e-WOM, along with their impact on e-satisfaction and e-loyalty toward OTAs, is crucial in shaping the future of Malaysia's tourism industry.

1.2.4 Online Travel Agencies (OTAs) Industry

Online Travel Agencies (OTAs) play a pivotal role in the travel industry by serving as digital platforms that connect consumers with a range of travel services, including flights, accommodations, car rentals, and activities. Prominent OTAs such as Booking.com, Expedia, Airbnb, Hostelworld, Agoda, Trip.com and Traveloka have revolutionised the

travel booking process since their inception in the 1990s (Cloudbeds, 2023b). These platforms enable users to compare and book travel services online, thereby significantly extending the reach of travel suppliers and providing consumers with a convenient, centralised booking experience (Cloudbeds, 2023b).

The impact of these changes is evident in the market size and revenue of the online travel industry whereas, the OTAs have become major players in the global tourism market, accounting for two-third of the global tourism market, estimated to reach a significant value of US\$ 599 billion in 2023 and was projected to be surpassing US\$ 800 billion by 2028 (Statista, 2024c). The OTA market is currently led by three major players: Booking Holdings, Expedia, and Airbnb. These companies have demonstrated impressive revenue growth as shown in Figure 1.3 with Booking.com generating US\$ 17 billion in online booking revenues in 2022, followed by Expedia with US\$11.6 billion, and Airbnb with US\$ 8.3 billion. All these major players witnessed impressive revenue growth of over 60% with both Booking Holdings and Expedia Group accounted for 60% of the online booking transactions in the US and Europe. The market capital of OTA worldwide is shown in Figure 1.4 with Booking Holdings leads the pack with a market capital of US\$ 112,793 million in 2023, indicating its status as the most highly valued OTA in the market. Airbnb follows closely behind with a market capital of US\$ 91,086 million, while Trip.com Group and Expedia Group hold market capitals of US\$ 23,203 million and US\$ 15,327 million respectively, indicating their positions as major players in the OTA industry but with lower valuations.

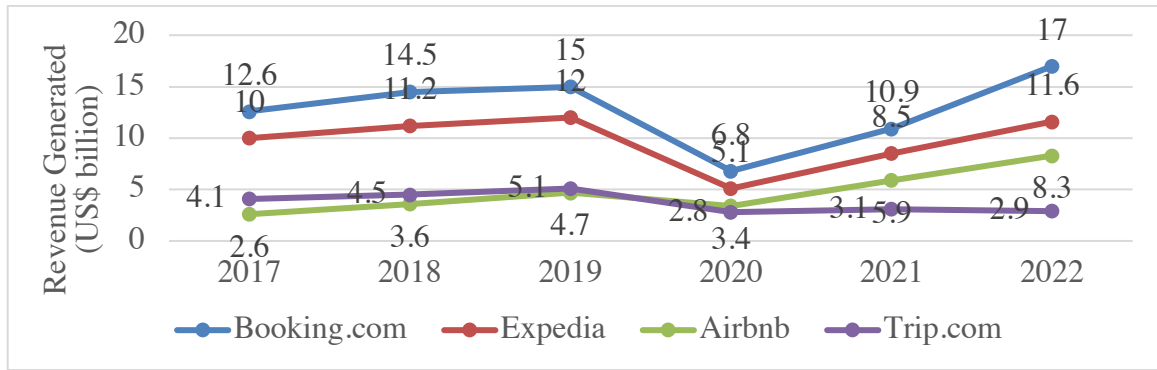


Figure 1.3: Revenue Generated by Top OTA from 2017 to 2022
Source: Curry (2024).

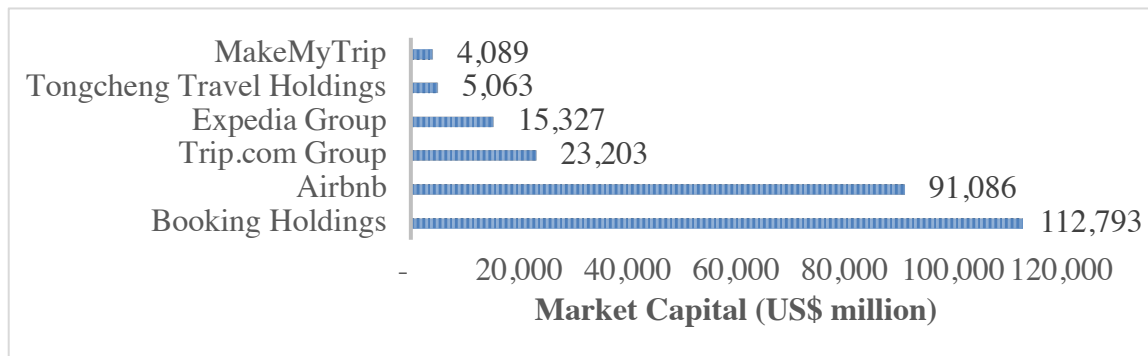


Figure 1.4: Market Capital of OTA Worldwide 2023
Source: Statista (2024b).

In the context of Malaysia, as shown in Figure 1.5, Agoda emerges as the leading OTA, with 80% of respondents having used its services. Booking.com follows closely with 73%, showcasing its strong presence in the market. Trivago and Airbnb also hold substantial popularity, with 43% and 42% respectively. Notably, Agoda is a subsidiary of Booking.com. Comparing the OTA market in Malaysia to the global OTA market, Booking.com is the leading player in both domains. Although Expedia ranks as the second-highest revenue-generating OTA globally, Airbnb surpasses Expedia in terms of market capitalization. In Malaysia, Expedia has been overtaken by Trivago, Airbnb, Trip.com, Traveloka, and Hotels.com. This observation underscores the competitive nature of the OTA market.

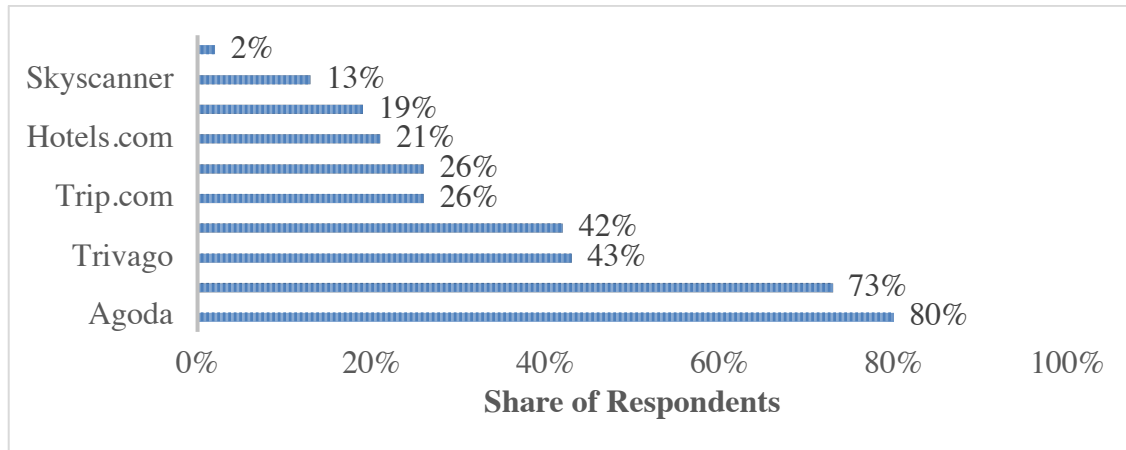


Figure 1.5: Most Popular OTAs in Malaysia 2023
Source: Statista (2023b).

OTAs, acting as the intermediaries, do not own any properties, but serve as a marketing tool for the properties listed on their platforms. This relationship can lead to the “billboard effect”, where travellers often booked directly through the accommodation’s website after initially booking via OTAs (Anderson & Han, 2017). This is evidenced with the rise of direct bookings from 11.8% in 2019 to 21.5% in 2021. In the first quarter of 2022, direct bookings averaged 19.3% (Cubilis, 2022), indicating a sustained preference for booking directly with the accommodation provider. In addition, recent findings reveal that 80% of the travellers who visited an OTA before making their final booking, may ultimately booked through another website (Travelperk, 2024). This phenomenon impacts e-loyalty by demonstrating that even if travellers engage with OTAs initially, their loyalty is not guaranteed unless the OTA effectively meets their expectations and fulfil their satisfaction. e-Loyalty is defined as a strong dedication towards an e-commerce platform, resulting in repetitive purchasing and consistent engagement in positive word-of-mouth, even in the face of marketing efforts by competitors (Chang et al., 2019).

Building on the importance of e-loyalty, e-satisfaction is one of the key factors that influences customer retention. e-Satisfaction referred to the customers’ positive feelings

towards the accommodations booked via OTAs (Li et al., 2021). High levels of e-satisfaction are associated with increased loyalty and repeat usage. According to the American Customer Satisfaction Index (ACSI) Travel Study 2022-2023 (American Customer Satisfaction Index, 2023), the OTAs are experiencing close competition in terms of customer satisfaction. Expedia leads with a score of 79, followed by Booking.com at 78, Trivago at 77, and Tripadvisor at 76 (American Customer Satisfaction Index, 2023). These scores indicate the intense competition within the OTA industry as the leading players are closely competing in terms of customer satisfaction. These findings have emphasized the critical role of customer satisfaction in the OTA industry and accommodation services sector.

Addressing consumer needs and expectations is essential in enhancing e-satisfaction. These expectations consist of consumption values including monetary value, quality of benefits value, social status value, information value, and preference value. Monetary value refers to the economic benefits derived from the products purchased (Chang et al., 2019). Quality of benefits value encompasses consumers' evaluations of the convenience, reliability, and consistency in delivering high-quality benefits of a product or service (Talwar et al., 2020b). Social status value pertains to the extent to which a product purchased through e-commerce enhances social acceptance, approval, perception, and impression (Huang & Lan, 2021; Chang et al., 2019). Information value involves the completeness and relevance of the product information provided on e-commerce platforms (Sharma et al., 2022). Preference value relates to the flexibility associated with the product purchased through e-commerce (Phonthanakitithawor et al., 2021).

In addition to consumption values, perceived risk is a significant concern for OTA users. Perceived risk encompasses concerns about privacy and security (Trinh et al., 2020) when using OTAs. Online scams have heightened these concerns. For instance, in 2023,

Malaysia reported a total of 34,497 online scams cases involving losses of RM1.218 billion (Bernama, 2024). The risk associated with travel products is higher, not only due to their tangible nature, but also because they often entail greater costs and complex options. The increasing incidence of online fraud, including fraudulent listings (BBC, 2023), dishonest providers (Ang, 2022) and concerns about the accuracy of accommodation listings (Trends Desk, 2023) deter the continuous usage of OTAs. These underscore the importance of addressing perceived risk in influencing consumer satisfaction and subsequent behaviour.

Perceived risk and e-WOM are interconnected factors which can influence satisfaction and loyalty in the context of OTA bookings. The Local Consumer Review Survey 2023 (Paget, 2023) revealed that 98% of consumers “occasionally” read online reviews, among them, 76% of consumers “regularly” read the online reviews while 33% of them “always” read the online reviews, leaving only 2% who had never read the online review in 2022 (Paget, 2023). In Malaysia, consumers are increasingly reliant on online reviews as information source. Websites’ reviews have been the leading information sources, accounting for 36.36% followed by social media (29.4%) and self-knowledge and experience (17.41%) as of January 2023 (Statista, 2023e). The prevalence of online reviews has significantly contributed to the dominance of OTAs in the tourism industry. Thus, incorporating e-WOM into the study provides a deeper understanding of its impact on OTA users’ satisfaction and loyalty.

1.3 Problem Statement

The central problem to be researched by this study is the impact of consumers’ expectations confirmation of consumption values, perceived risk, and e-WOM on e-satisfaction and e-loyalty towards OTAs for the accommodation bookings. This study identifies several interconnected challenges and gaps that warrant further exploration.

The online travel industry is dominated by three established players, including Booking.com, Expedia, and Airbnb (Curry, 2024). Additionally, there are numerous smaller players including the existing 400 more OTAs (Vianna, 2023) and new players constantly entering the market, further intensifying the competition. In the e-commerce settings, competing companies are just one mouse click away (Chang et al., 2009). Customers today can easily access to a wide array of choices and can easily switch between platforms. The ease of comparison, coupled with the evolving customer preferences and expectations have resulted in building e-loyalty an ongoing and complex endeavour. Furthermore, the “billboard effect” has been threatening the market of OTAs as travellers tend to book directly through the accommodation’s own website after physically experiencing the accommodation that they initially booked through the OTAs (Anderson & Han, 2017). Despite the significant role of e-loyalty, there remains lack of comprehensive understanding of the factors influencing e-loyalty in the context of OTAs. To address the gaps and challenges facing the OTAs, this study aims to investigate the complexity surrounding e-loyalty and the factors influencing e-loyalty in the context of OTAs.

The Malaysian tourism industry is currently in the recovery stage after significant impact of the Covid-19 pandemic. Despite being the second most popular destination in ASEAN, Malaysia has experienced a negative CAGR from 2016 to 2019 while other ASEAN countries are experiencing significant growth in their CAGR (GlobalData, 2022). This situation is concerning as it indicates a loss of competitiveness for Malaysia, despite having been the most popular destination in ASEAN in 2015 (GlobalData, 2022). The OTAs are playing crucial role in marketing Malaysia to global audience. The increasing reliance on online booking (Cloudbeds, 2023a) highlights the necessity for accommodations to collaborate with the OTAs. As OTAs serve as a primary interface between potential

travellers and Malaysian accommodations, ensuring high level of e-satisfaction and fostering e-loyalty are essential for enhancing the country's competitiveness as a tourist destination.

Leading OTAs are in close competition based on their ACSI scores, highlighting intense rivalry in customer satisfaction. Furthermore, the lower ACSI scores for hotels among travellers who lodged complaints (American Customer Satisfaction Index, 2023) reveal a critical issue in the accommodation sector. This discrepancy suggests a potential gap in customer satisfaction that could undermine e-loyalty, as satisfaction is a key determinant of customer loyalty. Therefore, addressing challenges in customer satisfaction is essential for improving e-satisfaction and fostering e-loyalty within the accommodation industry, ensuring that OTAs and their partnered accommodations can effectively retain customers in a highly competitive market.

Consumption values including monetary, quality of benefits, social status, information, and preference are identified to be essential in influencing intention to purchase through OTAs (Talwar et al., 2020b). Positive confirmation of the expectations of these consumption values would lead to e-satisfaction, which, in turn, would contribute to e-loyalty. However, the influence of these values in the OTA context remains underexplored. This study aims to fill this gap by investigating the impact of these consumption values on e-satisfaction and e-loyalty in the OTA environment.

While the impact of consumption values on e-satisfaction and e-loyalty has been extensively studied, this study acknowledges the significance of perceived risk in online travel products purchasing compared to traditional purchasing. The perceived risk associated with online travel bookings, including concerns about fraud (BBC, 2023), hidden charges (Ang, 2022) and inaccurate listings (Trends Desk, 2023). While perceived risk is recognised

as a factor in online purchasing, its impact on e-satisfaction and e-loyalty within the OTA context requires further examination.

One of the key factors contributing to the dominance of OTAs in the tourism industry is the availability of e-WOM. e-WOM plays a role in shaping the travellers' expectation of the accommodations they have booked (Statista, 2023e). However, concerns about the accuracy and reliability of the online reviews (Belhadi et al., 2023) have led to a decrease in trust in online reviews (Paget, 2023), complicating the impact of e-WOM on consumer behaviour. This study aims to explore the influence of e-WOM on both e-satisfaction and e-loyalty, contributing to a more nuanced understanding of its role in the OTA industry.

In conclusion, this study seeks to provide a comprehensive understanding of e-satisfaction and e-loyalty in the OTA context by investigating the confirmation of consumer expectations related to consumption values, perceived risk, and e-WOM. Addressing these issues will contribute to a broader understanding of how these factors shape consumer behaviour in the OTA context. The findings will enrich existing literature by highlighting the complex interplay between these variables and their impact on customer retention. Furthermore, the insights gained from this study will enable OTAs to develop effective strategies with their partnered accommodations to enhance e-satisfaction and foster e-loyalty among their users.

1.4 Research Questions

Based on an extensive review of existing literature, the following research questions were developed to ensure alignment with the main objectives and concerns of the study. This study aims to answer the following questions:

- i. Do consumption values including monetary, quality of benefit, social status, information, and preference influence the expectation confirmation of accommodations booked via OTAs?
- ii. What is the impact of perceived risk on expectation confirmation of accommodations booked via OTAs?
- iii. How does e-WOM influence the expectation confirmation of accommodations booked via OTAs?
- iv. To what extent does expectation confirmation of accommodations booked via OTAs affect e-satisfaction and e-loyalty towards OTAs?
- v. What is the relationship between e-satisfaction and e-loyalty towards OTAs?

1.5 Research Objectives

The general objective of this study is to identify the factors affecting OTA users' e-satisfaction and e-loyalty and to explore the impact of consumption values, perceived risk, and e-WOM on expectation confirmation, e-satisfaction, and e-loyalty. Therefore, the specific objectives of this study are as follows:

- i. To examine the influence of consumption values including monetary, quality of benefit, social status, information, and preference on expectation confirmation of accommodations booked via OTAs.
- ii. To investigate the impact of perceived risk on expectation confirmation of accommodations booked via OTAs.
- iii. To assess the influence of e-WOM on expectation confirmation of accommodations booked via OTAs.

- iv. To examine the influence of expectation confirmation of accommodations booked via OTA on e-satisfaction and e-loyalty towards OTAs.
- v. To determine the relationship between e-satisfaction and e-loyalty towards OTAs.

1.6 Significance of the Study

This study makes several significant contributions across different domains. Firstly, in terms of the government policy, the findings can provide useful insights for policymakers in developing regulations and policies that will safeguard consumer rights and promote fair practices in the online and accommodation marketplace. By understanding the factors influencing consumer satisfaction and loyalty, policymakers can shape policies that mandate clear and accessible disclosure of terms and conditions on OTAs, ensuring that consumers fully understand the risk involved in online bookings. Additionally, the study could support the development of consumer protection laws that require OTAs to implement stringent measures against fraudulent practices, enhancing trust in Malaysia's online travel market.

Secondly, this study provides valuable insights to accommodation service sector as well as the online travel market operating in competitive markets. By examining the relationships between the expectation confirmation of consumption values, perceived risk, and e-WOM and e-satisfaction and e-loyalty, the study offers industry practitioners a deeper understanding of the key drivers shaping consumer behaviour and decision-making processes. This knowledge can serve as a guideline for companies to develop effective marketing strategies, refine their products or services, and enhance consumer experiences to foster long-term loyalty. Furthermore, this study's insights could be used to improve the

accuracy of e-WOM by encouraging verified reviews and reducing the influence of fake feedback, thus fostering a more transparent online marketplace.

Moreover, this study has implications for individual consumers by empowering them to make informed decisions. By investigating consumption values and perceived risks, consumers can better evaluate the benefits and potential drawbacks associated with making bookings through online marketplaces. Additionally, the study sheds light on the impact of e-WOM and the role of expectation confirmation in shaping satisfaction and loyalty. Armed with this knowledge, consumers can navigate the online marketplace more effectively, align their choices with their preferences and needs, and make well-informed decisions.

Lastly, the study contributes to the advancement of academic literature in the fields of consumer behaviour, marketing, and customer relationship management. This study enriches the existing body of knowledge by integrating the Expectation Confirmation Theory (ECT) and the Theory of Consumption Values in the context of OTAs (OTA-TCV) to examine e-satisfaction and e-loyalty from the online-to-offline-to-online (O2O2O) mode, acknowledging the halo effect, where consumers transfer their offline experience to the online environment. Furthermore, the COVID-19 pandemic has caused a significant shift in consumer preferences toward online platforms. As this study delves into the specific context of Malaysia, it generates new empirical data and insights that can enrich the academic literature on consumer behaviour in the post-pandemic era. The findings can be used by researchers and scholars to compare and contrast consumer behaviour trends between different countries or regions.

In summary, this study's contributions extend to the government policymaking, industry practices, individual decision-making, and the advancement of the academic literature. It offers valuable insights and knowledge that can be used to shape policies,

improve industry practices, empower individual consumers, and contribute to the enrichment of research in consumer behaviour, marketing, and customer relationship management.

1.7 Scope of the Study

This study investigates the relationship between consumption values, perceived risk, e-WOM, expectation confirmation, e-satisfaction, and e-loyalty among users of OTAs in Malaysia. It focuses on understanding Malaysian consumers' preferences, expectations, and behaviours regarding OTA accommodation bookings. To ensure the selection of appropriate participants, a "screening process" was implemented to verify that individuals met the predetermined criteria for inclusion in this study. The primary data collection method involved a questionnaire survey, designed to gather information related to participants' perceptions of values and risks associated with using OTAs, their reliance on e-WOM, the confirmation of their perceptions of the OTAs, satisfaction with OTA services, and their loyalty toward the OTAs. A total of 271 Malaysian OTA users participated in the survey, with 4 straightliners identified, resulted in 267 valid responses for analysis. This exceeds the minimum required sample size of 172 as determined by G*Power and Kline (2022) recommended sample-size-to-parameter ratio of 20:1. The respondents are Malaysian OTA users who had made accommodation bookings through an OTA within the past year and regularly engaged in reading online reviews, were involved in testing the framework.

This study is essential for both the tourism industry in Malaysia and the broader OTA market, as it offers valuable insights into consumers' preferences and expectations. Additionally, it sheds light on the factors influencing e-satisfaction and e-loyalty toward OTAs, which are crucial for OTAs aiming to enhance their services and retain loyal customers. Furthermore, understanding the dynamics of the Malaysian market provides

valuable information for businesses to adapt and thrive in the competitive digital age of travel bookings.

1.8 Definitions of the Key Terms

The definitions of the key terms are central to the investigation of this study. Concise and clear definitions ensure a shared understanding and facilitate meaningful discussions and interpretations. Ultimately, this study aims to contribute valuable insights to the field by grounding the research in well-defined concepts and phenomena derived from an extensive literature review. A total of ten key terms have been identified and defined as follows:

e-Loyalty - A strong dedication towards an e-commerce platform, resulting in repetitive purchasing and consistent engagement in positive word-of-mouth, even in the face of marketing efforts by competitors (Chang et al., 2019).

e-Satisfaction - The customers' positive feelings towards the accommodations booked via OTAs (Li et al., 2021).

Expectation Confirmation - The extent to which the initial expectations formed during online booking, is fulfilled by the physical confirmation of the services provided (Chang et al., 2019, Li et al., 2021).

Monetary value – The economic benefits derived from the products purchased (Chang et al., 2019).

Quality of benefits value - The consumers' assessment on the convenience, reliability in providing benefits, and consistency in delivering high-quality benefits of the product or services (Talwar et al., 2020b).

Social status value - The ability of the product purchased from e-commerce to enhance social acceptance, approval, perception, and impression (Huang & Lan, 2021, Chang et al., 2019).

Information value - The completeness and relevance of the product information provided on the e-commerce platforms (Sharma et al., 2022).

Preference value - The flexibility (Phonthanakitithawor et al., 2021) associated with the product purchased through e-commerce.

Perceived risk - Subjective evaluation of the potential negative consequences when purchasing a product (Li et al., 2020).

e-WOM - A method to exchange or express consumer-generated opinions on the Internet, which is typically directed towards other users (Martínez-Navalón et al., 2021).

1.9 Organisation of the Study

This study is organised into five chapters to systematically address the research objectives. Chapter 1 serves as the introduction and sets the stage for the study. It provides the background of the research, defines the problem statement, outlines the research questions and objectives, and highlights the significance of the study. The scope of the research is also explained, along with the definition of key terms used throughout the study. Additionally, Chapter 1 presents an overview of the organization of subsequent chapters.

Chapter 2 is dedicated to the literature review. Here, the existing body of knowledge related to the research topic is thoroughly examined. It includes a review of relevant theories including ECT and OTA-TCV, conceptual frameworks, and the development of hypotheses. This comprehensive literature review lays the foundation for the research and helps contextualize the findings within the existing scholarly discourse.

Chapter 3 delves into the research methodology. This section details the research design, the chosen sample and procedure for data collection, and the development of the research questionnaire. The pre-test and pilot study process are discussed to ensure the validity and reliability of the questionnaire. Moreover, this chapter explains the statistical tool including SPSS 29.0 and SmartPLS4.0, as well as statistical analysis techniques that will be employed to analyse the collected data.

Chapter 4 is dedicated to the presentation and analysis of the study's findings. The results obtained from the data analysis are thoroughly presented, and their implications are discussed in the context of the research questions. The chapter offers insights into the study's key findings, drawing connections between the results and the research objectives. Moreover, it explores the implications of these findings for organizational behaviour and job performance.

Finally, Chapter 5 serves as the conclusion and recommendations section. It provides a concise summary of the research findings and revisits the research questions and objectives. The implications of the study are discussed, highlighting their potential impact on the field. Moreover, the study's limitations are acknowledged, and recommendations for future research are proposed, offering suggestions for further investigation and advancement in the domain.

Overall, this organized structure ensures a coherent and comprehensive exploration of the research topic, fostering a better understanding of the phenomena under investigation.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

In this chapter, the relevant literature concerning the variables under this study will be reviewed. The research and theories associated with these variables will be explored. Subsequently, the conceptual framework will be established. Finally, this chapter will outline the formulation of hypotheses derived from the conceptual framework.

2.2 Online Travel Agencies (OTAs)

As e-commerce has evolved, business strategies have shifted from exclusively focusing on online channels to adopting a hybrid approach known as the Online to Offline to Online (O2O2O) mode (Chang et al., 2019). The emergence of OTAs has transformed traditional travel products into online commodities (Tao, 2022). In the O2O2O mode, both online and offline channels work together to attract customers. OTAs, operating in the online channel, enabling customers booking accommodations either through their websites or apps and subsequently visit the accommodations, which represent the offline channel, to experience the offline services (Chang et al., 2019).

The online travel market has seen significant growth in recent years. In 2023, the global online travel market size reached US\$ 600.5 billion (Global Market Insights, 2024). This market is projected to grow at a compound annual growth rate (CAGR) of 7% from 2024 to 2032, reaching an estimated US\$ 1.1 trillion by 2032 (Global Market Insights, 2024). This substantial growth highlights the increasing importance of OTAs within the broader travel industry and underscores the need for continued research into factors influencing their success.

For OTAs, Internet has been used as a marketplace as travel services are provided purely online (e-commerce) which is “Hi Tech-Low Touch” agencies (Psefti et al., 2021). Unlike hybrid agencies, the OTAs do not own any hotels themselves. Instead, they function as platform that aggregate information from various hotels, offering customers a wider range of choice and options, enabling customers to compare prices, discounts, and customer reviews (Chang et al., 2019).

There are two primary categories of OTA business models: Merchant and Agent. The distinction between the two lies in the payment process. In the Merchant model, the OTA handles online payments directly on its website. In contrast, in the Agent model, the customer pays at the hotel upon check-in, with revenue shared between the hotel and the OTA. Some OTAs may use a combination of these two sub-types. Notable examples of OTAs include Expedia, Booking.com, MakeMyTrip, and CTrip (Perelygina et al., 2022).

In the context of OTAs, a wide array of theories have been utilised to understand the complex dynamics of consumer behaviour and decision making processes. For instances, uses and gratification theory (Cho & Agrusa, 2006; Brun et al., 2020), involvement theory (Cho & Agrusa, 2006), expectation confirmation theory (Chang et al., 2019; Xu, 2020; Serra-Cantalops et al., 2020), theory of consumption value (Talwar et al., 2020b; Fernandes, 2017), market signal theory (Xu, 2020; Lin & Lu, 2010), multi-attribute theory (Xu, 2020), innovation resistance theory (Talwar et al., 2020b), innovation diffusion theory (Aristio et al., 2019), theory of reasoned action (Zhang, 2021), theory of planned behaviour (Zhang, 2021; Wen, 2012), technology acceptance model (TAM) (Zhang, 2021; Ayeh et al., 2013; Assaker et al., 2020), social capital theory (Yang et al., 2016), stimulus-organism-response model (SOR) (Chen et al., 2022), motivation theory (Ayeh et al., 2013), credibility theory (Assaker, 2020), and cognitive response theory (Ip, 2018). In synthesising these theories, it

is evident that understanding consumer behaviour in the OTA context requires a multifaceted approach.

Previous research investigates various aspects of consumer behaviour including consumer satisfaction, attitudes, post purchase behaviour, repurchase intention, loyalty, future behaviour, and post purchase e-WOM. While most of these studies are conducted to investigate on the intention to purchase, it has been argued that the purchase intention being a poor predictor for actual behaviour (Rausch & Kopplin, 2021). While consumer intentions to book may reflect interest, they do not always translate into actual bookings (Rausch & Kopplin, 2021). This discrepancy highlights the importance of investigating e-loyalty as loyalty goes beyond mere intention and involves sustained engagement and repeat transactions. Despite various research done in the context of OTAs, although the online booking systems have brought about a revolutionary change to the process of accommodation booking, however, it is still highly stressful for consumers due to the considerable uncertainty they face as the abundance of available products and vast amount of information often leads to significant cognitive overload (Jo et al., 2021).

Initially, the research on OTA concentrates more on the online dimension on the websites due to the nature that it is emerged from the idea of e-commerce. For instances, Silva and Gonçalves (2016), Ye et al. (2016), Wang et al. (2017), Chang (2017), Albayrak et al. (2019), and Aristio et al. (2019), which mainly focused on investigating on the website quality and service quality of the OTA websites including the content, information, product, design, responsiveness, sorting option, usefulness, ease of use, privacy, price etc. These website quality dimensions were found to be significantly affecting e-loyalty towards OTAs. Besides, Assker (2020) also investigate the impact of the user generated content (UGC) on

OTA and found perceived usefulness and perceived ease of use having different impact on male and female OTA users' adoption of OTAs.

Recently, researchers have been investigating OTAs in the context of the O2O2O model, focusing on both online and offline dimensions, including studies by Chang et al. (2018), Chang et al. (2019), Huang et al. (2020), and Huang and Lan (2021). Chang et al. (2018) demonstrated that the quality of OTA websites directly impacts online satisfaction, while the emotional and social value derived from offline experiences at hotels influences offline satisfaction. However, this study does not establish a direct link between OTAs and accommodation providers. The O2O2O model intensifies competition between OTAs and accommodation providers. Chang et al. (2019) and Huang and Lan (2021) found that OTAs and hotels are competitors for customer loyalty, with a negative impact on the intention to rebook through OTAs affecting the intention to rebook through hotel websites. While OTAs facilitate accessibility between users and accommodation providers, accommodation providers may focus on enhancing offline experiences to attract returning customers.

Although these studies (Chang et al., 2019; Huang & Lan, 2021) effectively illustrate the competitive dynamics, existing research has not sufficiently addressed the potential benefits of collaboration between OTAs and accommodation providers. A notable gap remains in understanding how the confirmation of expectations regarding accommodations booked through OTAs influences consumer behavior toward OTAs. Further investigation into this collaborative dynamic could provide critical insights into how alignment between OTAs and accommodation providers might enhance overall e-satisfaction and e-loyalty.

The O2O2O model serves as the operational flow in attracting returning customers (Chang et al., 2019). In this study, the initial “online” phase involves forming expectations about accommodations through OTAs. The “offline” phase refers to the actual physical

experience at the accommodation, and the final “online” phase focuses on encouraging customers to rebook through OTA websites.

2.3 e-Loyalty

The adoption of digital technologies has decreased customer loyalty (Belhadi et al., 2023) due to the "one mouse click away" environment, where consumers can easily switch between different providers. Furthermore, Belhadi et al. (2023) revealed that excessive implementation of digital technologies may lead to unfavorable outcomes, as uncontrolled levels of digital adoption diminish their perceived value among buyers, who become increasingly skeptical about their accuracy. Considering that customers are rational individuals, customer loyalty does not occur automatically; instead, it involves a series of processes that develop over time (Albayrak et al., 2019).

In the context of loyalty towards OTAs, several studies have been conducted, including Albayrak et al. (2019), Cui et al. (2018), and Rizal et al. (2020). These studies highlight the importance of website quality (Albayrak et al., 2019; Cui et al., 2018) and online communication (Rizal et al., 2020) in building trust and satisfaction, which are crucial for achieving e-loyalty in the OTA industry. Additionally, Zhu et al. (2022) emphasized the significance of website credibility in shaping users' attitudes and loyalty towards OTAs.

Apart from e-loyalty, repurchase intention towards OTAs has also been explored in various studies, including those by Chang et al. (2019), Huang and Lan (2021), and Zhou et al. (2022). Website service quality (Chang et al., 2019), information quality, and system quality (Huang & Lan, 2021) were identified as important indicators of repurchase intention through OTAs. Similarly, Zhou et al. (2022) found that perceived usefulness, perceived ease of use, and perceived enjoyment positively influence repurchase intention. While these

studies provide a comprehensive understanding of how website-related factors influence e-loyalty, they primarily focus on the capabilities and attributes of OTA websites themselves. There is a lack of investigation into how physical experiences at the accommodation affect users' loyalty towards the platform. In Malaysia, where hospitality is deeply ingrained as a core aspect of the nation's identity (Kutty, 2024), consumers expect not only seamless online experiences but also outstanding physical experiences at their chosen accommodations. As OTAs serve as intermediaries between consumers and accommodation providers, it is important to examine how the physical confirmation of expectations regarding accommodations booked through OTAs influences consumers' satisfaction and subsequent behavior towards OTAs. Therefore, this study investigates e-loyalty towards OTAs by considering the confirmation of Malaysian OTA users' expectations of the accommodation booked through OTAs from the O2O2O model.

2.4 e-Satisfaction

Satisfaction leads to loyal customers who tend to share positive word of mouth (Nasir et al., 2021) and repurchase intention as satisfied customers tend to share their positive experiences with their relatives and friends, effectively providing free advertisement and promotion (Wang et al., 2017). To deliver a satisfying purchasing experience, it is essential for customers to perceive that their needs have been met or even exceeded by the company (Mwiya et al., 2022). Customer satisfaction has been the core of the marketing concept (Serra-Cantalops et al., 2020). In the e-marketing literature, satisfaction is a term referring to an assessment of how well products or services provided by an organisation meet the needs of consumer (Ehsani & Hosseini, 2023).

In determining satisfaction, the Expectancy Confirmation Theory (Oliver, 1980) posits that expectations play a crucial role as they serve as the baseline for consumers to

form evaluative judgments about the particular product or service (Bhattacharjee, 2001). The Expectation Confirmation Theory (ECT) assesses consumer satisfaction through pre-purchase expectations and post-use performance or usability comparison (Rahi & Ghani, 2019). Positive confirmation of pre-purchase expectation, where perceived performance surpasses the pre-purchase expectation, will positively influence consumer satisfaction (Eren, 2021).

Customer satisfaction holds paramount importance on customer loyalty, as unsatisfied customers may choose to abstain from making any purchases with the OTAs. The level of customer satisfaction serves as a critical factor in evaluating the business's market relationship and guiding its operational policies and processes (Sharma et al., 2022). In the context of O2O2O mode, Wang et al. (2017) distinguished between satisfaction with technology-enabled services and overall satisfaction. In their study, they identified the quality associated with the technology-enabled services as the factor contributing to the satisfaction with the technology-enabled services. This, in turn, was found to influence overall satisfaction. According to Wang et al. (2017), satisfaction derived from a website can be attributed to various aspects, including the websites' features, vendors, products, or services linked to it.

When it comes to travel experiences, technology-enabled services are often considered peripheral rather than central features, but they still play a significant role in shaping travellers' overall satisfaction. This influence can be observed during various stage of the trip, encompassing experiences before, during and after the journey. Masri et al. (2020) defined customer satisfaction as perceived value of the information system provided by the service provider and this is referring to the online satisfaction, which can be referred to Wang et al.'s (2017) technology-enabled service satisfaction.

Chang et al. (2018) explored satisfaction in the context of the O2O2O model by distinguishing between online satisfaction and offline satisfaction. In their study, online satisfaction is influenced by the quality of the OTAs' websites, which includes system quality, information quality, and service quality. On the other hand, offline satisfaction is influenced by the perceived value provided by the service providers. Online satisfaction and satisfaction with OTA websites have been widely investigated, including by Huang et al. (2020), Li et al. (2021), Ahmad and Sharma (2023), and Wu and Riantama (2022). In contrast, Huang and Lan (2021) examined offline satisfaction by referring to it as customers' feelings toward the hotel services they experienced. Their study demonstrated that offline satisfaction significantly affects customers' staying intention, which in turn influences rebooking intentions through both OTA websites and hotel websites. This finding underscores the importance of aligning the offline accommodation experience with e-satisfaction.

While these studies have significantly contributed to understanding satisfaction within the context of OTAs, it is notable that most research has focused on satisfaction related to website quality (Huang et al., 2020; Li et al., 2021; Ahmad & Sharma, 2023; Wu & Riantama, 2022). Although satisfaction has been shown to impact repurchase intentions through OTAs (Huang & Lan, 2021), there is a lack of investigation into the factors that influence satisfaction itself. This study aims to address this gap by examining how the physical confirmation of accommodations booked through OTAs impacts e-satisfaction and e-loyalty towards OTAs.

In Malaysia, where consumer expectations are influenced by cultural standards of hospitality (Kutty, 2024), it is essential that e-satisfaction accounts for the seamless integration of online booking experiences with actual accommodation quality. The halo

effect is acknowledged, where OTA users transfer their offline experience to the online environment. A satisfying offline experience impacts users' satisfaction with the OTAs. As a result, in this study, e-satisfaction is positioned between online satisfaction and offline satisfaction, creating an integrated satisfaction concept. This integrated satisfaction is based on customers' feelings that emerge after comparing the offline performance of the accommodation with the expectations formed while booking the accommodation online. Therefore, e-satisfaction is defined as customers' feelings toward the perceived difference between their prior expectations and the offline performance of the accommodation booked via OTA.

2.5 Expectation Confirmation

As the evolution of e-commerce, businesses have started to embrace the combination of online and offline channels, which is also known as the O2O2O mode. In this O2O2O mode, both online and offline channels cooperate in order to attract new customers (Chang et al., 2019). This model is particularly relevant in the Malaysian context, where both the digital and physical aspects of customer experience are crucial in influencing consumer behaviour. The OTAs allow Malaysians to make hotel reservation online through their websites and subsequently experience offline services when they visit the hotels. After experiencing satisfactory offline services of the hotels, customers have the options to book the hotels either through the current OTA, other OTAs or hotel websites, therefore, in terms of customer retention, they may be competing with each other (Chang et al., 2019).

The idea of confirmation derived from the ECT proposed by Oliver (1980) which proposed that consumer satisfaction as the function of expectation and the confirmation of the expectation. From the psychological state, satisfaction occurs when the emotions related to disconfirmed expectations are combined with the consumer's prior feelings about the

consumption experience. The definition emphasises a psychological or emotional state that arises from the cognitive evaluation of the expectation-performance discrepancy (confirmation). Lower expectations with higher performance results in greater confirmation, leading to an increase in customer satisfaction and continuance intention to use the product or service. Conversely, when the reverse happens, causing disconfirmation, it leads to dissatisfaction and the intention to discontinue using the product or service (Bhattacharjee, 2001).

Bhattacharjee (2001) extended the ECT to comprehend the continuance intention in the context of information systems, developed the Expectation Confirmation Model (ECM). The ECM primarily focuses only on the post consumption phase while the pre-consumption expectation is encompassed within the confirmation and satisfaction components. In the ECM, confirmation is positively associated with the satisfaction with the information system usage as it signifies the realisation of the anticipated benefits from using the information system. On the other hand, disconfirmation of which the perceived performance falls short of the expectations, indicates a failure to meet those expectations (Bhattacharjee, 2001).

In the context of hospitality, Oh et al. (2022) has proven disconfirmation between customer expectations and actual experiences will result in customer dissatisfaction. The study highlights the necessity for hotel businesses to carefully address the discrepancies between the information provided by hotels with the actual services delivered to customers. This is particularly important for upscale hotels rated four to five stars as customers tend to have higher expectations in these establishments (Oh et al., 2022).

Chang et al. (2019) define confirmation as the customers' perceptions of the degree of alignment between their expectations of the offline services and the actual performance

delivered by the accommodation provider. The confirmation of the expectations of the services provided by the accommodation influences the intention to visit the accommodation. When the expectations are not confirmed, the customers are likely to switch to another accommodation (Chang et al., 2019) or even another OTA in the future. Their study highlights that the confirmation of the expectations has a significant impact on the customers' intention to visit the accommodations, subsequently affecting their intention to rebook through both OTA websites and hotel websites.

Li et al. (2021) applied the ECM proposed by Bhattacherjee (2001) to investigate the continuous usage of the chatbot services of the OTAs. In their study, post-usage confirmation was defined as the extent to which the initial expectations about the performance of the chatbot-based OTAs were fulfilled. While the ECM primarily focuses on the post-consumption expectation, their study integrates the ECM's information system concept. The study revealed positive associations between the chatbot quality and the post-usage confirmation, which subsequently contributed to the customer satisfaction and continuance usage of the chatbot-enabled OTAs.

Given the importance of confirmation in the online travel sector, understanding the dynamics of confirmation is therefore crucial for both OTAs and accommodation providers. In the context of O2O2O, customers often form their expectations based on the information provided by the OTAs before physically visiting the hotel. These expectations serve as a mental framework which will be guiding customer's perceptions and evaluations of the actual travel experience. When the customers visit the hotel, the offline experience would serve as a confirmation or disconfirmation of their initial expectation. The confirmation of expectations for O2O2O holds significant implications for customer satisfaction and loyalty. If their expectations are met or exceeded, it leads to confirmation which would eventually

results in their satisfaction. On the other hand, if the actual experience falls short of their expectations, it may result in disconfirmation, leading to dissatisfaction (Oliver, 1980). Therefore, in this study, the confirmation is defined as the extent to which the initial expectations formed during online booking, is fulfilled by the physical confirmation of the services provided.

2.6 Consumption Values

The Theory of Consumption Values (TCV) proposed by Sheth et al. (1991) suggests five values including functional value, conditional value, social value, emotional value, and epistemic value, with price and quality treated as part of the functional value. According to Sheth et al. (1991), functional value is the perceived usefulness derived from an alternative's ability to perform functional, utilitarian, or physical tasks. Social value refers to the perceived benefit gained from an alternative's connection to a specific social group which could be demographic, socioeconomic, or cultural-ethnic groups. Emotional value is the perceived benefit obtained from an alternative's ability to evoke specific feelings or affective states. Epistemic value refers to the perceived benefit obtained from an alternative's ability to evoke curiosity, provide novelty, and fulfil a desire for knowledge. Lastly, the conditional value is the perceived benefit gained by an alternative based on specific situation or circumstances faced by the decision maker.

By utilising the TCV framework proposed by Sheth et al. (1991) as the foundation, Talwar et al. (2020b) extended the generic TCV in the context of OTA using mixed methods approach. The research encompasses both open ended online survey of forty OTA users and closed ended questionnaires involving 809 OTA user, identified five key consumption values, namely monetary value, quality of benefits value, social status value, information values, and preference value. Notably, emotional value was not found to be a significant

factor influencing the intention to use OTAs. While these consumption values were initially linked to purchase intention, it is crucial to recognise that purchase intention may not always translate into actual bookings (Rausch & Kopplin, 2021). This highlights the need to explore beyond mere purchase intention and focus on sustained engagement and repeat transactions. Therefore, this study aims to investigate how these consumption values impact e-satisfaction and e-loyalty, providing a deeper understanding of the factors driving not just initial use, but continued patronage and loyalty in the OTA context.

2.6.1 Monetary Value

Monetary value focuses specifically on the financial or economic benefits derived from a product or service, considering reasonable pricing, price comparison, and promotional offers (Talwar et al., 2020b). According to Chang et al. (2019), monetary value refers to the economic benefits derived from utilising the package offered. Higher economic value is obtained when the costs is lower, or time or effort required is lesser. Chang et al. (2018) refers monetary value as the benefit derives from the product as a result of its perceived decrease in both short term and long-term costs.

In the realm of online products and services, it is widely observed that price has taken a backseat as a primary concern as the online platforms have made price comparison easier (Yang et al., 2021) leading to reference price effect among consumers (Wang et al., 2020). In general, online consumers anticipate lower prices compared to the traditional marketplaces, and online providers indeed offer more competitive pricing. This is largely as the online shopping environment incurs reduced overhead expenses and therefore is able to offer lower prices than brick-and-mortar stores (Wang & Wang, 2022). As a result, the OTA users are able to save money (Fang & Li, 2022) by booking flight tickets, accommodations, or car rental online.

In the context of tourism domain, customers often involve the choice regarding the destinations and accommodations for the first time, leading to perceived risks, especially when the cost is high. Elements such as location, events, and distinctive features can cause variations in the base prices of the accommodation units, along with fluctuations during different seasons (Pinto & Castro, 2019). In an online market, e-commerce has made it easier than ever for buyers to access product information, benefiting them by facilitating the flow of information (Hufnagel et al., 2022). Price comparisons has becoming easier on the Internet which increased the difficulty in attracting and retaining price sensitive consumers (Pandey et al., 2019). Notably, Malaysia is a market known for its price sensitivity (Aman, 2024), emphasising the importance of competitive pricing in influencing their behaviour.

Han and Bai (2022) identified four research themes in pricing research within hospitality and tourism context consisting of price promotion, reference price, price fairness and pricing strategy. Consumers tends to evaluate the service provided, which is the benefits, against their expectation and cost incurred (Uzir et al., 2021). While comparing prices of various services remains essential for consumers to make practical choices, relying solely on price may not be a reliable long-term predictor for booking intention. Therefore, additional factors such as promotions are indispensable to enhance consumer value (Sharma et al., 2022).

In the context of OTAs, promotions available such as price reduction and special offers of the day (Pinto & Castro, 2019). In Pinto and Castro (2019) cluster analysis, all three clusters including adventure seeker, budget tourists, and information seekers have ranked price as their most important concern in purchasing decision making in OTAs. The budget tourists believe that the OTAs provide better price and promotion than the hotels' websites. The filtering and sorting features allow users to sort the products based on different

categories, and sort the price of the products either from lowest or highest (Macakoğlu et al., 2022). Kim et al. (2023) experimental studies revealed a stronger inclination to select non-extreme or middle-attributed options when price was displayed sorted. While their study has demonstrated the impact of easy comparison on decision making, the importance of price in the decision making has also been proven indirectly.

Ray and Bala (2021) employed mixed method approaches comprising traditional and natural-language-processing based technique to examine the factors influencing usage intention of online food delivery services and OTAs. Both approaches consistently found price-benefits to be the major factors of usage intention for both online food delivery services and OTAs. In their study, price benefits refer to price-elasticity, discounts and promotion, and value for money.

Chang et al. (2018) examined the influence of monetary value on offline satisfaction for economy hotels, and surprisingly, no significant effect was found. This could be attributed to the low expectation associated with the economy hotels, thus highlighting the need to investigate of the role of expectations in this context. Furthermore, customers hold the belief that price reductions are primarily driven by pressure from OTAs rather than the hotels themselves. As a result, even when the monetary value appears to be favourable, customer satisfaction with the hotels remains low, with credit awarded to the OTAs (Chang et al., 2018). This observation suggests that while monetary value does not significantly enhance satisfaction with the accommodation, it may still be influential in the context of e-satisfaction, where the OTA' role is more prominent. Conversely, Chang et al. (2019) found monetary value significantly influences perceived value. However, the overall perceived value comprising functional, emotional, social, and monetary values, does not have significant impact on the intention to rebook through OTA platforms. This indicates a need

to further investigate the specific influence of monetary value on the e-satisfaction and e-loyalty towards OTAs, as it may interact differently with other value dimensions and consumer expectations.

2.6.2 Quality of Benefits Value

In marketing research, it is generally agreed that satisfaction and quality are highly interconnected, and quality is one of the main factors to determine satisfaction (Serra-Cantallops et al., 2020). Quality of Benefits Value was subdivided from the functional value of the generic consumption values proposed by Talwar et al. (2020b). It is measured by considering factors such as convenience, consistency in providing benefits, and continuousness in delivering superior benefits (Talwar et al., 2020b). Consumers tend to rely on the star rating of an accommodation as the higher star rating indicates higher quality (Nunkoo et al., 2020), which indicates the importance of quality. The experimental studies conducted by Kim et al. (2023) found heightened preference for non-extreme or middle-attributed options when quality is in a sorted format. The positive effect of quality sorting underscores the role of easy comparison and quality in decision making.

In the context of O2O2O mode, quality could be referring to the website quality or the accommodation quality, which can also be referred to as online service quality and offline service quality. Due to the nature of the services offered, consumers' quality assessment takes a comprehensive approach, considering all interactions that take place before, during, and after the service is delivered (Serra-Cantallops et al., 2020). Ju et al. (2019) distinguished three quality experiential components for the OTA context, consisting of the OTAs website, the accommodation provider, and the accommodation facility.

For OTAs users, they typically visit the OTAs websites to explore various lodging options and make online reservations. At this stage, the users are experiencing the website quality. When the travellers physically visit the accommodation, the accommodation provider plays crucial role to interact with the guests including the process of checking in and out and problem solving if any, and this is referring to the quality associated with the service provider. Lastly, the accommodation facility provided represents a significant dimension of the service quality of the accommodation as it is the main product of the OTAs (Ju et al., 2019). Serra-Cantallops et al. (2020) examine the service quality in relation to the accommodation consisting of the quality associated with the service provider and the facility. This dimension of service quality significantly and positively influences consumers' satisfaction.

The impact of service quality from the online dimension has been extensively studied and has shown a significant impact on the repurchasing intention through OTAs, as evident in Huang & Lan (2021) and Masri et al. (2020), and the intention to use OTAs, as seen in research by Talwar et al. (2020b) and De Vries (2022). Additionally, Chang et al. (2018) found that service quality of the OTA websites had a significant impact on online satisfaction, which subsequently influences the purchasing intention. However, it is noteworthy that the majority of these studies focus primarily on the service quality of the OTA websites themselves, with limited research addressing how the quality of accommodation affects e-satisfaction and e-loyalty. It is noteworthy that, apart from website quality, OTA users also consider the quality associated with the accommodations (Ju et al., 2019). This gap is particularly relevant in Malaysia, an upper middle-income economy where the growing affluent middle class increasingly drives demand for quality goods and services (International Trade Administration, 2024). This suggests a need for further

investigation into how the quality of benefits value, as experienced offline, impacts e-satisfaction and e-loyalty, thereby providing a more comprehensive understanding of factors influencing consumer behaviour in the OTA context.

2.6.3 Social Status Value

Chang et al. (2018) define social value as the benefit derived from an alternative's ability to enhance social self-conceptualization. Chang et al. (2019) refer to social value as the social approval and social impression gained from using a hotel package. Huang and Lan (2021) define social value as a product's ability to improve social self-concept. According to Shi et al. (2022), social value is derived from the opportunity for users to form social connections where they can share their experiences while using OTAs. The ability to share experiences enhances socialization among OTA users, which ultimately stimulates purchase intention (Shi et al., 2022). Malaysia is an incredibly diverse country, comprising various ethnicities, languages, and religions. This diversity is reflected in the social dynamics of the country, where there is strong acceptance of social hierarchies (Evason, 2016). In this context, social value plays a significant role in consumer behavior, especially in the OTA sector.

Chang et al. (2018) found that social value is one of the factors affecting offline satisfaction, which subsequently influences the intention to book and visit. This finding highlights the importance of social value in the context of satisfaction with accommodation, particularly in how it affects consumers' intentions to book and visit. In a subsequent study, Chang et al. (2019) observed that social value significantly influences perceived value. However, similar to monetary value, overall perceived value was tested against the intention to rebook through OTAs, but no significant impact was found. This finding suggests that

different components of perceived value may have varying levels of influence on repurchase intentions.

The lack of a significant impact of overall perceived value on e-loyalty, as noted by Chang et al. (2019), indicates the need for a more granular analysis of individual variables such as social value. While overall perceived value may not drive e-loyalty, specific elements like social value could have a more pronounced effect. The impact of social value on the intention to use OTAs has been demonstrated in studies such as Talwar et al. (2020b), as well as on rebooking through hotel websites (Huang & Lan, 2021), and on the intention to visit (Chang et al., 2019). However, the varying impact of social value on different outcomes suggests the need for further investigation into how social value influences e-satisfaction and e-loyalty. Understanding these nuances could provide valuable insights into enhancing customer retention strategies.

2.6.4 Information Value

In 2024, an impressive 97.4% of Malaysians had access to the internet. Among these users, 78.3% primarily used the internet to find more information (Howe, 2024). The Internet has become a vital source of vast information, providing online users with easy access to almost limitless data and allowing users to conduct transactions conveniently at any time. This abundance of information on the Internet has significantly indirectly influences users' information seeking behaviour (Mladenović et al., 2023). Sharma et al. (2022) has proven that furnishing detailed and relevant information had a positive impact on consumers' perception of the website quality, leading to increased satisfaction and ultimately influencing their purchasing decision making. In an online platform, comprehensive product information and accompanying photos will help customers to visualise the destination (Sharma et al., 2022).

The significance of investigating the pre-purchase phase of online travel shopping primarily stems from the unique attributes of travel products. Their intangible nature, referring to online booking and thereafter physically visit is needed for services, such as when booking a hotel room in a foreign country online makes them challenging (Shi et al., 2020) to assess prior to purchase. Furthermore, the inseparability of production and consumption in travel services means that they are typically non-returnable once consumed (Lin et al., 2009). Therefore, consumers typically spent significant time and effort in evaluating pre-purchase product information (Nisar et al., 2020). Comprehensive product information and visual aids are essential in online channels as they enable customers to visualise the destination details (Chakraborty et al., 2023). Therefore, OTAs should persist in providing detailed accommodation-related information to the users, facilitating well-informed decisions that will align with their specific needs (Sharma et al., 2022). From the cluster analysis conducted by Pinto and Castro (2019), budget tourists ranked photos as one of the most important factors influencing their purchasing decision and give lesser concern with the online reviews. On the other hand, information seekers give more importance to price followed by online reviews.

Information value was incorporate into the OTA consumption values by Talwar et al. (2020b), replacing the epistemic value of the generic TCV. Epistemic value was defined by Sheth et al. (1991) as the perceived value obtained from an alternative's ability to stimulate consumer's curiosity, offer something new and different, and satisfy their desire to acquire knowledge. It is referring to the inherent value associated with the acquisition of new information and knowledge (Sheth et al., 1991). While the epistemic value focuses more on the intellectual or cognitive aspects of the value, information value, on the other hand, focuses more on the practical and functional aspects of the information acquired through

OTA such as offers, promotions, and terms and conditions (Talwar et al., 2020b). Chang et al. (2018) refers information quality as being complete, easy to understand, personalised, relevant and secure.

De Vries (2022) conducted a comprehensive analysis by integrating OTA consumption values with six information dimensions to assess the quality of information provided by OTAs compared to hotel websites. The study revealed that OTA information consistently outperformed hotel websites, achieving a perfect score in half of the examined clusters. This finding highlights the superiority of OTAs in providing comprehensive and relevant information that meets consumer needs, underscoring the importance of maintaining high information quality, which plays a crucial role in shaping consumer perceptions and decision-making processes. Huang and Lan (2021) further support this by demonstrating that the information quality associated with OTA websites significantly influences repurchasing intentions through OTAs. The study emphasizes that detailed, accurate, and relevant information on OTA websites not only enhances the user experience but also fosters loyalty and repeat bookings. Chang et al. (2018) also found that information quality significantly affects online satisfaction, which subsequently influences the intention to purchase. However, there remains a gap between information and offline satisfaction. While the information presented online plays a significant role in shaping initial expectations, the physical experience at the accommodation may not always align with these expectations, leading to a potential discrepancy between online and offline satisfaction. This gap suggests that further research is needed to explore how OTAs can bridge this divide, ensuring that the information provided online is a reliable predictor of the offline experience.

2.6.5 Preference Value

In the context of OTAs, preference value encompasses conditions such as free cancellations, promotional incentives, and the availability of a wider range of accommodations offered by OTAs (Talwar et al., 2020b). In the evolving landscape of OTAs, the importance of preference value has become increasingly prominent, particularly in response to shifting consumer expectations and external uncertainties. Salem et al. (2021) investigated booking flexibility and cancellation policies among five-star hotels and found that policies often included free cancellation until 24 hours before arrival and flexible rescheduling. Additionally, pre-paid policies have been replaced by reservable options with pay-later arrangements, reducing consumer concerns about failing to get a full refund for cancellations (Gao & Bi, 2021). This shift reflects a broader understanding of the need to alleviate consumer concerns, particularly in uncertain times.

The demand for booking flexibility is especially significant among foreign travellers, as highlighted by Zhang and Fu (2020). Their research emphasized that the higher level of uncertainty associated with long-distance travel increases the importance of flexible booking options. The ability to cancel or reschedule without significant penalties is crucial, as it directly influences consumer behaviour toward OTAs. MacSween and Canziani (2021) further suggest that booking flexibility plays a critical role in reducing travellers' stress.

In the Malaysian context, booking flexibility is closely linked with consumer expectations around safety and sustainability, with 93% of Malaysian travellers prioritizing flexible arrangements (Business Times, 2023). This aligns with findings from Phonthanukitithawor et al. (2021), who noted that the demand for preference value has intensified post-pandemic, with OTAs focusing efforts on offering options that allow alterations without incurring extra costs. Amidst the health crisis, restoring customer

confidence is of utmost importance, and flexible booking options have been essential to the recovery of the hotel industry (Garrido-Moreno et al., 2021). Interestingly, Bigne et al. (2021) reveal that consumers prefer to book only one month in advance, despite OTAs offering better rates for bookings made 90 days in advance. This finding suggests that variables beyond price, such as booking flexibility options, play a key role, as consumers face a trade-off where they can save money by booking well in advance but risk the uncertainty that might arise between the booking and arrival dates. While price remains a critical factor, the ability to provide preference value is increasingly shaping consumer behaviour in the OTA market. This trend is particularly pronounced among Malaysian travellers, who now prioritize safety, flexibility, and sustainability in their travel choices. As the industry continues to evolve, understanding these dynamics will be crucial for OTAs seeking to enhance e-satisfaction and e-loyalty.

2.7 Perceived Risk

In modern society, the level of risk is significantly increasing, leading to a gradual rise in public attention and awareness towards these risks (Yuan et al., 2021). Due to the information asymmetry and variations in consumers' subjective perceptions, individuals have become highly sensitive to risks (Boubaker et al., 2021). Consumer behaviour is inherently risky, as any decision or action taken by the consumer may lead to outcomes which are unpredictable and to some extent, undesirable (Sutinen et al., 2021). These consequences cannot be anticipated with a high level of certainty, and there is a likelihood that some of them will be unfavourable, therefore, risk implies subjective expectation of a loss (Sánchez-Cañizares et al., 2020).

In Malaysia, the high prevalence of online scams, with 34,497 cases reported in 2023 resulting in losses of RM1.218 billion (Bernama, 2024), highlights the significant impact of

perceived risk on consumer behaviour, particularly in the OTA context. Perceived risk refers to the subjective evaluation of the potential negative consequences when purchasing a product (Li et al., 2020). Different levels of risk perception can arise among individuals in the same risky situations (Li et al., 2020). Subjective knowledge, perceived control, benefit perception, and initial negative attitude has been significant in shaping the risk perception (Nardi et al., 2020). An increase in the amount of objective information acquired would lead to a reduction in perceived risk, while an increased in the amount of subjective information would increase the risk perception (Manika et al., 2021).

Yu et al. (2021) identified four components of risk: physical, psychological, financial and performance. In addition, privacy, time, and social were also identified as components of risk for technology-based product (Featherman et al., 2021). Cui et al. (2016) identified two subjective dimensions of risks and seven objective dimensions of tourism perceived risk. Subjective dimensions of tourism perceived risk are physical characteristics and psychological processes. Physical characteristics are referring to demographical variables, geography, culture, etc. while psychological processes encompass various aspects such as attention, perception, the effect of representation, memory, and language skills. Objective dimensions, on the other hand, are physical (food poisoning or accidents), economic (unexpected cost incurred), equipment (equipment failure), social (change in attitude towards the purchaser), psychological (negative self-perception), time (waste of time) (Sánchez-Cañizares et al., 2020) and opportunity loss (missing out best alternative options) (Agarwal et al., 2023).

Perceived risk can be influenced not only by an individual's subjective level of risk perception, but also by the mode of shopping (Wu et al., 2020). In 1960s, before the advent of the Internet, Cox and Rich (1964) discovered that consumer perceived higher risk when

making purchases over the telephone. Similarly, in today's context, when consumers are engaging in the purchasing situations involving advanced technology, such as the Internet, they tend to become more vulnerable to risk (Yuniarti et al., 2022). The consumers perceived the risk associated with online shopping is higher than other modes of shopping (Wu et al., 2020).

In the digital age, individuals have the ability to access to vast quantities of information through diverse online platforms (Yuan et al., 2021). The new digital information environment provides fertile ground for stress and information overload, both of which can result in mistakes and misjudgements (Misra et al., 2020). In addition to the previously identified risks, security is a significant concern in online market, especially regarding online payment, particularly credit card transactions and the storage of the payment information. This concern extends to the practice of loading credit card details onto smartphones (Hossain et al., 2020).

Perceived risk can have a limiting effect on the connection between consumer satisfaction and loyalty. Several studies have consistently highlighted the negative impact of perceived risk on various consumer outcomes. Hien et al. (2024) found that perceived risk significantly and negatively affects purchase intention toward OTAs, a finding echoed by Sadiq et al. (2021), who also demonstrated that perceived risk negatively influences consumer attitudes and purchase intentions. The impact of perceived risk is not limited to attitudes and intentions; Sharma et al. (2021) reported that financial, privacy, and psychological risks significantly deter both Millennials and Baby Boomers from purchasing online. The negative impact extends to other crucial consumer outcomes. Timur et al. (2023) confirmed a similar relationship, showing that perceived risk negatively impacts repurchase intention. The findings of Wang et al. (2019) further reveal that perceived risk negatively

affects the confirmation of expectations, a vital precursor to satisfaction in the OTA context. Additionally, Tzavlopoulos et al. (2019) found that perceived risk negatively impacts satisfaction and perceived value.

Contradictory findings also emerge in the literature. For example, Faqih (2022) discovered that high perceived risk does not negatively impact behavioural intention in internet shopping in developing countries. Zhang (2021) revealed a negative impact of perceived risk on purchase intention through OTAs. However, Ray and Bala (2021) found an inconsistent relationship between perceived risk and usage intention. In the case of online food delivery, perceived risk was found to have no impact on usage intention, according to both quantitative analysis and Natural Language Processing (NLP) analysis. In the context of OTAs, quantitative analysis revealed that perceived risk has no impact on usage intention. However, NLP analysis revealed a significant positive impact of perceived risk on usage intention. These findings suggest that the relationship between perceived risk and consumer behaviour is complex and context-dependent, warranting further investigation. Perceived risk is a multifaceted concept with significant implications for consumer behaviour in the OTA context. While it generally exerts a negative influence on purchase intention, satisfaction, and loyalty, the relationship is not always linear or predictable. This complexity underscores the need for OTAs to carefully manage perceived risk, particularly in regions like Malaysia, where online scams are prevalent, to enhance e-satisfaction and e-loyalty.

2.8 e-WOM

Technological advancements have brought numerous benefits, such as the emergence of Electronic Word of Mouth (e-WOM), which has become a significant and potent tool for users seeking to share their insights, experiences, and emotions related to a product or service (Martínez-Navalón et al., 2021). e-WOM has emerged as a valuable

marketing communication tool for tourism industry due to its capacity to reach potential vacationers globally and influence their decision making (Kanje et al., 2020). Before embarking on a trip, people typically engage in researching content on various websites about different tourist destinations, hotel quality, and the hospitality industry as a whole. In the event of encountering a collection of negative or unfavourable comments on platforms like TripAdvisor, Airbnb, Booking.com, Expedia, or Agoda, it could have a detrimental impact on potential future customers (Martínez-Navalón et al., 2021).

E-WOM plays significant role in both travellers and the tourism-related businesses. The travellers rely on e-WOM for their decision-making while the businesses consider the e-WOM as a guidance for their business strategies (Kanje et al., 2020). The continuous growth of e-commerce platforms has further highlighted the importance of e-WOM, as it clearly influences consumers' purchasing decisions (Sharma et al., 2022). Recent systematic review performed by Carvalho and Alves (2023) revealed the importance of customer value co-creation in addition to the satisfaction and loyalty from the consumers' perspective. Customer value co-creation enables individuals to actively participate and contribute significantly to the innovation process within organisation. Therefore, businesses are urged to adopt various approaches to encourage content sharing by the customers (Carvalho & Alves, 2023).

In today's digital era, the Internet provides consumers with the ability to share their opinions and experiences about products and services with a wide range of other consumers, which facilitates electronic word-of-mouth (e-WOM) communication. As it is convenient and able to achieve significant outreach among consumers, allowing for anonymous exchange of information without geographical constraints (Tran & Strutton, 2020), it is

considered to be more impactful in influencing consumer perceptions as compared to traditional word-of-mouth.

Martínez-Navalón et al. (2021) defines e-WOM as a method to exchange or express consumer-generated opinions on the Internet, which is typically directed towards other users. The e-WOM plays a crucial role in the context of OTAs as it significantly impacts customer satisfaction and decision-making processes. When potential travellers are reading the reviews and comments, consumption utility derived. Approval utility further reinforces positive e-WOM, whether through informal praise from other users or formal rankings implemented by OTA operators, which boosts consumer confidence and trust in the platform. Moreover, the moderator-related utility has been essential in addressing dissatisfying experiences where the involvement of moderators is able to resolve complaints and facilitate smooth interactions which would then enhance satisfaction and trust among the consumers. Lastly, homeostasis utility allows consumers to restore balance by sharing comments and feedback, which would contribute to improve satisfaction and serve as a guideline for the OTAs to make necessary improvements to better serve their customers.

In the service sector, word of mouth has emerged as a significant factor in shaping customer behaviour and formulating marketing approaches (Lee et al., 2022). From Mukhopadhyay et al.'s (2022) study identified three themes from the past research in the hospitality or tourism field related to e-WOM, including e-WOM and behaviour, e-WOM and social media, and e-WOM as a marketing tool. The e-WOM communications are important especially in the absence of personal experience. This is particularly true for travellers who are booking accommodations through OTAs where they have never stayed before. For the accommodations they have no personal experience with, they heavily rely on

the online reviews posted by the fellow members of the travel community within the OTA platforms.

The role of customer-generated-content, particularly through customer value co-creation and e-WOM has become increasingly significant in influencing satisfaction and loyalty in the online travel industry. Several studies have highlighted the importance of these factors in shaping consumer behaviour and decision making. Carvalho and Alves (2023) demonstrated that customer value co-creation, particularly involving content sharing by customers, has a favourable influence on travellers' loyalty. This finding aligns with Martínez-Navalón et al. (2021), who revealed the critical role of e-WOM in enhancing e-satisfaction. Further supporting these insights, Oh et al. (2022) revealed that review comments had a more significant impact on customer satisfaction than hotel images and information, underscoring the power of customer feedback in the decision making process. These findings collectively emphasise the importance for service providers to actively consider and analyse customer reviews to enhance service quality and achieve higher levels of customer satisfaction. Lopes et al. (2023) further suggested that the businesses should respond to the e-WOM on timely manner especially when it is negative, as responding to the feedback typically leads to a more positive results than choosing not to respond, regardless of the approach employed.

Online reviews play a significant role in shaping consumers' purchasing intentions in an online channel, leaving a lasting impression in their minds. In Malaysia, consumers are increasingly reliant on online reviews as a key information source, with website reviews accounting for 36.36% as the leading information source (Statista, 2023c). Having access to online reviews adds value to consumers' experience (Sharma et al., 2022). However, Belhadi et al. (2023) found that some consumers opt to block the reviews' toolbar due to the concerns

about the reliability of the reviews. Their study indicates a decline in the value of digital-driven e-WOM as consumers become reluctant to take reviews when making purchasing decision, owing to the possibility of suppliers abusing digital technologies, such as artificial intelligence (AI), to create counterfeit reviews that closely resemble authentic content written by real individuals. These findings suggest that while e-WOM play a crucial role in influencing consumer behaviour, their impact is complex and multifaceted. The potential for abuse of digital technologies poses a significant challenge to the reliability of online review, which in turn, affect consumer trust and decision making. Therefore, OTAs need to maintain the authenticity and trustworthiness of online reviews to sustain their influence on e-satisfaction and e-loyalty.

2.9 Underlying Theories

This study is supported by two underlying theories, namely, Expectation Confirmation Theory (ECT) and Theory of Consumption Values in the context of OTA (OTA-TCV). ECT is applied for confirmation, e-satisfaction, and e-loyalty while OTA-TCV is adopted as independent variables including monetary value, quality of benefits value, social status value, information value, and preference value.

2.9.1 Expectation Confirmation Theory (ECT)

In 1980, Oliver proposed the ECT which is also known as Expectation-Disconfirmation Theory (EDT). The ECT is presented as a theoretical framework for the understanding of customer satisfaction. The framework includes mainly three components: expectations, performance perceptions, and disconfirmation as shown in Figure 2.1. Based on the ECT, consumers form initial expectations about a product or service before purchase decision making (Oliver, 1980). These expectations are formed based on various sources

such as product information media reports, feedback from previous users, and other relevant sources of information (Premkumar & Bhattacharjee, 2008).

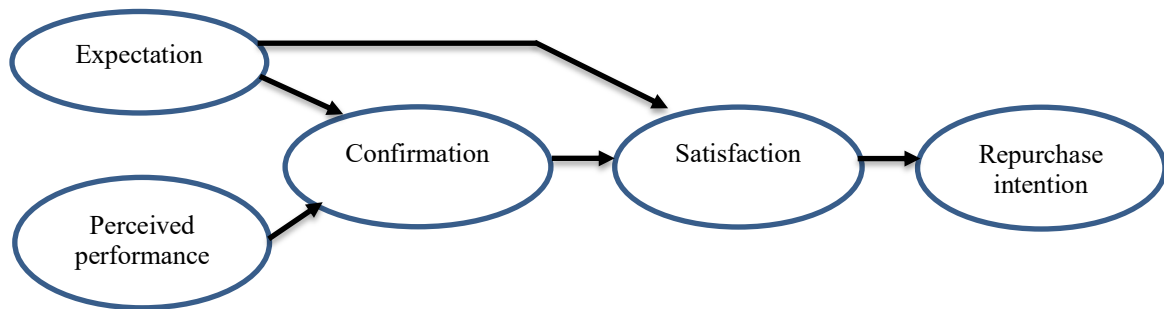


Figure 2.1: Expectation Confirmation Theory
Source: Bhattacharjee (2001).

By adapting the ECT developed by Oliver (1980), Bhattacharjee (2001) developed an Expectation Confirmation Model (ECM) for information system (IS) continuance intention. While the ECT focuses on the pre-consumption expectation, the ECM focuses only on post-consumption expectations. In the ECM, it is assumed that the pre-acceptance variables are already captured within the confirmation and satisfaction constructs and post-consumption expectations will change over time. The post-consumption expectations is presented as perceived usefulness in the ECM adapting the Technology Acceptance Model (TAM) developed by Davis et al. (1989).

Following the formation of expectation, once consumers perceive the product as valuable and useful, they purchase and use it. After using the product, perceived performance is formed (Hossain & Quaddus, 2012). Consumers would then assess the perceived performance of the product based on their initial expectations (Hossain & Quaddus., 2012) which will be serving as a baseline to evaluate disconfirmation. When the product or service performed better than expectation, it results in positive disconfirmation. Conversely, if the evaluation of the product or service fall short of expectations, a negative disconfirmation

occurs. When the performance of the product or service matches the expectation, it would be labelled as simple confirmation (Hossain & Quaddus, 2012).

When all other factors are held constant, the higher expectations tend to result in higher satisfaction judgement and vice versa (Hossain & Quaddus, 2012). Positive disconfirmation brings pleasure and enhance the level of satisfaction while negative disconfirmation will lead to disappointment which would reduce the level of satisfaction (Hossain & Quaddus, 2012). Simple confirmation, on the other hand, serves to maintain the existing level of satisfaction without any significant changes (Hossain & Quaddus, 2012). Ultimately, satisfied consumers may develop an intention to repurchase while on the other hand, dissatisfied consumers may discontinue using the product and seek alternative options (Hossain & Quaddus, 2012).

ECT has been widely adopted to examine satisfaction and continuance intention to use in various context. For instance, Choi et al. (2021) applied ECT to mobile apps, Mahmud et al. (2021) to medical tourism, and Mamun et al. (2020) to information systems. In a recent study, Oh et al. (2022) integrated ECT with a deep learning model and applied it in the hospitality sector. Their research examined the influence of online customer review comments, hotel information and images to customer satisfaction. For OTAs, Chang et al. (2019) adopted ECT along with cost-benefit analysis, halo effect, and multiple channel effect to examine the variables affecting continuance intention to re-book through hotel websites and OTAs.

In the context of OTAs, the Online to Offline to Online (O2O2O) mode plays a pivotal role in shaping travelers' expectations and behaviors. In this study, the initial "online" phase involves Malaysian travelers forming expectations about accommodations through OTAs. During this phase, as they browse on their computers or mobile OTA apps,

travelers develop expectations regarding the accommodation, including anticipated values, perceived risk, and e-WOM. The next stage, the “offline” phase, occurs when travelers check in and physically visit the accommodation they booked online. This phase provides an opportunity to confirm or disconfirm the expectations formed during the initial “online” phase, particularly concerning value, risk, and e-WOM. Following the “offline” experience, the final “online” phase focuses on encouraging customers to rebook through OTA websites. At this stage, the confirmation of expectations during the previous “offline” phase influences their e-satisfaction and e-loyalty toward OTAs. To explore these dynamics, this study employs the Expectation Confirmation Theory (ECT) developed by Oliver (1980) to investigate whether consumers' expectations of value, risk, and e-WOM are confirmed by their actual experiences, ultimately leading to satisfaction and loyalty. This study aims to provide a comprehensive understanding of how the confirmation or disconfirmation of these expectations impacts e-satisfaction and e-loyalty.

2.9.2 Theory of Consumption Values (TCV)

The Theory of Consumption Values (TCV), developed by Sheth et al. (1991), is based on three essential propositions. First, consumer choice is determined by the presence of various consumption values. Second, each consumption value has a different impact on the decision-making process. Lastly, each consumption value is independent of the others (Sheth et al., 1991). The theory identifies five consumption values: functional value, social value, emotional value, epistemic value, and conditional value (Sheth et al., 1991).

Since the introduction of TCV, researchers have modified these values by using them as a baseline to suit various contexts, such as hospitality (Talwar et al., 2020b), green consumption (Roh et al., 2022; Kushwah et al., 2019; Amin & Tarun, 2021), mobile apps (Kaur et al., 2021; Tandon et al., 2021; Chakraborty & Paul, 2023; Rakshit et al., 2021), and

mobile payment (Zhang et al., 2023). In addition to extending TCV to different contexts, researchers have integrated it with other theories or frameworks, such as the Theory of Planned Behaviour (TPB) (Raskshit et al., 2021; Nekmahmud et al., 2022), innovation resistance theory (Kushwah et al., 2019), and the Cognitive-Affective-Behaviour (C-A-B) model (Zhang et al., 2023).

Recently, Talwar et al. (2020b) extended the generic TCV to the context of OTAs, creating the OTA-TCV. Based on a qualitative study, five distinct consumption values specific to OTAs were identified, as shown in Figure 2.2. These values are similar to the generic TCV in terms of social value, epistemic value, and conditional value. However, functional value was subdivided into monetary value and quality of benefits value, while emotional value was removed, as it did not emerge as a key theme during the qualitative study.

Additionally, three of the generic consumption values were relabelled. First, epistemic value was renamed information value, which refers to the acquisition of information about various offers, promotions, and terms and conditions related to OTAs. Second, social value was renamed social status value, as consumers perceive that using OTAs cultivates a positive image and gains social approval. Lastly, conditional value was renamed preference value to account for factors such as free cancellations, promotions, and the wide range of options available through OTAs.

The OTA-TCV model was applied by De Vries (2022) to compare the consumption values between OTAs and hotel websites, with OTAs scoring perfectly in half of the clusters compared to hotel websites. However, this finding alone does not allow for a direct conclusion regarding the relevance of the OTA-TCV, as the study focused on evaluating the information content of OTA and hotel websites rather than specifically assessing the OTA-

TCV model. Therefore, further investigation is needed to determine the relevance and applicability of OTA-TCV. As a result, the perceived value component of this study employs the five OTA-related consumption values identified in the OTA-TCV model.

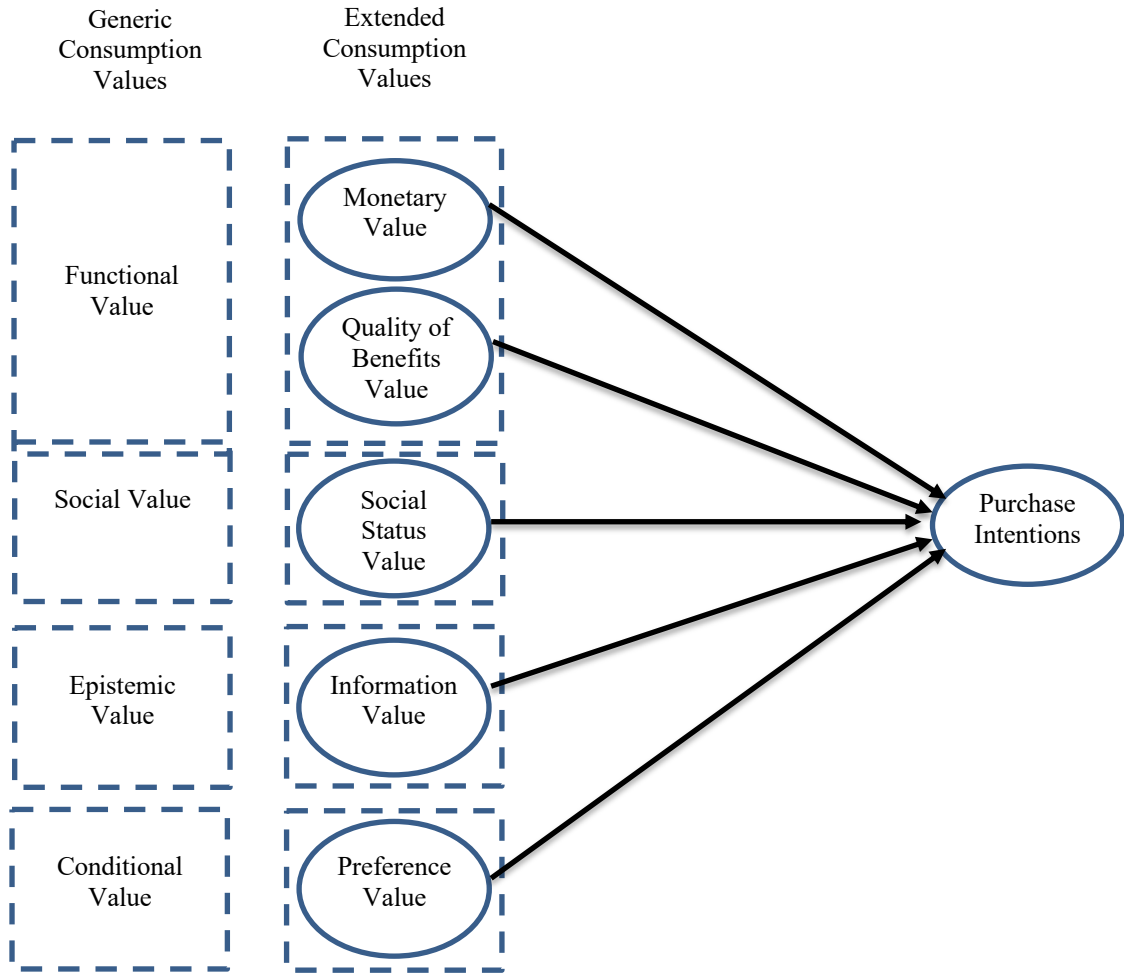


Figure 2.2: Theory of Consumption Values in the Context of OTAs (OTA-TCV)
Source: Talwar et al. (2020b).

The relevance of these consumption values is particularly evident in the Malaysian context. Malaysia is characterized by significant price sensitivity (Aman, 2024), highlighting the importance of competitive pricing in influencing consumer behaviour, which aligns with the relevance of monetary value. Furthermore, as an upper-middle-income economy, Malaysia’s increasingly affluent middle class drives demand for high-quality goods and

services (International Trade Administration, 2024), aligning with the quality of benefits value. The country's diverse social fabric, encompassing various ethnicities, languages, and religions, reflects a strong acceptance of social hierarchies (Evason, 2016), correlating with social status value. Additionally, with 97.4% of Malaysians having internet access in 2024 and 78.3% primarily using the internet to seek information (Howe, 2024), the information value is particularly pertinent. Lastly, preference value plays a crucial role, as 93% of Malaysian travellers prioritize booking flexibility linked to safety and sustainability (Business Times, 2023).

By applying the OTA-TCV framework to the Malaysian OTA market, this study seeks to explore how these consumption values—monetary, quality of benefits, social status, information, and preference—impact consumer satisfaction and loyalty. This approach not only contextualizes the theory within a specific market but also provides insights into the unique consumption behaviours of Malaysian travellers.

2.10 Conceptual Framework

In view of the facts and figures provided in the background of the study, along with past literature and theories, this study proposes a novel model for the online travel sector, integrating Expectation Confirmation Theory (ECT) and Talwar et al.'s (2020b) OTA-TCV. Additionally, this model incorporates perceived risk and e-WOM, as shown in Figure 2.3.

ECT posits that consumers form expectations before making a purchase and assess their experiences against these expectations to determine satisfaction and loyalty. This aligns with the initial "online" phase of the OTA-TCV framework, where travellers form expectations about accommodations based on various consumption values, including

monetary value, quality of benefits value, social status value, information value, and preference value.

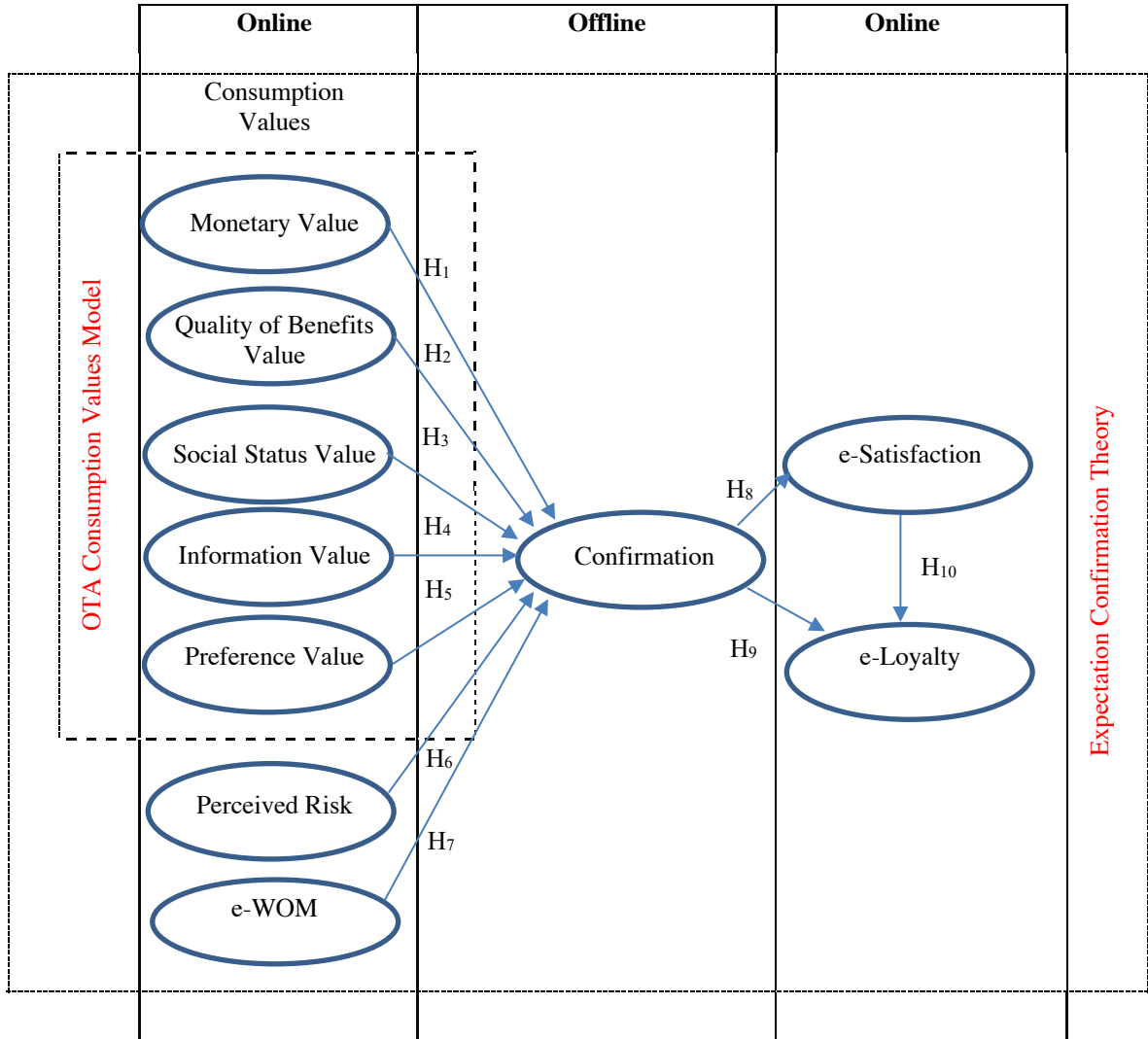


Figure 2.3: Conceptual Framework

In addition to these consumption values, this study integrates perceived risk and e-WOM into the framework. The high prevalence of online scams in Malaysia (Wilson et al., 2023) underscores the significant impact of perceived risk on consumer behaviour. Furthermore, the increasing reliance of Malaysian consumers on online reviews (Isa et al., 2023) highlights the crucial role of e-WOM in shaping consumer expectations.

As a result, this study examines nine independent variables: monetary value, quality of benefits value, social status value, information value, preference value, perceived risk, e-WOM, confirmation, and e-satisfaction. All of these independent variables are assumed to affect e-loyalty, which is the dependent variable in this study. By understanding these dynamics, both OTAs and accommodation providers can develop effective strategies to enhance consumers' loyalty.

2.10.1 Justification of the Conceptual Framework

The conceptual framework serves as the backbone of research study, providing structured and systematic approach to understand the interplay of variables and relationships under investigation. By integrating relevant theoretical models and previous research findings, the conceptual framework will guide the exploration of key constructs, such as consumption values, perceived risk, e-WOM, confirmation, e-satisfaction, and e-loyalty. The conceptual framework in this study is developed upon three rationales, which will be discussed below:

Firstly, purchase intention in TCV has been integrated with the intention to repurchase in the ECT and has been replaced by e-loyalty in this study as e-loyalty encompasses more than just repurchasing behaviour. It is an essential element for e-businesses such as OTAs to ensure long-term sustainability, encompassing not only the likelihood of future purchases but also emotional commitment and long-term customer retention. Understanding e-loyalty enables OTAs to develop strategies that ensure enduring customer relationships and higher lifetime value, which are crucial for long term success.

Secondly, perceived performance of the ECT has been omitted from this study, as it is already explained by the concept of confirmation. This aligns with the Expectation-

Confirmation model (ECM) developed by Bhattacharjee (2001). While the ECM emphasises post-acceptance variables, which are the expectations formed after consumer's usage, this study focuses on the O2O2O mode, where expectations are formed online before consumers are able to experience the accommodation offline. Therefore, confirmation becomes the primary concept as consumers can only confirm their expectations during their physical visit to the accommodation. As a result, the ECT is chosen as the theoretical framework for this study.

Thirdly, the expectation component of the ECT is replaced by consumption values comprising monetary, quality of benefits, information, and preference adopted from Talwar et al.'s (2020b) OTA-TCV model. Moreover, considering the high prevalence of online scams in Malaysia, perceived risk has been incorporated into the framework under the expectation component. Additionally, given the increasing reliance on e-WOM by Malaysian consumers, e-WOM has been integrated into the expectation component in this study. This conceptual framework illustrates the operational flow of e-loyalty development in an O2O2O mode. Expectations including monetary value, quality of benefit value, social status value, information value, preference value, perceived risk, and e-WOM are formed during the initial "online" phase. Following the physical visit to the accommodation in the "offline" phase, travellers are able to confirm or disconfirm the expectations they previously formed. These offline experiences then influence OTA users' satisfaction and loyalty towards OTAs in the final "online" phase.

The rationales behind the conceptual framework ensure that it addresses the unique characteristics of OTAs and their impact on consumer behaviour. By examining these constructs within the context of online bookings, this study aims to contribute valuable

insights to the existing body of knowledge, aiding OTAs and accommodation providers in enhancing e-satisfaction and e-loyalty.

2.10.2 Literature Gaps

After an extensive literature review, two highly impactful articles were selected in the context of OTAs: Chang et al. (2019) and Talwar et al. (2020b). As of 2nd September 2024, these articles have been widely cited, with 187 and 308 citations respectively. Chang et al. (2019) utilized the Expectation Confirmation Theory (ECT) to examine continuance intention to rebook via hotel websites or OTAs, incorporating cost-benefit analysis, the halo effect, and the multiple-channel effect in the context of the O2O2O model. On the other hand, Talwar et al. (2020b) extended the Theory of Consumption Values (TCV) to OTAs, identifying five specific consumption values relevant to OTAs to investigate users' purchase intentions. However, despite the valuable contributions of these studies, certain gaps still exist in the literature related to OTAs. Several gaps have been identified in this study, which will be discussed in the following paragraphs.

The current research on OTA in the context of O2O2O mode is limited (Chang et al., 2019; Huang & Lan, 2021). While overall impact of perceived value on the intention to rebook via OTA websites has been examined (Chang et al., 2019), the specific relationship between individual components of perceived value and the e-loyalty remains under-investigated, with scarce empirical evidence. Therefore, necessitate the need to thoroughly explore the relationship between individual components of perceived values and e-loyalty of OTAs within the framework of O2O2O mode. To address these gaps, this study investigates the impact of individual value components including monetary value, quality of benefits value, social status value, information value, and preference value on e-satisfaction and e-loyalty within the O2O2O mode. In this model, the expectations of these values are

formed during the initial “online” phase. During the “offline” phase, when consumers physically visit the accommodation, these expectations are either confirmed or disconfirmed. subsequently, the confirmation or disconfirmation of these expectations influences e-satisfaction and e-loyalty in the final “online” phase.

Past research investigating loyalty towards OTA has primarily focus on website quality (Albrayrak et al., 2019; Chang et al., 2017), source credibility (Zhu et al., 2022), perceived quality (Silva & Gonçalves, 2016), trust (Albrayrak et al., 2019; Wilis & Nurwulandari, 2020), with a focus on OTA websites themselves. However, there is a lack of examination of the relationship between consumption values of the accommodations listed in OTAs and e-loyalty towards OTAs. Furthermore, previous research on the impact of consumption values has mainly centred on examining the purchase intentions (Talwar et al., 2020b), leaving a gap in understanding the link between consumption values and e-loyalty. Additionally, the OTA-TCV model, which was developed recently (Talwar et al., 2020b), remains under investigated in the current body of literature, presenting an opportunity for further research in this area. Consequently, this study investigates e-satisfaction and e-loyalty towards OTAs from the perspective of services provided by accommodation providers. Furthermore, the OTA-TCV has been integrated with ECT, extending the investigation on purchase intention to e-satisfaction and e-loyalty.

While there is research conducted on OTAs using ECT to examine satisfaction (Xu, 2020; Antoni et al., 2020), little has been extended to the study of loyalty (Chang et al., 2019). Additionally, the confirmation component was often neglected (Xu, 2020). In the case where the confirmation component was incorporated, it is only used solely to investigate its impact on satisfaction (Chang et al., 2019). There is a lack of examination between the expectations and confirmation which would lead to satisfaction and loyalty.

Therefore, this study investigates the impact of each expectations including consumption values, perceived risk, and e-WOM on confirmation.

Following the growing significant of perceived risk, the impact of perceived risk remains complex and unpredictable (Sutinen et al., 2021). When it is generally argued that perceived risk will have negative impact on satisfaction and loyalty (Zhang, 2021). There are studies that have found positive or no impact (Ray & Bala, 2021). Therefore, there is a need to incorporate perceived risk into this study to investigate the relationship between perceived risk and confirmation, e-satisfaction, and e-loyalty. As a result, in addition to consumption values, perceived risk has been included as one of the expectations of OTA users in this study.

Lastly, the importance of e-WOM has been proved. Several studies have been conducted to investigate the willingness of consumers to leave an online review, types of perceived risk, and risk relievers. In the context of OTAs, there are studies conducted with e-WOM as a dependent variable (Aristio et al., 2019; Antoni et al., 2020) while the impact of e-WOM is under investigated (Krisana, 2019). While there is study conducted to investigate the impact of e-WOM on loyalty, however, the e-WOM has been tested individually. Furthermore, there are studies which found consumers opt to block the review toolbar due to doubt on the reliability and accuracy of the online reviews (Belhadi et al., 2023). Therefore, e-WOM has been incorporated alongside consumption values and perceived risk in this study to investigate their impacts on confirmation, e-satisfaction, and e-loyalty.

In this study, the expectations including consumption values, perceived risk, and e-WOM are formed prior to users' physical visits to the accommodations. During the stay of the accommodation, initial expectations are confirmed or disconfirmed, depending on

whether the expectations have been met or fallen short. If the initial expectations are met or exceed, positive confirmation will contribute to satisfaction, which would ultimately lead to loyalty to the OTA, and vice versa. Understanding how these factors interact and influence user behaviour is crucial for enhancing e-satisfaction and ultimately fostering e-loyalty.

2.11 Hypotheses Development

In this section, ten specific research hypotheses are formulated based on the relationships and associations identified in the literature review and conceptual framework. These hypotheses will serve as the foundation for testing the research questions and objectives of this study. Each hypothesis will articulate a clear and testable statement about the expected relationships between the variables under investigation. The conceptual framework of this study extends and challenges existing models by incorporating the O2O2O mode, which captures the continuous cycle between online and offline experiences. Unlike the existing models that treat online and offline phases independently whereby intention to rebook through OTAs were investigated solely based on the service quality of OTA websites, and the intention to rebook through hotels being explored through the perceived values of the accommodation (Chang et al., 2019; Huang & Lan, 2021), this framework offers a more integrated approach between OTAs and accommodation providers. It recognises that consumer expectations of the accommodation formed during the online phase, not only influenced by the initial online interaction but are also confirmed or disconfirmed during the offline experience. This cyclical and interconnected view challenges the linear perspective inherent in existing models, offering a more comprehensive understanding of how these experiences collectively shape e-satisfaction and e-loyalty towards OTAs.

2.11.1 Monetary Value and Expectation Confirmation

Monetary value derived from the assessment of the prices of the product or services being offered (Tandon et al., 2021). Previous studies have highlighted the importance of monetary value as a significant factor affecting purchase intention towards OTA. Talwar et al. (2020b) found functional value, including monetary value, significantly influences OTA users' perception. Chang et al. (2019) found functional value, pertaining monetary value (Tandon et al., 2021), significantly affect perceived value. While perceived value was found being one of the elements affecting the loyalty of both online and offline travel agencies customers from the study conducted by Silva and Gonçalves (2016). Masri et al. (2020) revealed that perceived value positively affects customer satisfaction, which in turn impacts the continuance intention among online travel users. Shi et al. (2022) revealed significant impact of functional value on purchase intention.

While prior studies have explored the relationship between monetary value and various consumer behaviour outcomes such as purchase intention and perceived value, there is lack of research specifically examining how monetary value influences expectation confirmation. Most studies (Talwar et al., 2020b; Chang et al., 2019; Masri et al., 2020; Shi et al., 2022) focus on direct outcomes, but they have not adequately addressed the role of expectation confirmation. This study advances understanding by proposing that monetary value not only directly affects purchase intention, satisfaction, and loyalty, but also crucially shapes expectation confirmation. Therefore, it is hypothesized that:

H₁: Monetary value positively affects expectation confirmation.

2.11.2 Quality of Benefits Value and Expectation Confirmation

Quality of benefits value derived from the assessment of the perceived quality of the products or services offered (Tandon et al., 2021). Quality of benefits value was sub-divided from the functional value by Talwar et al. (2020b) which was found to be significantly influencing the purchase intention (Talwar et al., 2020b; Tandon et al., 2021). Furthermore, Silva and Gonçalves (2016) reported perceived quality being one of the key elements to enhance both online and offline travel users. Assaker et al. (2020) revealed perceived quality being the greatest factor affecting hotel guests' loyalty, followed by satisfaction, and trust. Shi et al. (2022) reported positive relationship between functional value and purchase intention.

While existing research has highlighted the significance of quality of benefits value in influencing purchase intention, loyalty, and satisfaction (Talwar et al., 2020b; Tandon et al., 2021; Assaker et al., 2020; Shi et al., 2022), there is a lack of focus on how the quality of benefits value influences expectation confirmation, particularly in the OTA context. Consumers form expectations prior to making a purchase and then evaluate their experiences against these expectations. However, the impact of quality of benefits value on this confirmation process has not been extensively explored in the OTA literature. To address this gap, it is therefore hypothesised that:

H₂: Quality of benefits value positively affects expectation confirmation.

2.11.3 Social Status Value and Expectation Confirmation

Talwar et al. (2020b) revealed social status value to be significant factor affecting purchase intention. In contrast, Shi et al. (2022) found that social value does not contribute to purchase intention which could be attributed to the culture of individualism prevalent

among younger generation. The impact of social value on perceived value has been proven in the study conducted by Chang et al. (2019). The perceived value as a whole was shown to have an influence on the intention to rebook through hotel websites, but this influence was not observed through the OTA websites. Huang and Lan (2021) found significant positive effect of social value on the repurchase intention through hotel websites. Furthermore, Chang et al. (2018) found social value as one of the factors contributing to offline satisfaction, which subsequently influences the purchase intention.

Given the inconsistencies in the existing literature, there is notable need to investigate the role of social status value in expectation confirmation, particularly within the context of OTAs. While social status value has been linked to various facets of consumer behaviour (Chang et al., 2019; Huang & Lan, 2021; Chang et al., 2018; Shi et al., 2022; Talwar et al., 2020b), its specific impact on expectation confirmation has not been extensively examined. By investigating the impact of social status value on the expectation confirmation, this study contributes to the broader discourse on the impact of social value on e-satisfaction and e-loyalty. Therefore, it is hypothesised that:

H₃: Social status value positively affects expectation confirmation.

2.11.4 Information Value and Expectation Confirmation

Toubes et al. (2021) found a shift in preference towards online information sources compared to seeking advice from friends and relatives which may lead to the displacement of physical travel agencies by OTAs. Huang and Lan (2021) observed the information quality has significant impact on the repurchase intention of OTAs. Sharma et al. (2022) found that by providing comprehensive and relevant information had a positive impact on consumer perception leading to consumer satisfaction and ultimately influencing their

purchasing decision-making. In the context of O2O2O mode, the completeness and relevance of the information provided on the OTA websites are confirmed during physical visit to the accommodation. Although prior studies have established the importance of information value in influencing purchase intentions and consumer satisfaction (Huang & Lan, 2021; Sharma et al., 2022), there is limited research specifically examining how information value impacts expectation confirmation in the OTA context. By exploring this relationship, this study highlights how the information value can influence the degree to which consumer expectations are confirmed. Therefore, the following hypothesis is developed:

H₄: Information value positively affects expectation confirmation.

2.11.5 Preference Value and Expectation Confirmation

Dogra et al. (2023) found preference values serve as sufficient prerequisites for a high level of online travel purchase intention. Phonthanakitithawor et al. (2021) found booking flexibility as one of the most influential factors associated with the quality of the OTAs website. Talwar et al. (2020b) found preference value, which includes free cancellation, promotion and incentives, and a wide range of choices, serves as a significant indicator for OTAs purchase intention. Garrido-Moreno et al. (2021) have demonstrated the significance of cancellation management and flexibility in restoring consumer confidence amidst the Covid-19 health crisis. Consumers expect the accommodations to fulfil the preferences they have selected during online booking.

While prior research has established the importance of preference values in influencing online travel purchase intentions (Dogra et al., 2023; Talwar et al., 2020b) and website quality (Phonthanakitithawor et al. 2021), there is limited exploration of how

preference value affect expectation confirmation specifically. This study investigates the alignment between consumer preferences and the actual offerings of OTAS influences the extent to which expectations are confirmed. By focusing on this relationship, this study enhances understanding of how preference values contribute to the expectation confirmation process in the context of OTAs. Therefore, the following hypothesis is developed:

H₅: Preference value positively affects expectation confirmation.

2.11.6 Perceived Risk and Expectation Confirmation

Sadiq et al. (2021) found perceived risk to be significant negatively influence consumer attitude and purchase intention. Similarly, Sharma et al. (2021) reported perceived risk, including financial, privacy and psychological, to have significant negative impact on intention to purchase online for both Millennials and Baby Boomers. Additionally, Wu et al. (2020) identified perceived risk to have significant negative impact on perceived usefulness and satisfaction. Timur et al. (2023) confirmed similar relationship between perceived risk and continuance intention to use. Wang et al. (2019) revealed negative impact of perceived risks on confirmation. The perceived risks that consumers developed before physically visiting an accommodation are influence by the hope that these risks do not materialise. If, unfortunately, the perceived risk does materialise during the visit, it leads to a negative confirmation which would eventually lead to dissatisfaction. Therefore, the following hypothesis is formulated:

H₆: Perceived risk negatively affects expectation confirmation.

2.11.7 e-WOM and Expectation Confirmation

Several research studies have demonstrated that customer value co-creation involving content sharing by the customers has a favourable influence on tourist loyalty

(Carvalho & Alves, 2023). Martínez-Navalón et al. (2021) revealed the importance of e-WOM on users' satisfaction. Oh et al. (2022) employed deep learning approach in conjunction with ECT to examine hotel customer satisfaction. Their study revealed that review comments had a more significant impact on customer satisfaction compared to hotel images and hotel information. Surprisingly, Sharma et al. (2022) found travellers' reviews being the primary reason influencing consumer's selection of the accommodation while price being the secondary reason. Before arriving at the accommodation that have been booked through the OTAs, travellers often rely on e-WOM such as online reviews and testimonials to form their initial expectations about the property's quality, amenities, and overall experience. During their physical visit to the accommodation, travellers have the opportunity to confirm or disconfirm their initial expectations formed according to the information they obtain through e-WOM. Therefore, the following hypothesis is developed.

H₇: e-WOM positively affects expectation confirmation.

2.11.8 Expectation Confirmation and e-Satisfaction

Consumers are found to be satisfied when their initial expectations are fulfilled (Li et al., 2021). In the context of OTA, Li et al. (2021) reported that confirmation is positively associated with satisfaction among OTA users. Kim et al. (2019) found confirmation to have significant impact on satisfaction of OTAs mobile app. Oh et al. (2022) demonstrated the disconfirmation of expectations and actual experiences will result in dissatisfaction. While previous studies have predominantly examined satisfaction in relation to the online dimension of OTAs, such as website and travel apps quality (Li et al., 2021; Kim et al., 2019), this study shifts focus to satisfaction towards OTAs by considering the confirmation of the expectations regarding the accommodations, rather than the quality of OTA websites. This distinction is crucial as it underscores the impact of expectation confirmation related to

the accommodation experience on e-satisfaction towards OTAs. By focusing on expectation confirmation concerning the accommodation, this study provides a more comprehensive understanding of how OTAs can enhance satisfaction through effective expectation management and collaboration with accommodation providers. Therefore, the following hypotheses are formulated:

H₈: Expectation confirmation positively affects e-satisfaction.

2.11.9 Expectation Confirmation and e-Loyalty

Chang et al. (2019) have found confirmation of the expectation upon visiting the accommodations has a direct impact on the intention to revisit, which would subsequently affect the intention to re-book through OTAs and hotel websites. Similarly, Li et al. (2021) and Choi et al. (2021) have identified positive relationships among confirmation, satisfaction, and continuance intention to use OTAs. Their findings highlight the importance of confirming users' initial expectations as positive confirmation leads to user satisfaction and ultimately influences the continuance intention to use. While most previous research has focused on the impact of expectation confirmation on satisfaction (Li et al., 2021; Choi et al., 2021), there has been little investigation into the direct relationship between expectation confirmation and loyalty (Chang et al., 2019). The findings of Chang et al. (2019) suggests that positive expectation confirmation not only enhances satisfaction but also plays a critical role in influencing customer repurchase intentions and loyalty towards OTAs. Based on these findings, it is proposed that:

H₉: Expectation confirmation positively affects e-loyalty.

2.11.10 e-Satisfaction and e-Loyalty

In the context of hospitality industry, Assaker et al. (2020) demonstrated the significance of satisfaction as key determinant of hotel guests' loyalty. Masri et al. (2020), Li et al. (2021), Choi et al. (2021) and Sharma et al. (2022) found significant positive relationship between satisfaction and continuance intention to use OTAs. Similarly, Timur et al. (2023) identified e-satisfaction has significant impact on the continuance intention to use hospitality mobile apps. While existing research has robustly investigated how satisfaction with OTA website quality impacts e-loyalty (Masri et al., 2020; Li et al., 2021; Choi et al., 2021; Sharma et al., 2022), there is a notable gap in exploring how satisfaction with the physical experience of the accommodation booked through OTAs affects e-loyalty towards OTAs. This distinction is crucial as it addresses the broader spectrum of customer experience, extending beyond the online interaction to encompass the satisfaction derived from the actual accommodation experience. Understanding this relationship is essential, as it provides insights into how satisfaction with the entire service experience, from booking to the physical stay, affects e-loyalty to the OTAs. Therefore, it is hypothesised that:

H₁₀: e-Satisfaction positively affects e-loyalty.

2.12 Chapter Summary

This chapter provides a comprehensive analysis of various factors influencing loyalty and satisfaction in the context of OTAs. Beginning with an exploration of OTAs, the chapter examines their evolution and dominance within the travel industry. Key themes such as e-loyalty, e-satisfaction, expectation confirmation, consumption values, perceived risk, and e-WOM are discussed, drawing upon theoretical frameworks such as ECT and OTA-TCV from the O2O2O dimension.

ECT elucidates the interplay between initial consumer expectations and post-consumption evaluations, framing the study's research question regarding how expectation confirmation impacts e-satisfaction and e-loyalty. Conversely, OTA-TCV provides a comprehensive perspective on how various consumption values namely monetary value, quality of benefits, social status, information, and preference value, shape consumer behaviour, supporting the research objective of investigating the influence of these values on expectation confirmation.

The complexity of perceived risk and its impact on consumer behaviour also highlights the necessity for further investigation, correlating with the study's objective to elucidate how perceived risk affects expectation confirmation, e-satisfaction, and e-loyalty. Furthermore, although the role of e-WOM in consumer decision-making is recognized, its specific impact on expectation confirmation, satisfaction, and loyalty is not thoroughly examined, supporting the research objective to assess e-WOM's influence on these outcomes.

By synthesizing these elements, the chapter lays a solid groundwork for addressing the research questions and objectives, highlighting the intricate relationships between consumption values, perceived risk, e-WOM, and consumer behaviour within the OTA context.

CHAPTER 3

METHODOLOGY

3.1 Introduction

In this chapter, the research methodology employed in this study is presented. It begins with an explanation of the chosen research design, followed by a discussion of the population and sampling techniques. The process of data collection is then detailed, along with the development of the research questionnaires and measurement instruments. The pre-test process is outlined to ensure the validity and reliability of the research instruments. Finally, the chapter discusses and justifies the selected statistical analyses that will be used to analyze the data collected in the study. The chosen methodology is carefully aligned with the study's research questions and objectives, which focus on examining the factors influencing e-satisfaction and e-loyalty in the context of OTAs. The adoption of a positivist paradigm and a deductive approach enables an objective analysis of quantifiable data, ensuring that the findings are both statistically robust and theoretically grounded, thereby supporting the generalization of results.

3.2 Research Design

The research design serves as the blueprint for conducting a study, guiding the researcher in effectively addressing the research questions. The research design for this study is based on the research onion model developed by Saunders et al. (2019). The research onion consists of six layers, including philosophies, approaches, strategies, choices, time horizons, and techniques and procedures.

The research philosophy encompasses the fundamental beliefs about the nature of knowledge and reality which shapes how researchers view and interpret their study. The

major research philosophies include positivism, interpretivism, and pragmatism. Positivism is grounded in the belief that knowledge is derived from observable and measurable phenomena, emphasizing objectivity and the use of statistical methods. In contrast, interpretivism seeks to understand the deeper meanings and subjective experiences of individuals, favouring qualitative methods to explore complex social phenomena. Pragmatism, on the other hand, advocates for a practical approach, utilizing both quantitative and qualitative methods to address research questions based on their practical utility rather than adhering strictly to one philosophical stance. This study adopts a positivist research paradigm, as it seeks to objectively study the world using observable and quantifiable data that can be analysed statistically.

Research approaches define the process by which researchers develop theories and collect data. Deductive approaches begin with a theoretical framework or hypothesis, followed by the design of a research strategy to test these pre-existing theories. This approach often involves quantitative methods and aims to validate or refute theoretical propositions. In contrast, inductive approaches start with data collection to identify patterns and develop new theories or insights based on the observed data. This approach is typically qualitative, emphasizing the generation of theories through empirical observation. The deductive approach is employed in this study, as it involves developing hypotheses from existing theories.

Research strategies outline the plan for conducting the study and collecting data. Common strategies include experiments, where researchers manipulate variables to observe causal relationships, and surveys, which gather data from a large population through structured questionnaires to identify trends and correlations. Case studies provide in-depth examinations of specific instances within their real-life contexts, offering rich, qualitative

insights. Action research focuses on solving practical problems through iterative cycles of planning, action, and reflection. Surveys are chosen as the primary strategy for data collection where closed-ended survey questionnaires are to be distributed to qualified respondents.

Research choices refer to the methodological options available for data collection and analysis. Mono method research utilizes single approach, either quantitative or qualitative for data collection and analysis. Mixed methods research combines both quantitative and qualitative approaches, allowing for a more comprehensive understanding of the research problem by integrating numerical data with contextual insights. This study follows a mono-method approach as this approach allows the researcher to focus on one method, ensuring depth and consistency in the data collection process. However, the mono-method approach can be limiting in scope, as it may not fully capture the complexity of the research problem or provide a well-rounded understanding that a mixed-methods approach could offer. In this study, mono-method approach is appropriate as the primary aim is to quantify relationships between specific variables, such as consumption values, perceived risk, e-WOM, expectation confirmation, e-satisfaction, and e-loyalty in the context of OTAs. The focus on quantification and hypothesis testing aligns well with a quantitative mono-method design, allowing for the rigorous statistical analysis needed to address the research questions effectively.

Time horizons address the temporal aspect of research, specifying when and how long data is collected. Cross-sectional studies capture data at a single point in time, offering a snapshot of the research problem and facilitating the examination of relationships at that moment. Longitudinal studies involve data collection over an extended period, allowing researchers to observe changes and developments over time and understand trends and

causality more effectively. The time horizon for this study is cross-sectional, focusing on observations at a single point of time. While a cross-sectional study may not capture changes over time or provide insights into causality, it offers the advantage of being more time-efficient and less resource-intensive. It allows for the collection of a large amount of data in a relatively short period, making it well-suited for this study where the goal is to understand the state of a phenomenon at a specific point rather than track its evolution. Given the study's focus on the immediate relationships between variables, the cross-sectional approach is sufficient to meet the research objectives despite its limitations. Further details regarding techniques and procedures will be discussed in the subsequent sections in this study.

3.2.1 Population and Sampling Technique

In January 2023, the number of internet users in Malaysia amounted to 33.03 million, with an internet penetration rate of 96.8% of the total population (Kemp, 2023). A study conducted by Rakuten Insight revealed that 73% of Malaysians have experience using OTAs (Mordor Intelligence, 2023). Therefore, it is estimated that the number of OTA users in Malaysia is approximately 24.11 million (33.03 million x 73%), which will constitute the population for this study. A convenience sampling approach will be employed to select participants from this population of OTA users. Convenience sampling is a non-probability sampling method where participants are selected based on their accessibility and proximity to the researcher (Khan, 2020). While this method is practical and cost effective, it introduces several potential biases that can affect the reliability and generalizability of research findings (Khan, 2020). Selection bias may occur as the sample may not accurately represent the broader population because it consists only of individuals who are easily accessible. Additionally, volunteer bias may arise, as those who choose to participate may have distinct characteristics that skew the results (Khan, 2020). To mitigate these biases, this study strives

to increase sample diversity by incorporating participants from a range of demographic backgrounds and introducing randomization within the convenience sample to enhance representativeness (Tyrer & Heyman, 2018).

Sample size is a subset drawn from population to ensure that there is sufficient information to draw conclusions (Sekaran & Bougie, 2016). G*power analysis was used in this study to determine the sample size as recent developments suggest that sample size should be determined using power analysis (Hair et al., 2019; Uttley, 2019; Ringle et al., 2018). The recommended sample size for this study using G*power analysis is determined using the common guidelines suggested by Memon et al. (2020). In the test family options, “F tests” is selected. From the options of statistical tests, “linear multiple regression: fixed model, R^2 deviation from zero” is chosen. The type of power analysis is set at “A-priori: Compute required sample size – given α , power and effect size”. In the input parameters, the effect size is specified at 0.15 (medium effect), α at 0.05, and power at 0.95. The number of predictors is set at 10, as there are ten hypotheses in this study, which is referring to the maximum number of arrows pointing to the dependent variable in the conceptual framework.

As a result, the minimum sample size required for this study is 172 as shown in Figure 3.1. Nonetheless, this study strives for a higher response rate from the sample, aiming to obtain a more robust and reliable result with a target of 200 responses. The sample size aligns with Kline (2022) recommended sample-size-to-parameter ratio of 20:1, resulting in a final sample size of 200 samples.

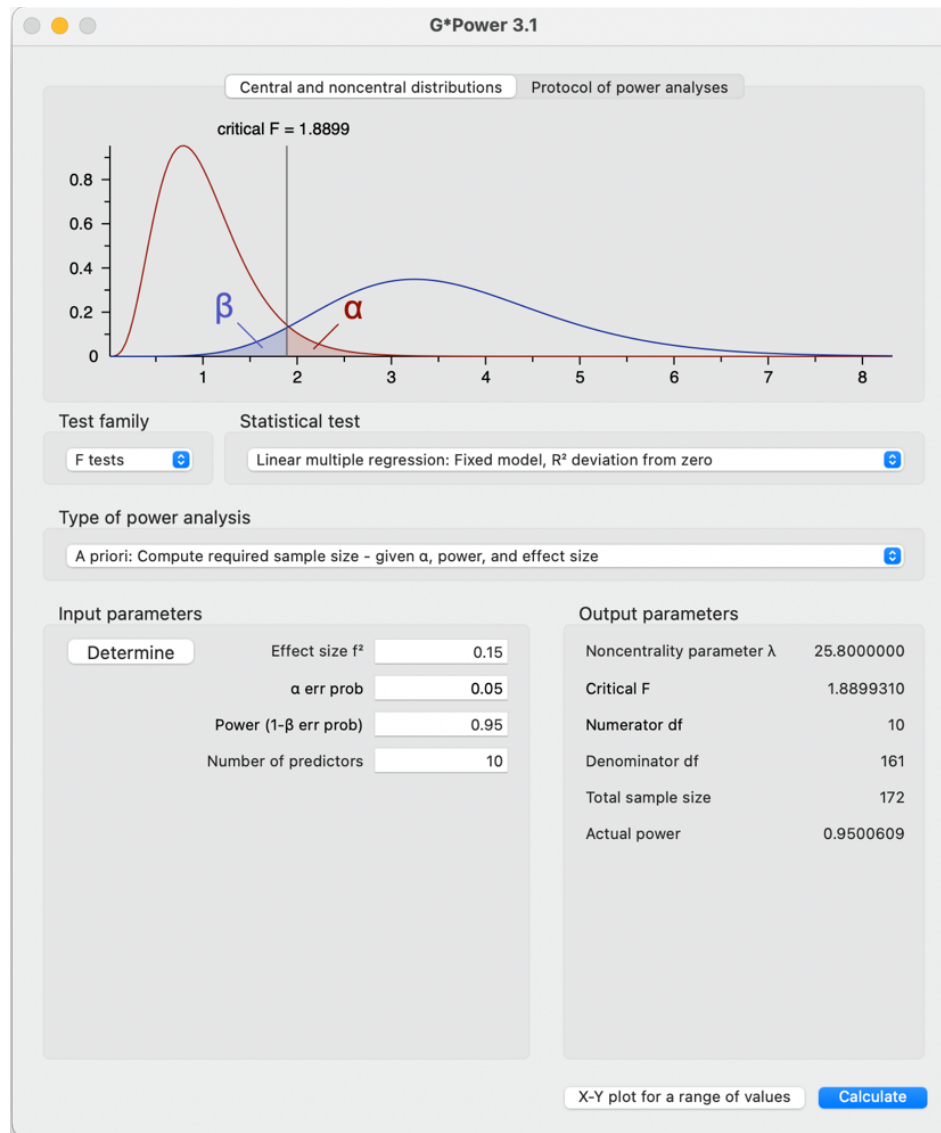


Figure 3.1: G*Power Calculation

3.2.2 Data Collection Procedure

Primary data for this study will be collected through a closed-ended questionnaire survey. Respondents will be recruited based on three sampling criteria: (1) Malaysians; (2) individuals who have made accommodation bookings through an OTA within the past year; and (3) individuals regularly engaged in reading online reviews. The data collection process will involve both online and physical surveys to ensure comprehensive data gathering.

For the online surveys, a structured questionnaire was developed using Google Forms. The survey link was disseminated via various online channels, including email and

social media platforms. Participants were invited to complete the questionnaire at their convenience. The online questionnaire was programmed to automatically terminate if participants did not meet any of the three screening criteria. The online data collection period lasted one month, starting on January 17, 2024, when the initial emails were sent. A reminder email was sent on February 1, 2024, and the online survey closed on February 15, 2024.

Additionally, printed copies of the questionnaire were prepared to ensure consistency with the online survey instrument. Participants were recruited from Kuala Lumpur International Airport (KLIA), where physical surveys were administered. Data collection at the KLIA terminals took place from February 10, 2024, to February 15, 2024, between 9 a.m. and 8 p.m. daily. Prior to survey distribution, participants were informed of the study objectives and screened to ensure they met the three screening criteria. Informed consent was obtained from each participant. The researcher was available to provide assistance or clarification as needed. Completed physical surveys were collected, checked for completeness, and securely stored for subsequent data entry and analysis.

To ensure the quality and consistency of the data collected through different methods, several measures were implemented. Both the online and physical surveys used identical questionnaires to maintain consistency in data collection. For the online surveys, the questionnaire was designed with mandatory fields and logical sequencing, preventing participants from skipping questions or providing incomplete responses. This automated control ensured that all online responses were as complete and consistent as the physical surveys, which were manually checked for completeness. These measures helped ensure that data collected from both online and physical methods were reliable and comparable.

3.3 Instrument Development

A questionnaire survey is developed in English. The questionnaire is divided into three sections. The first section aims to identify consumers' usage of OTAs and their purchasing behaviour towards OTAs as shown in Table 3.1. Questions 1 and 2 in this section function as screening tools to preclude respondents who did not align with this study. These questions are presented in a multiple-choice format.

Table 3.1: Respondents' Usage of OTA

1. Have you used an online travel agency to book accommodations in the past one year?
2. Do you read online reviews before booking accommodations through online travel agencies?
3. Which type of accommodations did you book?
4. What was the purpose for the trip?
5. Which online travel agencies did you use most often to book the accommodation(s)?
6. How often do you use this online travel agency to book accommodation?
7. How much time do you spend on browsing online travel agencies on average?
8. How much money did you pay on average for purchasing accommodation per night?

The second section comprises questions about the proposed constructs as shown in Table 3.2 using seven-Likert scale as suggested by Taherdoost (2019). The use of seven-point Likert scale enhances the sensitivity of the responses and ensures that the responses accurately reflect the respondents' trust feelings (Taherdoost, 2019). The e-loyalty, e-satisfaction, confirmation and e-WOM will be measured from "strongly agree" (1) to "strongly disagree" (7). The expectation constructs are measured based on subjective disconfirmation based on the respondents' standpoint and were adopted from the ECT (Oliver, 1980). For constructs concerning values received including monetary value, quality

of benefits value, social status value, information value, and preference value, respondents are to check whether they were “much lesser than expected” (1) at negative extreme to “much greater than expected” (7) at the positive extreme. For perceived risk, respondents are to check whether the risk associated is “much more serious than expected” (1) to the midpoint of “pretty much as expected” (4) and the other extreme of “much less serious than expected” (7). Lastly, the third section comprises respondents’ demographical information including gender, age, level of education, occupation, and monthly income.

Table 3.2: Measurement Items

Constructs	Code	Items	Sources
e-Loyalty	ELOY1	I intend to continue using OTA for a long time	Jasni et al. (2020) & Chang et al. (2009)
	ELOY2	OTA will be my first choice when I am travelling	
	ELOY3	I like using OTA	
	ELOY4	I would like to recommend OTA to friends and colleagues	
	ELOY5	I am willing to say positive things about OTA to other people	
	ELOY6	I would recommend OTA to those who are planning to travel	
e-Satisfaction	ESAT1	I believe that I made the right decision when I used OTA services	Jasni et al. (2020)

Table 3.2: Measurement Items (Continued)

Constructs	Code	Items	Sources
Confirmation		I believe that using OTA reliable	Li et al. (2021) & Lin et al. (2009)
	ESAT2	services is usually a very pleasing experience	
	ESAT3	The promising service offered by OTA meets my expectation	
	ESAT4	My choice to use OTA has been a wise one	
	ESAT5	The OTA has provided an excellent perception of their services	
	ESAT6	I am satisfied with the overall service of OTA	
	CONF1	My experience of using the OTA was better than what I expected.	
	CONF2	The service level provided by the OTA was better than what I expected.	
	CONF3	The service content delivered by the OTA was more thoughtful than what I expected.	
	CONF4	Overall, the OTA confirmed most of my expectations.	

Table 3.2: Measurement Items (Continued)

Constructs	Code	Items	Sources
Electronic word-of-mouth		Before I book accommodation via	Martínez-Navalón et al. (2021)
	EWOM1	OTA, I check the online reviews of other travellers.	
	EWOM2	The OTA has enough options with reviews of other travellers.	
	EWOM3	The online reviews of the OTA allowed me to choose the best accommodation.	
	EWOM4	The online reviews are consistently reliable.	
Monetary value	MV1	The accommodation booked via OTA is reasonably priced	Chang et al. (2019)
	MV2	The accommodation booked via OTA offers good value for money	
	MV3	The accommodation booked via OTA is a great choice for the price	
	MV4	The accommodation booked via OTA is an economical option.	
Quality-of-benefits value	QV1	The accommodation booked via OTA offers a friendly and comfortable environment.	Serra-Cantallops et al. (2020)

Table 3.2: Measurement Items (Continued)

Constructs	Code	Items	Sources
	QV2	The accommodation booked via OTA is well maintained and clean.	
	QV3	The accommodation booked via OTA provides high quality services.	
	QV4	The staff at the accommodation booked via OTA are polite and respectful.	
Social status value	SV1	The accommodation booked via OTA will help me to feel acceptable.	Chang et al. (2019)
	SV2	The accommodation booked via OTA will create a good impression on others.	
	SV3	The accommodation booked via OTA will improve the way I am perceived by others	
	SV4	The accommodation booked via OTA will earn me social approval	
Information value	INV1	Before booking via the OTA, I like to obtain substantial information about the terms and conditions.	Talwar et al. (2020b)

Table 3.2: Measurement Items (Continued)

Constructs	Code	Items	Sources
	INV2	Before booking via the OTA, I like to acquire a great deal of information about the benefits offered.	
	INV3	The accommodation matches the information provided on the OTA website	
	INV4	The accommodation aligns precisely with the information provided on the OTA website	
Preference value	PV1	I would book rooms more often if the OTA offered free cancellation	Talwar et al. (2020b) & Phonthanakitithaworn, et al. (2021)
	PV2	I would book rooms more often if the OTA offered flexible rescheduling options.	
	PV3	I would book rooms more often if the OTA offered reservations with the option to pay later.	
	PV4	I would book rooms more often via OTA if there were more options available on the platform that matched my preferences.	

Table 3.2: Measurement Items (Continued)

Constructs	Code	Items	Sources
Perceived risk	PR1	Booking via OTA will take too much time or be a waste of time	Yuan et al. (2021) & Sharma et al. (2020)
	PR2	If I were to book accommodation via OTA, I would be concerned that I would not receive sufficient value for the cost of the accommodation.	
	PR3	If I were to book accommodation via OTA, I would be concerned that they would not provide the level of benefits that I would be expecting.	
	PR4	The thought of booking accommodation via OTA gives me an unwanted feeling of anxiety.	
	PR5	If I book accommodation via OTA, my credit card details are likely to be stolen.	

3.4 Pre-Test and Pilot Study

A pre-test allows the researchers to determine whether the respondents can understand the questions, whether the questions can be interpreted consistently, and the understanding aligns with the researchers' intended meaning (Collins, 2003). Expert reviewers tend to be few in number, often consisting of two or three expert reviewers (Holbrook et al., 2007). In this study, two academic experts from the University Technology

of Sarawak were engaged to conduct the pre-test. These experts were selected for their extensive experience in survey research and their familiarity with the subject matter of the study. Their task was to identify ambiguous questions, confusing instructions, or missing response options. Based on their suggestion, several revisions were made to the questionnaire for clarity and precision. For example, the statement “The accommodation booked via OTA would be economical” was rephrased to “The accommodation booked via OTA is an economical option” to improve clarity. Similarly, the statement “If I were to book accommodation via OTA, I may not get my money’s worth from accommodation” was revised to “If I were to book accommodation via OTA, I would be concerned that I would not receive sufficient value for the cost of the accommodation” to more accurately capture the intended meaning. These adjustments were crucial in ensuring that the questionnaire was clear, comprehensible, and effectively captured the nuances of the constructs being studied.

Pilot study is a small-scale trial run of the entire research study. It provides an opportunity to assess the reliability and validity of the research instrument, helping to ensure the accuracy and trustworthiness of the study findings. Cooper and Schindler (2011) proposed a sample size ranging from 25 to 100 individuals for a pilot study while Machin et al. (2018) recommended sample size of 30. In this study, 40 responses were collected for the pilot study to accommodate data cleaning and refinement needs.

3.5 Data Analysis

The data analysis was conducted using two software tools, namely IBM SPSS Statistics 29.0 and SmartPLS 4.0. IBM SPSS Statistics 29.0 is a comprehensive statistical analysis software used for conducting a wide range of statistical tests, including both descriptive and inferential statistics, to evaluate and interpret quantitative data. In contrast, SmartPLS 4.0 specializes in Partial Least Squares Structural Equation Modeling (PLS-

SEM), which is used to analyze complex relationships between latent variables and assess the structural paths in models.

Data cleaning is a crucial step in the research process, involving the identification and resolution of issues such as missing data, outliers, and inconsistencies that could potentially bias the results or reduce the reliability of the findings. According to Hair et al. (2022), indicators with more than 15% missing values should be removed to avoid skewed results. In this study, which includes 45 measurement items, any indicator with 7 or more missing values will be excluded. For indicators with less extensive missing data, the mean imputation method will be employed, substituting the missing values with the mean of the observed values. This approach preserves the dataset's completeness while minimizing potential biases.

Outliers, which are extreme values deviating significantly from the rest of the data, can distort statistical analyses and lead to misleading conclusions. Methods such as Mahalanobis distance or z-score can be used to identify outliers. The Mahalanobis distance considers the correlations between variables and measures the distance of a data point from the centroid of the multivariate distribution, whereas z-scores detect only univariate outliers. Therefore, Mahalanobis distance is preferred in this study for dealing with multivariate data.

To address data normality issues, various statistical techniques, such as the Shapiro-Wilk test, can be employed to test the null hypothesis that a sample comes from a normally distributed population. However, under PLS-SEM, the bootstrapping procedure is robust even when the data are non-normal. Therefore, Hair et al. (2022) suggest that skewness and kurtosis should be examined, with values between -2 and +2 considered acceptable.

After the data cleaning process, SPSS was utilized to analyze respondents' demographic information and generate descriptive statistics for the variables. Subsequently, SmartPLS was employed to analyze both the measurement and structural models.

3.5.1 Descriptive Statistic

In this study, invalid questionnaires were screened out and deleted to ensure accuracy of the results. Only those which had booked accommodation via OTA in the past year and those which will read the online reviews before booking, enters into data analysis. Frequency and percentage were employed to explore and describe the respondents' past experiences with booking accommodations via OTAs, along with their demographic information. Additionally, means and standard deviations were computed for all ten variables under investigation in this research.

3.5.2 Partial Least Squares Structural Equation Modeling (PLS-SEM)

PLS-SEM and Covariance-Based Structural Equation Modeling (CB-SEM) are two prominent techniques for analyzing complex models involving multiple variables and relationships. PLS-SEM is a variance-based approach that emphasizes maximizing the explained variance of dependent variables. It allows researchers to estimate complex models with numerous constructs, indicator variables and structural paths without requiring specific assumptions about the data distribution. PLS-SEM is focuses on causal prediction within the SEM framework, prioritizing the estimation of statistical models designed to offer causal explanations (Hair et al., 2022). This method is particularly suitable for predicting key target constructs, identifying key 'driver' constructs, exploratory research, or extensions of existing structural theories (Hair et al., 2011). In contrast, CB-SEM is a covariance-based approach that aims to estimate model parameters by reproducing the covariance matrix of the observed

data. CB-SEM relies on common variance and requires specific assumptions about data distribution, including multivariate normality (Hair et al., 2022). This method is more appropriate for validating existing theories and models (Hair et al., 2011). Given the exploratory nature of this study, which aims to analyse complex relationships between multiple variables and latent constructs while extending existing theories, including ECT and OTA-TCV, PLS-SEM is deemed particularly appropriate. Additionally, PLS-SEM is advantageous for handling a sample size of 172, as determined by G*Power, and does not necessitate adherence to strict assumptions about data distribution. Measurement theory outlines the specific indicators and how these indicators are used to measure a specific construct. Conversely, structural theory describes the relationships between each construct in the structural model (Hair et al., 2022). This study follows the 2-step approach suggested by Anderson and Gerbing (1988). The initial stage of assessing PLS-SEM findings involves examining the measurement model which is the outer model, for reliability and validity. If the measurement models are confirmed, the evaluation of the structural model, which is the inner model, can be proceeded (Hair et al., 2022). Measurement model and structural model are discussed in the following sub-sections.

3.5.2.1 Measurement Model

The measurement model is evaluated using confirmatory composite analysis (CCA) which is referred to as confirmatory factor analysis (CFA) in CB-SEM (Manley et al., 2021). Four aspects are used to analyze the reliability and validity of the measurement model including (1) item loadings, (2) composite reliability, (3) convergent validity, and (4) discriminant validity.

Item loadings represent the correlation between each indicator and its underlying latent construct (Hair et al., 2022). Higher item loadings indicate that the indicators are well-

aligned with the construct they are intended to measure (Hair et al., 2022). All factor loadings of the construct should be above 0.708 for each to be valid, as this suggests that the indicator explains at least 50% of the construct (Hair et al., 2022). However, for reflective measurement model, factor loading more than 0.5 is still considered acceptable. Hence, factor loading less than 0.5 should be removed. Composite reliability (CR) is used to quantify the data's internal consistency of the latent construct, assessing how well the indicators of a construct are related to each other. CR values range from 0 to 1, with higher values indicating better internal consistency (Hair et al., 2022). A CR value above 0.7 is considered as satisfactory. Convergent validity assesses the extent to which a construct is correlated with other measures that it theoretically should be related to. This ensures that the indicators are indeed measuring the intended construct (Hair et al., 2022). Average variance extracted (AVE) is used to quantify convergent validity and the acceptable level will be 0.5 and above, indicating that the construct explains at least half of the variance in its indicators.

Lastly, discriminant validity evaluates the level of empirical distinct between a construct and other constructs within the structural model (Hair et al., 2019). This ensures that the construct is not just a reflection of other variables but represents a unique aspect of the data (Hair et al., 2022). Heterotrait-monotrait (HTMT) ratio is analyzed to determine the discriminant validity. The HTMT refers to the mean value of the item correlations between constructs, relative to the geometric mean of the average correlations among items measuring the same construct (Hair et al., 2019). Henseler et al. (2015) suggest using different threshold values for the HTMT depending on the level of conceptual similarity between the constructs in the model. For acceptable discriminant validity, the HTMT value should be generally be below 0.85 or 0.90, depending on the conceptual similarity or distinctiveness of the constructs.

3.5.2.2 Structural Model

Once the evaluation of the measurement model is deemed satisfactory, the subsequent step in the assessment of PLS-SEM results involves evaluating the structural model. There are five steps for structural model assessment suggested by Manley et al. (2021) including: (1) collinearity, (2) path coefficients, (3) coefficient of determination, (4) effect size, and (5) predictive relevance.

Collinearity refers to a situation in which two or more predictor variables in a structural model are highly correlated, which can lead to issues in estimating the model parameters accurately (Hair et al., 2022). High collinearity can inflate the standard errors of the coefficients, making it difficult to determine the individual effect of each predictor on the dependent variable (Hair et al., 2022). To assess collinearity, the variance inflation factor (VIF) values are typically examined. Ideally, the VIF values should be lower than 5.0 (Chatterjee & Simonoff, 2013; O'Brien, 2007). A VIF value above 5 indicates high collinearity, suggesting that corrective measures, such as removing or combining variables, may be necessary.

Path coefficients represent the strength and direction of the relationships between latent variables in the structural model (Hair et al., 2022). These coefficients are analogous to regression coefficients in multiple regression analysis. They indicate how much change in the dependent variable is expected for a one-unit change in the predictor variable, holding other variables constant (Hair et al., 2022). Statistical significance of path coefficients is examined by using bootstrapping technique and examine *t*-value and *p*-value or bootstrapping confidence intervals. The value of *t*-value should exceed 1.645 and *p*-value should be 0.05 or lower for the path coefficients to be statistically significant.

The coefficient of determination (R^2) measures the proportion of variance in the dependent variable that is explained by the independent variables in the model (Hair et al., 2022). It indicates the overall explanatory power of the structural model. R^2 values range from 0 to 1, with higher values indicating a better fit of the model to the data (Hair et al., 2022). In this study, there are three endogenous variables including confirmation, e-satisfaction, and e-loyalty. In social science discipline, higher R^2 value is preferable with 0.75, 0.50, and 0.25 being considered as substantial, moderate, and weak respectively (Hair et al., 2011).

Effect size (f^2) measures the impact of an individual predictor constructs on explaining the dependent construct within the structural model. It assesses the change in the R^2 values when a specific predictor is included or excluded from the model (Hair et al., 2022). The rank order is often similar for both effect size and path coefficients. Effect size f^2 value larger than 0.35, 0.15, and 0.02 is considered as having large, medium, and small effect size respectively (Cohen, 1988). Understanding the effect size helps in determining the practical significance of each predictor, beyond just its statistical significance.

Lastly, predictive relevance ($Q^2_{predict}$) is a measure used to assess the out-of-sample predictive power of the model by using blindfolding technique (Hair et al., 2022). A positive $Q^2_{predict}$ value indicates the prediction error of the PLS path model is smaller than the naïve benchmark. If $Q^2_{predict}$ value is greater than zero, the root means square error (RMSE) will be compared against the naïve linear regression model (LM) benchmark. The RMSE is a measure of the differences between predicted values and actual values in a model while LM refers to the performance of a simple linear regression model (Hair et al., 2022). When comparing the RMSE of a PLS-SEM against the LM benchmark, if the RMSE of the PLS-SEM is lower than that of the LM, it suggests that the model has better predictive power. If

the RMSE is higher, it indicates that the simpler LM performs as well or better (Hair et al., 2022). Therefore, if all indicators show lower RMSE compared to LM benchmark, the model demonstrates strong predictive power. When the majority of indicators exhibit lower RMSE than LM, it suggests moderate predictive power. In cases where only a minority of indicators' RMSE is lower than LM, it signals weak predictive power. If no indicator displays lower RMSE than LM, it indicates a lack of predictive power in the model (Hair et al., 2022; Shmueli et al., 2019).

3.6 Chapter Summary

This chapter presents a thorough overview of the methodological framework employed in the study. The study is grounded in a positivist paradigm, which underscores the emphasis on objective measurement and empirical data collection. A deductive approach was adopted, focusing on testing hypotheses derived from existing theoretical frameworks. This approach supports the objective of validating or challenging theoretical assumptions through empirical evidence, thereby contributing to the broader understanding of OTA users' behaviours. The research utilizes a mono method design, relying exclusively on surveys as the data collection. This choice ensures methodological consistency and focuses on gathering comprehensive data from a sample of 200 Malaysian OTA users who have made accommodation bookings through an OTA within the past year and are regularly engaged in reading online reviews. The data collection utilizes both online and physical surveys. Pre-test was conducted to identify ambiguous questions, confusing instructions, or missing response options while a pilot test was conducted to assess the reliability and validity of the research instrument. Data analysis procedures begin with descriptive statistics including consumers' OTA usage and behaviour, demographical analysis, along with mean and

standard deviations of the variables. Lastly, PLS-SEM analysis, encompassing both measurement and structural models, is detailed.

CHAPTER 4

RESULTS AND FINDINGS

4.1 Introduction

This chapter provides a comprehensive analysis of the results obtained from both the pilot study and the main study. Section 4.2 presents the outcomes of the pilot study, which was conducted as a precursor to the main research endeavor. Building upon the foundation established in the pilot study, Section 4.3 explores the substantive findings and results of the main study. The primary objective of this research is to explore the factors influencing Malaysian OTA users' e-satisfaction and e-loyalty toward OTAs. To achieve this, descriptive and demographic analyses were conducted using SPSS version 29.0, while SmartPLS 4.0 was employed to assess both the measurement and structural models.

4.2 Pilot Study

A pilot test was conducted before the actual study to assess the reliability, clarity, and structural flow of the questionnaire as the research instrument. Participants were initially instructed to identify and report any ambiguities, errors, or difficulties encountered while completing the survey. The participants found the questionnaire structure easy to understand, and all measurement items were clear. They completed the entire set of questions in approximately fifteen minutes. Forty responses were collected, and four outliers were identified, resulting in 36 valid responses retained for analysis.

The primary objective of conducting the pilot study was to ensure the responsiveness and applicability of the research instrument by assessing its validity and reliability (Srinivasan & Lothith, 2017). Table 4.1 presents the reliability and validity analysis for the pilot study. Regarding outer loadings, all constructs met the recommended outer loading

criterion of 0.708 except *ELOY1* (0.559), *ELOY2* (0.636), *ELOY4* (0.650), *EWOM1* (0.690), *EWOM4* (0.674), *PV2* (0.668), and *PR2* (0.531). However, for reflective measurement model, factor loading above 0.50 is still acceptable (Hulland, 1999). In addition, for factor loading below 0.708, it is crucial to consider internal consistency reliability and convergent liability (Hair et al., 2022). The composite reliability (CR) was used to measure the internal consistency of the data (Hair et al., 2022), and average variance extracted (AVE) was used to measure the convergent validity of the data. All CR values were above the critical value of 0.700 (Hair et al., 2021), indicating that all the measurements were internally consistent. The AVE of each model construct surpassed the acceptable level of 0.500 (Hair et al., 2021), establishing their convergent validity. As a result, all constructs with factor loadings below 0.708 but above 0.400 in this study were retained. Additionally, HTMT of correlations was used to assess discriminant validity. All the HTMT values were lower than the conservative threshold value of 0.850 (Henseler et al., 2015) as shown in Table 4.2. Thus, it can be concluded that discriminant validity was established between all the constructs. Based on the pilot study's results, all measurement items were retained, and no modifications were made to the questionnaire.

Table 4.1: Pilot Study Reliability and Validity Analysis

Construct	Measurement	Factor	CR	AVE
	Items	Loadings		
e-Loyalty (ELOY)	ELOY1	0.559	0.861	0.513
	ELOY2	0.636		
	ELOY3	0.841		
	ELOY4	0.650		

Table 4.1: Pilot Study Reliability and Validity Analysis (Continued)

Construct	Measurement Items	Factor Loadings	CR	AVE
	ELOY5	0.843		
	ELOY6	0.722		
e-Satisfaction (ESAT)	ESAT1	0.782	0.925	0.674
	ESAT2	0.830		
	ESAT3	0.822		
	ESAT4	0.835		
	ESAT5	0.797		
	ESAT6	0.859		
Expectation Confirmation (CONF)	CONF1	0.889	0.929	0.765
	CONF2	0.882		
	CONF3	0.833		
	CONF4	0.894		
Electronic word-of-mouth (EWOM)	EWOM1	0.690	0.842	0.574
	EWOM2	0.879		
	EWOM3	0.770		
	EWOM4	0.674		
Monetary value (MV)	MV1	0.951	0.948	0.821
	MV2	0.903		
	MV3	0.914		
	MV4	0.853		

Table 4.1: Pilot Study Reliability and Validity Analysis (Continued)

Construct	Measurement	Factor	CR	AVE
	Items	Loadings		
Quality of benefit value (QV)	QV1	0.855	0.913	0.724
	QV2	0.799		
	QV3	0.898		
	QV4	0.850		
Social status value (SV)	SV1	0.873	0.941	0.799
	SV2	0.948		
	SV3	0.886		
	SV4	0.866		
Information value (INV)	INV1	0.732	0.894	0.679
	INV2	0.780		
	INV3	0.898		
	INV4	0.874		
Preference value (PV)	PV1	0.723	0.866	0.622
	PV2	0.668		
	PV3	0.847		
	PV4	0.894		
Perceived risk (PR)	PR1	0.801	0.846	0.529
	PR2	0.531		
	PR3	0.741		
	PR4	0.784		
	PR5	0.746		

Table 4.2: Pilot Study HTMT Criterion for Discriminant Validity of Constructs

	CONF	ELOY	ESAT	EWOM	INV	MV	PR	PV	QV	SV
CONF										
ELOY	0.498									
ESAT	0.657	0.842								
EWOM	0.529	0.625	0.654							
INV	0.634	0.474	0.576	0.654						
MV	0.560	0.495	0.742	0.576	0.646					
PR	0.638	0.404	0.527	0.546	0.749	0.484				
PV	0.132	0.579	0.538	0.495	0.401	0.586	0.269			
QV	0.746	0.530	0.844	0.782	0.628	0.746	0.564	0.522		
SV	0.203	0.351	0.370	0.494	0.366	0.473	0.403	0.401	0.548	

4.3 Main Study Findings and Results

The main study data was collected involving both online surveys and physical surveys. A total of 271 qualified responses were collected from both channels. Data processing and examining will be covered in Section 4.3.1, followed by Section 4.3.2 for demographic profile analysis, Section 4.3.3 consumers' usage of and behaviour towards OTAs, Section 4.3.4 for reflective measurement model, and finally, Section 4.3.5 for structural model.

4.3.1 Data Processing and Examining

Data cleaning procedures, including identifying missing values, straight-lining, and outliers, were performed. It is worth noting that the researcher was actively present during the physical data collection process to provide guidance, and for the online data collection,

respondents were required to answer each question before submitting the questionnaire. As a result, no questionnaires were returned with missing data.

4.3.1.1 Straight-lining

A total of 271 qualified responses were initially collected. Straight-lining occurs when survey participants provide identical responses to multiple questions within a questionnaire, using the same scale for their answers. This phenomenon has the potential to diminish the quality of the data collected (Kim et al., 2018). In this study, standard deviations for each response were calculated using Excel, and four responses with standard deviation of zero were identified as straight-liners, which were subsequently removed from the dataset. This process resulted in 267 valid responses for analysis.

4.3.1.2 Multivariate Outliers

The term outlier refers to an observation that differs significantly from other observations to the extent that it raises suspicions that it was produced by a different mechanism (Hawkins, 1980). In some cases, it is preferable to eliminate outliers as they can lead to misleading analyses, while in other cases, outliers can provide valuable insights and retaining them may be the optimal approach (Smiti, 2020). In this study, Mahalanobis distance was computed using SPSS to detect multivariate outliers. The linear regression option was selected by checking the box Mahalanobis. Subsequently, p-values for each Mahalanobis distance were computed using the formula $1 - \text{CDF.CHISQ}(\text{MAH_1}, 3)$. The number of decimal places for p-values was increased to 5 or 6. Observations with p-values less than 0.001 were considered as outliers (Zach, 2020). In this study, 18 outliers were identified. Normality tests were performed after excluding these outliers, but there was no notable improvement in the normality of the data. The skewness and kurtosis scores, with or

without outliers, for all indicators, ranged between -2 and +2 which are considered as acceptable (Hair et al., 2022). While outliers can disproportionately influence the mean and variance in the data, potentially skewing the results of the analyses, the acceptable skewness and kurtosis scores suggest their impact on central tendency measures may be minimal. In regression analysis, outliers can bias coefficient estimates, but the fact that normality did not improve after excluding them suggests that they do not drastically distort the overall data distribution. These outliers are likely representing respondents with unique or extreme experiences and divergent perceptions. Retaining them may enhance the generalisability of the study's findings, especially when these outliers reflect genuine differences in consumer behaviour or expectations. This approach aligns with Sarstedt and Mooi (2019) who recommended retaining outliers unless they are attributable to data entry errors, do not align with the research objective, or significantly affect the results.

4.3.1.3 Response Rate

Response rate is commonly considered as a significant indicator of the quality of data (Biemer & Lyberg, 2003). In this study, 300 emails had been sent out and receiving 121 responses resulting in a response rate of 40.3%. In terms of physical data collection, the questionnaires are distributed to 152 qualified respondents who are willing to take part in the survey and the researcher was ready to assist at any time. However, 2 out of 152 respondents who had requested for softcopy of the questionnaire turned out to be non-responding. Therefore, the response rate for physical data collection is 98.7%. It is common that online survey achieves lower response rate compared to face-to-face administered survey. This is in line with the finding of Nulty (2008) who found the response rate for online survey ranged between 20% to 47% while face-to-face paper administered survey response rate ranged between 55% to 75%. Therefore, for this study, both online and physical survey

response rates indicated a relatively high level of participation among eligible individuals. It is suggested that higher response rate increases the probability that the sample are representative to the population, thus yielding results that closely resemble those obtained from the entire population (Groves & Peytcheva, 2008).

4.3.1.4 Normality Tests of Variables

Deviation from normality in the distribution of variables can distort the outcomes of multivariate analysis (Hair et al., 2022). The mean is the most frequently utilised measure of central tendency, while the standard deviation is the most frequently utilised measure of dispersion (Sarstedt & Mooi, 2019). According to Table 4.3, the mean value for the variables ranged between 4.6981 to 6.0140 while the standard deviation ranged between 0.75409 to 1.11805. According to Hair et al. (2022), mean and standard deviation only determines whether the null hypothesis regarding normally distributed data should be rejected. Therefore, they suggested the examination of skewness and kurtosis for distribution measures. As PLS-SEM make no distributional assumption, bootstrapping procedures in PLS-SEM works effectively with non-normal data distribution. However, it is advised that PLS-SEM results should be examined carefully when the data distributions exhibit significant deviations from normality (Hair et al., 2022).

Skewness evaluates how symmetrical is the variable's distribution. When the distribution of data leans either towards the right or left end of the curve, the distribution is described as skewed (Hair et al., 2022). Referring to Table 4.3, the value of skewness ranged between -0.257 and -0.99, which fall between -1 and +1, and therefore is considered excellent (Hair et al., 2022). Kurtosis serves as a measure to assess whether a distribution is too peaked or too flat. A positive kurtosis exceeding +2 signifies an overly peaked distribution, while value below -2 indicates a distribution that is too flat (Hair et al., 2022).

The value of kurtosis ranged between -0.583 and 0.746, which falls within -2 and 2. Therefore, suggesting the pattern of responses conforms to a normal distribution (George & Mallery, 2019) and exclude the possibility of sampling bias (Pizur, 2022).

The variables *ELOY*, *ESAT*, and *CONF* exhibit mean values of 5.8102, 5.5993, and 5.4307 respectively, with standard deviations ranging from 0.82009 to 0.89215, indicating consistent responses among participants. The skewness values for these variables range from -0.323 to -0.630, reflecting a slight leftward skew, suggesting that respondents generally rated their e-loyalty, e-satisfaction, and expectation confirmation higher. The kurtosis values, ranging from -0.331 to 0.358, indicate distributions close to normal, with no significant deviations that could impact the analysis.

The variables *MV*, *QV*, *SV*, *INV*, and *PV* exhibit mean values ranging from 5.2219 to 5.9897, with standard deviations between 0.95880 and 1.02145, indicating consistent perceptions among respondents. The skewness values for these variables range from -0.256 to -0.990, reflecting a slight leftward skew, suggesting that respondents generally rated aspects such as monetary value, quality of benefits, social status, information, and preference value higher. Kurtosis values range from 0.583 to 0.746, indicating distributions that are either slightly flatter or slightly peaked but still within normal limits.

The *PR* variable has a mean of 4.6981 and a standard deviation of 1.11805, the lowest mean among the variables, suggesting that, on average, respondents perceive risks as slightly less serious than expected. The skewness value of -0.364 indicates a slight leftward skew, meaning more respondents rated the risk as less serious than expected, with fewer perceiving it as more serious. The kurtosis value of -0.024 is close to zero, suggesting a normal distribution.

In contrast, the *EWOM* variable displays a mean of 6.0140, the highest among all variables, with a standard deviation of 0.75409, indicating that most respondents agreed with positive statements about e-WOM. The skewness of -0.789 suggests a more pronounced leftward skew, indicating that a significant portion of respondents rated e-WOM highly. The kurtosis value of 0.614 shows a moderately peaked distribution but remains within the normal range. Despite the more noticeable skewness, the distribution is still considered normal for analysis purposes.

Table 4.3: Data Distribution of Variables

Variables	Mean	Standard Deviation	Skewness		Kurtosis	
			Statistic	Std. Error	Statistic	Std. Error
ELOY	5.8102	0.89215	-0.630	0.149	-0.043	0.297
ESAT	5.5993	0.82009	-0.323	0.149	-0.331	0.297
CONF	5.4307	0.88448	-0.496	0.149	0.358	0.297
MV	5.3474	1.01718	-0.262	0.149	-0.583	0.297
QV	5.2313	0.97988	-0.446	0.149	0.372	0.297
SV	5.2219	1.01985	-0.257	0.149	-0.457	0.297
INV	5.4766	1.02146	-0.442	0.149	-0.177	0.297
PV	5.9897	0.95880	-0.990	0.149	0.746	0.297
PR	4.6981	1.11805	-0.364	0.149	-0.024	0.297
EWOM	6.0140	0.75409	-0.789	0.149	0.614	0.297

Overall, the skewness and kurtosis values for all variables fall within acceptable ranges, indicating that the distributions are sufficiently normal for the purposes of PLS-SEM

analysis. This suggests that the data can be confidently used in further multivariate analysis, without significant concerns regarding distributional assumptions.

4.3.2 Demographical Profile Analysis

The demographic profile analysis of the respondents (N=267) presented in Table 4.4 illustrates a diverse composition across various demographic variables. The sample comprises 58.8% female and 41.2% male respondents. This gender distribution somewhat reflective Malaysia's generally balanced gender ratio. Age distribution shows a relatively even spread, with the highest proportion falling within the 21 to 30 years old category (39.3%), followed by the 31 to 40 years old category (31.5%), 41 to 50 years old (16.9%), not more than 20 years old (8.2%), 51 to 60 years old (3%), and more than 60 years old (1.1%). This distribution aligns with findings from Siddharta (2023), which indicate that the majority of Malaysian internet users are in their twenties, while those age 60 and above represent the smallest segment. Regarding ethnicity, the sample was predominantly Bumiputera including Malays and indigenous peoples (50.9%), followed by Chinese (44.6%), Indian (16.1%), and others (1.1%). This distribution is consistent with the broader Malaysian demographic profile where Bumiputera represent the largest ethnic group, followed by Chinese and Indian populations.

All respondents are Malaysian, with diverse origins spanning states such as Sarawak (43.8%), Selangor (22.8%), Johor (7.1%), Sabah (4.9%), Negeri Sembilan (3.4%), and Kedah (3%). In total, 48.7% of respondents originated from East Malaysian states including Sarawak and Sabah, while 51.3% are from Peninsular Malaysian states. This reflects a balanced representation from both regions. Vast majority of respondents (97.4%) reside within Malaysia, indicating a predominantly Malaysian-based participant pool. A minor fraction of respondents (2.6%) resides outside Malaysia, with countries like Brunei,

Cambodia, Saudi Arabia, Singapore, and New Zealand serving as their primary places of residence. This diversity in the geographic location of respondents enriches the dataset and enables a comprehensive analysis of demographic and socioeconomic characteristics across different regions, enhancing the study's validity and generalisability.

In terms of education level, the respondents were diverse, with the highest proportions having undergraduate degrees (37.1%), followed by postgraduate/professional qualifications (34.9%), diploma/foundation (21.3%), secondary school (5.6%), and primary school (1.1%). This distribution suggests that a significant portion of the sample is likely to have the financial resources and stability to travel. Marital status varied, with a significant portion of respondents being single (51.3%), 45.7% being married/defacto, 2.2% divorced and 0.8% widow/widower. This distribution reflects a balance between single and married or family travellers. Monthly income distribution ranged widely, with the highest proportions earning between RM4,001 and RM6,000 (22.5%), followed by earning between RM2,001 and RM4,000 (21.0%), no income (19.5%), earning more than RM10,000 (12.4%), earning between RM6,001 and RM8,000 (12.0%), earning not more than RM2,000 (6.7%) and earning between RM8,001 and RM10,000 (6%). This range reflects the middle-income segment, which is substantial in Malaysia.

Finally, occupation categories were diverse, with company employees (29.2%) and professionals (25.1%) comprising the largest proportions, followed by students (20.2%), self-employed/businessmen (9.7%), government servants (9%), housewives (3.4%), technical workers (3%), and unemployed (0.4%). This reflects a significant portion of the Malaysian workforce engaged in corporate and professional sectors, which often come with stable incomes and job security. The presence of a substantial number of students indicates

that younger individuals might prioritise travel during academic breaks or for educational purposes.

Overall, the demographic profile of the sample demonstrates a broad and representative composition of Malaysian OTA users, which enhances the generalisability of the results. The gender distribution closely aligns with Malaysia's balanced gender ratio, ensuring that findings are relevant to both males and females. The age distribution predominantly featuring younger adults, reflects current trends among Malaysian internet users. The ethnic composition mirrors Malaysia's demographic profile with a predominance of Bumiputera followed by Chinese and Indian groups, supports the study's relevance across major ethnic groups in Malaysia. Geographic representation from both East and Peninsular Malaysia, along with diverse educational backgrounds, income levels, and occupations, provides a comprehensive view of regional and socioeconomic perspectives. The sample's diversity supports the validity and relevance of the results across various segments of the Malaysian population.

Table 4.4: Demographical Profile Analysis

Respondent (N=267)			
Demographic variables	Category	Frequency	Percent (%)
Gender	Female	157	58.8
	Male	110	41.2
	Total	267	100.0
Age	Not more than 20 years old	22	8.2
	21 to 30 years old	105	39.3

Table 4.4: Demographical Profile Analysis (Continued)

Demographic variables	Category	Frequency	Percent (%)
	31 to 40 years old	84	31.5
	41 to 50 years old	45	16.9
	51 to 60 years old	8	3.0
	More than 60 years old	3	1.1
	Total	267	100.0
Ethnicity	Bumiputera (Malays and indigenous people)	133	49.8%
	Chinese	119	44.6
	Indian	12	4.5
	Others	3	1.1%
	Total	267	100.0
Country of Origin	Malaysia	267	100.0
	Total	267	100.0
State of Origin	Johor	19	7.1
	Kedah	8	3.0
	Kelantan	4	1.5
	Melaka	8	3.0
	Negeri Sembilan	9	3.4
	Pahang	5	1.9
	Penang	7	2.6
	Perak	7	2.6

Table 4.4: Demographical Profile Analysis (Continued)

Demographic variables	Category	Frequency	Percent (%)
	Perlis	4	1.5
	Sabah	13	4.9
	Sarawak	117	43.8
	Selangor	61	22.8
	Terengganu	5	1.9
	Total	267	100.0
Country of Residence	Brunei	1	0.4
	Cambodia	1	0.4
	Malaysia	260	97.4
	New Zealand	2	0.7
	Saudi Arabia	1	0.4
	Singapore	2	0.7
	Total	267	100.0
Level of Education	Primary school	3	1.1
	Secondary school	15	5.6
	Diploma/Foundation	57	21.3
	Undergraduate	99	37.1
	Postgraduate/Professional	93	34.9
	Total	267	100.0
Marital Status	Single	137	51.3
	Married/Defacto	122	45.7

Table 4.4: Demographical Profile Analysis (Continued)

Demographic variables	Category	Frequency	Percent (%)
	Divorced	6	2.2
	Widow/Widower	2	0.8
	Total	267	100.0
Monthly Income	No income	52	19.5
	Not more than RM2,000	18	6.7
	RM2,001 - RM4,000	56	21.0
	RM4,001 - RM6,000	60	22.5
	RM6,001 - RM8,000	32	12.0
	RM8,001 - RM10,000	16	6.0
	More than RM10,000	33	12.4
	Total	267	100.0
Occupation	Company employee	78	29.2
	Government Servant	24	9.0
	Housewife	9	3.4
	Professional	67	25.1
	Self-employed/ Businessman	26	9.7
	Student	54	20.2
	Technical	8	3.0
	Unemployed	1	0.4
	Total	267	100.0

4.3.3 Consumers' Usage of and Behaviour Towards OTAs

The consumers' usage of OTAs and purchasing behaviour towards OTAs are presented in Table 4.5. In regard to the type of accommodation booked through OTAs, a total of 336 responses were recorded. Among these, most respondents (N=200) booked hotels and resorts, constituting 59.5% of the total responses, followed by Airbnb (N=95, 28.3%). Bed and breakfast accounted for a smaller proportion (N=18, 5.4%), while hostels constituted 6.8% of bookings with 23 respondents. This pattern is consistent with the accommodation preferences observed in Malaysia, where hotels and homestays are the most favoured options (Siddharta, 2024). This finding implies that OTAs need to cater to broad spectrum of accommodation types, with a focus on enhancing their offerings in both traditional hotels and alternative lodging categories.

For the purpose for the trip, holiday/leisure trips were the most common with 237 respondents indicating their purpose as holiday/leisure among the total of 349 responses, making up 67.9% of the total responses. This is then followed by work/business trip (N=69, 19.8%), visit friends and relatives (N=30, 8.6%), and education and training (N=11, 3.1%). Health and medical care being the least trip with only 2 respondents constituting 0.6%. This distribution reflects the industry's emphasis on catering primarily to vacationers and tourists. Consequently, OTAs should focus on tailoring their services and promotions to the leisure segment. However, maintaining competitiveness in the business travel sector remains important due to its stable revenue potential.

The types of OTAs often used illustrate the preferred OTAs used by respondents. The majority favoured Agoda (N=171, 42.2%) and Booking.com (N=131, 32.3%), followed by Airbnb (N=58, 14.4%), and other platforms such as Trip.com (N=30, 7.4%), Traveloka (N=9, 2.2%), Expedia (N=4, 1.0%), and Hostelworld (N=2, 0.5%). This distribution aligns

with the broader trends observed in Malaysia where Agoda and Booking.com lead in popularity, followed by Trivago and Airbnb, as shown in Figure 1.5. The total number of responses in this section was 405 responses, indicating that respondents used multiple OTAs. This highlights the competitive nature of the OTA industry, with users engaging with various platforms to meet their travel needs.

The frequency of OTA usage varied among the respondents. The majority of respondents used OTAs 1-3 times a year (N=145, 54.3%), closely followed by 4-6 times a year (N=80, 30%), more than ten times a year (N=26, 9.7%), and 7-9 times a year (N=16, 6%). A majority use OTAs 1-3 times a year, with fewer users engaging more frequently. This usage frequency indicates that while OTAs are regular part of travel planning, frequent use is less common. OTAs could focus on increasing user engagement and repeat bookings through loyalty programs or incentives, aiming to convert occasional users into more frequent customers.

For the time spent by respondents in browsing OTAs, majority of the respondents spent less than 15 minutes (N=97, 36.3%) or 16-30 minutes (N=68, 25.5%). This indicates that a significant portion of respondents prefers quick and efficient browsing when making travel arrangements. However, notable percentage of respondents also spent more time, with 13.9% spending 31-45 minutes, 16.1% spending 46-60 minutes, and 8.2% spending more than 60 minutes. This suggests that a subset of consumers invests more time in researching and comparing options before making their travel bookings. Consequently, streamlining the booking process and improving user experience are crucial. Enhancements in search functionality and user interface could improve customer satisfaction and foster greater customer loyalty.

In regard to the money spent by the consumers for the accommodation booked via OTAs, the majority of respondents reported spending RM201 to RM300 (N=103, 36.8%) or RM101 to RM200 (N=82, 29.3%), indicating a moderate spending range among the respondents. Additionally, 17.5% spent RM301 to RM400, while smaller percentages spent less than RM100 (N=12, 4.3%), RM401 to RM500 (N=16, 5.7%), and more than RM500 (N=18, 6.4%). This distribution suggests a diversity in spending habits, with a significant portion of consumers falling within the mid-range spending categories. Therefore, OTAs should provide a range of options within these budget categories and consider offering value-for-money deals to appeal to these key customer segments.

The analysis of consumers' usage and purchasing behavior toward online travel agencies (OTAs) reveals valuable insights into industry preferences and trends. The data indicate a diverse range of preferences among consumers regarding the types of accommodations booked through OTAs, with hotels and resorts being the most popular choices. Leisure trips are the most common purpose for using OTAs, followed by work or business trips. Agoda, Booking.com, and Airbnb emerge as the top choices among respondents. However, many respondents utilize more than one OTA platform, highlighting the competitiveness within the OTA industry.

Consumers are actively engaged in the online travel booking process, with varying amounts of time spent browsing OTAs. Additionally, there is a moderate spending range among respondents, suggesting diverse spending habits. Overall, these insights underscore the need for OTAs to offer a wide range of options and competitive pricing to attract and retain customers in the highly competitive online travel booking market.

Table 4.5: Consumers' Usage of and Purchasing Behaviour Towards OTAs

OTA Usage	Category	Responses	
		Frequency (N)	Percent (%)
Type of Accommodation Booked	Hotels & resorts	200	59.5
	Airbnb	95	28.3
	Bed & breakfast	18	5.4
	Hostels	23	6.8
	Total	336	100.0
Purpose for the Trip	Work/Business	69	19.8
	Holiday/Leisure	237	67.9
	Education and training	11	3.1
	Health and medical care	2	0.6
	Visit friends and relatives	30	8.6
	Total	349	100.0
Type of OTA often used	Booking.com	131	32.3
	Agoda	171	42.2
	Airbnb	58	14.4
	Expedia	4	1.0
	Trip.com	30	7.4
	Hostelworld	2	0.5
	Traveloka	9	2.2
	Total	405	100.0
Frequencies of OTA usage	1-3 times a year	145	54.3
	4-6 times a year	80	30.0

Table 4.5: Consumers' Usage of and Purchasing Behaviour Towards OTAs (Continued)

OTA Usage	Category	Responses	
		Frequency (N)	Percent (%)
	7-9 times a year	16	6.0
	More than 10 times a year	26	9.7
	Total	267	100.0
Time Spent on	Less than 15 minutes	97	36.3
Browsing OTA	16-30 minutes	68	25.5
	31-45 minutes	37	13.9
	46-60 minutes	43	16.1
	More than 60 minutes	22	8.2
	Total	267	100.0
Money Spent	Less than RM100	12	4.3
	RM101 to 200	82	29.3
	RM201 to 300	103	36.8
	RM301 to 400	49	17.5
	RM401 to 500	16	5.7
	More than RM500	18	6.4
	Total	280	100.0

4.3.4 Reflective Measurement Model Evaluation

After establishing the normal distribution of variables within the dataset, reflective measurement model is explored. Reflective measurement model is a common approach widely used in social sciences (Hair et al., 2022). The relationship between underlying construct and indicator is reflective if changes in indicator is associated with changes in an

underlying construct. The causality flows from the underlying construct to the indicator as shown in Figure 4.1 (Hair et al., 2022, Coltman et al., 2008). The measurement model is assessed using PLS-SEM to evaluate reliability and validity of the measures for the constructs (Hair et al., 2022). This study refers to the guidelines provided by Hair et al., (2022). The stages for reflective measurement model including the assessment of indicator reliability, internal consistency reliability, convergent validity, and discriminant validity. Both indicator reliability and internal consistency reliability are meant to assess the reliability of the measures, while convergent validity and discriminant validity are to assess the validity of the measures. The results of the reflective measurement model are shown in Table 4.6 and are be discussed in the following Sections 4.3.7.1 to 4.3.7.4.

4.3.4.1 Indicator Reliability

The initial stage of evaluating a reflective measurement model involves examining the outer loadings of the indicators. Significant outer loadings on a construct, typically defined as being above a threshold of 0.708 (Hair et al., 2022), suggest that the associated indicators share a substantial amount of commonality, effectively capturing the essence of the construct. A loading of 0.708 or higher implies that the indicator shares at least 50% of its variance with the construct, a threshold that ensures that the constructs are consistently and accurately measured by their indicators, leading to more reliable and valid research findings. In Table 4.6, all constructs meet the recommended outer loading criterion of 0.708, except for *PR5* (0.634). This indicates that majority of the constructs explain at least 50% of the variance of the indicators, as squaring the value of 0.708 equals 0.50. It is common for social science to obtain outer loading lower than 0.708. Considering internal consistency reliability and convergent validity is crucial to determine whether outer loadings between 0.4 and 0.70 should be retained or deleted (Hair et al., 2022). Since the construct measures

meet the recommended thresholds for internal consistency reliability (Section 4.3.7.2) and convergent validity (Section 4.3.7.3), *PR5* is therefore retained. As a result, all indicators in this study are considered to be reliable, ensuring that the constructs are consistently captured by their indicators, thus providing a solid foundation for subsequent analysis.

4.3.4.2 Internal Consistency Reliability

Internal consistency reliability is most commonly used as a measure of reliability, indicating its ability to yield similar outcomes under stable conditions (Hair et al., 2022). Traditionally, Cronbach's alpha has been employed to estimate internal consistency reliability. However, as Cronbach's alpha assumes all indicators are equally reliable, it may underestimate internal consistency reliability. To address this, CR ρ_c considers the different individual outer loadings of the indicator variables (Hair et al., 2022). Both Cronbach's alpha and the CR ρ_c range from 0 to 1, with higher values indicating better internal consistency. According to Hair et al. (2022), CR ρ_c values above 0.70 is satisfactory as this indicates that the majority of the variance in the indicators is explained by the underlying construct. In Table 4.6, CR ρ_c values range between 0.879 and 0.959, which are regarded as satisfactory. Thus, it is concluded that all measurements are highly internally consistent, and the indicators reliably represent the construct. This high level of reliability underscores the robustness of the measurement model, ensuring that the constructs are accurately and consistently captured by their respective indicators.

4.3.4.3 Convergent Validity

Convergent validity assesses the extent to which a measure correlates positively with other measures that evaluate the same construct (Hair et al., 2022). The AVE is a common method used to evaluate convergent validity at the construct level. According to Hair et al.

(2022), AVE of 0.50 or higher suggests that the construct explains more than half of the variance in its indicators while AVE below 0.50 suggests that more than half of the variance in the indicators is due to other factors not captured by the construct. Therefore, an AVE of 0.5 or higher are considered to have sufficient convergent validity. In Table 4.6, the AVE values for each construct ranging between 0.594 to 0.855 exceeded the acceptable level of 0.500 (Hair et al., 2022). This indicates that the constructs in this study explained more than half of the variance in their respective indicators, thereby establishing their convergent validity. The high AVE values suggest that the measurement model is valid and reliable as the constructs explain a significant portion of the variance in their indicators while the likelihood of measurement error or unrelated factors influencing the indicators is minimised. This implies that the research framework is sound and the relationships between constructs and indicators are well-founded, providing a strong basis for subsequent data analysis.

4.3.4.4 Discriminant Validity

Discriminant validity refers to the extent to which a construct is distinct from other constructs empirically, which means that they do not overlap too much in their measurement. Establishing discriminant validity suggests that a construct captures phenomena that are not encompassed by other constructs in the model (Hair et al., 2022). Henseler et al. (2015) recommended using the HTMT of correlations as a reliable method to assess discriminant validity and proposed an HTMT value of 0.85 for conceptually distinct construct and 0.90 for conceptually similar construct. In Table 4.7, the HTMT values ranged between 0.161 to 0.866, which is below 0.90, thus establishing discriminant validity among all the constructs. The HTMT values in this study are all below the 0.90 threshold, indicate that the constructs are conceptually distinct and do not overlap excessively. These results suggest that each construct provides distinct and valuable information, thus establishing the discriminant

validity of the measurement model, thereby reinforcing the validity of the measurement framework.

Table 4.6: Results of Measurement Model

Construct	Measurement Items	Factor Loadings	CR	AVE
e-Loyalty (ELOY)	ELOY1	0.797	0.942	0.730
	ELOY2	0.873		
	ELOY3	0.896		
	ELOY4	0.866		
	ELOY5	0.823		
	ELOY6	0.868		
e-Satisfaction (ESAT)	ESAT1	0.836	0.941	0.725
	ESAT2	0.862		
	ESAT3	0.847		
	ESAT4	0.848		
	ESAT5	0.849		
	ESAT6	0.868		
Expectation Confirmation (CONF)	CONF1	0.901	0.945	0.811
	CONF2	0.921		
	CONF3	0.867		
	CONF4	0.911		
Electronic word-of-Mouth (EWOM)	EWOM1	0.799	0.897	0.686
	EWOM2	0.876		
	EWOM3	0.867		
	EWOM4	0.764		

Table 4.6: Results of Measurement Model (Continued)

Construct	Measurement Items	Factor Loadings	CR	AVE
Monetary value (MV)	MV1	0.910	0.959	0.855
	MV2	0.936		
	MV3	0.935		
	MV4	0.918		
Quality of benefit value (QV)	QV1	0.880	0.936	0.787
	QV2	0.888		
	QV3	0.917		
	QV4	0.863		
Social status value (SV)	SV1	0.904	0.950	0.825
	SV2	0.944		
	SV3	0.911		
	SV4	0.873		
Information value (INV)	INV1	0.746	0.921	0.745
	INV2	0.848		
	INV3	0.925		
	INV4	0.921		
Preference value (PV)	PV1	0.882	0.929	0.766
	PV2	0.885		
	PV3	0.848		
	PV4	0.886		

Table 4.6: Results of Measurement Model (Continued)

Construct	Measurement Items	Factor Loadings	CR	AVE
Perceived risk (PR)	PR1	0.819	0.879	0.594
	PR2	0.793		
	PR3	0.772		
	PR4	0.821		
	PR5	0.634		

Table 4.7: HTMT Criterion for Discriminant Validity of Constructs

	CONF	ELOY	ESAT	EWOM	INV	MV	PR	PV	QV	SV
CONF										
ELOY	0.715									
ESAT	0.857	0.845								
EWOM	0.681	0.802	0.731							
INV	0.641	0.570	0.629	0.677						
MV	0.643	0.528	0.657	0.550	0.699					
PR	0.231	0.281	0.286	0.195	0.268	0.224				
PV	0.397	0.476	0.444	0.524	0.641	0.473	0.161			
QV	0.706	0.486	0.661	0.476	0.817	0.754	0.242	0.539		
SV	0.656	0.510	0.604	0.494	0.812	0.723	0.210	0.476	0.866	

4.3.5 Structural Model Evaluation

In the previous Section 4.3.4, all model evaluation criteria have been met supporting the reliability and validity of the measures. The next step is to evaluate the structural model results. The evaluation starts from assessing the collinearity (VIF), followed by the

significance and relevance of the relationships (path coefficients), explanatory power (R^2), and predictive power (PLS_{predict} procedure).

4.3.5.1 Collinearity

Potential collinearity issues need to be addressed before evaluating path coefficients. Collinearity occurs when two variables are highly correlated, while multicollinearity happens when more than two variables are highly correlated (Hair et al., 2022). VIF is a measure of collinearity. According to Becker et al. (2017), VIF value of 5 and above indicates significant collinearity issue, suggesting merging or eliminating the construct. For reflective model, VIF for inner model should be considered while VIF for outer model is allowed to be high (Becker, 2017). In Table 4.8, the VIF value for inner model ranged between 1.00 to 3.635 which are below the threshold value of 5. Hence, collinearity between the predictor constructs was not an issue in this dataset.

4.3.5.2 Significance and Relevance of Structural Model Relationships

As collinearity is not a critical issue among predictor constructs, the significance and relevance of the structural model relationships could be assessed. The standardized path coefficients ranged from -1 to +1, indicate the strength and direction of the relationships. Path coefficients close to +1 signify strong positive relationships and negative values represent inverse relationships, both of which are typically statistically significant (Hair et al., 2022). Conversely, coefficients closer to 0 denote weaker relationships and lesser importance of one construct in explaining another which are usually not statistically significant (Hair et al., 2022). In Table 4.8 and Figure 4.1, it is found that *EWOM* ($\beta = 0.391$) has the highest path coefficient on *CONF*, followed closely by *QV* ($\beta = 0.355$), *SV* ($\beta = 0.133$), and *MV* ($\beta = 0.122$). In contrast, the *PV* ($\beta = -0.084$), *INV* ($\beta = -0.040$), and *PR* ($\beta =$

0.037) have minimal impact on *CONF*. Furthermore, it is also found that *CONF* ($\beta = 0.793$) has remarkably importance in establishing *ESAT*. Moving on in the model, it is found that *ESAT* ($\beta = 0.696$) being the key driver for *ELOY* as compared to *CONF* ($\beta = 0.117$).

The analysis of structural model relationships reveals that some path coefficients (*INV*, *PV*, and *PR* on *CONF*) exhibit relatively low values. To assess the significance of these relationships, we employ bootstrapping procedure. If the empirical *t* value exceeds the critical value, we conclude that the coefficient is statistically significant at a certain error probability. In marketing research, a significance level of 5% is commonly assumed. For a one-tailed test, critical value at a significance level of 5% is 1.65 (Hair et al., 2022). As shown in Table 4.8 and Figure 4.1, all relationships in the structural model are significant except for *INV* $\rightarrow$ *CONF* ($t = 0.483$), *PV* $\rightarrow$ *CONF* ($t = 1.554$), and *PR* $\rightarrow$ *CONF* ($t = 0.953$).

These findings suggest that the expectations regarding monetary value, quality of benefit value, social status value, and e-WOM were confirmed by the accommodation booked through OTAs, significantly contributing to e-satisfaction and subsequent e-loyalty among Malaysian OTA users. In contrast, the expectations regarding information value, preference value, and perceived risk were not confirmed, indicating the need for further efforts in these areas. Furthermore, this study also highlights the importance of expectation confirmation in the accommodation booked via OTAs in establishing both e-satisfaction and e-loyalty among Malaysian OTA users. Lastly, while expectation confirmation plays a significant role in establishing e-loyalty among Malaysian OTA users, e-satisfaction plays a more remarkable role.

Table 4.8: Results of the Path Analysis

Hypothesis	Relationship	Coefficient	VIF	<i>t</i> -value	f^2	Decision
H ₁	MV → CONF	0.122	2.323	1.870	0.015	Supported
H ₂	QV → CONF	0.355	3.635	4.400	0.082	Supported
H ₃	SV → CONF	0.133	3.317	1.672	0.013	Supported
H ₄	INV → CONF	-0.040	3.339	0.483	0.001	Not Supported
H ₅	PV → CONF	-0.084	1.578	1.554	0.011	Not Supported
H ₆	PR → CONF	0.037	1.074	0.953	0.003	Not Supported
H ₇	EWOM → CONF	0.391	1.650	7.539	0.218	Supported
H ₈	CONF → ESAT	0.793	1.000	28.874	1.698	Supported
H ₉	CONF → ELOY	0.117	2.698	1.829	0.014	Supported
H ₁₀	ESAT → ELOY	0.696	2.698	11.687	0.483	Supported

4.3.5.3 Explanatory Power

Once the significance and relevance of the relationships within the structural model are established, the next step is to assess the model's explanatory power. Explanatory power of a model refers to the strength of the assumed causal relationships in a PLS path model (Hair et al., 2022). The most commonly used method for evaluating the model's explanatory power is by using the coefficient of determination (R^2) which quantifies the extent to which the variance of an endogenous construct is accounted for by its predictor construct (Hair et al., 2022), which is also referred to as in-sample predictive power (Sarstedt et al., 2014). The R^2 value varies between 0 and 1, with greater values indicating stronger explanatory power. According to Hair et al. (2011), R^2 values of 0.75, 0.50 and 0.25 are substantial, moderate,

and weak respectively. In Figure 4.1, the R^2 values of *CONF* (0.576), *ESAT* (0.629), and *ELOY* (0.628), are all above 0.50, indicating the model has moderate explanatory power. This indicates that *MV*, *QV*, *SV*, *INV*, *PV*, *PR*, and *EWOM* account for 57.6% of the variance in *CONF*. Additionally, *CONF* explains 62.9% of the variance in *ESAT*, while both *CONF* and *ESAT* together account for 62.8% of the variance in *ELOY*.

The R^2 value can additionally be used to quantify the strength of the structural model relationships through the f^2 effect size. The f^2 effect size measures the impact of removing a specific predecessor construct on the R^2 value. According to Cohen (1988), f^2 values higher than 0.35, 0.15, and 0.02 indicate large, medium, and small effect sizes respectively. In Table 4.8, *CONF* (1.698) has a large effect on *ESAT*. In contrast, *CONF* (0.014) has no effect on *ELOY*. Furthermore, it is found that *ESAT* (0.483) has a large effect on *ELOY*. Additionally, *EWOM* (0.218) has a medium effect on *CONF*. On the other hand, *QV* (0.082) and *MV* (0.015) have a small effect on *CONF*. On contrary, *SV* (0.013), *PV* (0.011), *INV* (0.001), and *PR* (0.003) have no effect on *CONF*. It is normal for most constructs to have a minimal effect size in the model, similar to how not all actors in a movie can be the main character (Benitez et al., 2020).

4.3.5.4 Predictive Power

The fourth stage of evaluating the structural model involves assessing its predictive power using $PLS_{predict}$. For a PLS path model to be valuable for managerial decision, it should yield findings applicable beyond the dataset used in its estimation (Hair & Sarstedt, 2021). This includes determining if the findings extend to data not included in the model's estimation, known as assessing its out-of-sample predictive power (Chin et al., 2020; Sarstedt et al., 2017). The primary approach for this assessment is through Shmueli et al.'s (2016) $PLS_{predict}$, which divides the dataset into training and holdout samples. The training

sample estimates model parameters used to predict values of the dependent construct's indicators in the holdout sample (Hair et al., 2022). According to Hair et al. (2019), Q^2_{predict} values should be greater than zero for an endogenous construct to indicate the predictive accuracy of the structural model for that construct. In this study, Q^2_{predict} values were generated using *PLS Predict* with default settings of 10 folds and 10 repetitions. This process involves partitioning the dataset into 10 equal parts and estimating the model 10 times, each time using a different subset for validation and the remaining subsets for training. This cross-validation technique ensures that the results are robust and generalisable. As shown in Table 4.9, all Q^2_{predict} values are greater than zero, ranging between 0.181 and 0.495, indicating that all indicators outperform the most naïve benchmark (Shmueli et al., 2019).

As the Q^2_{predict} values are greater than zero, RMSE values are compared with LM benchmark. When comparing the RMSE of a PLS-SEM against the LM benchmark, if the RMSE of the PLS-SEM is lower than that of the LM, it suggests that the model has better predictive power. If the RMSE is higher, it indicates that the simpler LM performs as well or better (Hair et al., 2022). As shown in Table 4.9, the majority of the indicators in the PLS-SEM demonstrate lower RMSE values compared to the LM benchmark indicating majority of them produce lower prediction errors. In this study, the PLS-SEM RMSE values for *CONF1*, *CONF2*, *CONF3*, and *CONF4* are 0.748, 0.694, 0.815, and 0.690 respectively, all lower than the LM values of 0.840, 0.742, 0.860, and 0.74. Similarly, the PLS-SEM RMSE values for *ESAT2*, *ESAT3*, *ESAT4*, and *ESAT5* are 0.774, 0.835, 0.709, and 0.719 respectively, which are lower than the LM values of 0.793, 0.916, 0.752, and 0.724. Conversely, indicators such as *ELOY*, *ESAT1*, and *ESAT6* exhibit lower LM values compared to PLS-SEM RMSE. Given that the number of indicators with PLS-SEM RMSE values lower than LM values is equal to the number of indicators with LM values lower than

PLS-SEM RMSE values, with 8 indicators each, it is therefore concluded that this model demonstrates a medium predictive power (Shmueli et al., 2019). These findings underscore the model's effectiveness in accurately predicting outcomes, thereby supporting its value for managerial decision-making.

Table 4.9: Model's Predictive Power

	Q^2_{predict}	PLS- SEM_RMSE	LM_RMSE	PLS-SEM – LM RMSE
CONF1	0.426	0.748	0.840	-0.092
CONF2	0.495	0.694	0.742	-0.048
CONF3	0.340	0.815	0.860	-0.045
CONF4	0.495	0.690	0.745	-0.055
ELOY1	0.181	1.028	1.012	0.016
ELOY2	0.274	0.869	0.833	0.036
ELOY3	0.314	0.832	0.823	0.009
ELOY4	0.351	0.848	0.839	0.009
ELOY5	0.371	0.836	0.810	0.026
ELOY6	0.344	0.823	0.808	0.015
ESAT1	0.359	0.793	0.789	0.004
ESAT2	0.386	0.774	0.793	-0.019
ESAT3	0.354	0.835	0.916	-0.081
ESAT4	0.396	0.709	0.752	-0.043
ESAT5	0.418	0.719	0.724	-0.005
ESAT6	0.396	0.711	0.699	0.012

4.4 Chapter Summary

In this chapter, the pilot study indicates that all constructs are reliable and valid. A total of 271 qualified responses were collected with 4 straight liners removed, retaining 267 valid responses. The demographic profile of the sample demonstrates a broad and representative composition of Malaysian OTA users, enhancing the generalisability of the results. The data are normally distributed, thus excluding the possibility of sampling bias. Reflective measurement model demonstrates that all indicators are reliable and valid, establishing a solid foundation for addressing the research questions. The reliability and validity of the constructs ensure that the measurements are sound, and the results are credible. In the structural model, all relationships are found to be significant except for the relationships involving information value, preference value, and perceived risk concerning expectation confirmation. This nuanced finding suggests that these variables may not have the anticipated impact on expectation confirmation, highlighting areas where the constructs may not align with the hypothesized relationships. The model demonstrates a moderate explanatory power and medium predictive power, providing a reasonable amount of variance in the dependent variables and a moderate level of predictive accuracy. This indicates that while the model is effective, there is room for further research and exploration. These findings set the stage for the discussion chapter, where the implications of these results will be explored in depth. The discussion will focus on interpreting the significance of the relationships, understanding the reasons behind non-significant findings, and considering the implications for theory and practice. Additionally, the discussion will address the model's explanatory and predictive power, offering insights into potential areas for future research and model improvement.

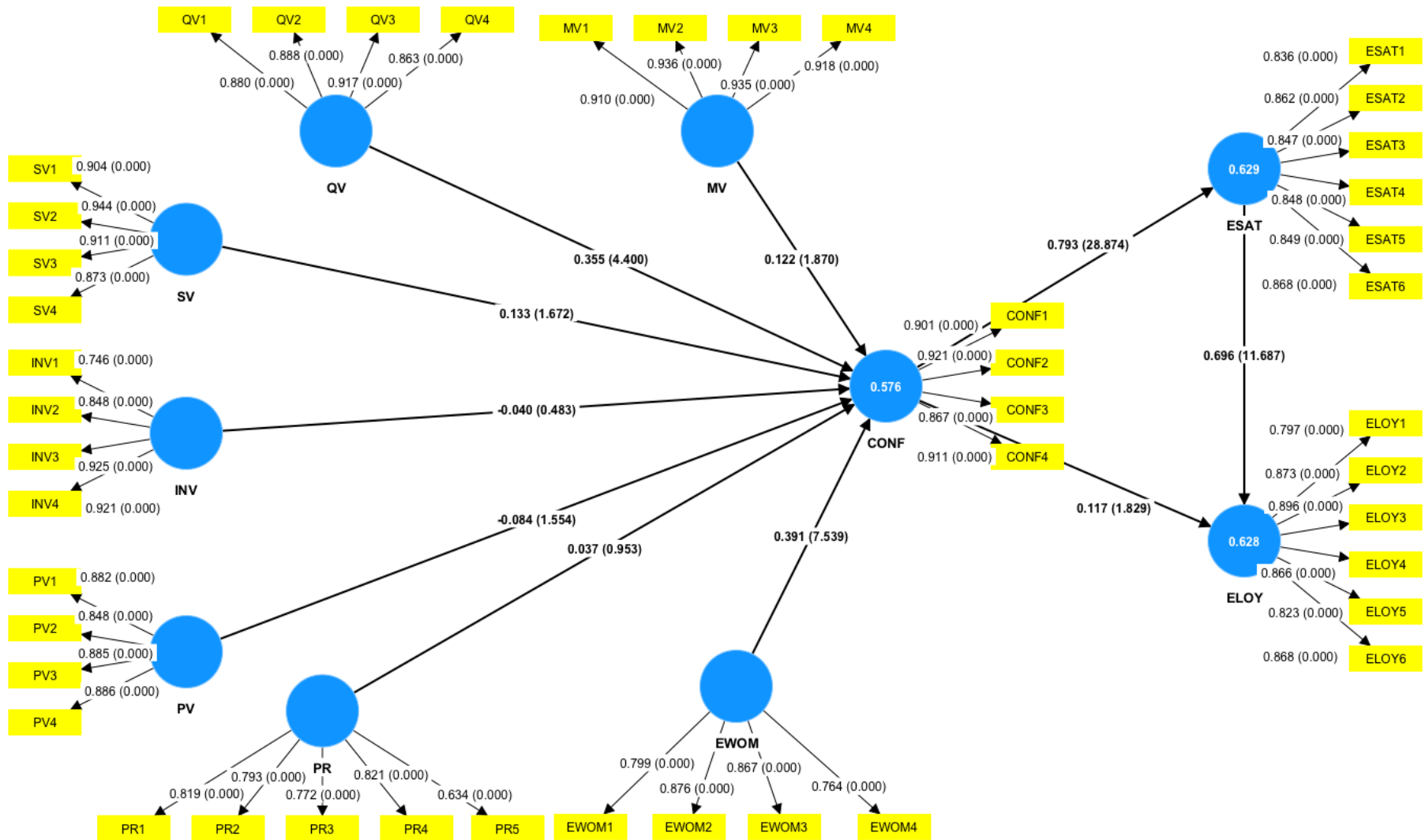


Figure 4.1: Results of the Path Analysis

CHAPTER 5

DISCUSSION AND CONCLUSIONS

5.1 Introduction

This chapter presents a comprehensive discussion of the key findings, their theoretical insights, practical applications, study limitations, and recommendations for future research, concluding with a summary. The findings reveal that most hypothesised relationships are supported, particularly the significant impact of e-WOM, monetary value, quality of benefits value, and social status value on expectation confirmation, as well as the influence of expectation confirmation on e-satisfaction and e-loyalty. These results address the research question by identifying factors influencing e-satisfaction and e-loyalty in the context of Malaysian OTA users.

5.2 Key findings and discussions

In this study, five research questions (RQs) and five research objectives (ROs) provide the framework and defined the goals. Ten hypotheses were proposed to examine the direct relationships between the identified variables. Hypotheses H₁ to H₅ align with RQ1 and RO1, exploring the impact of consumption values on expectation confirmation. Hypotheses H₆ and H₇ correspond to RQ2 and RQ3, addressing the role of perceived risk and e-WOM, with RO2 and RO3 guiding these investigations. Hypotheses H₈ and H₉ focus on the effect of expectation confirmation on e-satisfaction and e-loyalty (RQ4 and RO4) and Hypothesis H₁₀ explores the relationship between e-satisfaction and e-loyalty, (RQ5 and RO5). Table 5.1 summarises the research questions, research objectives, and hypotheses. Key findings and discussions for each of the hypotheses are discussed in Sections 5.2.1 to 5.2.10.

Table 5.1: Research Questions, Research Objectives, Hypotheses, and Findings

Research Questions	Research Objectives	Hypotheses	Findings
RQ1: How consumption values including monetary, quality of benefit, social status, information, and preference affect the expectation confirmation of accommodations booked via OTAs?	RO1: To examine the impact of consumption values including monetary, quality of benefit, social status, information, and preference on expectation confirmation of accommodations booked via OTAs.	H₁: Monetary value is positively associated with expectation confirmation. H₂: Quality of benefits value is positively associated with expectation confirmation. H₃: Social status value is positively associated with expectation confirmation. H₄: Information value is positively associated with expectation confirmation.	H₁: Monetary value is positively associated with expectation confirmation. H₂: Quality of benefits value is positively associated with expectation confirmation. H₃: Social status value is positively associated with expectation confirmation. H₄: Information value is not significantly associated with expectation confirmation.

Table 5.1: Research Questions, Research Objectives, Hypotheses, and Findings (Continued)

Research Questions	Research Objectives	Hypotheses	Findings
		H ₅ : Preference value is positively associated with expectation confirmation.	H ₅ : Preference value is not significantly associated with expectation confirmation.
RQ2: In what way does perceived risk affect the expectation confirmation of accommodations booked via OTAs?	RO2: To investigate the impact of perceived risk on expectation confirmation of accommodations booked via OTAs.	H ₆ : Perceived risk is negatively associated with expectation confirmation.	H ₆ : Perceived risk is not significantly associated with expectation confirmation.
RQ3: How does e-WOM affect the expectation confirmation of accommodations booked via OTAs?	RO3: To study the impact of e-WOM on expectation confirmation of accommodations booked via OTAs.	H ₇ : e-WOM is positively associated with expectation confirmation.	H ₇ : e-WOM is positively and significantly associated with expectation confirmation.

Table 5.1: Research Questions, Research Objectives, Hypotheses, and Findings (Continued)

Research Questions	Research Objectives	Hypotheses	Findings
RQ4: To what extend does expectation confirmation of accommodations booked via OTAs affect e-satisfaction and e-loyalty towards OTAs?	RO4: To examine the influence of expectation confirmation of accommodations booked via OTA on e-satisfaction and e-loyalty towards OTAs.	H ₈ : Expectation confirmation is positively associated with e-satisfaction. H ₉ : Expectation confirmation is positively associated with e-loyalty.	H ₈ : Expectation confirmation is positively and significantly associated with e-satisfaction. H ₉ : Expectation confirmation is positively and significantly associated with e-loyalty.
RQ5: What role does e-satisfaction play in influencing e-loyalty towards OTAs?	RO5: To determine the relationship between e-satisfaction and e-loyalty towards OTAs.	H ₁₀ : e-Satisfaction is positively associated with e-loyalty.	H ₁₀ : e-Satisfaction is positively associated with e-loyalty.

5.2.1 Monetary Value and Expectation Confirmation

In this study, monetary value is found to be positively and significantly associated with expectation confirmation ($\beta = 0.122$, $t = 1.870$). This result highlights the crucial role of confirming monetary value during the physical visit to accommodations booked through OTAs. This finding confirms existing research by establishing that monetary significantly influences expectation confirmation, aligning with prior studies that underscore its importance in shaping purchase intentions and loyalty in the OTA context. Talwar et al. (2020b) and Memarzadeh et al. (2017) have consistently highlighted monetary value as a pivotal factor driving purchase decisions, while Silva & Goncalves (2016) demonstrated its role in cultivating customer loyalty. The positive and significant association found in this study reaffirms these earlier conclusions and emphasizes the relevance of monetary value in the accommodation booking process. This research finding underscores the complexity of the influence of monetary value on expectation confirmation in the context of accommodation booking via OTAs among Malaysian OTA users, as different consumer segments exhibit varying price sensitivities. This is supported by Chung et al. (2021) who found varying price sensitivities among different consumer segments.

Furthermore, it has been observed that the impact of room prices on consumer expectations also varies among Malaysian OTA users. Economy travellers typically prioritise practical aspects such as affordability, basic amenities, and functionality. Conversely, luxury travellers often prioritize aesthetics, high quality amenities, personalized services, and overall experience of luxury and comfort. Since expectations vary with the varying room price preferences, the confirmation of the expectations also varies. This is supported by the findings of Zhuo and Wang (2022), who noted that budget room consumers

typically focus on practical aspects while luxury room consumers prioritizing aesthetics and accommodation purpose.

Despite these variations, the expectation of the monetary value among Malaysian OTA users was positively confirmed by the accommodations booked via OTAs in this study, suggesting the Malaysian OTA users perceive they are receiving good value of money. This could be attributed to the alignment between what consumers anticipate and what they actually receive in terms of quality or overall benefits. As the effect size ($f^2 = 0.015$) is relatively small, indicating that monetary value explains only a small portion of the variance in expectation confirmation, it is clear that other factors such as quality or overall benefits, also contribute to this relationship. Nonetheless, the hypothesis is supported, suggesting that monetary value plays a role in confirming expectations. Therefore, delivering tangible value propositions that justify the price would be crucial to enhance expectation confirmation and overall satisfaction, which would eventually contribute to consumer loyalty.

5.2.2 Quality of Benefits Value and Expectation Confirmation

Quality of benefits value is found to be positively and significantly associated with expectation confirmation of accommodation booked via OTAs ($\beta = 0.355$, $t = 4.400$). This result is consistent with previous studies that have identified quality as a major predictor of both purchase intention and repurchase intention. For instance, Talwar et al. (2020b), Tandon et al. (2021), Silva and Goncalves (2016), and Shi et al. (2022) have all highlighted the importance of quality in driving consumers' purchase decisions and their subsequent loyalty. Furthermore, this finding supports the work of Huang and Lan (2021) and Assaker et al. (2020), who have established that quality significantly impacts repurchase intention. The study also aligns with Huang et al. (2018), who found that consumers who book higher-rated hotels tend to have elevated expectations regarding the quality of their

accommodations. This alignment suggests that consumers' expectation confirmation is heavily influenced by the perceived quality of the benefits they receive, reinforcing the established link between quality and consumer satisfaction. By demonstrating the strong positive association between quality of benefits value and expectation confirmation, this study confirms the pivotal role that quality plays in the OTA context. It extends previous research by providing empirical evidence of this relationship in the specific context of Malaysian OTA users, thereby contributing to a more nuanced understanding of how quality influences consumer satisfaction and expectation confirmation in accommodation bookings.

Malaysian OTA users typically seek for higher quality accommodations by referring to the rating of the accommodation. This trend aligns with the findings of Hu and Yang (2020). By seeking higher rated accommodation, consumers expect higher quality lodging. The expectation of quality of benefit value among Malaysian OTA users was positively confirmed by the accommodation booked via OTA, indicating that the OTA users perceived they were receiving quality higher than their expectations. This study highlights the significance of delivering high quality experiences to meet or exceed consumers' expectations in the hospitality industry.

Various determinants of perceived quality in relation to accommodations should be considered, encompassing cleanliness, hospitality and service, building facilities, room equipment, internet connection, and accessibility. This is supported by Ding et al. (2020) who categorised accommodation quality into general attributes (room equipment, amenities, and service) and convenience related benefits (accessibility to tourist attraction sites or availability of public transportations). The effect size ($f^2 = 0.082$) is relatively small, indicating that the quality of benefits value explains only small portion of the variance in expectation confirmation. This indicates that apart from quality of benefit value, there are

other factors which significantly contribute to the expectation confirmation. Nonetheless, the hypothesis is supported with the highest path coefficient ($\beta = 0.355$) among the consumption values suggested by Talwar et al. (2020b). Therefore, delivering high-quality accommodations is essential to bolster expectation confirmation and overall satisfaction, ultimately fostering consumer loyalty.

5.2.3 Social Status Value and Expectation Confirmation

The social status value has significant positive influences on expectation confirmation ($\beta = 0.133$, $t = 1.672$). The result aligns with studies by Talwar et al. (2020b) and Garcia (2023), which emphasize the importance of social status in influencing consumer behavior and expectation confirmation. These studies highlight how social identity and the desire to project a positive image can significantly impact consumer decisions and satisfaction. The finding also supports Chen and Hung's (2010) research, which indicates that social interaction and integration within online communities are crucial for Malaysian users. By using OTAs to book accommodation, Malaysian OTA users feel integrated with society rather than disconnected, as the society increasingly embraces digitalization. Furthermore, when accommodations booked via OTAs meet expectations, Malaysian OTA users feel accepted by their travel companions, thereby creating a positive impression and achieving social approval. Conversely, when accommodations fail to meet expectations, users are often blamed by others, resulting in social disapproval.

In this study, social status value was positively confirmed by the accommodations booked via OTAs, indicating that Malaysian OTA users perceived their expectations in terms of social status were met or exceeded. Additionally, this study found that the desire to improve social status can influence consumer behavior through processes such as social comparison. This is consistent with the findings of Thakur (2018) and Guo et al. (2022).

Furthermore, social comparison heightened the importance of social status within online communities, aligning with the findings of Shi et al. (2023).

However, the effect size ($f^2 = 0.015$) is relatively small, indicating that social status value explains only a small portion of the variance in expectation confirmation. This could be attributed to multifaceted and complex consumer behaviour and expectation confirmation being influenced by diversity of consumer needs beyond just social status value. This is aligned with the findings of Lim et al. (2022) and Ding et al. (2023). While some individuals may value social status, others may prioritise affordability or quality. In this study, quality of benefits plays more dominant roles among the consumption values in shaping expectation confirmation, followed by social status value and monetary value. Nonetheless, the hypothesis is supported, suggesting that social status value plays a role in confirming expectations. While accommodation providers and OTAs continue to prioritise quality of benefits value, acknowledging and addressing the aspect of social status value can further enhance the overall value proposition.

5.2.4 Information Value and Expectation Confirmation

Contrary to hypothesis developed, the relationship between information value and expectation confirmation is found to be not significantly ($\beta = -0.040$, $t = 0.483$). The negative coefficient suggests a negative relationship, which, however, is not statistically significant. Moreover, the effect size ($f^2 = 0.0001$) is extremely small, indicating that information value explains almost no variance in expectation confirmation. This finding contradicts with previous studies (Sharma et al., 2022; Huang & Lan, 2021; Chaw & Tang, 2019), which demonstrated a positive relationship between information value and consumer outcomes.

One possible explanation for this contradiction is the wide range of options and vast amount of information on OTAs, leading to information overload and resulting in choice barriers. It is undeniable that one of the benefits of e-commerce is to make comparison easier. However, the vast array of choices and information may result in consumers having hard time to make decisions and spending more time comparing and searching for relevant information. This, in turn, may be unfavourable for consumers who do not wish to spend so much time browsing OTAs. This is in line with the findings of Hu and Yang (2020) and Jo et al. (2021) who suggested that vast array of options and information may lead to cognitive overload and confusion. This could reduce their decision confidence and make the booking process more frustrating than beneficial. As a result, consumers may feel more stressed than satisfied, which weakens the influence of information value on their expectation confirmation. This phenomenon of choice overload can make it difficult for consumers to commit to a decision, which in turn diminishes the perceived value of the information provided. If consumers feel overwhelmed, they may not believe that the information available on the OTAs meaningfully contributes to their confirmation of expectations. The presence of information filtering mechanism, which help consumers narrow down their choices, could mitigate the negative impact of information overload. This aligns with Guillet et al.'s (2020) findings, suggesting that information overload can be managed through effective interface design that simplifies the decision-making process.

Another explanation for the non-significant relationship between information value and expectation confirmation could be the phenomenon of hidden affordance on OTA platforms. Hidden affordance refers to essential information being obscured or requiring additional user actions to access, such as hovering over a price tag or scrolling to a lower section of the page. Jo et al. (2021) highlighted how hidden information, such as additional

fees or restrictions, can lead to consumer dissatisfaction when expectations are not met. For example, a consumer might be drawn to a room based on an attractive rate, but mandatory resort fees or service charges are only revealed after expanding a dropdown menu or hovering over an icon. If users do not perform these actions, they are surprised by unexpected charges upon arrival at the accommodation. This lack of clarity, despite the information being technically present, can lead to frustration and dissatisfaction, contributing to the failure in aligning information value with expectation confirmation.

Furthermore, incomplete or misleading information provided by accommodation providers on OTA platforms could also explain the lack of a significant relationship. For instance, accommodation providers often fail to communicate maintenance-related closures of amenities such as swimming pool through OTA platforms. As a result, consumers may arrive expecting access to these amenities, only to discover that they are unavailable. Similarly, essential information such as the entrance fees for using amenities like swimming pool or playgrounds are often omitted from OTAs listings. These discrepancies between consumers' expectations and their actual experience further contribute to the disconfirmation of expectations. While consumers may still express satisfaction with their bookings and the overall experience, the value of the information itself may not play a central role in shaping their expectation confirmation. This suggests that other factors such as online reviews or e-WOM, might compensate for the lack of reliable information from the provider. However, the importance of clear and accurate information cannot be overlooked. To mitigate this issue, accommodation providers could implement proactive and transparent communication approach by regularly updating their listings with accurate information about amenities, including real-time updates on maintenance schedules and closures. This approach aligns with the findings of Sadiq et al. (2021) suggesting the importance of developing

communication strategy that highlights the authenticity and accuracy of the product information.

5.2.5 Preference Value and Expectation Confirmation

In the realm of OTAs, preference value encompasses factors such as booking flexibility (Phonthanukitithawor et al., 2021; Salem et al., 2021), wide range of choices (Talwar et al., 2020b) and flexible cancellation policies (Salem et al., 2021). However, contrary to the hypothesis, the relationship between preference value and expectation confirmation is found to be negatively insignificant ($\beta = -0.084$, $t = 1.554$) in this study. Furthermore, trivial effect size ($f^2 = 0.011$) was observed, indicating that preference value explains very small portion of the variance in expectation confirmation. This finding is contradicting with the previous studies (Dogra et al., 2023; Phonthanukitithawor et al., 2021; Talwar et al., 2020b; Garrido-Moreno et al., 2021).

One possible reason for this discrepancy could be the overwhelming number of options available on OTAs which lead to confusion and decreased in decision confidence among consumers as discussed in previous section. Additionally, while the range of choices may be extensive, the variety of accommodations, features, or locations available through the OTA may be limited or not aligned with Malaysian consumers preferences. Furthermore, despite the presence of flexible booking policies, Malaysian consumers may still perceive a lack of flexibility when using OTAs. This perception may arise if the cancellation or modification policies offered are perceived as restrictive or with hidden terms and conditions limiting the extent of flexibility. For example, while free or flexible cancellation are advertised, they may require the authorisation of credit card or advance payment, and may impose limitations on flexibility, such as non-refundable fees for first night if cancellation is made after a certain time.

Additionally, flexible booking policies might be perceived as a “nice-to-have” rather than a critical factor in assessing whether the accommodation meets expectations. For instance, if consumers have already made firm travel plans, the cancellation policy might not significantly impact their perception of value compared to other variables such as monetary value, quality of benefits value, social status value, and e-WOM. Therefore, while preference value is important, they may not significantly influence expectation confirmation when other factors dominate the consumer experience in the OTA context.

While increased availability of flexibility may lead to higher costs for service providers, OTAs are encouraged to establish comprehensive strategic partnerships to mitigate these expenses. For instance, options such as adjustable booking dates could be offered to OTA users to facilitate easy modifications without incurring penalties, thereby ensuring customer retention for accommodation providers. Although some accommodation providers permit booking date adjustments, OTA users are often required to contact the property directly for such changes. It would be advantageous if users could make these adjustments themselves within the OTA system.

For consumers, it is recommended to plan trips early, allowing them to take advantage of flexible booking options, such as free cancellation or modification policies. Additionally, consumers are advised to carefully read the terms and conditions of bookings, including cancellation policies and any fees associated with changes, to fully understand the level of flexibility offered by the OTA. This aligns with the findings of Gao and Bi (2021), who suggested that consumers should accurately assess their likelihood of following through with the booking and the possibility of cancellation before making a decision.

Another possible explanation is that preference value is typically confirmed before the physical visit to the accommodation, as factors such as booking flexibility and

cancellation policy primarily affect consumers before their actual stay. In this study, consumers' expectations of preference value were not confirmed, suggesting that preference value may be more significant before the purchase decision is made, as indicated by Talwar et al. (2020b). Therefore, understanding and catering to consumer preferences remain essential for businesses in creating offerings that resonate with their target segments and enhance overall satisfaction.

5.2.6 Perceived Risk and Expectation Confirmation

The association between perceived risk and expectation confirmation is found to be insignificant ($\beta = 0.037$, $t = 0.953$), contrary to findings from previous studies (Zhang, 2021; Tzavlopoulos et al., 2019; Sadiq et al., 2021; Sharma et al., 2021; Wu et al., 2020; Timur et al., 2023). However, other research also reported no significant impact of perceived risk on purchase intention (Ray & Bala, 2021; So et al., 2018). Despite the positive coefficient suggesting a positive relationship which is contrary to the initial hypothesis, some studies have indeed found a positive impact of perceived risk (Ray & Bala, 2021; Faqih, 2022; Talwar et al., 2020a).

This study found that while Malaysian OTA users have expressed concerns about time, financial, performance, psychological, and security issues associated with OTAs, these concerns do not hinder their use of OTAs. This could be due to the trust they placed in these platforms. This is consistent with the findings of Talwar et al. (2020a) who observed concerns about privacy and security issues associated with OTAs but found that these concerns do not create barrier to using OTAs. The perceived risks that consumers developed before physically visiting an accommodation are influence by the hope that these risks do not materialise. The positive coefficient for perceived risk found in this study indicates that perceived risk did not materialise during the visit. However, a weak relationship indicates

that Malaysian OTA users may have varied experiences with the risks associated with booking accommodations through OTAs. Some may have encountered situations where their perceived risks materialised, leading to dissatisfaction or negative confirmation, which could even lead to a lack of trust in OTAs. When consumers distrust OTAs, they may be reluctant to use them, and thus may not be represented in this study, which focuses on the expectation confirmation regarding accommodations booked through OTAs. This could possibly explain the weak positive relationship found here.

Furthermore, this study found risk perception varies among tourists based on their individual characteristics, past experience, and cultural background. For instance, tourist with high tolerance for risk may be more willing to stay in accommodations that others perceive as risky, such as shared accommodations. Travellers who have had positive experiences in the past may have a lower perceived risk associated with the accommodations. Conversely, travellers who have had negative experiences, such as theft, poor service, or scam, may have a higher risk perception associated with the accommodations booked via OTAs. This is consistent with the findings of Isaac (2020) who found that risk perception varies among tourists by factors like being first-time travellers, gender (females), and travelling with children.

Another possible explanation for insignificance of perceived risk on expectation confirmation is that, in the context of accommodation booked through OTAs, consumers are primarily motivated by factors such as price, quality, or location, rather than concerns related to potential risks. When consumers prioritise these tangible attributes over perceived risks, the impact of perceived risk on their expectation confirmation may be diminished. Additionally, in markets where consumers possess a high level of familiarity with OTAs and their operational processes, the perceived risk may be lower and less influential on

expectation confirmation. Furthermore, recent positive experiences with OTAs, coupled with favourable trends in online reviews and ratings may also contribute to a lower perceived risk. If consumers have had consistent positive experiences or if the OTA has a strong reputation, the impact of perceived risk on expectation confirmation may diminish.

Travelling inherently involves risks due to visiting new places, yet it also adds excitement through exploration of unfamiliar destinations. However, if perceived risks solely result in negative impacts on tourism, the sector's sustainability could be compromised. This is consistent with the findings of Yi et al. (2020) who found that cultural conflicts and unpredictable outcomes are common during travelling, adding to the excitement of the experience. In this study, perceived risk is not strongly associated with expectation confirmation suggesting that Malaysian OTA users may not heavily weigh potential risks when assessing whether their expectations have been met. This could indicate that other factors such as monetary value, quality of benefits value, social status value, or e-WOM overshadow concerns about risk when confirming expectations. Nonetheless, businesses should still address and mitigate perceived risks by establishing trust with consumers through consistent provisions of experiences that exceed their expectations, which is consistent with the suggestions of So et al. (2018).

Additionally, accommodation providers and OTAs could actively solicit feedback from guests after their stay and encourage them to share their experiences through reviews on the OTA platform. By referring to the customers reviews, potential guests can gain insights into the experiences of previous customers, helping them to make a more informed decisions and reducing the uncertainty associated with booking accommodations online. This is consistent with the findings of Yi et al. (2020) who suggested leveraging sharing

economy platforms, such as providing photos, information, and reviews to enhance the controllability of the perceived risk among consumers.

5.2.7 e-WOM and Expectation Confirmation

e-WOM emerges as the most significant factor in expectation confirmation showing a positive and significant association ($\beta = 0.391$, $t = 7.539$) with moderate effect size ($f^2 = 0.218$). This finding underscores the influential role of online reviews, recommendations, and feedback in shaping consumers perceptions and confirming their expectations. e-WOM holds significance irrespective of the tourists' characteristics. This finding is consistent with previous studies (Carvalho & Alves, 2023; Martínez-Navalón et al., 2021; Oh et al., 2022; Sharma et al., 2022). In the digital age, consumers increasingly rely on e-WOM to shape their expectations and guide their decision-making processes. They seek insights from fellow travellers and previous guests to assess the quality and suitability of accommodations booked through OTAs.

In this study, it was found that Malaysian OTA users rely heavily on e-WOM to assist them in selecting the best accommodation. This reliance on e-WOM underscores the significant role that online reviews and recommendations play in shaping the expectations of Malaysian OTA users when choosing accommodations. These users refer to online reviews and ratings to gather information and opinions from fellow travelers about their experiences with different accommodations available on OTAs. Malaysian OTA users seek insights into various aspects of accommodations, including cleanliness, amenities, staff, location, and overall satisfaction. Positive reviews and high ratings can instill confidence in Malaysian OTA users, while negative reviews may deter them from booking a particular property. This finding is consistent with the studies of Serra-Cantalops et al. (2020) and Serra-Cantalops et al. (2018), which suggest that e-WOM encompasses comments about the

service quality of accommodations, influencing consumers' trust in hotels and enhancing their willingness to make bookings.

Furthermore, *EWOM* demonstrated the highest path coefficient ($\beta = 0.391$) on expectation confirmation among Malaysian OTA users, surpassing consumption values and perceived risk. This finding suggests that Malaysian OTA users place greater trust and reliance on user-generated content compared to information provided by the accommodation providers. The shift towards e-WOM over information from the accommodation providers in this study implies that consumers perceive e-WOM as more authentic and trustworthy. This perception is likely to be influenced by several factors. Firstly, Malaysian OTA users may view user-generated content as unbiased and genuine, as it reflects the actual experiences and opinions of customers. Additionally, a wide range of user-generated content provides Malaysian OTA users with a sense of transparency and authenticity that may be lacking in the information provided by the accommodation providers.

Overall, the prominence of e-WOM in influencing expectation confirmation among Malaysian OTA users underscores the importance of maintaining a positive online reputation and actively managing user-generated content among accommodation providers and OTAs. Furthermore, the accommodation providers are encouraged to actively participate and respond to their customer reviews. This is in line with the webcare strategy suggested by Casado-Díaz et al. (2018) who observed that no response is the least favourable managerial response, followed by defensive responses while accommodative responses are regarded as the most effective.

5.2.8 Expectation Confirmation and e-Satisfaction

In the context of the hospitality industry, expectation confirmation refers to consumers' perceptions of the alignment between their expectations and the actual performance delivered by the accommodation providers. Significant positive relationship was found between expectation confirmation and e-satisfaction ($\beta = 0.793$, $t = 28.874$) with substantial effect size ($f^2 = 1.698$). This finding aligns with previous studies (Chang et al., 2019; Li et al., 2021). In the O2O2O mode, consumers often form their expectations based on information provided by the OTAs before physically visiting the hotel. These expectations including the monetary value, quality of benefits value, social status value, and e-WOM, play a crucial role in shaping consumers' perceptions and evaluations of the physical experience. The confirmation or disconfirmation of these expectations during the offline experience has significant implications for consumers' satisfaction over OTAs. This is consistent with the findings of Chiu et al. (2021). In this study, positive significant association between expectation confirmation and e-satisfaction aligns with the theoretical underpinnings of the ECT, suggesting that when consumers' initial expectations are fulfilled by the physical confirmation of services provided, it leads to higher levels of satisfaction with the overall experience.

In this study, it is found that achieving alignment between consumers' expectations of the accommodation book via OTAs and their performance is crucial for establishing e-satisfaction. To promote positive confirmation, the accommodation providers and OTAs should ensure that consumers have clear insights into the features of the accommodations. Video introductions, photos and user-generated contents can help consumers to form expectations closely match with the actual accommodation, thus reducing the risk of dissatisfaction resulting from disconfirmation. Furthermore, ongoing monitoring of

consumers' experiences and consistent updates to address any dissatisfaction are essential for enhancing performance and satisfaction. For consumers, it is recommended that OTA users refer not only to the information provided by the accommodation providers but also user-generated content to align their expectations closely with the actual accommodation. This helps to avoid dissatisfaction and disappointment during travel.

5.2.9 Expectation Confirmation and e-Loyalty

Significant positive relationship was found between expectation confirmation and e-loyalty ($\beta = 0.117$, $t = 1.829$), with a trivial effect size ($f^2 = 0.014$). In comparison, expectation confirmation demonstrates a much stronger relationship with e-satisfaction, suggesting the impact of expectation confirmation on e-satisfaction is more pronounced compared to its impact on e-loyalty. This result also highlights the complexity of e-loyalty as a multifaceted construct, while e-satisfaction primarily focuses on a single dimension of consumer experience. Meeting or exceeding expectations can lead to an immediate sense of satisfaction, whereas building loyalty often requires sustained positive experiences over time.

Several factors have been identified in previous studies as significant determinants of travelers' loyalty including price (Mursid & Wu, 2022), service quality (Jasni et al., 2020), hedonic value, trust (Albayrak et al., 2019), travelers' characteristics (Li et al., 2021). These findings underscore the multifaceted nature of e-loyalty and highlight the importance of considering various factors in understanding and promoting consumer loyalty in the online travel sector. Nonetheless, there is a positive significant relationship between expectation confirmation and e-loyalty, suggesting high level of congruence between consumers' expectations and their actual performance is crucial to fostering e-loyalty among Malaysian OTA users. Therefore, while expectation confirmation plays a significant role in fostering

e-loyalty, accommodation providers and OTAs should also focus on delivering consistent positive experiences over time. This could involve continuously improving service quality, offering competitive pricing, and building strong relationships with customers through effective communication and engagement strategies. This is in line with Li et al. (2021) who suggested that service providers should priorities equally the quality of the products and interactional service by having frequent interaction between employees and consumers.

5.2.10 e-Satisfaction and e-Loyalty

This study reveals a significant positive relationship between e-satisfaction and e-loyalty ($\beta = 0.0.696$, $t = 11.687$), along with a substantial effect size ($f^2 = 0.483$). The strong coefficient, t -value, and effect size indicate that e-satisfaction significantly influences e-loyalty, suggesting that satisfied customers are more likely to exhibit loyalty behaviours. Moreover, the substantial effect size underscores the magnitude of the impact of e-satisfaction on e-loyalty, indicating that changes in e-satisfaction can lead to significant variations in e-loyalty behaviours among customers. Affecting almost half of the variance in e-loyalty, e-satisfaction emerges as a critical driver of e-loyalty. This finding is aligned with previous studies (Assaker et al., 2020; Masri et al., 2020; Li et al., 2021; Choi et al., 2021; Sharma et al., 2022), highlighting the robustness and consistency of the relationship between e-satisfaction and e-loyalty. Accommodation providers and OTAs should prioritise efforts to enhance customer satisfaction to cultivate loyal customer relationships, driving repeat purchases, and amplifying positive word-of-mouth, ultimately leading to a sustainable competitive advantage and long-term success in the digital marketplace.

This study reveals that expectation confirmation plays a crucial role in determining e-satisfaction with the OTAs. Several factors are highlighted to have significant impact on expectation confirmations including e-WOM, monetary value, quality of benefit value, and

social status value. On the other hand, this study reveals that factors such as information value, preference value, and perceived risk do not significantly affect expectation confirmation despite being important consideration for Malaysian OTA users. Therefore, it is recommended that the accommodation providers and OTAs should focus on delivering experiences that meet or exceed consumer expectations, particularly in terms of e-WOM, monetary value, quality value, and social status value. By focus on these and improving information value, preference value, and addressing perceived risk, accommodation providers and OTAs can foster greater e-satisfaction and ultimately drive to higher levels of e-loyalty among Malaysian OTA users.

5.3 Theoretical implications

The main objective of this study is to identify the factors affecting OTA users' e-satisfaction and e-loyalty. This study examined the impact of consumption values, including monetary value, quality of benefits, social status value, information value, and preference value, on expectation confirmation. It also explored the impact of perceived risk and e-WOM on expectation confirmation, as well as the implications of expectation confirmation on both e-satisfaction and e-loyalty. The framework was developed to investigate the progression of e-loyalty behaviour formation among OTA users. The process began with the formation of expectations before the physical visit to the accommodation. During the physical visit, the previously formed expectations were either confirmed or disconfirmed. Once expectations were confirmed, they contributed to both the e-satisfaction of OTA users and the development of e-loyalty.

The study's framework, which incorporates both Expectation Confirmation Theory (ECT) and the Theory of Consumption Values in the context of OTAs (OTA-TCV) along with perceived risk and electronic word-of-mouth (e-WOM), offers a holistic approach to

understanding e-satisfaction and e-loyalty. This integration allows for a multifaceted exploration of how different factors affect expectation confirmation and subsequently influence e-satisfaction and e-loyalty. By incorporating these elements into a single framework, this study provides a richer theoretical perspective on the online travel booking process.

In terms of ECT, this study contributes to the theory by examining the direct relationship between beneficial values, risk components, and user-generated content with expectation confirmation. Specifically, the study highlights the pivotal role of confirming expectations in shaping user satisfaction and subsequent loyalty in online travel bookings. It addresses a gap in existing research by emphasizing the significance of the confirmation component within ECT, examining the factors influencing satisfaction directly through expectation confirmation—a dimension that prior studies have largely overlooked. By exploring the interplay between users' initial expectations, confirmation, satisfaction, and loyalty, the study offers insights into the mechanisms through which users' perceptions evolve in the online travel booking process. Moreover, while ECT originally posits that expectation confirmation contributes to satisfaction, and subsequently to loyalty, this study provides theoretical evidence of the direct relationship between expectation confirmation and e-loyalty.

In addition to its contribution to ECT, this study advances OTA-TCV by exploring the impact of consumption values on expectation confirmation and how this, in turn, influences e-satisfaction and e-loyalty, rather than solely focusing on purchase intention. This broader application of OTA-TCV highlights how different consumption values—monetary, quality of benefits, social status, information, and preference values influence user satisfaction and e-loyalty, thereby expanding OTA-TCV's theoretical scope. By extending

OTA-TCV in this manner, the study underscores the importance of expectation confirmation as a pivotal mechanism through which consumption values affect not only initial purchase decisions but also subsequent satisfaction and loyalty. This expanded view of OTA-TCV emphasizes the role of consumption values in shaping the entire consumer experience within online travel bookings, offering deeper insights into how users' perceptions and evaluations evolve beyond the act of purchasing. As a result, the study enriches OTA-TCV's theoretical framework by incorporating the sequential impact of consumption values on satisfaction and loyalty, broadening its application and relevance in the context of e-commerce and OTAs.

Additionally, the study's integration of perceived risk and e-WOM into the ECT framework alongside the OTA-TCV provides a more comprehensive understanding of the factors influencing e-satisfaction and e-loyalty in OTAs. By elucidating how perceived risk and e-WOM interact with users' expectations and confirmation processes, the research sheds light on the sequential process through which users' perceptions evolve in online travel booking contexts.

By integrating OTA-TCV into ECT, this study provides deeper insights into how various consumption values shape OTA users' expectations before they engage with a product or service. This approach allows for a more nuanced understanding of what drives initial expectations and how these expectations are formed. Moreover, the inclusion of OTA-TCV refines the expectation confirmation process by highlighting how different values influence whether expectations are met or exceeded. This can help in identifying which specific aspects of consumption values are most critical in confirming or disconfirming expectations. In this study, e-WOM emerged as the most critical factor, followed by monetary value, quality of benefits value, and social status value. This integration contributes to theoretical advancements by demonstrating how ECT can be enriched by

incorporating insights from other theories, such as OTA-TCV, to provide a more robust framework for understanding consumer behaviour.

5.4 Practical implications

The findings of this study carry significant practical implications for various stakeholders in the OTA industry. Policymakers play a crucial role in shaping the regulatory landscape governing OTA operations. By incorporating the insights from this study, policymakers can develop and enforce regulations that ensure fair and transparent practices within the industry. Policymakers should mandate clear pricing transparency to prevent hidden fees and support the development of price comparison tools to aid consumers in finding the best deals. They should also establish clear cancellation and refund policies and protection against fraudulent practices. Furthermore, setting quality standards and certification programs for accommodations can ensure consistent service levels and protect consumers. Regulating the authenticity of online reviews will aid consumers in evaluating e-WOM. Additionally, policymakers can work to enhance consumer rights and protections, such as ensuring that users have recourse in case of disputes with OTAs or accommodation providers. By fostering a regulatory environment that prioritises consumer trust and satisfaction, policymakers can contribute to the long-term sustainability and growth of the OTA industry.

Accommodation providers play a pivotal role in the OTA ecosystem, as they are responsible for delivering the travel experiences booked by consumers. By leveraging the insights from this study, accommodation providers can optimise their strategies and enhance customer satisfaction and loyalty. Accommodation providers should ensure competitive pricing by regularly reviewing rates and offering promotions or special packages to attract budget-conscious travellers. They should maintain high standards of cleanliness and conduct

regular maintenance to ensure the facilities are in good condition. Additionally, accommodation providers should actively seek and review guest feedback to identify areas for improvement and address any recurring issues. Ultimately, by incorporating these insights into their operations, accommodation providers can differentiate themselves in the competitive OTA landscape and drive sustainable growth in the long term.

As intermediaries between consumers and accommodation providers, OTAs play a central role in facilitating online travel bookings. By incorporating the findings of this study into their business practices, OTAs can enhance the overall user experience and build trust and loyalty among their customer bases. Large OTAs can utilise AI-driven dynamic pricing and comprehensive loyalty programs to offer competitive rates and rewards, while small to mid-sized OTAs can focus on targeted promotions and flexible payment options to attract budget-conscious travellers. To ensure accommodation quality, OTAs should implement clear standards and guidelines, conduct regular audits, and verify properties. Additionally, actively soliciting and showcasing authentic guest reviews and recommendations, can strengthen user trust and confidence in the platform. By prioritising user satisfaction and loyalty, OTAs can position themselves for long-term success in the competitive online travel market.

Individual consumers are the end-users of OTA platforms, and they stand to benefit greatly from the findings of this study. By understanding the factors influencing satisfaction and loyalty on OTA platforms, consumers can make more informed decisions when booking accommodations online. Consumers should compare prices and offers from different OTAs to ensure they receive the best monetary value and search for detailed information and reviews about the accommodations before booking. Paying attention to reviews and recommendations from other travellers helps in assessing the quality and reliability of the

OTAs and their offerings. Ultimately, empowered consumers can drive positive change within the OTA industry by demanding higher standards of service and transparency from providers.

5.5 Limitations of the Study

In addition to the exciting theoretical and practical implications, this study has several limitations. Firstly, the study was conducted among Malaysian OTA users, which limits the generalizability of the findings to a broader international audience. It is important to recognize that the characteristics, preferences, and behaviors of Malaysian OTA users may differ from those in other countries or regions. Factors such as cultural norms, socio-economic status, and technological infrastructure can influence how individuals interact with OTAs and perceive accommodation services.

Secondly, this study did not address the specific locations or destinations where Malaysian OTA users book accommodations. Destination characteristics and regional factors can significantly influence travelers' expectations and experiences. OTA users may have different expectations when booking accommodations in urban areas versus rural locations. Additionally, factors such as local attractions and cultural amenities may impact OTA users' perceptions of accommodation quality and overall satisfaction.

Furthermore, this study did not consider user characteristics, such as demographic variables, past booking experiences, and travel preferences. These factors can significantly shape users' perceptions, expectations, and behaviors when using OTAs to book accommodations. Variables such as age, income level, travel frequency, purpose of travel, traveler preferences, and companionship may influence OTA users' expectations regarding accommodations.

Another limitation stems from the reliance on a cross-sectional design. Cross-sectional studies capture data at a single point in time, limiting the ability to assess changes over time. Consequently, this design may not adequately account for temporal variations in user satisfaction and loyalty, which could influence the findings. Additionally, cross-sectional data may not fully capture the dynamics of how expectations and experiences evolve.

Lastly, a notable limitation of this study is the omission of OTA website quality, as the focus is exclusively on the accommodation dimension. Despite the extensive investigation into OTA website quality in the literature, its exclusion remains a limitation. By focusing solely on accommodation, this study overlooks the broader digital environment in which users interact. While accommodation quality is crucial, the quality of the OTA platform itself plays a significant role in shaping e-satisfaction and e-loyalty. Incorporating both dimensions would provide a more comprehensive understanding of the factors influencing user experiences.

5.6 Recommendations for Future Research

For future research, cross-cultural analysis presents a valuable opportunity to explore differences in user behaviour and perceptions of OTAs across diverse cultural contexts. By comparing how individuals from different cultural backgrounds interact with OTAs, researchers can uncover unique patterns and preferences that shape expectations, decision-making processes, satisfaction levels, and loyalty. Understanding these cultural influences can provide OTAs with valuable insights to tailor their services and marketing strategies, effectively engaging users from various cultural backgrounds and ultimately enhancing their overall satisfaction and loyalty.

Additionally, future research could delve into specific locations or destinations where OTA users book accommodations. Investigating expectation confirmation, e-satisfaction, and e-loyalty within specific destinations could offer valuable insights into the unique dynamics of those areas. By examining these factors, researchers can identify region-specific trends, challenges, and opportunities that impact the accommodation sector. This localized understanding can inform the development of tailored strategies to enhance the overall visitor experience in each destination.

User segmentation is another promising area for future research. Identifying OTA users based on demographic variables, past booking experiences, and travel preferences allows for the analysis of distinct user segments. By understanding the unique needs and preferences of these different groups, accommodation providers and OTAs can design personalized services and experiences, thereby fostering greater e-satisfaction and e-loyalty.

Employing longitudinal designs could significantly enhance the understanding of user satisfaction and loyalty over time. Longitudinal studies, which collect data at multiple points over an extended period, would allow researchers to track changes and trends in user behaviour. Offering incentives such as gift cards or discounts could help maintain participant engagement throughout the study period, ensuring robust data collection.

Finally, future research should include the dimension of OTA website quality alongside accommodation quality to provide a more comprehensive analysis of e-satisfaction and e-loyalty. Given that users primarily engage with OTAs through digital platforms, examining factors such as website usability, design, responsiveness, and navigability is crucial. Integrating both OTA and accommodation dimensions would offer a holistic understanding of how the digital environment and service offerings jointly influence e-satisfaction and e-loyalty.

5.7 Conclusion

This study underscores the importance of understanding the factors influencing e-satisfaction and e-loyalty among OTA users, addressing the research questions and objectives comprehensively. The primary aim of this study is to explore how consumption values, perceived risk, and e-WOM impact expectation confirmation, and in turn, how expectation confirmation influences e-satisfaction and e-loyalty. The study highlights the significant role of consumption values, specifically, quality of benefit value, social status value, and monetary value in shaping expectation confirmation, which is found to be a crucial determinant of e-satisfaction and e-loyalty. Although information value and preference value do not directly impact expectation confirmation, they still contribute to consumers' perceptions of the accommodation booking process.

This study further highlights the role of perceived risk, which, while not directly affecting expectation confirmation, remains a key factor in shaping consumer decisions and trust in OTA platforms. Moreover, the study emphasizes the significance of e-WOM as a powerful influencer of expectation confirmation, highlighting the preference for user-generated content over the information provided by accommodation providers. This shift in reliance on e-WOM underscores the need for accommodation providers and OTAs to maintain a positive online reputation and actively engage with customer feedback to enhance consumer trust and satisfaction.

Additionally, the study confirms the vital connection between expectation confirmation and e-satisfaction, which subsequently drives e-loyalty. It emphasizes the complexity of e-loyalty as a multifaceted construct influenced by various factors. While expectation confirmation plays a significant role in fostering e-loyalty, accommodation providers and OTAs should focus on delivering consistent positive experiences over time by

continuously improving service quality, offering competitive pricing, and building strong relationships with customers through effective communication and engagement strategies.

The framework developed in this study outlines the process of e-loyalty formation, starting with expectation formation prior to accommodation visits, followed by confirmation during the visit, and leading to e-satisfaction and loyalty, viewed from the O2O2O dimension. By integrating ECT and OTA-TCV, this study underscores the critical role of expectation confirmation in shaping e-satisfaction and its direct impact on e-loyalty. It extends ECT by broadening its application to include consumption values, perceived risk, and e-WOM, while also extending OTA-TCV by shifting the focus from solely examining purchase intention to investigating how these consumption values impact e-satisfaction and e-loyalty. Consequently, this study significantly broadens the scope of both ECT and OTA-TCV, contributing to a more comprehensive perspective on consumer behaviour in digital platforms.

From a practical perspective, the findings provide valuable insights for key stakeholders in the OTA industry. Policymakers can leverage these insights to establish regulations that promote pricing transparency, enforce fair cancellation policies, and regulate the authenticity of online reviews, thereby enhancing consumer trust. Accommodation providers can enhance customer satisfaction and loyalty by offering competitive pricing, maintaining high service standards, and actively engaging with customer feedback. For OTAs, the study highlights the importance of adopting AI-driven pricing strategies and promoting authentic reviews. For consumers, it emphasizes the importance of making informed decisions by comparing prices, reading reviews, and selecting platforms that prioritize transparency and quality, empowering them to make better choices when booking accommodation.

While this study offers valuable theoretical and practical insights, it is important to acknowledge its limitations, including its focus solely on Malaysian OTA users, the lack of consideration for specific locations or destinations, and the omission of user characteristics. These limitations provide directions for future research. To address these gaps, it is recommended that future research incorporate cross-cultural analysis, explore specific destinations, and perform user segmentations.

In conclusion, this study highlights the complex interplay between consumption values, perceived risk, e-WOM, and expectation confirmation in shaping e-satisfaction and e-loyalty in online travel bookings. By addressing these factors, stakeholders can create more personalized and engaging experiences for OTA users, driving positive outcomes for both consumers and industry stakeholders.

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APPENDICES

Appendix A: Questionnaire



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Dear respondents,

I hope this message finds you well. My name is Kiew Jiet Ping, and I am currently a Doctor of Business Administration student at Universiti Malaysia Sarawak. I am writing to request your assistance in my research for my dissertation, titled "Modelling e-Satisfaction and e-Loyalty of Online Travel Agencies (OTAs) in the Accommodation Sector."

Your insights and expertise are vital to the success of my research project. I kindly ask for a few moments of your time to complete a short survey/questionnaire, which will take approximately 10 to 15 minutes to finish. Your responses will remain strictly confidential and will be used solely for academic purposes.

If you have any questions or need further information, please feel free to reach out to me at kiew.jiet.ping@uts.edu.my. Your cooperation is greatly appreciated, and your input will contribute significantly to the advancement of knowledge in this field.

Thank you in advance for your support and participation.

Warm regards,

Kiew Jiet Ping

Universiti Malaysia Sarawak

Section A: Respondents' Usage of Online Travel Agencies (OTAs)

The aim of this section is to gather information about your usage of OTA. Please respond to each question by selecting the appropriate answer as required.

1. Have you used an online travel agency to book accommodations in the past one year?

Remark: Online travel agencies such as Booking.com, Agoda, Expedia, Airbnb, Trip.com, Traveloka etc.

- ☐ Yes
☐ No (Terminated, thanks)

2. Do you read online reviews before booking accommodations through online travel agencies?

- ☐ Yes
☐ No (Terminated, thanks)

3. Which type of accommodations did you book?

- | | |
|---|---|
| ☐ Hotels & resorts | ☐ Airbnb (entire home including homestay) |
| ☐ Hostels | ☐ Bed & breakfast (a room within the owner's home) |
| ☐ Others: _____ | |

4. What was the purpose for the trip?

- | | |
|---|--|
| ☐ Work/ Business | ☐ Health and medical care |
| ☐ Holiday/ Leisure | ☐ Visit friends and relatives |
| ☐ Education and training | ☐ Others: _____ |

5. Which online travel agencies did you use most often to book the accommodation(s)?

- | | |
|--------------------------------------|--|
| ☐ Booking.com | ☐ Agoda |
| ☐ Expedia | ☐ Hostelworld |
| ☐ Trip.com | ☐ Traveloka |
| ☐ Airbnb | ☐ Others: _____ |

6. How often do you use online travel agencies to book accommodation?

- | | |
|---|---|
| ☐ 1 – 3 times a year | ☐ 7 – 9 times a year |
| ☐ 4 – 6 times a year | ☐ > 10 times a year |

7. How much time do you spend on browsing online travel agencies on average?

- | | |
|--|--|
| ☐ ≤ 15 minutes | ☐ 46 – 60 minutes |
| ☐ 16 – 30 minutes | ☐ > 60 minutes |
| ☐ 31 – 45 minutes | |

8. How much money did you pay on average for purchasing accommodation per night?

- | | |
|--|--|
| ☐ ≤ RM100 | ☐ RM301 – RM400 |
| ☐ RM101 – RM200 | ☐ RM401 – RM500 |
| ☐ RM201 – RM300 | ☐ > RM500 |

Section B: Measurement

Please select the appropriate number from “1=strongly disagree” to “7=strongly agree”							
	Strongly disagree	Disagree	Somewhat disagree	Neither agree/disagree	Somewhat agree	Agree	Strongly agree
e- Loyalty							
1. I intend to continue using OTA for a long time.	1	2	3	4	5	6	7
2. OTA will be my first choice when I am travelling.	1	2	3	4	5	6	7
3. I like using OTA.	1	2	3	4	5	6	7
4. I would like to recommend OTA to friends and colleagues.	1	2	3	4	5	6	7
5. I am willing to say positive things about OTA to other people.	1	2	3	4	5	6	7
6. I would recommend OTA to those who are planning for travel.	1	2	3	4	5	6	7
e-Satisfaction							
1. I believe that I made the right decision when I used OTA services.	1	2	3	4	5	6	7
2. I believe that using OTA reliable services is usually a very pleasing experience.	1	2	3	4	5	6	7
3. The promising service offered by OTA meets my expectation.	1	2	3	4	5	6	7
4. My choice to use OTA has been a wise one.	1	2	3	4	5	6	7
5. The OTA has provided an excellent perception of their services.	1	2	3	4	5	6	7
6. I am satisfied with the overall service of OTA.	1	2	3	4	5	6	7
Confirmation							
1. My experience of using the OTA was better than what I expected.	1	2	3	4	5	6	7
2. The service level provided by the OTA was better than what I expected.	1	2	3	4	5	6	7
3. The service content delivered by the OTA was more thoughtful than what I expected.	1	2	3	4	5	6	7
4. Overall, the OTA confirmed most of my expectations.	1	2	3	4	5	6	7
Electronic word-of-mouth							
1. Before I book accommodation via OTA, I check the online reviews of other travellers.	1	2	3	4	5	6	7
2. The OTA provides a variety of options with reviews of other travellers.	1	2	3	4	5	6	7

3. The online reviews of the OTA allows me to choose the best accommodation.	1	2	3	4	5	6	7
4. The online reviews are consistently reliable.	1	2	3	4	5	6	7

Expectation Constructs – Benefits Received							
Please select the appropriate number from “1=Much less than expected” to “7=Much greater than expected”							
	Much less than expected	Less than expected	Slightly less than expected	As expected	Slightly greater than expected	Greater than expected	Much greater than expected
Monetary value							
1. The accommodation booked via OTA is reasonably priced.	1	2	3	4	5	6	7
2. The accommodation booked via OTA offers good value for money.	1	2	3	4	5	6	7
3. The accommodation booked via OTA is a great choice for the price.	1	2	3	4	5	6	7
4. The accommodation booked via OTA is an economical option.	1	2	3	4	5	6	7
Quality-of-benefits value							
1. The accommodation booked via OTA offers a friendly and comfortable environment.	1	2	3	4	5	6	7
2. The accommodation booked via OTA is well maintained and clean.	1	2	3	4	5	6	7
3. The accommodation booked via OTA provides high quality services.	1	2	3	4	5	6	7
4. The staff at the accommodation booked via OTA are polite and respectful.	1	2	3	4	5	6	7
Social status value							
1. The accommodation booked via OTA will help me feel acceptable.	1	2	3	4	5	6	7
2. The accommodation booked via OTA will create a good impression on others.	1	2	3	4	5	6	7
3. The accommodation booked via OTA will improve the way I am perceived by others.	1	2	3	4	5	6	7
4. The accommodation booked via OTA will earn me social approval (positive recognition and acceptance from others within a social context).	1	2	3	4	5	6	7
Information value							
1. Before booking via the OTA, I like to obtain substantial information about the terms and conditions.	1	2	3	4	5	6	7

2. Before booking via the OTA, I like to acquire a great deal of information about the benefits offered.	1	2	3	4	5	6	7
3. The accommodation matches the information provided on the OTA website.	1	2	3	4	5	6	7
4. The accommodation aligns precisely with the information provided on the OTA website.	1	2	3	4	5	6	7
Preference value							
1. I would book rooms more often if the OTA offered free cancellation.	1	2	3	4	5	6	7
2. I would book rooms more often if the OTA offered flexible rescheduling options.	1	2	3	4	5	6	7
3. I would book rooms more often if the OTA offered reservations with the option to pay later.	1	2	3	4	5	6	7
4. I would book rooms more often via OTA if there were more options available on the platform that matched my preferences.	1	2	3	4	5	6	7

Expectation Constructs – Risk Associated							
Please select the appropriate number from “1=Much more serious than expected” to “7=Much less serious than expected”							
	Much more serious than expected	More Serious than expected	Slightly more serious than expected	Pretty much as expected	Slightly less serious than expected	Less serious than expected	Much less serious than expected
1. Booking via OTA will take too much time or be a waste of time.	1	2	3	4	5	6	7
2. If I were to book accommodation via OTA, I would be concerned that I would not receive sufficient value for the cost of the accommodation.	1	2	3	4	5	6	7
3. If I were to book accommodation via OTA, I would be concerned that they would not provide the level of benefits that I would be expecting.	1	2	3	4	5	6	7
4. The thought of booking accommodation via OTA gives me an unwanted feeling of anxiety.	1	2	3	4	5	6	7
5. If I book accommodation via OTA, my credit card details are likely to be stolen.	1	2	3	4	5	6	7

Section C: Demographic Profile

The following questions are intended solely for the purpose of analysis. Please respond by writing or marking a tick, as appropriate.

1.	Gender	☐ Male	☐ Female
2.	Age	☐ ≤ 20 years old ☐ 21 to 30 years old ☐ 31 to 40 years old	☐ 41 to 50 years old ☐ 51 to 60 years old ☐ > 60 years old
3.	Race	☐ Malay ☐ Indian ☐ Others: _____	☐ Chinese ☐ Iban
4.	Country of ORIGIN State of ORIGIN Country of RESIDENCE State of RESIDENCE	_____ _____ _____ _____	(State only if different from country and state of origin)
5.	Level of education	☐ Primary school ☐ Secondary school ☐ Diploma/Foundation	☐ Undergraduate ☐ Postgraduate/Professional ☐ Others: _____
6.	Marital status	☐ Single ☐ Married/Defacto ☐ Divorced	☐ Widow/Widower ☐ Separated
7.	Monthly income	☐ No income ☐ ≤ RM2,000 ☐ RM2,001 – RM4,000 ☐ RM4,001 – RM6,000	☐ RM6,001 – RM8,000 ☐ RM8,001 – RM10,000 ☐ > RM10,000
8.	Occupation	☐ Professional ☐ Technical ☐ Company employee ☐ Government servant ☐ Self-employed/ Businessman	☐ Retiree ☐ Unemployed ☐ Student ☐ Housewife ☐ Others: _____

Thank you for participating in this survey! 😊